

# The Agaricomycotina of the Kotlina Orawsko-Nowotarska basin, Western Carpathian Mts (Poland)



Halina Komorowska  
Dariusz Karasiński  
Zofia Heinrich

Kraków 2023



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*In memory of Professor Władysław Wojewoda*



Photo from the family archive

*This monograph is dedicated to the memory of Professor Władysław Wojewoda (20.05.1932–3.11.2010) – mentor and teacher of the three authors. Our work was shaped by the ideas of Professor Wojewoda, who as early as in the 1960s saw the importance of mycological research in the Kotlina Orawsko-Nowotarska basin. Our three-year field studies (2010–2012) in this area, undertaken at the Professor's inspiration, supplement the groundbreaking research done by Professor Wojewoda and his team (MSc. Izabela Jalocho, Dr. Zofia Heinrich) in 1966–2000.*

## AUTHORS

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## INTRODUCTION

In the mycological literature, the Kotlina Orawsko-Nowotarska basin (KON) was one of the geographical regions of the Polish Carpathians least studied in terms of fungal diversity. By the 1960s only six species of fungi were published from this area.

The KON is a unique region: many tree species, shrubs and herbaceous plants typical of the surrounding area are lacking here, but peat bogs and coniferous forests with plant species not found in the surrounding area dominate. Accordingly, the fungi of the KON are expected to be more diverse and considerably different from the fungi of the surrounding regions. Appreciating the uniqueness of the KON habitats, Professor Władysław Wojewoda initiated mycological studies in the area as early as 1960. That work was continued by his collaborators and led to a three-year regular study (for details see *History of mycological research in the Kotlina Orawsko-Nowotarska basin*).

The aim of this publication is to compile all published and unpublished data concerning the macroscopic fungi of the KON, including the results of the first long-term studies done in the area. This overview of the fungal diversity of this unique region should give the reader an idea of the richness of the rarest local fungi as well as the threats to them, and should increase our knowledge of the diversity and distribution of fungi associated with peat bogs and marshy forests in Poland.

## THE HISTORY OF MYCOLOGICAL STUDIES IN THE KOTLINA ORAWSKO-NOWOTARSKA BASIN

The first data on fungi occurring in the the Kotlina Orawsko-Nowotarska basin (KON) date to the 19<sup>th</sup> century. Krupa (1886) listed four species of plant-parasitizing fungi from the vicinity of Czarny Dunajec village. Nearly fifty years later, Teodorowicz (1933) reported *Rhizina undulata* Fr. (as *Rhizina inflata* (Schaeff.) Quél.) from this area. The first agaricoid fungus, *Armillaria mellea* (Vahl) P. Kumm., was noted by Kulig (1952) and Twarowski and Twarowska (1959), but without an exact location given. The first planned studies in the area were initiated by Professor Wojewoda in 1960. In the following years (1966–2000) those studies were continued by researchers from the Department of Mycology of the W. Szafer Institute of Botany, Polish Academy of Sciences in Kraków: Izabela Jałocha, Zofia Heinrich (1970s) and Halina Komorowska (from the 1980s).

The first data obtained in these studies were published by Grodzińska et al. (1973), who provided a list of 25 species from the Bór na Czerwonem Nature Reserve. Later, the most important contribution to the funga of the KON was a list of 203 species (including 197 Agaricomycotina) collected in the Bór na Czerwonem Nature Reserve over the forty years from 1960 to 2000 (Wojewoda et al. 2004). Subsequent data from the material collected in the KON in 1966–2000 were published by various authors in monographs of individual species or genera, or on their distribution in Poland or Europe. Four species – *Heterobasidion annosum* (Fr.) Bref., *Laccaria amethystina* Cooke, *Piptoporus betulinus* (Bull.) P. Karst. and *Schizophyllum commune* Fr. – were reported by Skirgiełło (1977). Seven species – *Exidia plana* (Wiggers) Donk, *E. saccharina* (Alb. & Schwein) Fr., *Exidiopsis effusa* (Bref. Ex Sacc.) F.H. Moll., *Pseudohydnum gelatinosum* (Scop.: Fr.) P. Karst., *Tremella encephala* Pers., *T. foliacea* Pers. and *T. obscura* (L.S. Olive) M.P. Christ. – were published by Wojewoda (1979). Other publications contained information about individual species (Hausknecht 2005, 2009; Komorowska 2006; Wojewoda 1977, 2000, 2002, 2003).

Apart from the studies by mycologists from Kraków, other researchers visited the area sporadically and provided single records, such as *Cortinarius tortuosus* (Fr.) Fr. depicted in a colour plate (as *C. plumbosus* Fr.) in a monograph devoted to the genus *Cortinarius* in Poland (Nespiak 1981), and *Lactarius fuscus* M.M. Moser used to study the colour reactions of the context (Rymkiewicz 1981). Both species were found in forests near Harkłowa village.

## THE STUDY AREA

The Kotlina Orawsko-Nowotarska basin (KON) is an elongated basin that extends approximately 45 km West to East (Staszkievicz 1958), located in the northern part of the Western Carpathian Mts, north of the Tatras (Fig. 1). It is situated between the tectonically raised Pogórze Spisko-Gubałowskie foothills to the south, the Magura Orawska range to the west, Babia Góra massif to the north-west, and the Gorce Mts to the north. The Pieniny Mts form the eastern wall of the basin. The KON forms a separate geobotanical unit called Bory Nowotarskie, recognized either as a subregion (Szafer and Zarzycki 1977) or as a region (Staszkievicz 1958). It straddles the border between Poland and Slovakia, with the Polish part covering approximately 370 km<sup>2</sup> (Kondracki 2000).

The Białka, Czarny Dunajec and Biały Dunajec rivers are the three main rivers in the basin; the water of the Białka and the Biały Dunajec appears to be white against the granite substrate, and their Polish names, based on the Polish word for white (*biały*), reflect this optical effect, while the water of the Czarny Dunajec is tinted black (in Polish, *czarny*) by water draining from peat bogs (Mirska 1956; Cichocki 2002). A part of the main European watershed between water draining into the Baltic Sea and the catchment area of the Black Sea is located in the KON. This watershed is a hydrographic division that splits the uniform landscape of the region into two parts: the Kotlina Orawska and Kotlina Nowotarska basins. They are tilted in opposite directions, up to approximately 500 m above sea level eastwards and approximately 600 m westwards, respectively (Kondracki 1994).

The depression of the KON developed in the younger Tertiary, forming a lake whose sediment, composed of silt and gravel, reaches 300 m thickness in the west of the basin. Glacial-fluvial gravels collected here (in the form of alluvial cones) in the Quaternary during three glaciation periods in the Tatra Mts (Kondracki 1994). The gravel is covered by poorly permeable clay, probably of eolian origin, on which podzolic soil developed outside peat bogs and bog woodlands (Łajczak 2006). After climate warming 10 000 years ago, peat bogs began to develop on floodplains formed during successive glaciations.

The KON is in a moderately warm climate zone but has specific local features. A pool of cold air forms during winter highs and fog patches develop, while in summer the basin is warmer and drier than the surrounding elevations. Thus the local climate of the basin can be described as having continental features (Kondracki 2000). The centrally located town of Nowy Targ is considered to be the cold pole of Poland, and increased precipitation has been recorded from the east westwards. Westerly and south-westerly winds predominate; southerly winds are less frequent (Cichocki 2002).

The vegetation cover of the KON differs considerably from that of the surrounding regions. Beech-fir forests, and consequently many plants associated with them, do not occur here, and many montane species common in the flysch Carpathian Mts are also absent.



**Fig. 1.** General view of the Kotlina Orawsko-Nowotarska basin and the surrounding area, seen from Zarębek Niżni above Łopuszna village, summer 1968; in the background are the Tatra Mts. Photo: W. Wojewoda

In addition, many deciduous tree species do not occur in the area (e.g. *Acer campestre*, *A. platanoides*, *A. pseudoplatanus*, *Carpinus betulus*, *Quercus robur*, *Q. sessilis*, *Tilia cordata*, *T. platyphyllos*, *Ulmus scabra*). Widespread raised bogs, which are considerably more frequent here than in other parts of the Western Carpathians, are characteristic of the basin (Plate I). Peat bog plants found here are very rare or absent in the flysch Carpathian Mts. Koczur (1996, 1999a, 1999b, 2004, 2007a, b, c, 2009) studied the flora and plant communities of raised bogs, and presented the distribution of plant species in the KON, with comments on their biology and on the need for protection. The rare species occurring include *Andromeda polifolia*, *Carex limosa*, *C. pauciflora*, *Drosera anglica*, *D. rotundifolia*, *Empetrum nigrum*, *Oxycoccus microcarpus*, *O. palustris*, *Rubus chamaemorus*, *Rynchospora alba* and *Scheuchzeria palustris*.

Next to the peat bogs, coniferous forests (Plate II) are the second most important element of the KON vegetation; the area covered by both elements is shrinking under the pressure of human activity. Among the forest complexes (associations) distinguished here are *Vaccinio uliginosi-Pinetum* Kleist 1929, *Calamagrostio villosae-Pinetum* Stasz. 1958 (found for the first time in the area of the KON), and *Pino rhaeticae-Sphagnetum* Stasz. 1992 including *Pinus ×rhaetica*, a characteristic hybrid taxon occurring in the KON peat bogs (Staszkievicz 1958; Staszkievicz and Szelağ 2003).

More or less degraded alder groves *Alnetum incanae* Lüdi 1921 (Plate III) occur on the alluvial floodplains of the rivers (Czarny Dunajec, Biały Dunajec, Białka) and streams. This plant community mostly occurs as alder-willow thickets. The open areas are mainly

mowed meadows (*Molinio-Arrhenatheretea* class) and pastures (Plate IV). More information on the flora and plants of riverine habitats, and proposals for their protection, can be found in publications by Koczur (1999a, b). Information on geobotanical studies of the Bór na Czerwonym Nature Reserve (the only reserve in the KON) may be found in a publication by Staszkiewicz and Szelağ (2003).



**Plate I.** Peatbogs of the Kotlina Orawsko-Nowotarska basin. **1.** Pustać Chyżne (5), ATPOL square DG 38-50, 4 Sept. 2012; **2.** Puścizna Jasiowska (4), ATPOL square DG 38-61, 4 Sept. 2012. Photos: Paweł Komorowski. Numbers in parentheses refer to those in Fig. 3





**Plate I** (cont.). Peatbogs of the Kotlina Orawsko-Nowotarska basin. **3.** Bór za Lasem Kaczmarka (13), ATPOL square DG 38-68, 2 Sept. 2012; **4.** Puścizna Wielka (10), large-scale industrial exploitation of peat. ATPOL square DG 38-56, 2 Sept. 2012. Photos: Paweł Komorowski. Numbers in parentheses refer to those in Fig. 3



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**Plate I** (cont.). Peatbogs of the Kotlina Orawsko-Nowotarska basin. **5.** Puścizna Wielka (10), overgrown drainage ditch, ATPOL square DG 38-56, 2 Sept. 2012; **6.** Puścizna Rękowiańska (19), ATPOL square DG 39-20, 3 Sept. 2012. Photos: Paweł Komorowski. Numbers in parentheses refer to those in Fig. 3



**Plate I** (cont.). Peatbogs of the Kotlina Orawsko-Nowotarska basin. 7. Bór na Czerwonym (24) Reserve, platform leading to dome of peat bog, ATPOL square EG 30-25, 16 Sept. 2011; 8. Przymiarki (22), ATPOL square EG 30-30, 14 Aug. 2011. Photos: 7 – Marta Łysek, 8 – Paweł Komorowski. Numbers in parentheses refer to those in Fig. 3



**Plate II.** Spruce forests of the Kotlina Orawsko-Nowotarska basin. **1, 2.** S of Jabłonka, Bór koło Chyżnego (II) forest, Nowa Droga, ATPOL square DG 38-82, 30 June 2011; **3, 4.** SW of Łopuszna, Bór Ostrowski (XI) forest, ATPOL square EG 31-20, 6 Sept. 2011. Photos: Paweł Komorowski. Numbers in parentheses refer to those in Fig. 3



**Plate II** (cont.). Spruce forests of the Kotlina Orawsko-Nowotarska basin. **5.** S of Czarny Dunajec–Jabłonka road, Baligówka (IV) forest, ATPOL square DG 38-48, 29 Oct. 2011; **6.** S of Jabłonka, Bór koło Chyżnego (II) forest, N part, ATPOL square DG 38-33, 17 Sept. 2011. Photos: Paweł Komorowski. Numbers in parentheses refer to those in Fig. 3



**Plate III.** Riparian montane alder forests of the Kotlina Orawsko-Nowotarska basin. **1.** Gronków Środkowy village, thickets along Leśnica river, ATPOL square EG 30-49, 3 Sept. 2011; **2.** N of Chochołów village, Czarny Dunajec river valley, rocky meander of the river, ATPOL square DG 48-29, 13 Nov. 2011. Photos: Paweł Komorowski



**Plate III** (cont.). Riparian montane alder forests of the Kotlina Orawsko-Nowotarska basin. **3.** N of Chochołów village, Czarny Dunajec river valley, *Alnetum incanae*, ATPOL square DG 48-29, 13 Nov. 2011; **4.** Lipnica stream valley, ATPOL square DG 37-26, 14 July 2012. Photos: Paweł Komorowski



**Plate III** (cont.). Riparian montane alder forests of the Kotlina Orawsko-Nowotarska basin. **5.** Leśnica stream valley, ATPOL square EG 30-59, 28 June 2011; **6.** Thickets along Lipnica stream, ATPOL square DG 37-26, 14 July 2012. Photos: Paweł Komorowski





**Plate IV.** Meadows and pastures of the Kotlina Orawsko-Nowotarska basin. **1.** W of Jabłonka, Lipnica Wielka village, ATPOL square DG 37-16, 14 July 2012; **2.** S of Odrowąż village, ATPOL square DG 29-91, 30 Oct. 2011. Photos: Paweł Komorowski



**Plate IV** (cont.). Meadows and pastures of the Kotlina Orawsko-Nowotarska basin. **3.** SE of Jabłonka village, ATPOL square DG 38-33, 17 Sept. 2011; **4.** 2.5 km NW of Czarny Dunajec village, ATPOL square DG 38-39, 4 Sept. 2011. Photos: Paweł Komorowski



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**Plate IV (cont.).** Meadows and pastures of the Kotlina Orawsko-Nowotarska basin. **5.** Nowa Biała village, ATPOL square EG 31-42, 13 Aug. 2011; **6.** SE of Jabłonka village, ATPOL square DG 38-33, 30 Oct. 2011. Photos: Paweł Komorowski

## MATERIAL AND METHODS

The present work compiles published and unpublished data about macroscopic fungi collected in the Kotlina Orawsko-Nowotarska basin (KON) within the boundaries shown on the topographic map (sheets\*: Jabłonka M-34-88-C, Czarny Dunajec M-34-88-D, Nowy Targ M-34-89-C). The area has been divided into 1 km squares of the ATPOL grid (Komsta 2016) (Fig. 2). Also included in the study area are two adjacent regions: the Przełom Białki pod Krempachami Reserve and the Pasieczny Las forest (Fig. 3). The first is inside the Dolina Białki Natura 2000 protected area but outside the KON (Fig. 3, e), while the second is close to the KON (Fig. 3, VII). Many specimens of macrofungi were collected in those two areas in 1966–2000.

Field studies in various habitats in the KON were conducted irregularly and with different frequency in individual years. From 1966 to 2000 the study area was visited rarely; material was collected along long routes by Władysław Wojewoda, Izabela Jałocha, Zofia Heinrich and Halina Komorowska. From that material, only data from the Bór na Czerwonym Nature Reserve (Grodzińska et al. 1973; Wojewoda et al. 2004) and information on selected species (see *History of mycological research in the Kotlina Orawsko-Nowotarska basin*) were published.

In 2010–2012, regular and comprehensive studies (project no. N N305 382738, financed by the Polish Ministry of Science and Higher Education) were carried out in forests and peat bogs of the KON during three entire growing seasons. The material was collected along short routes from selected points in the field. The minimum distance between individual points as well as between localities was 1 km. Investigations lasted from early spring until late autumn (April–November) during two or three field trips per month, each lasting a few days. Each day, material was collected from 3–7 localities (= selected points). Fruitbodies were collected by Zofia Heinrich, Halina Komorowska, Dariusz Karasiński and Barbara Pleban, with the assistance of Grażyna Końska and Pierre Rou, Marta Łysek (M. Łysek), Mirosław Łysek (Mi. Łysek), Anna Mapoubi, Maria Pilch, Aleksandra Sadowska, Marcin Sadowski and Ryszard Łysek. Several specimens randomly collected in the KON and donated by others were also included. All this material collected over nearly forty years (1966–2000 and 2010–2012) became the basis for the present work. Specimens are deposited in the Herbarium of the W. Szafer Institute of Botany, Polish Academy of Sciences (KRAM).

The collected specimens were described and some of them were documented with crayon drawings (Plate V). The material was dried with an electric dryer and then determined by the standard methods used for the taxonomy and identification of fungi. Freehand sections of dried basidiomata were made under a Nikon SMZ-2T stereoscopic microscope using a razor

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\* Mapa Topograficzna Polski w skali 1: 50 000 w układzie 1992, Główny Geodeta Kraju, 1998.

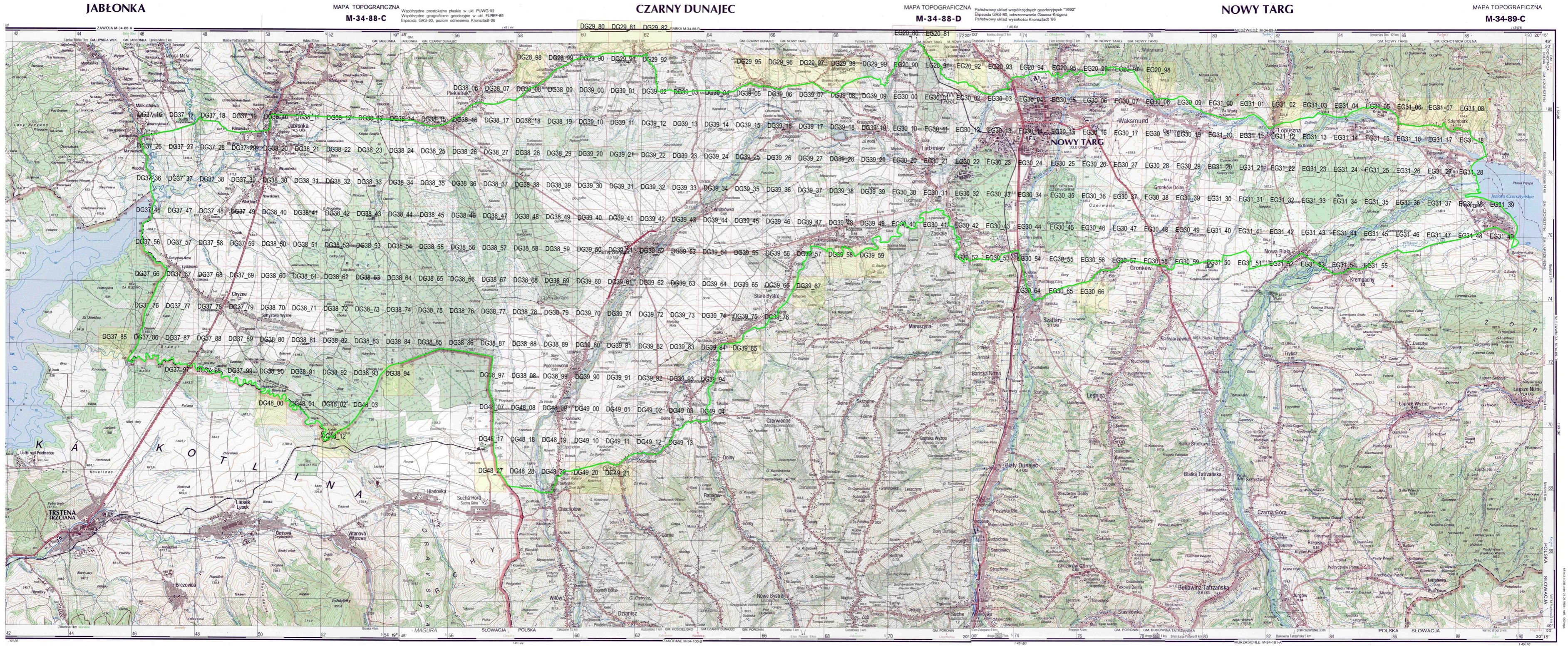
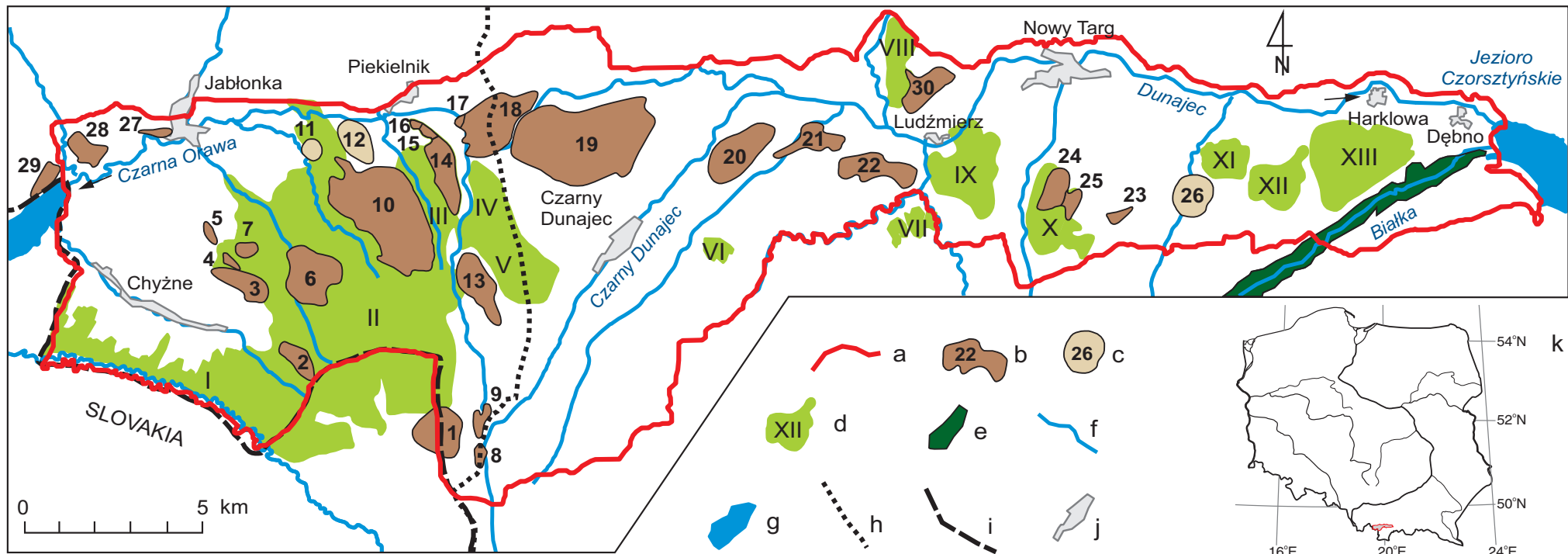


Fig. 2. Topographic map of the study area, with ATPOL grid system shown  
 (Source: Mapa Topograficzna Polski w skali 1: 50 000 w układzie 1992, Główny Geodeta Kraju, 1998, modified by W. Paul)



**Fig. 3.** Study area and location of peat bogs and marshy coniferous forests. Legend: a – borders of the study area; b – raised peat bogs with dome or with preserved dome fragments; c – peat bogs without dome or remaining only as post-peat area; d – marshy coniferous forests; e – Dolina Białki Natura 2000 protected area; f – rivers and streams; g – artificial lakes; h – European Watershed; i – border of Poland; j – urban area; k – location of the Kotlina Orawsko-Nowotarska basin in Poland. Peat bogs (names adopted from Łajczak 2006): 1 – Przybojec (Polish part); 2 – Puścizna Wysoka; 3 – Łysa Puścizna; 4 – Puścizna Jasiowska; 5 – Pustać Chyżne; 6 – Puścizna pod Pustą Polaną; 7 – Składziska; 8 – Kosarzyska; 9 – Bacuch; 10 – Puścizna Wielka; 11 – Torfowisko koło Lasu Ucinki; 12 – Torfowisko koło Księżej Sośliny; 13 – Bór za Lasem Kaczmarka; 14 – Puścizna Mała; 15 – Piekielnik-a; 16 – Piekielnik-b; 17 – Piekielnik-c; 18 – Baligówka; 19 – Puścizna Rękowiańska; 20 – Puscizna Długopole; 21 – Puścizna Franków; 22 – Przymiarki; 23 – Gronków; 24 – Bór na Czerwonem-a; 25 – Bór na Czerwonem-b; 26 – Torfowisko koło Księżego Boru; 27 – Otrębowa; 28 – Otrębowskie Brzegi; 29 – Janowieckie; 30 – Do Grela. Forests (names adopted from current physiographic maps, from Staszkievicz 1958, and in part from Łajczak 2006): I – Las Brzegi; II – Bór koło Chyżnego; III – Las Gajka; IV – Las Baligówka; V – Las Cikówka; VI – Soślina; VII – Pasieczny Las; VIII – Bór na Grelu; IX – Bór Nowotarski; X – Bór na Czerwonem; XI – Bór Ostrowski; XII – Bór Bielski; XIII – Bór Harkłowski

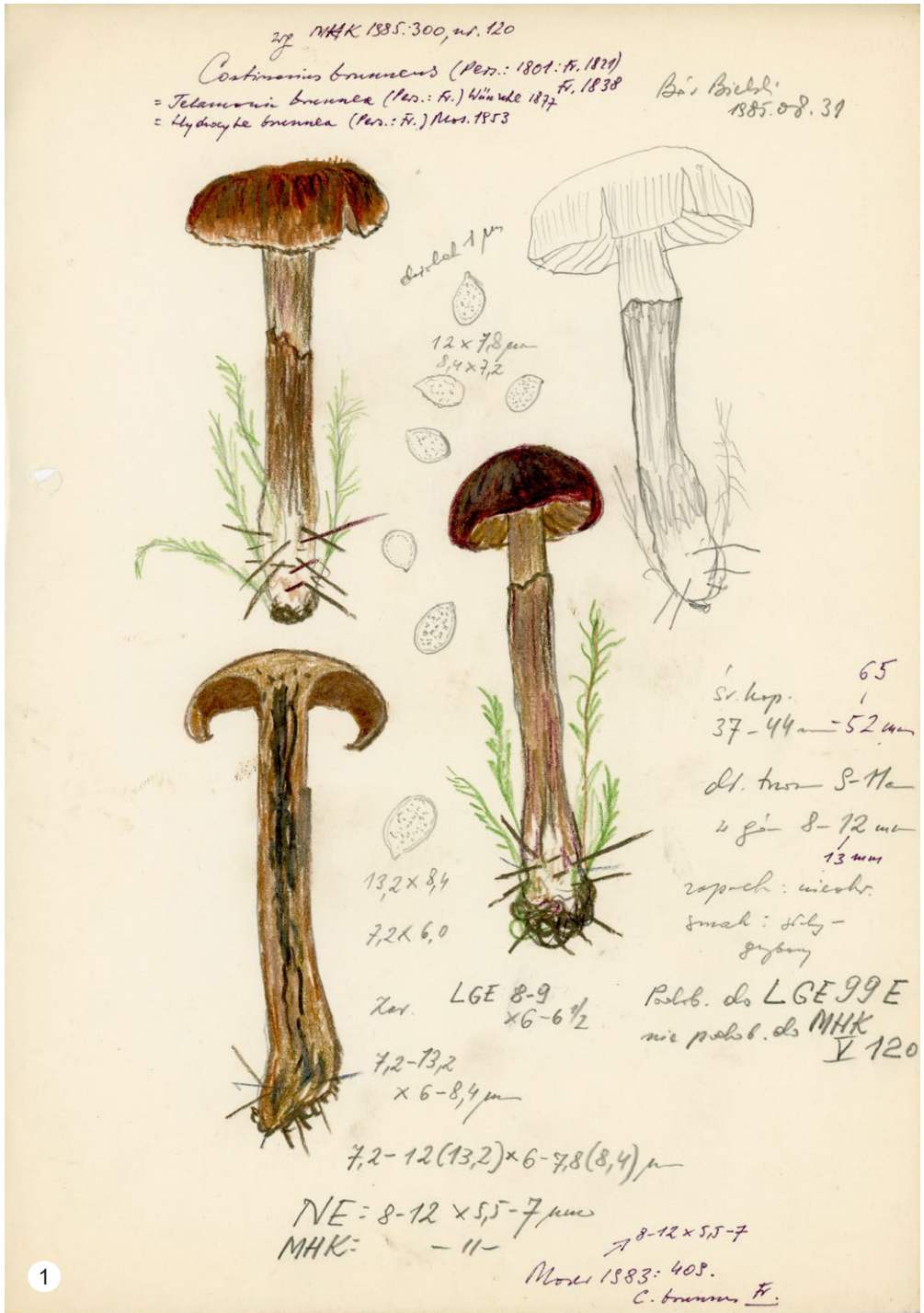


Plate V. Examples of specimens documented in crayon drawings by Prof. W. Wojewoda. 1. *Cortinarius brunneus* (KRAM F-25949)

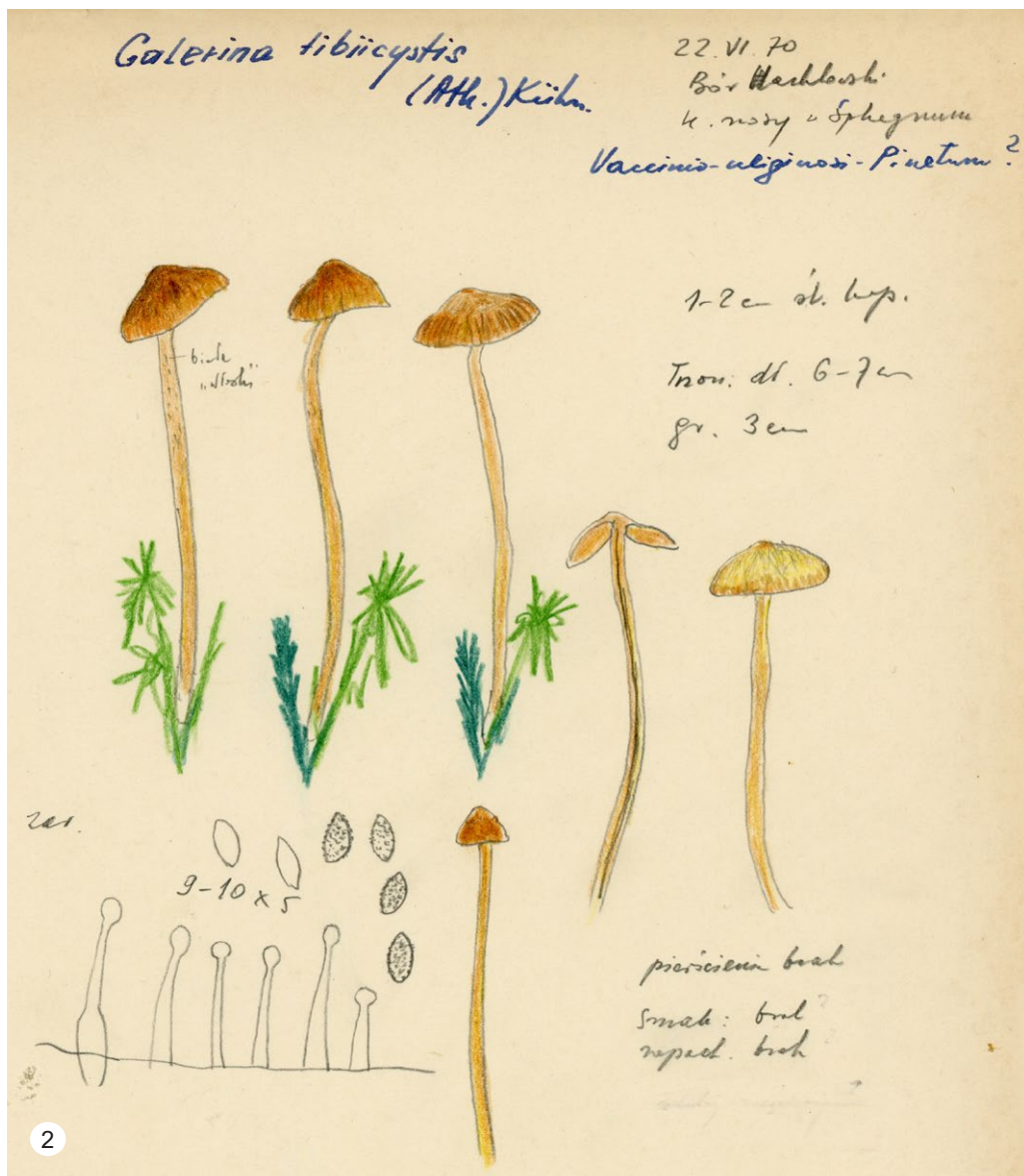


Plate V (cont.). Examples of specimens documented in crayon drawings by Prof. W. Wojewoda. 2. *Galerina tibiiocystis* (KRAM F-19166)



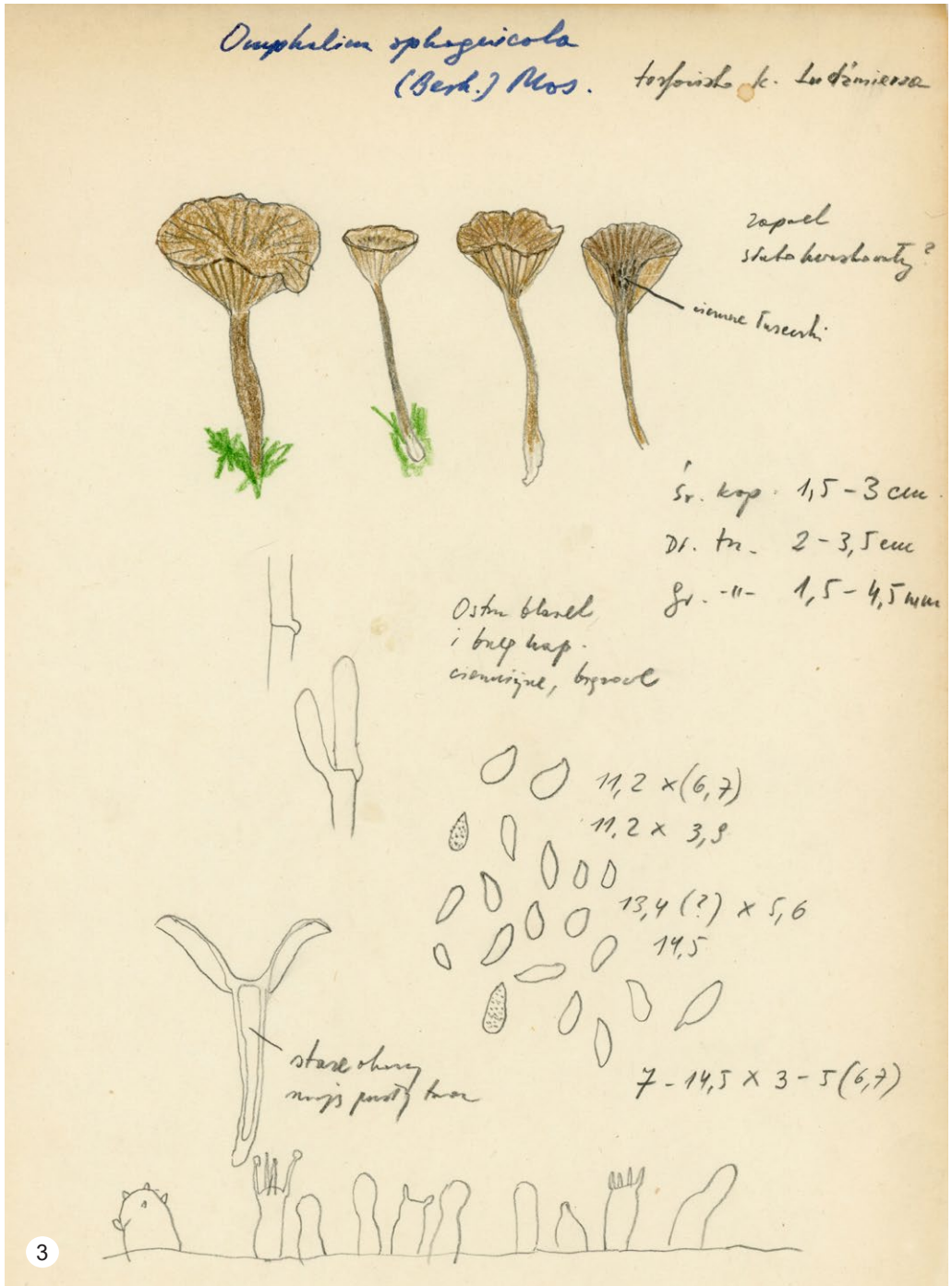
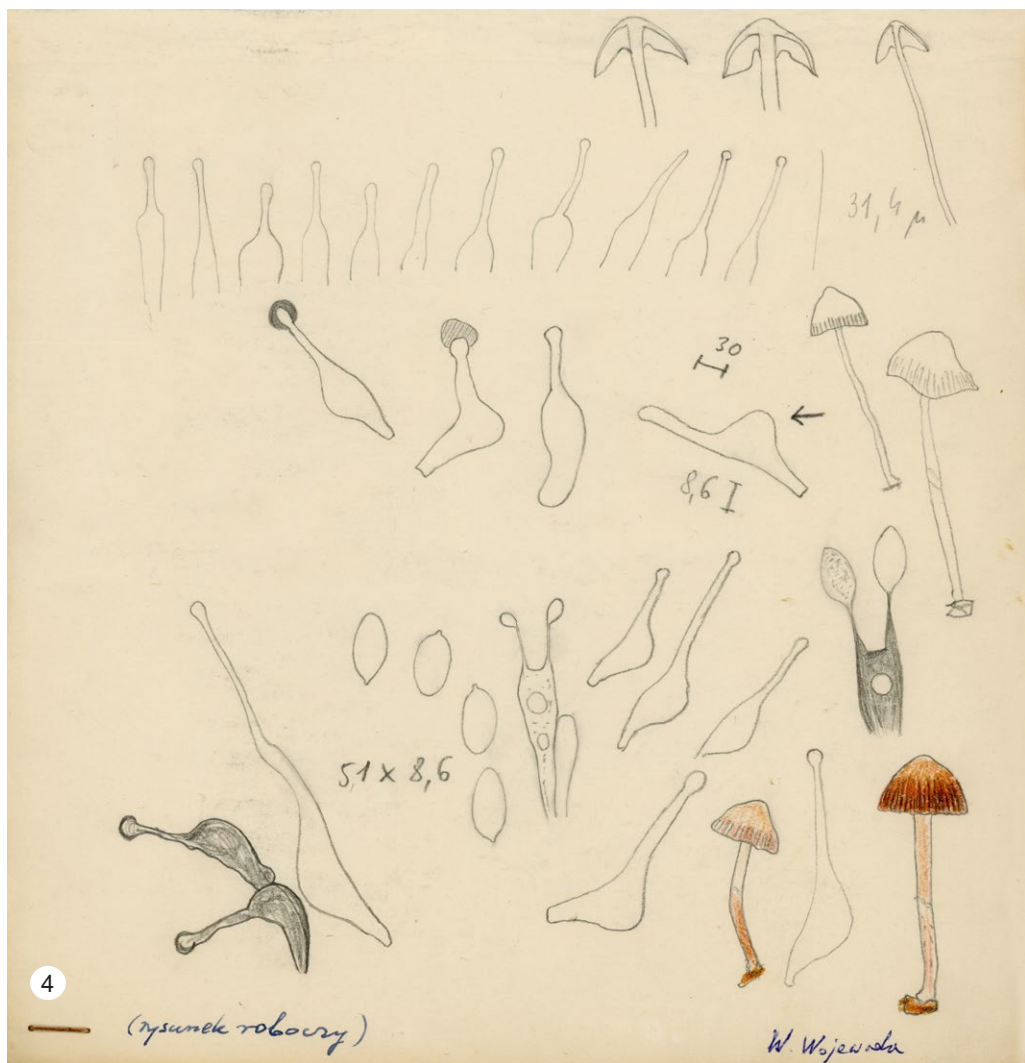
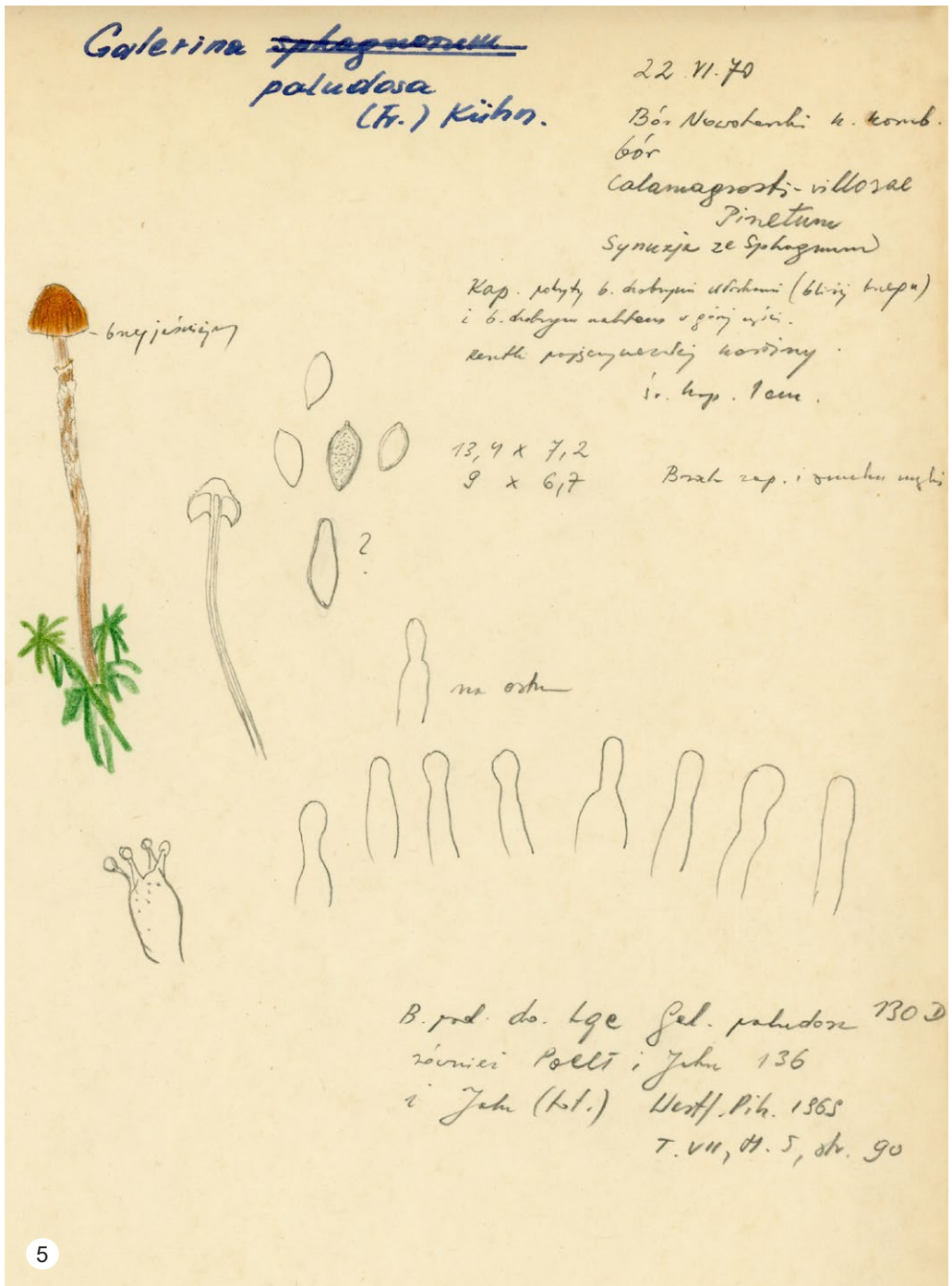


Plate V (cont.). Examples of specimens documented in crayon drawings by Prof. W. Wojewoda.  
3. *Arrhenia gerardiana* (= *Omphalina sphagnicola*) (KRAM F-25810)

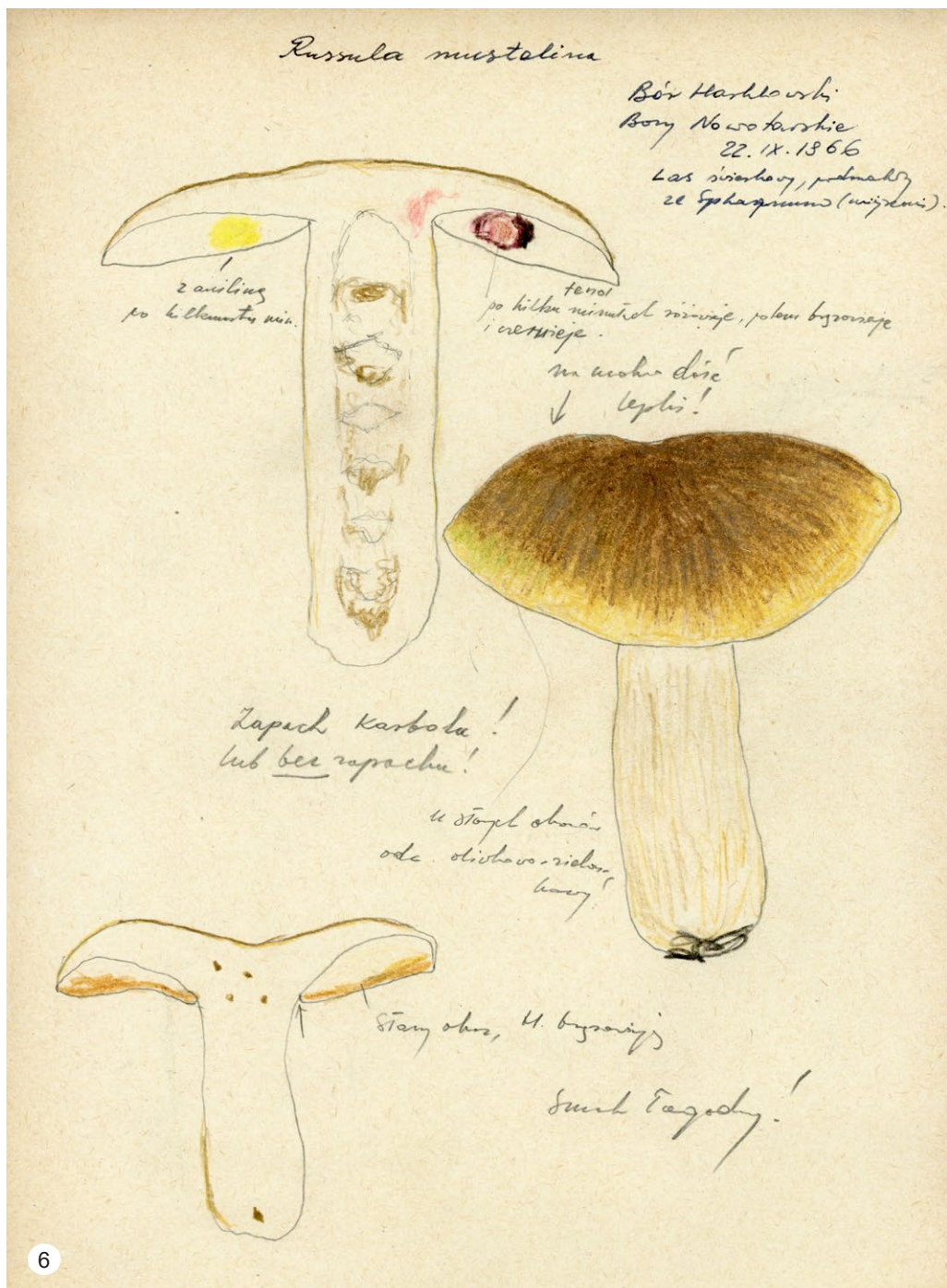


**Plate V (cont.).** Examples of specimens documented in crayon drawings by Prof. W. Wojewoda. **4.** *Galeirina ampullaceocystis* (KRAM F-11299)



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Plate V (cont.). Examples of specimens documented in crayon drawings by Prof. W. Wojewoda. 5. *Galerina paludosa* (KRAM F-19133)



**Plate V (cont.).** Examples of specimens documented in crayon drawings by Prof. W. Wojewoda. **6.** *Russula mustalina* (KRAM F-26265)

blade. In the case of corticioid and polyporoid fungi, Melzer's reagent, 0.1% cotton blue in 60% lactic acid (CB) and 3% KOH solution were used as mounting media. Microscope preparations were analysed under a Nikon Eclipse E-400 light microscope at magnification up to 1250×. Agaricoid fungi were studied in 5% KOH, phloxin solution and Melzer's reagent. Micromorphology was studied under a Nikon Eclipse 80i light microscope with Nomarski contrast (white-spored fungi) and with a Carl Zeiss 115215 microscope (dark-spored fungi). Macrochemical reactions using KOH (25% aqueous solution), FeSO<sub>4</sub> (10% aqueous solution), phenol (2–3% aqueous solution), NH<sub>3</sub> (ammonia, 25% aqueous solution) and guaiac (ethanol solution) were also used to identify species of the genera *Lactarius* and *Russula*.

The following authors analysed the collected fungi of particular systematic groups: Zofia Heinrich – dark-spored agaricoid fungi; Dariusz Karasiński – corticioid and polyporoid fungi; Halina Komorowska – white-spored agaricoid fungi; and Halina Komorowska together with Grażyna Końska – *Lactarius* and *Russula*.

Nomenclature follows Knudsen and Vesterholt (2012) for agaricoid, boletoid, clavarioid, cyphelloid and gastroid taxa, Bernicchia & Gorjón (2010) for corticioid fungi, and Ryvar-den & Melo (2014) and MycoBank (Crous et al. 2004) for polyporoid fungi. Additionally, Index Fungorum ([www.indexfungorum.org/names/names.asp](http://www.indexfungorum.org/names/names.asp)) and Cortbase (Parmasto et al. 2004) were consulted for nomenclature and for abbreviations of authors of fungal names of corticioid and poroid fungi. Latin names of vascular plants mentioned in the text follow Mirek et al. (2002), apart from those given on herbarium labels, which are quoted exactly from the label. The names of plant communities of the Bór na Czerwonem Nature Reserve follow Staszkiwicz and Szelağ (2003); the names of other plant communities are according to Matuszkiewicz (2005).

The division into meteorological seasons was adopted after Niedźwiedz (2003).

Frequency of species occurrence in the study area is presented on a three-step scale. Species found at up to five localities (one locality = one ATPOL square) are considered rare, those from 6–20 localities are noted as frequent, and those occurring at more than 20 localities are noted as common.

The distribution of the rarest fungi in Poland is given based on a published checklist of Polish fungi (Wojewoda 2003) and an on-line database (Kujawa 2021). For species with up to three localities in Poland, full information on their national distribution is given. For those known from four or five Polish records only the number of localities is provided.

The map of the research area (Fig. 3), showing the distribution of forest complexes and peat bogs in the KON area, is based on a map of peat bogs by Łajczak (2006) and maps of forests by Staszkiwicz (1958). The names of forests (marked I–XIII) and peat bogs (marked 1–30) were adopted from these maps and publications (Łajczak 2006; Staszkiwicz 1958). A printed version of the topographic map (Fig. 2) with the boundaries of the study area and ATPOL squares, and the map with forests and peat bogs (Fig. 3), were used to prepare the species distribution maps (see *Maps of species distribution in the Kotlina Orawsko-Nowotarska basin* chapter). The maps illustrate all localities of a given fungus recorded in the KON; they are listed in alphabetical order following the list of species (see below).

The specimens collected in the Bór na Czerwonem peat bog are described differently: as being from the nature reserve or not from the reserve, depending on the date of collection.

This is due to changes in the borders of the reserve area over time. Before 2003 the reserve covered 49.7 ha; thus fungi collected in the peat bog area but outside of its contemporary borders are documented as collected outside the reserve. In 2003 the reserve area was expanded to 114.66 ha, covering the entire peat bog, so all fungi collected in the peat bog are documented as occurring in the reserve.

The red-list categories used here follow Wojewoda and Ławrynowicz (2006): **Ex** – Extinct and probably extinct; **E** – Endangered; **V** – Vulnerable; **R** – Rare; and **I** – Indeterminate. The protection categories follow Rozporządzenie<sup>\*\*</sup>: **SP** – under strict protection; and **PP** – under partial protection.

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<sup>\*\*</sup> Rozporządzenie Ministra Środowiska z dnia 9 października 2014 r. w sprawie ochrony gatunkowej grzybów. – Journal of Laws of the Republic of Poland (Dziennik Ustaw), 2014 Oct. 9, Item 1408.

## LIST OF SPECIES WITH THEIR LOCALITIES IN THE KOTLINA ORAWSKO-NOWOTARSKA BASIN

The species are listed alphabetically, with data presented as follows: species name, Red List category and protection status (if any – abbreviations, see p. 34), habitat and substrate, trophic status, period of occurrence (months) and frequency (number of localities =  $1 \times 1$  km ATPOL squares given in parentheses). The *Distribution* section contains published and unpublished data on specimens collected and/or examined by the authors. The presented localities are exact quotations (or their English translations) from herbarium labels, and include the collection number and KRAM accession number. Localities are listed alphabetically by their ATPOL grid square. The names of forests and peat bogs follow those illustrated in Figure 3, including numbers in parentheses: I–XII for forests and 1–30 for peat bogs. The *Remarks* section gives additional information about a given species, including (for the rarest fungi) its species distribution in Poland.

### Abbreviations:

*Alin* – *Alnetum incanae* Lüdi 1921

*ALPa* – *Alno-Padion* Knapp 1942 em. Medw.-Korn. ap Mat. et Bor. 1957 (= *AIUl* – *Alno-Ulmion* Br.-Bl. et R.Tx., Matuszkiewicz 2005)

*CvP* – *Calamagrostio villosae-Pinetum* Stasz. 1958

*PrS* – *Pino rhaeticae-Sphagnetum* Stasz. 1992

*VmP* – *Vaccinio myrtilli-Pinetum* Juraszek 1928

*VuP* – *Vaccinio uliginosi-Pinetum* Kleist 1929

Dolina Białki p.a. – Dolina Białki Natura 2000 protected area

KON – Kotlina Orawsko-Nowotarska basin

Red List – Red list of the macrofungi in Poland (Wojewoda and Ławrynowicz 2006)

! – reported for the first time from Poland

\* – reported for the first time from the KON

? – at the ATPOL grid signature, denotes imprecise location

\* *Acanthobasidium norvegicum* (J. Erikss. & Ryvarden) Boidin, Lanq., Cand., Gilles & Hugueney – dome of peatbog; *Calluna vulgaris* twigs; saprobic; in summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'54.2"N, 19°42'53.8"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. D. Karasiński 5878 (KRAM F-58559); Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'53.3"N, 19°42'53.7"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. D. Karasiński 5889 (KRAM F-58558).

REMARKS. Probably a rare species known mainly from Northern Europe. Easy to recognize due to its particular substrate and consistently 2-sterigmate basidia. Basidia with protuberances seem to be rare and difficult to detect; not observed in the examined specimen. The species has recently been reported from the first locality in Poland in the Puszcza Białowieska primeval forest (Yurchenko and Wołkowycki 2022).

\**Agaricus arvensis* Schaeff. – coniferous forest; on the ground; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 38-38**: edge of Las Baligówka (IV) forest, 4 km SE of Piekielnik village, 650–670 m, ca 17 km SW of Nowy Targ, 1 Aug. 1970, *leg. I. Jalocha*, KRAM F-32560; **DG 38-49**: Las Baligówka (IV) forest, near Czarny Dunajec, coniferous forest, on the ground, 7 July 1970, *leg. I. Jalocha*, KRAM F-10988.

\**Agaricus sylvicola* (Vittad.) Peck s. str. – coniferous forest; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest, on the ground, 18 Aug. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-10989 (as *A. abruptibulbus* Peck.).

\**Agrocybe dura* (Bolton) Singer – alder thicket; on the ground; saprobic; summer (June); rare (1).

DISTRIBUTION. **EG 30-24**: between Szaflary Dolne and Nowy Targ, on bank of Biały Dunajec river, *AlPa*, on the ground, 11 June 1971, *leg. I. Jalocha*, KRAM F-11334.

\**Agrocybe praecox* (Pers.: Fr.) Fayod – forest, meadow, riverbank; on the ground; saprobic; spring and summer (May, June); rare (4).

DISTRIBUTION. **EG 30-03**: near Nowy Targ, on bank of Czarny Dunajec river, on meadow, near road, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11293; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce-pine forest, in underwood (*Sorbus*, *Rubus*, *Vaccinium*), at road, 28 June 2012, *leg. B. Pleban*, KRAM F-57919; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 590 m, edge of pine-spruce forest and meadow, on the ground, 27 May 1986, *leg. W. Wojewoda*, KRAM F-26429; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'43.0"N, 20°07'39.9"E, *Myricaria germanica* shrubs, 24 May 2012, *leg. D. Karasiński* 7066 (KRAM F-58583).

\**Albatrellus confluens* (Fr.) Kotl. & Pouzar – E; coniferous forest; on the ground; mycorrhizal; autumn (Sept., Oct.); rare (2).

DISTRIBUTION. **DG 38-49**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest (*Picea*, *Pinus*), on the ground, 2 Oct. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11065; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-32609.

REMARKS. The species was collected only before 2010. Anthropogenic changes in natural habitats and collecting by local people for culinary purposes are probably the reasons why this species and also *Albatrellus ovinus* (see below) are now difficult to find in the KON.

*Albatrellus ovinus* (Schaeff.) Murrill – E; coniferous forest; on the ground; mycorrhizal; summer to autumn (Aug.–Oct.); frequent (6).

DISTRIBUTION. **DG 38-49**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest (*Picea*, *Pinus*), on the ground, 2 Oct. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11066; **DG 39-48**: near Rogoźnik village, in coniferous forest (*Picea*, *Pinus*), on the ground, 3 Oct. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11068; **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest (*Picea*, *Pinus*), on the ground, 18 Aug. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11067; *leg. I. Jalocha & Z. Heinrich*, KRAM F-11069; in coniferous forest, on the ground, 18 Aug. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11064; **EG 31-22**: Bór Bielski (XII) forest, near Łopuszna, in coniferous forest (*Picea*, *Pinus*), on the ground, 14 Aug. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11070; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-32605; *leg. Z. Heinrich*, KRAM F-32608;



30 Aug. 1972, *leg. Z. Heinrich*, KRAM F-32606; *leg. Z. Heinrich*, KRAM F-32607; **EG 31-32**: Bór Bielski (XII) forest, spruce forest on right side of Łopuszna–Nowa Biała road, ca 2 km NW of Nowa Biała, ca 8 km SE of Nowy Targ, ca 590 m, on the ground, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-19089.

REMARKS. See remarks under *Albatrellus confluens*. Wojewoda (2003) provides the locality of this species from the KON, near Nowy Targ. This information concerns the above-mentioned collections, but the record does not allow an unambiguous assignment to a specimen.

\**Alutaceodontia alutacea* (Fr.) Hjortstam & Ryvarden – pine forest; on wood; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-47**: Las Gajka (III) forest, 49°27'04.2"N, 19°47'22.5"E, pine forest, on dead attached *Pinus sylvestris* branch, 22 May 2012, *leg. D. Karasiński* 6999.

\**Amanita ceciliae* (Berk. & Broome) Bas – coniferous forest; on the ground; mycorrhizal; summer (July); rare (1).

DISTRIBUTION. **DG 38-26**: small forest near Piekienik, ca 6 km E of Jabłonka, 620–680 m, ca 20 km W of Nowy Targ, 3 July 1970, *leg. I. Jalocha*, KRAM F-32565.

*Amanita citrina* (Schaeff.) Pers. f. *citrina* – pine forest; on the ground; mycorrhizal; rare (1).

DISTRIBUTION: ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004).

*Amanita excelsa* (Fr.: Fr.) Bertill. f. *excelsa* – coniferous forest; on the ground; mycorrhizal; summer (July); rare (2).

DISTRIBUTION. **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, underwood (*Sorbus*, *Salix*), below *Sphagnum* and *Vaccinium*, on the ground, 15 July 2012, *leg. A. Sadowska*, KRAM F-49596; *leg. M. Pilch*, KRAM F-49597; *leg. M. Pilch*, KRAM F-49598; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004).

*Amanita fulva* (Schaeff.: Fr.) Fr. – coniferous and mixed forest; on the ground; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, under trees (Wojewoda et al. 2004); **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus* and sparse *Sorbus*, *Betula*, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49511.

*Amanita muscaria* (L.: Fr.) Pers. var. *muscaria* – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (3).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, *VuP*, on the ground, under trees (Wojewoda et al. 2004); **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 18 Aug. 1970, *leg. I. Jalocha*, KRAM F-32566; 19 Aug. 1970, *leg. I. Jalocha*, KRAM F-32561; **EG 31-33**: Bór Harkłowski (XIII) forest, near Łopuszna, ca 10 km SE of Nowy Targ, 570–580 m, 8 Sept. 1972, *leg. I. Jalocha*, KRAM F-32558.

*Amanita muscaria* (L.: Fr.) Pers. var. *regalis* Fr. – V; coniferous forest; on the ground; mycorrhizal; summer (July); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, 650–670 m, ca 17 km SW of Nowy Targ, 6 July 1970, *leg. I. Jalocha*, KRAM F-32568; ?**EG 30-25**: Bór na Czerwonem (24)

Nature Reserve (Grodzińska et al. 1973 as *A. regalis* (Fr.) Michael.); *CvP*, on the ground under trees (Wojewoda et al. 2004 as *A. regalis* (Fr.) Michael.).

***Amanita pantherina*** (DC.: Fr.) Krombh. – pine forest; on the ground; mycorrhizal; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve; *CvP*; on the ground, under trees (Wojewoda et al. 2004).

\****Amanita porphyria*** Alb. & Schw.: Fr. – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (3).

DISTRIBUTION. **DG 38-26**: forest near Piekielnik, ca 6 km E of Jabłonka, 620–680 m, ca 20 km W of Nowy Targ, 3 Aug. 1970, *leg. I. Jalocha*, KRAM F-32573; **DG 38-43**: Bór koło Chyżnego (II) forest, N part (near Borowy Potok), spruce forest with sparse *Pinus*, in brushwood (*Salix* and young *Picea*), 17 Sept. 2011, *leg. M. Lysek*, KRAM F-58018; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-32569.

***Amanita rubescens*** Pers.: Fr. – coniferous and mixed forest; on the ground, under trees; mycorrhizal; summer to autumn (July–Sept.); frequent (9).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'8.67"E, 678.5 m, edge of spruce forest with young *Pinus* and *Picea*, on the ground in undergrowth of grass, moss and *Vaccinium* sp., 14 July 2012, *leg. M. Pilch*, KRAM F-49599; *leg. M. Pilch*, KRAM F-59600; **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea abies* and *Populus tremula*, 17 Sept. 2011, *leg. G. Końska*, KRAM F-58013; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekielnik village, 650–670 m, ca 17 km SW of Nowy Targ, 6 July 1970, *leg. I. Jalocha*, KRAM F-32567; **DG 38-73**: Bór koło Chyżnego (II) forest, *CvP*, on the ground, 31 July 1984, *leg. W. Wojewoda*, KRAM F-25565; **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, in spruce-fir forest, on soil in brushwood (*Sorbus*, *Salix*, *Sphagnum*), 15 July 2012, *leg. M. Sadowski*, KRAM F-49594; *leg. M. Pilch*, KRAM F-49595; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, pine forest, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-32556; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground, under trees (Wojewoda et al. 2004); **EG 31-15**: Bór Harkłowski (XIII) forest, N part, S of Harkłowa, pine-spruce forest, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-58015; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-32557; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25930.

\****Amanita submembranacea*** (Bon) Gröger – coniferous forest on peatbog; on the ground; mycorrhizal; summer (June); rare (1).

DISTRIBUTION. **DG 39-35**: Puścizna Długopole (20) peatbog with coniferous trees, SW of Długopole, SW part of peatbog, 49°27'36.36"N, 19°54'15.51"E, 637.9 m, 29 June 2011, *leg. M. Lysek*, KRAM F-58016.

***Amanita vaginata*** (Bull.: Fr.) Lam. – coniferous and mixed forest; on the ground; mycorrhizal; summer to autumn (June–Nov.); frequent (6).

DISTRIBUTION. **DG 38-06**: forest near Piekielnik village, in mixed forest, 13 Oct. 1971, *leg. I. Jalocha*, KRAM F-32553; **DG 38-26**: small forest near Piekielnik, 3 July 1970, *leg. I. Jalocha*, KRAM F-32572; **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, N part, pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, *leg. G. Końska*, KRAM F-58009; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekielnik village, 650–670 m, ca 17 km SW of Nowy Targ, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32570; 6 July 1970, *leg. I. Jalocha*, KRAM F-32571; Las Baligówka (IV) forest, coniferous forest (*Picea abies*, *Pinus sylvestris*), on the ground, 30 June 1971, *leg. I. Jalocha*, KRAM F-11377; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, 21 July 1971, *leg. I. Jalocha*,

KRAM F-32677; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, 8 Nov. 1972, *leg. Z. Heinrich*, KRAM F-32555; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, 20 Sept. 1973, *leg. Z. Heinrich*, KRAM F-32678; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, under trees (Wojewoda et al. 2004); **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'03.7"N, 19°59'57.5"E, 630.0 m, 17 July 2011, *leg. Z. Heinrich*, KRAM F-57981.

***Ampheinema byssoides*** (Pers.) J. Erikss. – forest and brushwood; on bark and wood; mycorrhizal; spring, summer and autumn (May, June, Aug., Oct., Nov.); frequent (9).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 2 km SW of Chyżne, 49°24'50.0"N, 19°39'09.3"E, spruce-pine forest, on bark of fallen *Picea abies* trunk, 23 May 2012, *leg. D. Karasiński* 7058 (KRAM F-58437); Las Brzegi (I) forest, ca 2 km SW of Chyżne, 49°24'49.8"N, 19°39'10.0"E, spruce-pine forest, on bark of fallen *Picea abies* trunk, 23 May 2012, *leg. D. Karasiński* 7059 (KRAM F-58569); **DG 38-13**: Pieklińnik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Picea abies* branch, 8 Oct. 2012, *leg. D. Karasiński* 8863 (KRAM F-58265); **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, on trunk of *Juniperus communis*, 13 Oct. 1971, *leg. Z. Heinrich*, KRAM F-12061; Las Baligówka (IV) forest, ca 4 km W of Czarny Dunajec, ca 670 m, spruce forest with admixture of *Pinus*, on fallen twigs of *Pinus*, 15 June 1982, *leg. W. Wojewoda*, KRAM F-19075; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.9"N, 19°41'51.3"E, spruce forest, on well-decayed stump of *Picea abies*, 23 May 2012, *leg. D. Karasiński* 7031 (KRAM F-58338); **DG 39-20**: Puścizna Rękowiańska (19) peatbog, ca 4 km NW of Czarny Dunajec, edge of peatbog near road to Jabłonka, small pine forest, on fallen twigs and needles of *Pinus*, 15 June 1972, *leg. W. Wojewoda*, KRAM F-19074; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, in coniferous forest, on lying *Pinus sylvestris* trunk, 8 Nov. 1972, *leg. Z. Heinrich*, KRAM F-13566; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on fallen dead twigs and remains of needles and leaves (Wojewoda et al. 2004); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.5"N, 20°02'04.2"E, on bark and wood of fallen *Pinus* branch, 17 Oct. 2011, *leg. D. Karasiński* 6605 (KRAM F-58383); *leg. D. Karasiński* 6609 (KRAM F-58356); **EG 31-36**: between Dębno and Nowa Biała, on bank of Białka stream, ca 10 km SE of Nowy Targ, ca 580 m, on burnt twigs and mosses, 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25918; **EG-31-52**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.3"N, 20°07'40.9"E, willow brushwood on bank of Białka river, on bark and wood of fallen *Salix eleagnos* branch, 24 May 2012, *leg. D. Karasiński* 7084 (KRAM F-58252).

***Ampulloclitocybe clavipes*** (Pers.: Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys – coniferous forest; on the ground; saprobic; summer and autumn (Aug.–Oct.); frequent (10).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, *leg. H. Komorowska*, KRAM F-49632; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Pieklińnik village, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-25720; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, forest with *Pinus sylvestris*, *Vaccinium myrtillus*, *Calamagrostis villosa*, *Deschampsia* and *Holcus*, on the ground, 19 Sept. 2000, *leg. W. Wojewoda*, KRAM F-50609 (Wojewoda et al. 2004, as *Clitocybe clavipes* (Pers.: Fr.) P. Kumm.); Bór na Czerwonem (24) Nature Reserve, edge of forest, 49°27'55.27"N, 20°02'22.73"E, 604.9 m, in *Vaccinium* shrubs, 13 Aug. 2011, *leg. M. Sadowski*, KRAM F-49948; **EG 30-40**: Pasieczny Las (VII) forest, ca 2 km E of Rogoźnik, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-25721; **EG 30-48**: Bór village, E of Szaflary, near Nowy Targ–Białka Tatrzańska road, 49°26'41.88"N, 20°04'30.73"E, 627.1 m, pine-spruce forest with *Betula* and *Vaccinium*, 13 Aug. 2011, *leg. H. Komorowska*, KRAM F-49947; **EG 31-15**: Bór Harkłowski (XIII) forest, N part, S of Harkłowa, pine-spruce forest, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49626; *leg. M. Lysek*, KRAM F-49627; **EG 31-22**: Bór Bielski (XII, Brzezie) forest, NE part, near Łopuszna–Nowa Biała road, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49625; **EG 31-24**: Bór Harkłowski (XIII) forest, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-32258; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, 18 Aug. 1970, *leg. I. Jalocha*, KRAM F-32257; 8 Sept. 1972, *leg. I. Jalocha*, KRAM F-25719; *leg. Z. Heinrich*, KRAM F-32256; **EG 31-27**: between Dębno and Nowa Biała, on bank of Białka stream, ca 10 km SE of Nowy Targ, ca 580 m, in coniferous forest (*Picea abies*,

*Pinus sylvestris*), 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25920; **EG 31-42**: Bór Bielski (XII) forest, near Nowa Biała, 30 Aug. 1977, leg. Z. Heinrich & W. Wojewoda, KRAM F-55691; leg. H. Komorowska, KRAM F-55690; leg. H. Komorowska, KRAM F-55714.

***Amylostereum areolatum*** (Chaillet) Boidin – coniferous forest; on bark and wood of *Picea abies*; saprobic; spring, summer and autumn (Apr., May, July, Sept.); frequent (**10**).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 2 km SW of Chyżne, spruce-pine forest, on rotten *Picea abies* stump, 23 May 2012, leg. D. Karasiński 7063 (KRAM F-58662); **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'31.71"N, 19°39'47.79"E, 639.9 m, spruce forest, in brushwood (*Sorbus*, *Rubus* and mosses, *Vaccinium*, *Fragaria* sp.), on bark of fallen tree, 14 July 2012, leg. M. Pilch, KRAM F-49586; **DG 38-38**: Las Baligówka (IV) forest, 49°27'23.6"N, 19°47'57.5"E, spruce forest, on *Picea abies* stump, 22 May 2012, leg. D. Karasiński 6990 (KRAM F-58300); Las Baligówka IV forest, between Piekienik and Czarny Dunajec, on edge of coniferous forest, on *Picea abies* stump, 14 May 1971, leg. Z. Heinrich, KRAM F-11216; **EG 30-01**: Bór na Grełu (VIII) forest, near Ludźmierz, in coniferous forest, on *Picea abies* stump, 31 May 1971, leg. W. Wojewoda, KRAM F-11306; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on dead trunk of coniferous tree (*Picea abies*), 25 May 1971, leg. I. Jalocha, KRAM F-11243; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973); CvP, on *Picea abies* stumps (Wojewoda et al. 2004); **EG 30-64**: near Szaflary, in coniferous forest (*Picea*, *Pinus*), on rotten stump, 25 May 1971, leg. I. Jalocha, KRAM F-11258; **EG 31-14**: Bór Harkłowski (XIII) forest, ca 1 km S of Harkłowa, ca 10 km E of Nowy Targ, ca 570 m, spruce forest, *Picea abies* trunk, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-25247; **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, *Picea abies* trunk, 7 Apr. 1980, leg. H. Komorowska, KRAM F-25264; spruce forest, on *Picea abies* trunk, 24 May 1984, leg. W. Wojewoda, KRAM F-25617; Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, on rotten *Picea abies* stump, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25280; **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, *Picea abies* trunk, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25607; Bór Bielski (XII) forest, ca 2 km NW of Nowa Biała, ca 8 km of Nowy Targ, ca 600 m, spruce forest, trunk of *Picea abies*, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-25248.

***Amylostereum laevigatum*** (Fr.) Boidin – coniferous, mixed forest; on bark and wood of *Juniperus communis*; saprobic; from spring to autumn (Apr., Aug., Oct., Nov.); frequent (**6**).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, small forest near Piekienik village, in coniferous forest, on cone of *Juniperus communis*, 13 Oct. 1971, leg. Z. Heinrich & W. Wojewoda, KRAM F-12048; leg. Z. Heinrich & W. Wojewoda, KRAM 12049; **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, in mixed forest, on trunk of *Juniperus communis*, 13 Oct. 1971, leg. Z. Heinrich & W. Wojewoda, KRAM F-12050; **DG 38-42**: Bór koło Chyżnego (II) forest, between Jabłonka and Piekienik, near Pirogówka, ca 630 m, in coniferous forest (*Pinetum*), on dead standing *Juniperus communis* trunk, 14 Apr. 1972, leg. Z. Heinrich, KRAM F-12689; **DG 38-69**: Las Cikówka (V) forest, ca 2 km SW of Czarny Dunajec, ca 16 km SW of Nowy Targ, ca 700 m, pine-spruce forest, on dead attached *Juniperus communis* twig, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-25609; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 7 km SE of Jabłonka, ca 660 m, pine-spruce forest, on on dead *Juniperus communis* twigs lying on the ground, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25608; **EG 30-25**: Bór na Czerwonem (X) forest, in coniferous forest, near Nowy Targ, on living twig of *Juniperus communis*, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-13567; **?EG 30-25** Bór na Czerwonem (24) Nature Reserve, forest edges (*PrS* and *VuP*) on bark and wood of fallen and dead attached *Juniperus communis* branches (Wojewoda et al. 2004).

\* ***Antrodia heteromorpha*** (Fr.) Donk – **R**; spruce forest; on wood of *Picea abies*; saprobic; spring and autumn (May, June, Sept.); rare (**3**).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'21.5"N, 19°47'58.7"E, spruce forest, on fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6987 (KRAM F-58634); Las Baligówka (IV)

forest, N part, NW of Czarny Dunajec, on *Picea* stump, 18 June 2010, leg. Z. Heinrich, KRAM F-59121; **DG 48-02**: SE of Chyżne, Bór koło Chyżnego (II) forest (Graniowa Droga), 49°23'32.52"N, 19°43'05.03"E, 706.9 m, in clearing in spruce forest with *Sphagnum*, *Vaccinium myrtillus*, *V. vitis-idaea* and planted *Abies alba*, on trunk, 2 Sept. 2011, leg. H. Komorowska & M. Pilch, KRAM F-49745; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, 2 May 2011, leg. M. Lysek, KRAM F-58086.

\****Antrodia serialis*** (Fr.) Donk – coniferous forest; on stumps; saprobic; spring and autumn (Apr., May, Sept.); rare (3).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I) forest (Sławny Łęk), ca 4 km SE of Chyżne, 49°24'00.5"N, 19°42'01.4"E, coniferous forest, on stump of old *Picea abies* tree, 23 May 2012, leg. D. Karasiński 7053b (KRAM F-58660); **EG 30-54**: near Szafłary, on bank of Biały Dunajec river, on rotten *Picea abies* stump, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-11195; **EG 31-14**: Bór Harkłowski (XIII) forest, pine-spruce forest near Harkłowa, ca 10 km SE of Nowy Targ, ca 570 m, on stump of coniferous tree, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-27097.

\****Antrodiella romellii*** (Donk) Niemelä – R; alder forest; on wood; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-53**: Dolina Białki p.a., Nowa Biała, forest on bank of Białka river, alder forest (*Alnus*, *Salix* and young *Picea*), on unidentified wood of fallen trunk, 19 July 2010, leg. H. Komorowska, KRAM F-56715.

\****Aphanobasidium pseudotsugae*** (Burt) Boidin & Gilles – coniferous forest; on bark and wood; saprobic; spring, summer and autumn (May, June, Oct.); frequent (6).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekelnik, 49°28'01.8"N, 19°44'48.3"E, on rotten *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8951a (KRAM F-58471); coniferous forest, on fallen *Picea abies* branch, 9 Oct. 2012, leg. D. Karasiński 8961 and 8963a (KRAM F-58466); **DG 38-47**: Las Gajka (III) forest, 49°27'07.2"N, 19°47'19.5"E, pine forest, on fallen trunk of young *Pinus sylvestris* tree, 22 May 2012, leg. D. Karasiński 6998 (KRAM F-58435); Las Gajka (III) forest, 49°26'54.4"N, 19°47'29.6"E, pine forest, on wood of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7014; **DG 38-90**: Las Brzegi (I) forest (Sławny Łęk), ca 4 km SE of Chyżne, 49°24'03.6"N, 19°41'50.8"E, spruce forest, on strongly rotted wood of fallen *Picea abies* trunk, 23 May 2012, leg. D. Karasiński 7022 (KRAM F-58646); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'45.6"N, 20°02'25.3"E, on bark of fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. D. Karasiński 6634 (KRAM F-58434); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.7"N, 20°02'03.6"E, on fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6607 (KRAM F-58436); leg. D. Karasiński, KRAM F-58302; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'47.5"N, 20°08'47.7"E, pine-spruce forest, on bark of fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7193 (KRAM F-58606); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.7"N, 20°08'45.0"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7174 (KRAM F-58600).

***Armillaria mellea*** (Vahl: Fr.) P. Kumm. s.l. – spruce forest, alder brushwood; on more or less rotten stumps; parasitic; autumn (Sept., Oct.); rare (4).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekelnik village, on stump, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-32251; **DG 39-48**: Rogoźnik, in alder brushwood, on bank of Wielki Rogoźnik stream, 3 Oct. 1970, leg. I. Jalocha, KRAM F-32252; **DG 39-55**: on edge of Soślina (VI, Soślina) forest, near Rogoźnik village, on stump, 3 Oct. 1970, leg. I. Jalocha, KRAM F-32253; leg. I. Jalocha, KRAM F-32254; **EG 31-31**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, spruce forest, on rotten *Picea* stump, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-32255.

REMARKS. Kulig (1952) and Twarowski and Twarowska (1959) recorded this species from the KON, without any specific location.

**Arrhenia epichysium** (Pers.: Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys – **V**; coniferous forest; on rotten stumps; saprobic; summer (July); rare (**2**).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest near Piekienik, pine-spruce forest, on rotten stump of coniferous tree, 3 July 1970, leg. Z. Heinrich, KRAM F-25811; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CyP*, on rotten conifer stump (Wojewoda et al. 2004 as *Omphalina epichysium* (Pers.: Fr.) Quéł.).

REMARKS. The species is in the Red List as *O. epichysium*.

**Arrhenia gerardiana** (Peck) Elborne – **V**; raised peatbog, coniferous forest; in *Sphagnum*; saprobic or parasitic on mosses; summer and autumn (June–Sept.); frequent (**6**).

DISTRIBUTION. **DG 37-27**: near Otrębowski Brzegi (28) peatbog, SW of Jabłonka, 49°28'13.52"N, 19°38'59.25"E, 617,6 m, exploitation hollow (cutover peatland), meadows and fields, in a hollow with *Salix*, among mosses and *Sphagnum*, 14 July 2012, leg. M. Pilch, KRAM F-49810; **DG 39-39**: Przymiarki (22) peatbog, SW of Ludźmierz, in *Sphagnum*, 22 June 1970, leg. W. Wojewoda, KRAM F-25810 (Pl. V, 3); **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973, as *Omphalina sphagnicola* (Berk.) M.M. Moser); *PrS* in *Sphagnum* sp. (Wojewoda et al. 2004, as *O. sphagnicola* (Berk.) M.M. Moser); **EG 30-30**: Przymiarki (22) peatbog, near Ludźmierz, ca 4.5 km SW of Nowy Targ, in *Sphagnum*, 17 July 1985, leg. Z. Heinrich, KRAM F-26130; **EG 30-44**: on edge of Bór na Czerwonem (X) forest, in mossy place (*Sphagnum*), in moss, 11 June 1971, leg. Z. Heinrich, KRAM F-11367; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, pine-spruce forest, in *Sphagnum*, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-25809.

REMARKS. The species is in the Red List as *O. sphagnicola*.

\***Arrhenia onisca** (Fr.: Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys – **E**; raised peatbog, marshy pine-spruce forest; in *Sphagnum* and other mosses; saprobic or parasitic; summer and autumn (July, Oct.); rare (**4**).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, marshy pine-spruce forest, ca 1 km S of Piekienik village, in mossy place, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-25804; **DG 39-21**: Puścizna Rękowańska (19) peatbog, ca 3 km NW of Czarny Dunajec village, in *Sphagnum*, 11 Oct. 1960, leg. W. Wojewoda, KRAM F-25805; **DG 39-39**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 4.5 km SW of Nowy Targ, in *Sphagnum*, 17 July 1985, leg. Z. Heinrich, KRAM F-26136; **EG 30-30**: Przymiarki (22) peatbog, S of Ludźmierz, 49°27'23.84"N, 19°58'25.76"E, 616.6 m, on peat dome, 17 July 2011, leg. G. Końska, KRAM F-59349; leg. H. Komorowska, KRAM F-59348; leg. H. Komorowska, KRAM F-59350.

REMARKS. The species is in the Red List as *Omphalina oniscus* (Fr.) Gillet.

**Arrhenia philonotis** (Lasch) Redhead, Lutzoni, Moncalvo & Vilgalys – **E**; raised peatbog, edge of forest; in *Sphagnum*; saprobic; summer (June); rare (**2**).

DISTRIBUTION. **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973, as *Omphalina philonotis* (Lasch) Quéł.); *PrS* in *Sphagnum* sp. (Wojewoda et al. 2004, as *O. philonotis*; **EG 30-34**: on edge of Bór na Czerwonem (X) forest, in mossy place (*Sphagnum*), in moss, 11 June 1971, leg. I. Jalocho, KRAM F-11362.

REMARKS. In Poland the species was recorded only from Tatra National Park and from central Poland (peatbog communities) (Nespiak 1962 as *O. philonotis*; Grzesiak et al. 2015 as *O. philonotis*). The species is in the Red List as *O. philonotis*.

\***Athelia acrospora** Jülich – spruce forest; on wood of coniferous trees; saprobic; spring (May); rare (**1**).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I) forest (Sławny Łęk), ca 4 km SE of Chyżne, 49°24'03.0"N, 19°41'50.7"E, spruce forest, on wood of fallen trunk of young *Picea abies* tree, 23 May 2012, leg. D. Karasiński 7026 (KRAM F-58493).

REMARKS. Very close to *Athelia epiphylla* Pers. but differs by having shorter basidia, slightly smaller basidiospores with a tendency to be pip-shaped, and narrower subicular hyphae without encrustation. The species was known from five localities in Poland.

\**Athelia alnicola* (Bourdot & Galzin) Jülich – willow brushwood; on bark and wood; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.6"N, 20°07'40.6"E, willow brushwood on bank of Białka river, on bark and wood of fallen *Salix eleagnos* trunk, 24 May 2012, leg. D. Karasiński 7092 (KRAM F-58494).

REMARKS. In Poland the species was recorded only from Kampinos National Park (Karasiński et al. 2015) and the Kashubian Landscape Park (Karasiński 2011, 2016). Wojewoda (2003) considered *A. alnicola* to be a synonym of *A. epiphylla*.

\**Athelia bombacina* Pers. – coniferous forest; on bark; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekelnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on bark of fallen *Picea abies* twig, 9 Oct. 2012, leg. D. Karasiński 8932 (KRAM F-58501).

REMARKS. In Poland the species was recorded only from the Kashubian Landscape Park (Karasiński 2011, 2016).

\**Athelia decipiens* (Höhn. & Litsch.) J. Erikss. – coniferous forest and peat bogs; on wood; saprobic; spring, summer and autumn (May, June, Aug., Oct.); rare (5).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'29.3"N, 19°48'29.9"E, spruce forest, on bark and wood of fallen *Picea abies* twig, 22 May 2012, leg. D. Karasiński 6970 (KRAM F-58499); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'54.2"N, 19°42'53.8"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. D. Karasiński 5878b; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'47.0"N, 20°02'19.3"E, on bark of fallen *Pinus sylvestris* trunk (coexisting with *Fomitopsis pinicola*), 17 Oct. 2011, leg. D. Karasiński 6594 (KRAM F-58498); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'43.3"N, 20°08'43.6"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7198 (KRAM F-58502); **EG 31-32**: Bór Bielski (XII) forest (Brzezie), Łopuszna, 49°27'22.7"N, 20°08'01.8"E, spruce forest with pine, on fallen *Pinus sylvestris* branch, 24 May 2012, leg. D. Karasiński 7103 (KRAM F-58500).

*Athelia epiphylla* Pers. – pine and mixed forest; on fallen twigs and leaves; saprobic; summer and autumn (June, Nov.); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest (Szałas), ca 3 km SE of Jabłonka, 49°27'21.2"N, 19°44'12.4"E, mixed forest with pine, on bark of fallen *Pinus sylvestris* twig, 12 June 2012, leg. D. Karasiński 7132 (KRAM F-58626); **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, pine forest, on dead *Pinus sylvestris* twig lying on the ground, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-25610; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *VuP*, on fallen twigs and leaves (Wojewoda et al. 2004).

REMARKS. Determination of the actual distribution of this species in Poland requires revision of the herbarium materials. Wojewoda (2003) considered it to be a collective species including such taxa as *A. alnicola*, *A. macrospora*, *A. nivea*, *A. ovata*, *A. salicum* and *A. tenuispora*. Narrowly defined, the species was recorded only from Kampinos National Park (Karasiński et al. 2015) and the Kashubian Landscape Park (Karasiński 2011, 2016).

**Auriscalpium vulgare** Gray – coniferous forest; on fallen cones; saprobic; spring and summer (May, July, Aug.); rare (5).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, ca 15 km SW of Nowy Targ, ca 680 m, young pine forest, right bank of Czarny Dunajec river, on fallen *Pinus sylvestris* cones partly buried in soil 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25590; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on fallen cones of *Pinus sylvestris* (Wojewoda et al. 2004); **EG 30-31**: Bór Nowotarski (IX) forest, W part (Do Boru), *VuP*, 49°27'34.68"N, 19°59'23.49"E, 597.7 m, on litter of coniferous tree, on cone, 2 May 2011, leg. *M. Sadowski*, KRAM F-58045; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part (near Łopuszna), *CvP*, forest by wayside, 49°28'02.04"N, 20°08'29.99"E, 587.7 m, on cone, near old trunk, 3 May 2011, leg. *A. Sadowska*, KRAM F-58093; **EG-31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'27.9"N, 20°12'11.5"E, on cone of pine, 21 July 2012, leg. *D. Karasiński* 7500 (KRAM F-58455).

\***Baeospora myosura** (Fr.: Fr.) Singer – coniferous forests; on cones; saprobic; spring, summer and autumn (May, Aug., Sept., Nov.); rare (4).

DISTRIBUTION. **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula ?pubescens*), on *Pinus sylvestris* cone, 11 Nov. 2011, leg. *A. Sadowska*, KRAM F-49461; leg. *M. Sadowski*, KRAM F-49460; **DG 38-90**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce, mosses and *Vaccinium*, on cones, 2 Sept. 2011, leg. *H. Komorowska*, KRAM F-49861; on *Picea* cone, leg. *M. Pilch*, KRAM F-49999; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, edge of forest, in grass, under *Pinus*, on cone, 2 May 2011, leg. *M. Łysek*, KRAM F-58062; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, NE part, 49°27'30.55"N, 20°07'56.61"E, 586.3 m, spruce forest with admixture of *Pinus sylvestris*, in *Urtica dioica* undergrowth, or only spruce needles, also wet (swampy) places with *Sphagnum*, on *Picea* cone, 13 Aug. 2011, leg. *H. Komorowska*, KRAM F-56691.

\***Basidiodendron cinereum** (Bres.) Luck-Allen – willow brushwood; on wood; saprobic; spring (May); rare (1),

DISTRIBUTION. **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'41.7"N, 20°07'42.9"E, willow brushwood on bank of Białka river, on wood of fallen *Salix eleagnos* trunk, 24 May 2012, leg. *D. Karasiński* 7068 (KRAM F-58510).

\***Basidioradulum radula** (Fr.) Nobles – mixed forest; on fallen trunk; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, in mixed forest (*Pinus*, *Picea*, *Betula* sp.), on dead trunk of *Betula* sp., 17 Oct. 1970, leg. *I. Jalocha*, KRAM F-11099.

**Bjerkandera adusta** (Willd.) P. Karst. – deciduous, mixed and coniferous forest; on wood of deciduous trees, rarely on conifers; saprobic; spring – autumn (Apr.–June, Aug., Sept.); frequent (10).

DISTRIBUTION. **DG 39-48**: Rogoźnik village, ca 8 km SW of Nowy Targ, on *Salix* sp. trunk, ca 620 m, 7 June 1972, leg. *Z. Heinrich*, KRAM F-27211; **DG 49-11**: Ciche, ca 6 km SW of Czarny Dunajec village, ca 17 km of Nowy Targ, ca 700 m, on bank of Cichy stream, *Alin*, on *Alnus incana* trunk, 24 Aug. 1984, leg. *W. Wojewoda*, KRAM F-27100; **EG 30-10**: between Ludźmierz and Nowy Targ, on bank of Czarny Dunajec river, ca 2.5 km SW of Nowy Targ, ca 600 m, *Alin*, on deciduous tree, 1 Sept. 1983, leg. *Z. Heinrich* & *H. Komorowska*, KRAM F-27098; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on stump of deciduous tree (Wojewoda et al. 2004); **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szafłary), 49°26'44.67"N, 20°00'37.5"E, 564.5 m, young spruce forest with old *Picea*, on trunk of coniferous tree (?*Picea*), 27 June 2012, leg. *H. Komorowska*, KRAM F-49603; **EG 30-44**: Bór na Czerwonem



(X) forest, in coniferous forest (*Pinus*), between Szaflary Dolne and Nowy Targ, on stump of coniferous tree (*Picea*), 11 June 1971, leg. Z. Heinrich, KRAM F-11326; near Szaflary Dolne, edge of coniferous forest, on *Picea abies* stump, 31 May 1971, leg. W. Wojewoda, KRAM F-11302; **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside, on fallen twig, 28 June 2011, leg. M. Lysek, KRAM F-56847; **EG 30-64**: Szaflary, ca 6 km S of Nowy Targ, ca 640 m, on *Picea abies* stump, 22 Apr. 1971, leg. Z. Heinrich, KRAM F-27099; **EG 31-53**: Dolina Białki p.a., forest on bank of river, between Nowa Biała and Krempachy, 49°26'12.19"N, 20°08'55.95"E, 599.4 m, on old trunk, 2 May 2011, leg. Mi. Lysek, KRAM F-58079; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.5"N, 20°07'40.5"E, willow brushwood on bank of Białka river, on bark of fallen *Salix eleagnos* trunk, 24 May 2012, leg. D. Karasiński 7091a (KRAM F-58334).

\***Bjerkandera fumosa** (Pers.) P. Karst. – deciduous brushwood; on deciduous wood; saprobic; spring (Apr.); rare (1).

DISTRIBUTION. **EG 30-64**: near Szaflary, in brushwood (*Alnus incana*) on bank of Biały Dunajec river, on stump of deciduous tree, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-11193.

\***Boletopsis leucomelaena** (Pers.) Fayod. – E; coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-14**: Bór Harkłowski (XIII) forest, SW of Harkłowa, pine-spruce forest, on the ground, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-10941.

**Boletus calopus** Pers.: Fr. – R; coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Oct.); rare (4).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve (Grodzińska et al. 1973); CvP (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, near Łopuszna, ca 1 km SW of village, coniferous forest, 1 Oct. 1967, leg. K. Szczepanek, KRAM F-18576; **EG 31-24**: Bór Harkłowski (XIII) forest, coniferous forest (*Picea abies*, *Pinus sylvestris*), on the ground, 18 Aug. 1970, leg. I. Jalocho, KRAM F-18577; **EG 31-32**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 600 m, 300 m from Nowa Biała–Łopuszna road (left side), coniferous forest (*Picea*, *Pinus*), on the ground, in litter of conifer needles, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-17126.

\***Boletus edulis** Bull.: Fr. – coniferous forest; on the ground; mycorrhizal; summer and autumn (June, Aug., Sept.); rare (4).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, between Czarny Dunajec and Piekelnik, near Nowy Targ–Jabłonka road, CvP, on the ground, 22 June 1970, leg. W. Wojewoda, KRAM F-26140; **DG 48-19**: between Chochołów and Koniówka, on right bank of Czarny Dunajec river, on the ground, under *Picea abies*, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-26144; **EG 31-20**: Bór Ostrowski (XI) forest, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-26142; Bór Ostrowski forest, ca 1 km SW of Łopuszna village, coniferous forest, on the ground, 8 Sept. 1972, leg. I. Jalocho, KRAM F-26141; **EG 31-42**: Bór Bielski (XII) forest, near Nowa Biała, coniferous forest, on the ground, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-26143.

**Boletus luridiformis** Rostk. var. *luridiformis* – coniferous forest; on the ground; mycorrhizal; autumn (Oct.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, between Czarny Dunajec and Piekelnik, coniferous forest, on the ground, 2 Oct. 1970, leg. I. Jalocho, KRAM F-26146; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve (Grodzińska et al. 1973 as *Boletus erythropus* Pers. s. Fries et auct. plur.); CvP, on the ground (Wojewoda et al. 2004); **EG 31-24**: Bór Harkłowski (XIII) forest, 1 Oct. 1967, leg. K. Szczepanek, KRAM F-26145.

\**Boletus pinophilus* Pilát & Dermek – coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.2"N, 19°42'07.5"E, on the ground under *Pinus sylvestris* and *Pinus xraetica*, 27 Aug. 2010, leg. D. Karasiński 5835.

\**Botrybasidium candicans* J. Erikss. – R; spruce forest, on bark and wood; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'29.8"N, 19°48'27.4"E, spruce forest, on bark and wood of fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6969 (KRAM F-58507).

\**Botrybasidium obtusisporum* J. Erikss. – R; spruce forest; on wood; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'21.3"N, 19°47'58.3"E, spruce forest, on fallen trunk of young *Picea abies* tree, 22 May 2012, leg. D. Karasiński 6985 (KRAM F-58504); Las Baligówka (IV) forest, 49°27'21.7"N, 19°47'59.3"E, spruce forest, on bark of fallen *Picea abies* branch, 22 May 2012, leg. D. Karasiński 6988 (KRAM F-58505); Las Baligówka (IV) forest, 49°27'19.5"N, 19°47'59.5"E, spruce forest, on fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6981 (KRAM F-58506).

*Botrybasidium subcoronatum* (Höhn. & Litsch.) Donk – coniferous and mixed forest; on bark and wood; saprobic; spring to autumn (May, June, Aug., Oct.); frequent (16).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, mixed forest, on fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8897 (KRAM F-58367); leg. D. Karasiński 8901b (KRAM F-58470); leg. D. Karasiński 8902a (KRAM F-58511); leg. D. Karasiński 8903 (KRAM F-58432); on fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8918 (KRAM F-58388); **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, on bark of rotten *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8938 (KRAM F-58278); **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.2"N, 19°44'12.6"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7131 (KRAM F-58313); leg. D. Karasiński 7139 (KRAM F-7139); Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.0"N, 19°44'16.5"E, mixed forest with pine, on rotten wood of fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7153 (KRAM F-58638); Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.9"N, 19°44'16.6"E, mixed forest with pine, on fallen *Pinus sylvestris* trunk, 12 June 2012, leg. D. Karasiński 7152 (KRAM F-58623); Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.2"N, 19°44'13.3"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7133 (KRAM F-58624); **DG 38-37**: Las Baligówka (IV) forest, 49°27'24.6"N, 19°47'57.2"E, spruce forest, on *Picea abies* stump remnants, 22 May 2012, leg. D. Karasiński 6991 (KRAM F-58580); Las Baligówka (IV) forest, 49°27'25.2"N, 19°47'52.9"E, spruce forest, on bark and wood of fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6993 (KRAM F-58296); **DG 38-38**: Las Baligówka (IV) forest, 49°27'23.5"N, 19°47'57.8"E, spruce forest, on fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6989 (KRAM F-58285); Las Baligówka (IV) forest, 49°27'20.2"N, 19°47'59.1"E, on fallen *Pinus sylvestris* branch, 22 May 2012, leg. D. Karasiński 6982 (KRAM F-58369); **DG 38-43**: Bór koło Chyżnego (II, Siedlcowa Soślina) forest, ca 3 km SE of Jabłonka, 49°27'23.4"N, 19°44'18.7"E, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7156 (KRAM F-58315); **DG 38-47**: Las Gajka (III) forest, 49°27'04.2"N, 19°47'22.5"E, pine forest, on fallen *Pinus sylvestris* branch, 22 May 2012, leg. D. Karasiński 7000 (KRAM F-58675); Las Gajka (III) forest, 49°27'04.1"N, 19°47'24.0"E, pine forest, on fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7001 (KRAM F-58267); Las Gajka (III) forest, 49°27'03.8"N, 19°47'25.3"E, pine forest, on fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7003 (KRAM F-58306); Las Gajka (III) forest, 49°27'02.0"N, 19°47'24.9"E, pine forest,

on wood of fallen *Pinus sylvestris* branch, 22 May 2012, *leg. D. Karasiński* 7006 (KRAM F-58563); Las Gajka (III) forest, 49°27'01.0"N, 19°47'25.5"E, pine forest, on wood of fallen *Pinus sylvestris* trunk, 22 May 2012, *leg. D. Karasiński* 7007 (KRAM F-58640); Las Gajka (III) forest, 49°27'03.8"N, 19°47'25.1"E, pine forest, on wood of fallen *Pinus sylvestris* branch, 22 May 2012, *leg. D. Karasiński* 7004 (KRAM F-58339); **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.9"N, 19°42'19.0"E, on wood of fallen *Pinus ×rhaetica* branch, 27 Aug. 2010, *leg. D. Karasiński* 5858; in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.3"N, 19°42'16.6"E, on wood of fallen *Pinus ×rhaetica* trunk, 27 Aug. 2010, *leg. D. Karasiński* 5851; **DG 38-61**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°26'00.8"N, 19°42'34.4"E, on wood of fallen *Pinus ×rhaetica* trunk, 27 Aug. 2010, *leg. D. Karasiński* 5865a; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'03.2"N, 19°41'51.2"E, spruce forest, on strongly rotted *Picea abies* stump, 23 May 2012, *leg. D. Karasiński* 7018 (KRAM F-58368); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.4"N, 19°41'54.2"E, *Alin*, on wood of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7044 (KRAM F-58309); *leg. D. Karasiński* 7047 (KRAM F-58251); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.2"N, 19°41'54.0"E, *Alin*, on burned wood of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7043 (KRAM F-58387); *leg. D. Karasiński* 7046 (KRAM F-58636); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.7"N, 19°41'52.3"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7034 (KRAM F-58637); on wood of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7037 (KRAM F-58639); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'02.7"N, 19°41'50.8"E, spruce forest, on bark of fallen *Picea abies* trunk, 23 May 2012, *leg. D. Karasiński* 7023 (KRAM bF-58676); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.6"N, 19°41'52.8"E, spruce forest, on rotten *Picea abies* trunk, 23 May 2012, *leg. D. Karasiński* 7041 (KRAM F-58674); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'02.7"N, 19°41'51.0"E, spruce forest, on bark of fallen *Picea abies* trunk, 23 May 2012, *leg. D. Karasiński* 7024 (KRAM F-58341); **EG 30-01**: Bór na Grelu (VIII) forest, near Ludźmierz, in coniferous forest (*Picea*, *Pinus*), on fallen twig (*Pinus sylvestris*?), 31 May 1971, *leg. W. Wojewoda*, KRAM F-11307; Bór na Grelu (VIII) forest, 2 km N of Ludźmierz, ca 4 km W of Nowy Targ, ca 620 m, spruce forest, on trunk of *Picea abies*, 31 May 1971, *leg. W. Wojewoda*, KRAM F-25249; **EG 30-23**: Bór Nowotarski (IX) forest, ca 3 km SW of Nowy Targ centre, spruce-pine forest, near shoe factory, on dead lying twig, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25251; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 620 m, pine forest, on rotten *Pinus sylvestris* stump, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-25612; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on rotten stumps (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*), between Szaflary Dolne and Nowy Targ, on fallen twig of *Pinus sylvestris*, 11 June 1971, *leg. Z. Heinrich*, KRAM F-11345; **EG-31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.0"N, 20°08'44.3"E, on fallen *Picea abies* trunk, 13 June 2012, *leg. D. Karasiński* 7188 (KRAM F-58314); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.3"N, 20°08'58.0"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7210 (KRAM F-58622); **EG 31-36**: between Dębno and Nowa Biała, on bank of Białka stream, ca 10 km SE of Nowy Targ, ca 580 m, in coniferous forest, on decayed stump, 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25915.

**Botryohypochnus isabellinus** (Fr.) J. Erikss. – pine forest, on stump, saprobic, rare (1).

DISTRIBUTION. **?EG 30-25** Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump (Wojewoda et al. 2004).

\***Bovista aestivalis** (Bonord.) Demoulin – riverside mountain alder and pasture; on the ground; saprobic; summer (Aug.); rare (2).

DISTRIBUTION. **DG 39-62**: on bank of Czarny Dunajec river, near Czarny Dunajec village, ca 670 m, ca 14 km SW of Nowy Targ, pasture, 2 Aug. 1970, *leg. W. Wojewoda*, KRAM F-26907; **DG 39-71**: between Czarny Dunajec and Podczerwone, edge of brushwood on bank of Czarny Dunajec river, *Alin*, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25697; *leg. W. Wojewoda*, KRAM F-25698.

\* *Bovista graveolens* Schwalb – E; field at road; on the ground; saprobic; spring (Apr.); rare (1).

DISTRIBUTION. **DG 38-21**: between Jabłonka and Piekielek, near road, ca 630 m, 14 Apr. 1972, *leg. I. Jalocho*, KRAM F-4279.

\* *Bovista nigrescens* Pers.: Pers. – pasture, meadow, riverbank, spruce forest; on the ground; saprobic; spring and summer (Apr., June–Aug.); frequent (12).

DISTRIBUTION. **DG 37-59**: meadow near Chyżne–Jabłonka road, 31 July 1984, *leg. J. Staszkiwicz*, KRAM F-25548; **DG 38-06**: between Piekielek and Jabłonka, ca 630 m, on meadow, 14 Apr. 1972, *leg. Z. Mirek*, KRAM F-13799; **DG 38-10**: Jabłonka, pasture, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25580; **DG 38-38**: meadow near Las Baligówka (IV) forest, ca 650 m, ca 3.5 km NW of Czarny Dunajec village, ca 16 km SW of Nowy Targ, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-26521; **DG 38-78**: meadow near Bór za Lasem Kaczmarka (13) peatbog, 4 km SW of Czarny Dunajec village, ca 13 km SW of Nowy Targ, ca 700 m, 31 July 1970, *leg. Z. Heinrich*, KRAM F-26523; **DG 39-18**: between Krauszów and Długopole, on pasture, 1 June 1979, *leg. H. Komorowska*, KRAM F-31874; **DG 39-25**: Puścizna Długopole (20) peatbog, NE of Czarny Dunajec, meadow (fields), 10 Aug. 2012, *leg. H. Komorowska*, KRAM F-49591; **DG 39-27**: Puścizna Franków (21) peatbog, near peat dome, 49°27'43"N, 19°56'07"E, hay meadow, near forest, 30 Aug. 2012, *leg. M. Piątek*, KRAM F-56843; **DG 39-51**: Czarny Dunajec, Mościckiego street, small young spruce forest, 49°26'44.92"N, 19°50'42.72"E, 671.3 m, 31 Aug. 2011, *leg. H. Komorowska*, KRAM F-49771; **DG 39-71**: between Czarny Dunajec and Podczerwone, edge of brushwood on bank of Czarny Dunajec river, *Alin*, on the ground, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25700; **DG 39-90**: near Podczerwone village, between Las Cikówka forest and Bory peatbog, on pasture, ca 710 m, 24 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25707; **EG 30-30**: pasture near Przymiarki (22) peatbog, near Ludźmierz, in vicinity of Nowy Targ, ca 620 m, 15 June 1982 (fragments of fruitbody from 1981), *leg. W. Wojewoda*, KRAM F-25699.

\* *Bovista plumbea* Pers.: Pers. – spruce and riparian forest, meadow and pasture; in grass; saprobic; spring to summer (Apr.–Aug.); frequent (12).

DISTRIBUTION. **DG 38-21**: between Jabłonka and Piekielek, ca 22 km W of Nowy Targ, ca 600–680 m, spruce forest, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-32644; **DG 38-42**: Bór koło Chyżnego (II) forest, between Jabłonka and Piekielek, near Pirogówka, ca 630 m, on meadow, 14 Apr. 1972, *leg. Z. Mirek*, KRAM F-13798; **DG 38-56**: Puścizna Wielka (10) peatbog, on narrow gauge railway, ca 3 km S of Piekielek, ca 670 m, 24 Aug. 1984, *leg. W. Wojewoda*, KRAM F-32671; **DG 39-19**: Krauszów, pasture on bank of Czarny Dunajec river, ca 5 km W of Nowy Targ, 620–640 m, 11 July 1984, *leg. W. Wojewoda*, KRAM F-32645; **DG 39-27**: between Puścizna Franków (21) and Puścizna Długopole (21) peatbogs, on meadow, 30 Aug. 2012, *leg. H. Komorowska*, KRAM F-56833; **DG 39-52**: Czarny Dunajec, pasture on bank of Czarny Dunajec river, ca 670 m, ca 14 km SW of Nowy Targ, 30 July 1970, *leg. W. Wojewoda*, KRAM F-26578; **EG 30-24**: near Bór na Czerwonem (24) Nature Reserve, meadow on bank of Dunajec river, near Nowy Targ, 600–640 m, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-32643; **EG 30-34**: between Szaflary Dolne and Nowy Targ, on bank of Biały Dunajec river, *AlPa*, in grass, 11 June 1971, *leg. Z. Heinrich*, KRAM F-11335; **EG 31-13**: edge of Bór Harkłowski (XIII) forest, ca 1 km SE of Łopuszna, ca 8 km SE of Nowy Targ, ca 575 m, in grass, 21 July 1977, *leg. W. Wojewoda*, KRAM F-26570; **EG 31-27**: between Dębno and Nowa Biała, 12 km SE of Nowy Targ, 535–600 m, pasture on Białka riverside, 6 Aug. 1985, *leg. W. Wojewoda*, KRAM F-32647; **EG 31-39**: Frydman, ca 16 km SE of Nowy Targ, 525 m, pasture, 24 May 1984, *leg. W. Wojewoda*, KRAM F-32648; **EG 31-55**: Krempachy, ca 12 km SE of Nowy Targ, 595 m, pasture, 24 May 1984, *leg. W. Wojewoda*, KRAM F-32646.

\* *Bovista pusilla* (Batsch: Pers.) Pers. – coniferous forest, dry grass in stream valley; on the ground; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **EG 30-44**: Bór na Czerwonem (X) forest, edge of forest, near Szaflary and Nowy Targ, dry grass in Biały Dunajec stream valley, 21 July 1971, *leg. W. Wojewoda*, KRAM F-26569; **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest, on the ground, 18 Aug. 1970, *leg. I. Jalocha*, KRAM F-11089.

\* *Brevicellicium olivascens* (Bres.) K.H. Larss. & Hjortstam. – mixed and deciduous forest; on fallen twigs and branches; saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, mixed forest, on fallen twig, 8 Oct. 2012, *leg. D. Karasiński* 8864 (KRAM F-58284); Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, 49°28'37.9"N, 19°43'53.2"E, on bark of fallen *Salix* sp. twig, 8 Oct. 2012, *leg. D. Karasiński* 8880 (KRAM F-58312); Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, mixed forest, on fallen *Populus tremula* branch, 8 Oct. 2012, *leg. D. Karasiński* 8886 (KRAM F-58325); **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec, 17 km SW of Nowy Targ, on bank of Cichy stream, ca 700 m, *Alin*, on dead decorticated twigs lying on the ground, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25613.

\* *Bulbillomyces farinosus* (Bres.) Jülich. – R; riparian forest; on *Alnus incana* trunk; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 30-12**: between Nowy Targ and Ludźmierz, on right bank of Czarny Dunajec river, in fragments of riparian forest (*Alin*), on *Alnus incana* trunk, 11 July 1984, *leg. W. Wojewoda*, KRAM F-25542.

\* *Byssomerulius corium* (Pers.) Parmasto – deciduous and mixed forest; on fallen branches of deciduous trees; saprobic; from spring to autumn (May–Oct.); frequent (8).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, mixed forest, on fallen *Salix* sp. trunk, 8 Oct. 2012, *leg. D. Karasiński* 8881 (KRAM F-58332); **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, brushwood and forest (*Salix* with young *Alnus*), on fallen twigs, 29 June 2011, *leg. Z. Heinrich*, KRAM F-56892; *leg. M. Lysek*, KRAM F-58108; *leg. H. Komorowska*, KRAM F-58137; **DG 39-71**: between Czarny Dunajec and Podczerwone, ca 15 km SW of Nowy Targ, ca 680 m, on right bank of Czarny Dunajec river, *Alin*, dead *Salix* twigs lying on the ground, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25597; **EG 30-10**: in vicinity of Ludźmierz, *Alin*, near mouth of Wielki Rogoźnik stream to Czarny Dunajec river, ca 4 km SW of Nowy Targ centre, ca 600 m, on dead twigs and trunks of *Salix* sp., 13 May 1981, *leg. W. Wojewoda*, KRAM F-25289; on fallen twigs of *Salix* sp., 1 Sept. 1983, *leg. Z. Heinrich*, KRAM F-26321; **EG 30-30**: Przemiarki (22) peatbog, SW of Ludźmierz, 49°27'25"N, 19°58'26.4"E, 580.6 m, edge of birch forest with *Populus tremula*, in the undergrowth clumps of peat, *Vaccinium vitis-idaea* and ferns. 16 July 2011, *leg. H. Komorowska*, KRAM F-58138; **EG 31-27**: Dębno, 13 km E of Nowy Targ, ca 540 m, *Alnus*-forest, bank of Dunajec river, on fallen trunk of *Picea abies*, 27 June 1972, *leg. Z. Mirek*, KRAM F-18349; *Alin* on right bank of Dunajec river, fallen twigs of deciduous tree or shrub, 27 July 1970, *leg. W. Wojewoda*, KRAM F-25262; Dolina Białki p.a., in vicinity of Dębno, 49°27'27.2"N, 20°12'11.3"E, on fallen *Salix eleagnos* branch, 21 July 2012, *leg. D. Karasiński* 7499 (KRAM F-58418); **EG 31-45**: between Frydman and Krempachy, on bank of Przykopa stream, ca 12 km SE of Nowy Targ, ca 560 m, on dead hanging twigs of *Salix* sp., in deciduous forest (?*Alin*), 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25913; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'41.7"N, 20°07'42.6"E, willow brushwood on bank of Białka river, on bark of *Salix eleagnos* branch, 24 May 2012, *leg. D. Karasiński* 7069a (KRAM F-58484).

*Calocera viscosa* (Pers.: Fr.) Fr. – coniferous, deciduous and mixed forest; on stumps and woody debris; saprobic; summer to autumn (June–Oct.); common (28).

DISTRIBUTION. **DG 29-90**: between Odrowąż and Żary, N of Czarny Dunajec, on right side of Odrowąż–Żary road, 49°29'26.82"N, 19°50'37.42"E, 657.9 m, spruce forest and *Betula*, and *Sorbus*, *Vaccinium*, moss,

edge of forest, 30 Aug. 2011, *leg. H. Komorowska*, KRAM F-49764; **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, 2 Sept. 2011, *leg. H. Komorowska*, KRAM F-49738; **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667.6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, *leg. M. Lysek*, KRAM F-56825; **DG 38-06**: little deciduous forest near Piekelnik, on roots, 3 Aug. 1970, *leg. I. Jalocha*, KRAM F-31637; **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, NW part of forest, 30 July 2010, *leg. Z. Heinrich*, KRAM F-56823; **DG 38-28**: Las Baligówka (IV) forest, E part, 49°27'37.92"N, 19°48'17.16"E, 664.4 m, 11 Aug. 2012, *leg. P. Roux & G. Końska*, KRAM F-49543; **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, near Nowy Targ, in coniferous forest, on remnants of wood, 1 Aug. 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-10923; Las Baligówka (IV) forest, near Czarny Dunajec, on the ground, on remnants of decayed wood, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-31640; Las Baligówka (IV) forest, ca 15 km W of Nowy Targ, ca 600 m, spruce-pine forest, on stump of coniferous tree, 23 Sept. 1981, *leg. M. Czerwieńiec*, KRAM F-31681; Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jabłonka road, 15 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49483A, *leg. Mi. Lysek*, KRAM F-49483B; **DG 38-48**: Las Baligówka (IV) forest, N part, 49°26'54.21"N, 19°48'18.31"E, 658.9 m, spruce forest with sparse *Larix*, *Pinus* and young *Betula* 29 Oct. 2011, *leg. M. Sadowski*, KRAM F-56900; **DG 38-59**: Las Cikówka (V) forest, N part (near Las Baligówka forest), 49°26'03.97"N, 19°49'03.98"E, 682.2 m, spruce forest with *Betula*, sparse *Pinus* and frequent mosses and ferns, 29 Oct. 2011, *leg. A. Sadowska*, KRAM F-56888; **DG 38-69**: Las Cikówka (V) forest, N part, 49°25'31.5"N, 19°49'01.8"E, 677.6 m, spruce forest, 14 Oct. 2010, *leg. Z. Heinrich*, KRAM F-56824; Las Cikówka (V) forest, S part (Czarny Dunajec), 49°25'31.44"N, 19°49'01.29"E, 561.1 m, spruce forest (clearing) with sparse *Betula* and frequent cut spruce logs, 29 Oct. 2011, *leg. A. Sadowska*, KRAM F-56901; **DG 38-82**: Bór koło Chyżnego (II) forest, W part (Nowa Droga), 49°25'00.87"N, 19°43'32.47"E, 695.8 m, 30 June 2011, *leg. H. Komorowska*, KRAM F-56902; **DG 38-90**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce and mosses and *Vaccinium*, 2 Sept. 2011, *leg. M. Pilch*, KRAM F-49728; *leg. M. Pilch*, KRAM F-49765; *leg. H. Komorowska*, KRAM F-49777; **DG 39-48**: Rogoźnik village, forest E of Rogoźnik, on the ground and trunks, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-31633; **DG 39-83**: Domański Wierch hill near Stare Bystre village, ca 700 m, small spruce forest with *Alnus incana*, on *Picea abies* stump, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26297; **DG 49-10**: between Ciche and Koniówka villages, hill 788 m, spruce forest, on *Picea* stump, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26295; **EG 20-91**: Bór na Grełu (VIII) forest, N of Ludźmierz, E part, edge of forest, 16 Oct. 2010, *leg. Z. Heinrich*, KRAM F-56726; **EG 30-01**: Bór na Grełu (VIII) forest, ca 4 km W of Nowy Targ, spruce forest, on trunk of *Picea abies*, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-26296; Bór na Grełu (VIII) forest, SW part (Grel), 49°28'55.9"N, 19°58'49.7"E, 627.2 m, spruce forest (with partial clearing), in brushwood with young *Picea* and *Vaccinium*, 16 July 2011, *leg. G. Końska*, KRAM F-49800; **EG 30-35**: Bór na Czerwonym (24) Nature Reserve, near Nowy Targ, ca 550 m, on stump of coniferous tree, 21 July 1971, *leg. I. Jalocha*, KRAM F-31634; *CvP*, *PrS*, *VuP*, on conifer stumps (Wojewoda et al. 2004); **EG 30-41**: Pasieczny Las (VII) forest, S part, on left side of Ludźmierz–Maruszyna road, 49°26'20.54"N, 19°58'34.46"E, 615.1 m, edge of forest, birch and pine-spruce forest with *Rubus* sp., *Oxalis acetosella* and ferns, 14 Aug. 2011, *leg. A. Sadowska*, KRAM F-56852; **EG 30-45**: Bór na Czerwonym (X, Czerwony Bór), on peatbog, SW part, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, 15 July 2011, *leg. G. Końska*, KRAM F-49799; **EG 30-55**: Bór na Czerwonym (X) forest, near Szaflary, coniferous forest (*Pinus*, *Picea*), on remnants of wood, 30 July 1976, *leg. H. Komorowska*, KRAM F-31953; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 km E of Nowy Targ, ca 650 m, pine-spruce coniferous forest, *Picea* trunk, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-31623; Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in brushwood with young *Picea abies* and *Carex* sp., 20 July 2010, *leg. M. Pilch*, KRAM F-56822; **EG 31-22**: Bór Bielski (XII, Brzezie) forest, NE part, near Łopuszna–Nowa Biała road, 16 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49484; **EG 31-26**: Bór Harkłowski (XIII) forest, between Nowa Biała and Dębno, marshy spruce forest, *Sphagnum*, 19 July 2010, *leg. M. Pilch*, KRAM F-56826; **EG 31-31**: Bór Bielski forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 580–600 m, 30 Aug. 1977, *leg. H. Komorowska*, KRAM F-18459; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy

Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on decayed stump of coniferous tree, 31 Aug. 1985, leg. *W. Wojewoda*, KRAM F-25926; **EG 31-42**: Bór Bielski (XII) forest, near Nowa Biała in vicinity of Nowy Targ, on the ground on remnants of wood, 14 Aug. 1970, leg. *Z. Heinrich*, KRAM F-31635; on the ground on roots, 14 Aug. 1970, leg. *I. Jalocha*, KRAM F-31639; **EG 31-53**: Dolina Białki p.a., Nowa Biała, forest on bank of Białka river, pine-spruce forest, single *Larix*, 19 July 2010, leg. *M. Pilch*, KRAM F-56720.

\***Calocybe gambosa** (Fr.: Fr.) Donk – meadow; on the ground; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-64**: near Szafłary, grassy hill, on the ground in grass, 25 May 1971, leg. *Z. Heinrich*, KRAM-11252.

**Cantharellula umbonata** (J.F. Gmel.: Fr.) Singer – pine forest, raised peatbog; on the ground in mosses; saprobic; autumn (Sept.–Nov.); rare (4).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szalas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. *M. Łysek*, KRAM F-49624; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, 2 Oct. 1970, leg. *Z. Heinrich*, on moss, KRAM F-25717; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, in pine forest, in moss, 8 Nov. 1972, leg. *Z. Heinrich*, KRAM F-13564; Bór na Czerwonem (X) forest, near Nowy Targ, ca 610 m, pine forest, on moss, 6 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17138; Bór na Czerwonem (24) Nature Reserve, edge of peatbog, ca 3 km S of Nowy Targ, 21 Sept. 1983, leg. *H. Komarowska*, KRAM F-26096; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve *CvP*, on the ground, in moss (Grodzińska et al. 1973, Wojewoda et al. 2004); **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, in *Polytrichum*, 16 Oct. 1970, leg. *Z. Heinrich* & *I. Jalocha*, KRAM F-26097; in moss, 16 Oct. 1970, leg. *Z. Heinrich* & *I. Jalocha*, KRAM F-25718; in *Polytrichum*, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25716.

**Cantharellus cibarius** Fr. – coniferous forest; on the ground; mycorrhizal; summer (July, Aug.); rare (5).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, edge of forest with young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. *M. Pilch*, KRAM F-49653; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, 650–670 m, ca 17 km SW of Nowy Targ, 1 Aug. 1970, leg. *Z. Heinrich*, KRAM F-33014; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. *A. Mapoubi*, KRAM F-56767; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, 23 Aug. 2000, leg. *W. Wojewoda*, KRAM F-50564 (Wojewoda et al. 2004); **EG 31-22**: Bór Bielski (XII) forest, in coniferous forest, between Łopuszna and Nowy Targ, on the ground, 14 Aug. 1970, leg. *Z. Heinrich*, KRAM F-10929.

**Cantharellus tubiformis** Bull.: Fr. – coniferous and mixed forest; on the ground; mycorrhizal; autumn (Sept., Oct.); frequent (6).

DISTRIBUTION. **DG 38-26**: Las Sosnowka forest, ca 1 km S of Piekienik village, mixed forest, 10 Oct. 1971, leg. *Z. Heinrich*, KRAM F-13797; **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest, on the ground, in moss, 2 Oct. 1970, leg. *Z. Heinrich*, KRAM F-10930; **EG 20-91**: Bór na Grelu (VIII) forest, E part, N of Ludźmierz, edge of forest, 16 Oct. 2010, leg. *Z. Heinrich*, KRAM F-59129; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, under trees, on the ground (Wojewoda et al. 2004); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, coniferous forest (*Pinus sylvestris*, *Picea abies*), on the ground, in moss, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25533; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała near Nowy Targ, coniferous forest (*Picea*), on the ground, in moss, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-25534.

**Ceraceomyces eludens** K.H. Larss. – coniferous forest, on wood; saprobic; spring to autumn (Apr., June, Sept., Oct.); frequent (6).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Picea abies* branch, 9 Oct. 2012, leg. D. Karasiński 8929 (KRAM F-58516); **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jabłonka road, on fallen twig, 15 Sept. 2011, leg. Mi. Lysek, KRAM F-49582; **DG 38-90**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce and mosses and *Vaccinium*, on young standing but very decayed *Picea* trunk, 2 Sept. 2011, leg. M. Pilch, KRAM F-49734; **EG 30-25**: Bór na Czerwonym (X) forest, near Nowy Targ, in coniferous forest (CvP), ca 630 m, on fallen *Pinus sylvestris* branch, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-14377; leg. W. Wojewoda, KRAM F-14378; **?EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, on fallen dead branch of coniferous tree (Wojewoda et al. 2004, as *Ceraceomyces sublaevis* (Bres.) Jülich); **EG 31-14**: Bór Harkłowski (XIII) forest, ca 1 km S of Harkłowa, ca 10 km E of Nowy Targ, ca 570 m, spruce forest, rotten *Picea abies* stump, 14 Apr. 1972, leg. W. Wojewoda, KRAM F-25253; Bór Harkłowski (XIII) forest, ca 1 km S of Harkłowa, ca 10 km E of Nowy Targ, ca 580 m, pine-spruce forest, *Picea abies* trunk, 8 Sept. 1972, leg. I. Jalocha, KRAM F-25643; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.6"N, 20°08'56.2"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7207 (KRAM F-58587).

REMARKS. In Poland the species was recorded only in Białowieża National Park, the Kashubian Landscape Park and Kampinos National Park (Karasiński et al. 2010, 2015; Karasiński 2011, 2016). The published record of *C. sublaevis* (no specimen preserved) (Wojewoda et al. 2004) is included here, because all the other preserved specimens that we could examine belong to *C. eludens*. We thus assume that Wojewoda et al. (2004) did not distinguish *C. eludens* from *C. sublaevis*.

\***Ceraceomyces microsporus** K.H. Larss. – coniferous forest; on wood; saprobic; autumn (Oct.); rare (1),

DISTRIBUTION. **EG 30-25**: Bór na Czerwonym (24) Nature Reserve, 49°27'45.6"N, 20°02'25.4"E, on rotten *Picea abies* branch, 17 Oct. 2011, leg. D. Karasiński 6636 (KRAM F-58517); leg. D. Karasiński 6637 (KRAM F-58485).

REMARKS. The species is very similar to *Ceraceomyces eludens* (earlier confused with it in the Polish mycological literature) but has no cystidia and has smaller spores. In Poland it was recorded only in the Kashubian Landscape Park and Kampinos National Park (Karasiński 2011, 2016; Karasiński et al. 2015).

\***Ceraceomyces serpens** (Tode) Ginns – E; deciduous forest, on fallen *Rubus* twigs and shoots; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-49**: Gronków Środkowy village, SE of Nowy Targ, on bank of Leśnica river, 49°26'21.11"N, 20°05'24.73"E, 608.4 m, thicket with *Acer*, *Carpinus*, *Fraxinus*, *Ulmus*, *Salix* and *Asarum*, *Urtica dioica*, *Arctium*, *Rubus*, *Prunus padus*, on *Rubus* shoots and fallen twigs, 3 Sept. 2011, leg. H. Komorowska, KRAM F-49741.

\***Ceraceomyces violascens** (Fr.) Jülich – coniferous forest; on rotten wood; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (I, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on very rotted wood of coniferous stump, 9 Oct. 2012, leg. D. Karasiński 8935 (KRAM F-58519); leg. D. Karasiński 8936 (KRAM F-58520).

REMARKS. In Poland the species was known only from the Kashubian Landscape Park (Karasiński 2011, 2016).

**Ceratobasidium cornigerum** (Bourdot) D.P. Rogers – I; peatbog, mixed and coniferous forest; on wood and *Calluna vulgaris* twigs; saprobic; spring and summer (May, June, Aug.); rare (5).



DISTRIBUTION. **DG 38-06**: between Piekienik and Jablonka, ca 24 km NW of Zakopane centre, on fallen twig of *Pinus*, 18 May 1973, leg. *W. Wojewoda*, KRAM F-37796; **DG 38-33**: Bór koło Chyżnego (II, Szalas) forest, ca 3 km SE of Jablonka, 49°27'20.8"N, 19°44'12.6"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. *D. Karasiński* 7126 (KRAM F-58513); **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, ca 650–670 m, ca 17 km SW of Nowy Targ, on *Pinus* twigs, 18 May 1973, leg. *Z. Heinrich & W. Wojewoda*, KRAM F-35177 (Wojewoda 2003); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'53.9"N, 19°42'52.8"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. *D. Karasiński* 5876; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'53.7"N, 20°08'42.3"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. *D. Karasiński* 7168 (KRAM F-58514); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.8"N, 20°08'45.6"E, pine-spruce forest, on fallen *Picea abies* trunk, 13 June 2012, leg. *D. Karasiński* 7182 (KRAM F-58515).

\**Ceriporia reticulata* (Hoffm.) Domański – **R**; deciduous forest and thicket; on wood and *Fomitiporia punctata* basidiome; saprobic; spring and summer (May, Aug.); rare (2).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., ca 2 km SW of Dębno, on bank of Białka river, *Alin*, ca 15 km SE of Nowy Targ, ca 540 m, on fallen twig of deciduous tree (?*Alnus incana*), 6 Aug. 1985, leg. *W. Wojewoda*, KRAM F-25961; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.2"N, 20°07'41.1"E, willow brushwood on bank of Białka river, on fallen *Salix eleagnos* trunk and dead *Fomitiporia punctata* basidiome, 24 May 2012, leg. *D. Karasiński* 7089 (KRAM F-58518).

\**Ceriporia viridans* (Berk. & Broome) Donk – **R**; riverside mountain alder; on *Trametes hirsuta* basidiome; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 49-11**: Ciche, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, ca 700 m, *Alin* on bank of Cichy stream, on *Trametes hirsuta* basidiome growing on *Alnus incana* trunk, 28 Aug. 1984, leg. *W. Wojewoda*, KRAM F-27101.

\**Cerrena unicolor* (Bull.) Murrill – open space, roadside; on trunks of living trees; parasitic and saprobic; spring (May); rare (2).

DISTRIBUTION. **DG 39-51**: Czarny Dunajec village, on side of Czarny Dunajec–Piekienik road, on living trunk of *Acer pseudoplatanus*, 14 May 1971, leg. *Z. Heinrich*, KRAM F-11217; **EG 31-27**: Dębno, ca 14 km E of Nowy Targ, ca 535 m, near church, on living trunk of *Salix (alba?, fragilis?)*, 24 May 1984, leg. *W. Wojewoda*, KRAM F-27102.

*Chalciporus piperatus* (Bull.: Fr.) Bataille – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **DG 38-73**: Bór kolo Chyżnego (II) forest, between Chyżne and Jablonka, pine forest with *Picea*, on the ground, 30 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25578; **EG 30-25**: Bór na Czerwonem (X) forest, pine forest between sports airfield and reserve (peatbog), on the ground, 21 Sept. 1983, leg. *H. Komorowska*, KRAM F-26147; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground under trees (Wojewoda et al. 2004).

\**Chlorophyllum rachodes* (Vittad.) Vellinga – coniferous forest; on the ground; saprobic; summer to autumn (Aug.–Oct.); rare (3).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest (*Picea abies*, *Pinus sylvestris*), ca 670 m, ca 17 km SW of Nowy Targ, 23 Sept. 1981, leg. *M. Czerwieniec*, KRAM F-27151; **DG 38-69**: Las Cikówka (V) forest, N part, 49°25'31.5"N, 19°49'01.8"E, 677.6 m, edge of spruce forest, 14 Oct. 2010, leg. *M. Łysek*, KRAM F-58150; **DG 39-90**: near Podczerwone, on bank of Czarny Dunajec river, ca 18 km SW of Nowy Targ, ca 700 m, in small spruce forest, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-27145.

\**Chondrostereum purpureum* (Schum.) Pouzar – mixed, deciduous forest and city park; on fallen trunks and stumps; saprobic; from spring to autumn (Apr., July, Sept., Oct.); rare (4).

DISTRIBUTION. **DG 39-52:** Czarny Dunajec, near Nowy Targ, on bank of Czarny Dunajec river, in *AlPa*, with *Alnus incana*, *Salix* sp., on dead of *Alnus incana* branch, 30 July 1970, leg. I. Jalocha & Z. Heinrich, KRAM F-10932; **EG 30-04:** Nowy Targ, in park, ca 600 m, on decaying stump, 15 Apr. 1986, leg. W. Wojewoda, KRAM F-26386; **EG 30-12:** brushwood (*Alin*) on bank of Czarny Dunajec river, between Nowy Targ and Ludźmierz, ca 2.5 km SW of Nowy Targ centre, near Bór Nowotarski forest, trunk of deciduous tree (*Alnus incana*), 1 Sept. 1983, leg. H. Komorowska, KRAM F-25615; **EG 30-23:** Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, 17 Oct. 1970, leg. Z. Heinrich, KRAM F-33013.

*Chroogomphus rutilus* (Schaeff.: Fr.) O.K. Mill. – coniferous forest; on the ground, under *Pinus sylvestris*; mycorrhizal; summer (Aug.); rare (4).

DISTRIBUTION. **DG 38-36:** Las Gajka (III) forest, pine forest 1.5 km S of Piekienik village, 640–660 m, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-25586; ?**EG 30-25:** Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground, under *Pinus* (Wojewoda et al. 2004). **EG 31-13:** Bór Harkłowski (XIII) forest, between Harkowa and Łopuszna, in coniferous forest, on the ground, 18 Aug. 1970, leg. Z. Heinrich, KRAM F-11096; Bór Harkłowski (XIII) forest, between Harkowa and Łopuszna, in spruce (*Picea*) forest, on the ground, 18 Aug. 1970, leg. I. Jalocha, KRAM F-11094; **EG 31-36:** on bank of Białka stream, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25922.

\**Clavaria argillacea* Pers. – **R**; meadow; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-25:** near Piekienik, on meadow near Puścizna Wielka (10) peatbog, 13 Oct. 1971, leg. I. Jalocha & W. Wojewoda, KRAM F-12060.

*Clavulina cinerea* (Bull.) J. Schröt. – mixed forest; on the ground; mycorrhizal; summer (Aug.); rare (2).

DISTRIBUTION. **DG 39-83:** Domański Wierch hill near Stare Bystre village, mixed forest, ca 700 m, ca 13 km SW of Nowy Targ, on the ground, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25593; ?**EG 30-25:** Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004).

\**Clavulina coralloides* (L.) J. Schröt. – riverside mountain alder and coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (2).

DISTRIBUTION. **DG 49-11:** Ciche village, on bank of Cichy stream, ca 700 m, ca 17 km SW of Nowy Targ, *Alin*, on the ground, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25940; **EG 31-32:** Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 8 km SE of Nowy Targ, ca 600 m, pine-spruce forest, 30 Aug. 1977, leg. H. Komorowska, KRAM F-25941.

\**Clavulinopsis corniculata* (Schaeff.) Corner – spruce forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-32:** Bór Bielski (XII) forest, spruce forest, on the ground, on moss, 30 Aug. 1977, leg. H. Komorowska, KRAM F-25573.

\**Climacocystis borealis* (Fr.) Kotl. & Pouzar – **R**; coniferous forest; on wood; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-48:** Las Baligówka (IV) forest, near Czarny Dunajec near Nowy Targ, in coniferous forest, on fallen dead twig of coniferous tree, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-11082.

\**Clitocybe candicans* (Pers.: Fr.) P. Kumm. – coniferous forest; on the ground; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-44**: Bór na Czerwonem (X, Czerwony Bór) forest, SW part, near Szaflary, 49°26'41.81"N, 20°01'47.16"E, 622.4 m, 17 Sept. 2011, leg. *Mi. Lysek*, KRAM F-49630.

\**Clitocybe* cf. *diatreta* (Fr.: Fr) P. Kumm. – coniferous forest; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. *Z. Heinrich*, KRAM F-56645.

\**Clitocybe nebularis* (Batsch: Fr.) P. Kumm.– coniferous forest; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, 2 Oct. 1970, leg. *Z. Heinrich & I. Jalocho*, KRAM F-25728.

*Clitocybe pruinosa* (Lasch) P. Kumm. – **R**; coniferous forest and riverside mountain alder; on the ground; saprobic; spring (Apr.); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004); **EG 30-44**: Szaflary, on border of *Alin* and spruce forest, Bór na Czerwonem (X), on bank of Biały Dunajec river, under *Picea*, 22 Apr. 1971, leg. *W. Wojewoda*, KRAM F-26095.

\**Clitocybe sinopica* (Fr.: Fr.) P. Kumm. – coniferous forest; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, S part, left side of Łopuszna–Nowa Biała road. Pine-spruce forest, in brushwood: *Sorbus*, *Frangula alnus*, ?*Cornus*. 17 July 2010, leg. *M. Pilch*, KRAM F-56860.

*Clitopilus hobsonii* (Berk.) P.D. Orton – riverside mountain alder; on stump; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 39-17**: Długopole, ca 8 km W of Nowy Targ, 600 m, left bank of Czarny Dunajec river, *Alin*, stump of *Salix* sp., 11 July 1984, leg. *W. Wojewoda*, KRAM F-32546 (Wojewoda 2003).

*Clitopilus prunulus* (Scop.: Fr.) P. Kumm. – coniferous forest; on the ground; saprobic; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, at edge of *CvP*, on the ground (Wojewoda et al. 2004).

\**Collybia cirrhata* (Pers.) Quéf. – pine forest, edge of peatbog; in *Sphagnum*; saprobic; summer and autumn (Aug., Sept.); rare (4).

DISTRIBUTION. **DG 38-36**: Las Gajka (III) forest, pine forest, S of Piekienik village, in *Sphagnum*, 3 Aug. 1970, leg. *Z. Heinrich*, KRAM F-25738; **DG 38-43**: Bór koło Chyźnego (II) forest, N part (near Borowy stream), spruce forest (mossy) and sparse *Pinus*, in brushwood ?*Salix* and young *Picea*, 17 Sept. 2011, leg. *Mi. Lysek*, KRAM F-49647; **DG 38-66**: edge of Puścizna Wielka (10) raised peatbog, ca 3 km S of Piekienik, in *Sphagnum*, 24 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25736; **EG 31-23**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, at Nowy Targ–Krościenko road, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25737.

*Collybia tuberosa* (Bull.: Fr.) P. Kumm. – peatbog, coniferous forest; on decaying basidiomata of fungi; saprobic; summer and autumn (Aug., Sept.); frequent (8).

DISTRIBUTION. **DG 38-27**: Puścizna Mała (14) peatbog, 2 km SE of Piekielek, on left side of Czarny Dunajec–Jablonka road, on peat dome (*Pinus*, *Betula*, *Vaccinium uliginosum*, *Vaccinium vitis-idaea*. *Calluna vulgaris*, *Oxycoccus*, ferns), in grass, 1 Sept. 2012, leg. A. Sadowska, KRAM F-58154; **DG 38-33**: Bór koło Chyżnego (II, Szafas) forest, N part, pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-49670; **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jablonka road, 15 Sept. 2011, leg. Mi. Lysek, KRAM F-49652; **DG 38-56**: Puścizna Wielka (10) peatbog, among *Sphagnum verucosum*, 7 Aug. 2002, leg. A. Koczur, KRAM F-56647; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, on remnants of fungus basidiocarp, 21 Sept. 1983, leg. H. Komorowska, KRAM F-25750; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest, on decaying basidiocarps of fungi (?*Lactarius*, ?*Russula*), sclerotium reddish brown, 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50612 (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, on remnants of fungus basidiocarp, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-25748; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, 14 Aug. 1970, leg. I. Jalocha, KRAM F-25749; Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, ca 7 km SE of Nowy Targ, 580–600 m, 30 Aug. 1977, leg. H. Komorowska, KRAM F-34705; leg. H. Komorowska, KRAM F-34706.

**Coltricia perennis** (L.) Murrill – coniferous forest; on the ground; mycorrhizal; summer to autumn (Aug.–Oct.); rare (5).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 16 km SW of Nowy Targ, ca 650 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on the ground, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-10935; **DG 38-69**: Las Cikówka (V) forest, ca 2 km SW of Czarny Dunajec, ca 16 km SW of Nowy Targ, 680–710 m, pine forest, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-32683; ?**DG 39-60**: forest near Czarny Dunajec, on the ground, ?1885 (Krupa 1886, as *Polyporus perennis* (L.) Fr.); ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 31-23**: Bór Harkłowski (XIII) forest, coniferous forest (*Picea abies*, *Pinus sylvestris*), ca 8 km SE of Nowy Targ, ca 580 m, on the ground, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-25955.

\***Coniophora arida** (Fr.) P. Karst. – coniferous forest, city park; on wood; saprobic; spring to autumn (Apr., June, Oct.); rare (3).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielek, coniferous forest, on fallen *Pinus sylvestris* branch, 9 Oct. 2012, leg. D. Karasiński 8946 (KRAM F-58289); **EG 30-04**: Nowy Targ, park, ca 600 m, on decaying trunk lying on the ground, 15 Apr. 1986, leg. W. Wojewoda, KRAM F-26389; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'43.2"N, 20°08'43.6"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7197 (KRAM F-58608).

\***Coniophora puteana** (Schum.) P. Karst. – riverside mountain alder; on wood; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-45**: between Frydman and Krempachy, on bank of Przykopa stream, ca 12 km SE of Nowy Targ, ca 560 m, *Alin*, on fallen *Alnus incana* trunk, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25919.

**Conocybe apala** (Fr.: Fr.) Arnolds – pasture; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-27**: near Dębno, pasture on bank of Białka stream, ca 540 m, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-26094 (Wojewoda 2003; Hausknecht 2005, 2009).

**Conocybe macrospora** (G.F. Atk.) Hauskn. – coniferous forest; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-42**: Bór Bielski (XII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, ca 570–580 m, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-32543 (Wojewoda 2003).

REMARKS. In Poland the species was recorded only from the Białowieża Primeval Forest, the Bieszczady Mts (Gierczyk et al. 2014, 2019b), the Krowiarki Mts in the Sudetes (Ślusarczyk 2021), and by Hausknecht (2009) without a precise locality.

***Conocybe pallidospora*** Kühner & Watling – riparian forest; on burnt ground; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-44**: near Szaflary Dolne, on bank of Biały Dunajec river, *ALPa*, on burnt ground, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11281 (Wojewoda 2003; Hausknecht 2005).

REMARKS. In Poland the species is known only from the KON (Wojewoda 2003; Hausknecht 2005). Hausknecht (2009) reported the species from Poland without a precise locality.

\****Conocybe rickeniana*** P.D. Orton – riverside mountain alder; on the ground; saprobic; summer (Aug.); rare (2).

DISTRIBUTION. **DG 39-43**: between Czarny Dunajec and Chraca, on left bank of Czarny Dunajec river, *Alin*, 21 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26378; **DG 39-71**: between Czarny Dunajec and Podczernone, on right bank of Czarny Dunajec river, *Alin*, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26380.

***Conocybe rickenii*** (Jul. Schäff.) Kühner – brushwood; on the ground; saprobic; summer (June, July); rare (2).

DISTRIBUTION. **DG 37-26**: W of Jabłonka, near Murowanica, 49°27'59.81"N, 19°38'27.96"E, 603.5 m, on bank of Lipnica river thick brushwood (*Salix, Arctium*), with grass and in some places moss, in grass, near moss, 14 July 2012, *leg. M. Pilch*, KRAM F-49940; **EG 30-34**: on bank of Biały Dunajec river, between Szaflary Dolne and Nowy Targ, on burnt ground, 11 June 1971, *leg. I. Jatocha*, KRAM F-11341 (Wojewoda 2003).

\****Conocybe semiglobata*** Kühner & Watling – grassland; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 39-52**: Czarny Dunajec, on right bank of Czarny Dunajec river, near bridge, on the ground in grass and moss, 30 July 1970, *leg. Z. Heinrich*, KRAM F-19452.

\****Conocybe subovalis*** Kühner & Watling – grassland and riverside mountain alder; on the ground; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 39-52**: Czarny Dunajec, on right side of Czarny Dunajec river, on the ground in grass, 30 July 1970, *leg. I. Jatocha*, KRAM F-19454; in moss, *leg. I. Jatocha*, KRAM F-19453; **DG 49-11**: Ciche, ca 6 km S of Czarny Dunajec, ca 17 km SW of Nowy Targ, 700–720 m, *Alin*, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26379.

\****Conocybe tenera*** (Schaeff.: Fr) Fayod – grassland, riparian forest; on the ground; saprobic; summer (July); rare (3).

DISTRIBUTION. **DG 37-26**: W of Jabłonka, near Murowanica, 49°27'59.81"N, 19°38'27.96"E, 603.5 m, thick brushwood on bank of Lipnica river (*Salix, Arctium*), on the ground in grass and in some places moss, 14 July 2012, *leg. M. Sadowski*, KRAM F-49934; **DG 38-29**: by field road from Baligówka to Puścizna Rękowiańska (19) peatbog, right side of Czarny Dunajec–Piekelnik road, on the ground in grass, 31 July 1970, *leg. Z. Heinrich*, KRAM F-19451; **EG 30-34**: small alder forest on bank of Biały Dunajec river, between Szaflary and Nowy Targ, near Bór na Czerwonem (X) forest, 21 July 1971, *leg. Z. Heinrich*, KRAM F-26403.

***Conohypha albocremaea*** (Höhn. & Litsch.) Jülich – V; coniferous forest; on stump; saprobic; spring (May); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on conifer stump (Wojewoda et al. 2004); **EG 30-45**: Bór na Czerwonem (X) forest, ca 4 km S of Nowy Targ, ca 630 m, in pine-spruce forest (*CvP*), on conifer stump, 25 May 1971, *leg. W. Wojewoda*, KRAM F-34508 (Wojewoda 2002).

\****Coprinellus disseminatus*** (Pers.: Fr.) J.E. Lange – brushwood; on wood; saprobic; summer (June, Aug.); rare (2).

DISTRIBUTION. **EG 30-15**: Nowy Targ, brushwood with *Alnus*, 585–605 m, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-32540; **EG 30-59**: Gronków Środkowy village, forest on bank of Leśnica stream, 49°26'15.42"N, 20°05'17.66"E, 603.8 m, 28 June 2011, *leg. M. Łysek*, KRAM F-56658.

\****Coprinellus ephemerus*** (Bull.: Fr.) Redhead, Vilgalys & Moncalvo – spruce forest; in litter; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (X) forest, N part (Do Boru), on edge of spruce forest, in litter, 49°28'00.93"N, 20°00'38.82"E, 602.0 m, 3 May 2011, *leg. M. Sadowski*, KRAM F-57918.

\****Coprinellus truncorum*** (Scop.) Redhead, Vilgalys & Moncalvo – roadside, on the ground; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-26**: at Nowy Targ–Białka road, ca 2.5 km of Nowy Targ, on the ground, near trunk (?*Salix* sp.), 7 May 1981, *leg. W. Wojewoda*, KRAM F-32539.

\****Coprinopsis atramentaria*** (Bull.: Fr.) Redhead, Vilgalys & Moncalvo – pasture; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-57**: near Rogoźnik village, on bank of Wielki Rogoźnik stream, ca 8 km SW of Nowy Targ, 620–640 m, pasture, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-32541.

\****Corticium roseum*** Pers. – riverside mountain alder; on trunks and branches; saprobic; spring and summer (Apr., May, Aug.); rare (4).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, ca 15 km SW of Nowy Targ, ca 680 m, *Alin*, *Salix* sp. trunk, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25618; **DG 48-29**: between Chochołów and Koniówka, ca 20 km SW of Nowy Targ, ca 740 m, *Alin*, on dead twigs of *Salix* sp., 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25616; **EG 30-10**: near mouth of Wielki Rogoźnik stream to Czarny Dunajec river, near Ludźmierz, ca 4 km SW of Nowy Targ centre, ca 600 m, *Alin*, dead, not fallen *Salix* sp. twigs and trunk, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25287; *leg. W. Wojewoda*, KRAM F-25288; **EG 31-27**: between Dębno and Harkłowa, in riverine scrub (*Salix* sp. *Alnus incana*), near Dunajec river, on dead *Salix* sp. trunk, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-11196.

***Cortinarius armillatus*** (Fr.: Fr.) Fr. – pine forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, ca 2.5 km S of Nowy Targ centre, ca 610 m, in pine forest with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus* and *Holcus mollis*, on the ground, in moss, under *Betula pendula*, 23 Aug. 2000, *leg. W. Wojewoda*, KRAM F-50566; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, under trees, on the ground (Wojewoda et al. 2004).

\****Cortinarius betulinus*** J. Favre – pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, N part, pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, *leg. Mi. Łysek*, KRAM F-57963.

REMARKS. In Poland the species was recorded only in Kampinos National Park (Ślusarczyk 2013).

**Cortinarius bivelus** (Fr.: Fr.) Fr. – V; pine forest on the ground; mycorrhizal; rare (1).

DISTRIBUTION. ?EG 31-15: near Harkłowa, pine forest among heather or under birches; (Nespiak 1981, Tab. III: 6).

\***Cortinarius brunneus** (Pers.: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. EG 31-32: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25949 (Pl. V, 1).

**Cortinarius caperatus** (Pers.: Fr.) Fr. – coniferous forest; on the ground, among mosses; mycorrhizal; summer and autumn (Aug.–Oct.); frequent (8).

DISTRIBUTION. DG 38-06: Piekieleń forest, near Piekieleń village (vicinity of Nowy Targ), edge of forest, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-12057; DG 38-26: pine-spruce forest, near Piekieleń village, on the ground, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-25197; DG 38-41: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, 4 Sept. 2011, leg. H. Komorowska, KRAM F-57950; DG 39-48: spruce-pine forest near Rogoźnik, SW of Nowy Targ, on the ground, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-25196; EG 30-25: Bór na Czerwonem (X) forest, near Nowy Targ, pine forest, on the ground, 21 Sept. 1983, leg. H. Komorowska, KRAM F-25304; ?EG 30-25: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004 as *Rozites caperatus*); EG 30-35: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50573; EG 31-15: Bór Harkłowski (XIII) forest, near Harkłowa village, E of Nowy Targ, marshy pine-spruce forest, in litter of conifer needles, 18 Aug. 1970, leg. I. Jalocha, KRAM F-25201; Bór Harkłowski (XIII) forest, near Harkłowa village in vicinity of Nowy Targ, marshy pine-spruce forest, in moss, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-25200; Bór Harkłowski (XIII) forest, near Harkłowa village, E of Nowy Targ, pine-spruce forest, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-25198; EG 31-32: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, near Nowy Targ, marshy pine-spruce forest, on the ground, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-25199; Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies* and *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25927.

\***Cortinarius cinnabarinus** Fr. – young pine-spruce forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. EG 31-21: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. R. Łysek, KRAM F-49933.

\***Cortinarius cinnamomeus** (L.: Fr.) Gray – coniferous forest; on the ground; mycorrhizal; summer to autumn (July–Oct.); frequent (6).

DISTRIBUTION. DG 38-06: Piekieleń forest, near Piekieleń, 13 Oct. 1971, leg. I. Jalocha, KRAM F-32525; DG 38-33: Bór koło Chyżnego (II, Szalas) forest, N part. pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. H. Komorowska, KRAM F-57961; DG 38-48: Las Baligówka (IV) forest, near Czarny Dunajec, in mossy place, 13 Oct. 1971, leg. I. Jalocha, KRAM F-32524; EG 30-35: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, on the ground in damp place, in moss, 17 July 1985, leg. Z. Heinrich, KRAM F-26126; EG 31-21: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49958; EG 31-32: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, pine-spruce forest, in litter of conifer needles, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-25180.

\**Cortinarius collinitus* (Sowerby: Fr.) Gray – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, marshy pine forest with *Sphagnum*, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-32527; **EG 31-32**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, pine-spruce forest, in litter of conifer needles, 30 Aug. 1977, leg. *H. Komorowska*, KRAM F-25175.

\**Cortinarius decipiens* (Pers.: Fr.) Fr. var. *decipiens* – coniferous forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-43**: Bór koło Chyźnego (II) forest, N part (near Sabałówka), 49°26'58.46"N, 19°44'01.32"E, 646.9 m, thicket in spruce-pine forest, wet, undulating terrain with frequent mosses, among mosses, 30 Oct. 2011, leg. *A. Sadowska*, KRAM F-56753.

\**Cortinarius fulvescens* Fr. – E; peatbog; on the ground; mycorrhizal; summer (July); rare (1).

DISTRIBUTION. **EG 30-45**: Bór na Czerwonem (X, Czerwony Bór), SW part, peatbog, on the ground in mosses, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, 15 July 2011, leg. *H. Komorowska*, KRAM F-58004.

\**Cortinarius hemitrichus* (Pers.: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; summer and autumn (July, Sept.); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyźnego (II, Szałas) forest, N part, pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. *Mi. Lysek*, KRAM F-57962; **EG 30-35**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, on the ground, 17 July 1985, leg. *Z. Heinrich*, KRAM F-26117.

*Cortinarius huronensis* Ammirati & A.H. Sm. var. *olivaceus* Ammirati & A.H. Sm. – coniferous forest; on the ground; mycorrhizal; autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-43**: Bór koło Chyźnego (II) forest, N part (near Sabałówka), 49°26'58.46"N, 19°44'01.32"E, 646.9 m, thicket in spruce-pine forest, wet undulating terrain, frequent mosses, in moss, 30 Oct. 2011, leg. *A. Sadowska*, KRAM F-57914; leg. *M. Sadowski*, KRAM F-57913; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, 10 Aug. 1983, leg. *H. Komorowska*, KRAM F-32526; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *VuP*, on the ground among *Sphagnum*, under trees (Wojewoda et al. 2004 as *C. huronensis* Ammirati & A.H. Sm.).

*Cortinarius obtusus* (Fr.: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; summer (June); rare (2).

DISTRIBUTION. ?**EG-31-15**: Harkłowa (Nespiak 1981), near Harkłowa (Wojewoda 2003); **EG-31-23**: Bór Harkłowski (XIII) forest, Harkłowa, pine-spruce forest, among *Sphagnum* and *Oxyccocus*, 13 June 2012, leg. *D. Karasiński* 7215.

\**Cortinarius phoeniceus* (Vent.) Maire – coniferous forest; on the ground; mycorrhizal; summer (July); rare (1).

DISTRIBUTION. **EG 31-43**: Bór Harkłowski (XIII) forest, S part, N of Nowa Biała, 19 July 2010, leg. *H. Komorowska*, KRAM F-57988.

*Cortinarius sanguineus* (Wulfen: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m., pine forest, in litter of conifer needles and moss, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17150; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground, under trees (Wojewoda et al. 2004).



**Cortinarius semisanguineus** (Fr.: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug.–Oct.); rare (5).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, 13 Oct. 1971, leg. I. Jalocha, KRAM F-32523; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, pine forest, ca 620 m, in litter of coniferous needles and moss, 6 Sept. 1973, leg. W. Wojewoda, KRAM F-17141; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, under trees (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, 580–595 m, ca 6 km SE of Nowy Targ, near *Pinus* tree, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-32528; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-27801; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, 30 Aug. 1977, leg. H. Komorowska, KRAM F-27863; Bór Bielski (XII, Brzezic) forest, NW part, spruce forest with sparse *Betula* sp., mosses and *Vaccinium*, on litter, 17 Oct. 2010, leg. M. Pilch, KRAM F-49955.

**Cortinarius tortuosus** (Fr.: Fr.) Fr. – forest; on the ground; mycorrhizal; rare (1).

DISTRIBUTION. ?**EG 31-15**: forest near Harkłowa; among peat moss under pines; mycorrhizal (Nespiak 1981: Tab. VII, 1, as *C. plumbosus*).

REMARKS. In Poland the species was known only from Siemianice in the central part of the country (Trocha et al. 2012).

\***Cortinarius traganus** (Fr.: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; autumn (Oct.); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekłownik village, 650–670 m, ca 17 km SW of Nowy Targ, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-32522; **DG 39-48**: Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-32521.

\***Cortinarius tubarius** Ammirati & A.H. Sm. – young pine-spruce forest; on the ground; in *Sphagnum*; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, in *Sphagnum*, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49956; leg. Z. Heinrich, KRAM F-49957.

**Cortinarius uraceus** Fr. – R; forest; on the ground; rare (1).

DISTRIBUTION. ?**EG 31-15**: Harkłowa; forest; under spruce trees; mycorrhizal; (Nespiak 1981: Tab. VII, 4).

\***Crepidotus applanatus** (Pers.) P. Kumm. – R; coniferous forest; on rotten wood; saprobic; summer and autumn (June, Sept.); rare (4).

DISTRIBUTION. **DG 39-43**: on bank of Czarny Dunajec river, between Czarny Dunajec and Wróblówka (Bugaj), 49°26'37.81"N, 19°52'09.43"E, 666.2 m, spruce forest and brushwood (young *Corylus*), 29 June 2011, leg. M. Łysek, KRAM F-56750; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, pine-spruce forest, 1 Sept. 1983, leg. Z. Heinrich, KRAM F-26323; **EG 31-24**: Bór Harkłowski (XIII) forest, pine-spruce forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26325; **EG 31-42**: Bór Bielski (XII) forest, pine-spruce forest, ca 1 km NW of Nowa Biała, ca 7 km SE of Nowy Targ, 580–600 m, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26324.

\***Crepidotus subverrucisporus** Pilát – deciduous riverine bushes; fallen twigs; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'22.6"N, 20°12'00.1"E, in *Salix eleagnos* and *Myricaria germanica* bushes on bank of Białka river, on fallen twig of *S. eleagnos*, 21 July 2012, leg. D. Karasiński 7516 (KRAM F-58308).

\***Crucibulum laeve** (Huds.) Kambly – riverine mountain alder, meadow; on wood, fallen twigs; saprobic; summer (July, Aug.); rare (3).

DISTRIBUTION. **DG 37-36**: meadow on bank of Czarna Orawa river, ca 600 m, near Lipnica Wielka village, ca 30 km SW of Nowy Targ, on lying wood, July 1962, leg. A. Środoń, KRAM F-26945; **DG 39-90**: Podczerwone, on right bank of Czarny Dunajec river, ca 18 km SW of Nowy Targ, ca 720 m, *Alin*, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25577; **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec village, 700–720 m, ca 17 km SW of Nowy Targ, *Alin*, on fallen dead twig of deciduous tree, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25576.

\***Cyathus striatus** (Huds.) Willd. – riverine deciduous forest and brushwood; on fallen twigs and plant remnants in litter; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 48-19**: between Chochółów and Koniówka, on bank of Czarny Dunajec river, near Nowy Targ, ca 747 m, deciduous forest (*Alin*), on fallen twigs, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25702; **EG 31-27**: Dolina Białki Natura 2000 p.a in vicinity of Dębno, 49°27'27.9"N, 20°12'11.5"E, in *Salix eleagnos* and *Myricaria germanica* brushwood on bank of Białka river, on plant remnants in litter, 21 July 2012, leg. D. Karasiński 7503 (KRAM F-58253).

**Cylindrobasidium laeve** (Pers.) Chamuris – various types of forest; on wood; saprobic; spring to autumn (Apr.–Aug.); frequent (16).

DISTRIBUTION. **DG 38-22**: Bór koło Chyżnego (II) forest, between Książówka and Pirogówka, on bank of Borowy stream, ca 3 km SE of Jabłonka, ca 620 m, fragments of *Alin*, fallen branch, 18 May 1973, leg. Z. Heinrich, KRAM F-25261; **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.8"N, 19°44'19.8"E, mixed forest with pine, on bark of dead attached *Frangula alnus* branch, 12 June 2012, leg. D. Karasiński 7164 (KRAM F-58613); **DG 38-69**: Las Cikówka (V) forest, SW of Nowy Targ, ca 700 m, pine-spruce forest, on dead twigs of deciduous tree lying on the ground, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-25621; **DG 39-17**: Długopole, ca 8 km W of Nowy Targ, ca 600 m, on right bank of Czarny Dunajec river, *Alin* on dead *Salix* branch, lying on the ground, 11 July 1984, leg. W. Wojewoda, KRAM F-25619; **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, brushwood and forest (*Salix* and young *Alnus*), 29 June 2011, leg. H. Komorowska, KRAM F-58136; **DG 39-52**: Czarny Dunajec near Nowy Targ, on bank of Czarny Dunajec river, on fallen *Alnus* sp. branch, 1 Aug. 1970, leg. Z. Heinrich & I. Jalocho, KRAM F-10943; **DG 48-29**: between Chochółów and Koniówka, ca 20 km SW of Nowy Targ, ca 740 m, on right bank of Czarny Dunajec river, *Alin*, on dead twigs of deciduous tree (?*Salix*) lying on the ground, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25623; **DG 49-11**: Ciche village, ca 17 km SW of Nowy Targ, on bank of Cichy stream, ca 700 m, *Alin*, on fallen twigs of *Salix* sp., 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25622; **EG 30-04**: Nowy Targ, centre of the town, ca 600 m, on lying trunk of deciduous tree, 15 Apr. 1986, leg. W. Wojewoda, KRAM F-26384; **EG 30-23**: Bór Nowotarski (IX) forest, edge of forest at Nowy Targ–Czarny Dunajec road, ca 3 km SW of Nowy Targ centre, ca 600 m, on fence post, 11 July 1984, leg. W. Wojewoda, KRAM F-25620; between Bór Nowotarski (IX) forest and Ludźmierz village, on right bank of Czarny Dunajec river, ca 600 m, *Alin*, on dead twigs of *Salix* sp., 13 May 1981, leg. W. Wojewoda, KRAM F-25258; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on fallen branches of deciduous trees (Wojewoda et al. 2004 as *Cylindrobasidium evolvens*); **EG 30-44**: edge of Bór na Czerwonem (X) forest, ca 3 km N of Szaflary, ca 4 km S of Nowy Targ, ca 620 m, on right bank of Biały Dunajec river, *Alin*, on lying *Alnus incana* twig, 11 June 1971, leg. Z. Heinrich, KRAM F-25260; **EG 30-45**: Bór na Czerwonem (X) forest, near Szaflary, near Nowy Targ, in coniferous forest, on decayed trunk of deciduous tree, 25 May 1971, leg. Z. Heinrich, KRAM F-14043; **EG 30-64**: Szaflary, on pine wood, 25 May 1971, leg. I. Jalocho, KRAM F-11256; **EG 31-12**: Łopuszna, right bank of Dunajec river, ca 7 km E of Nowy Targ, ca 560 m,

*Alin*, on fallen twigs of deciduous trees or shrubs, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-25259; **EG 31-14**: Harkłowa, on lying trunk of *Abies alba*, 22 Apr. 1971, leg. *W. Wojewoda*, KRAM F-11206.

***Cystoderma amianthinum*** (Scop.: Fr.) Fayod – coniferous, mixed forest, peatbog; on the ground among mosses; saprobic; summer and autumn (Aug., Oct.); frequent (9).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, near Piekielek village, in coniferous forest, in moss, 13 Oct. 1971, leg. *Z. Heinrich*, KRAM F-27155; **DG 38-38**: Las Baligówka (IV) forest (*Picea abies*, *Pinus sylvestris*), ca 17 km SW of Nowy Targ, ca 670 m, 2 Oct. 1970, leg. *I. Jalocha*, KRAM F-27153; Las Baligówka (IV) forest, near Czarny Dunajec, near Nowy Targ, in coniferous forest (*Pinus*, *Picea*), on the ground, 2 Oct. 1970, leg. *Z. Heinrich* & *I. Jalocha*, KRAM F-10957; **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, mixed forest, in mossy place, 13 Oct. 1971, leg. *I. Jalocha*, KRAM F-27142; **DG 39-48**: near Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, pine-spruce forest, 2 Oct. 1984, leg. *Z. Heinrich*, KRAM F-32559; **EG 30-11**: Do Grela (30) peatbog, ca 2 km NE of Ludźmierz, ca 3 km SW of Nowy Targ, in moss (*Polytrichum* sp.), 11 Oct. 1984, leg. *Z. Heinrich*, KRAM F-27154; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, *VuP* (Grodzińska et al. 1973); *CvP*, *VuP*, on the ground in mosses, under trees, saprobic (Wojewoda et al. 2004); **EG 30-40**: Pasieczny Las (VII) forest, near Rogoźnik, ca 5 km SW of Nowy Targ, 3 Oct. 1970, leg. *I. Jalocha*, KRAM F-27149; **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, edge of coniferous forest, on the ground, 16 Oct. 1970, leg. *Z. Heinrich* & *I. Jalocha*, KRAM F-10956; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 16 Oct. 1970, leg. *I. Jalocha*, KRAM F-32682; 18 Aug. 1970, leg. *I. Jalocha*, KRAM F-32563; leg. *I. Jalocha*, KRAM F-32564.

\****Cystodermella granulosa*** (Batsch: Fr.) Harmaja var. ***granulosa*** – I; coniferous forest; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 16 Oct. 1970, leg. *Z. Heinrich*, KRAM F-32562.

\****Dacrymyces minor*** Peck – deciduous brushwood and coniferous forest; on wood; saprobic; spring (May); rare (2).

DISTRIBUTION. **EG 30-58**: near the road between Nowy Targ and Białka, W of Gronków village, ca 620 m, spruce forest, on trunk of *Picea abies*, 7 May 1981, leg. *W. Wojewoda*, KRAM F-30089; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.6"N, 20°07'40.8"E, willow brushwood on bank of Białka river, on wood of fallen *Salix eleagnos* trunk, 24 May 2012, leg. *D. Karasiński* 7096 (KRAM F-58560).

***Dacrymyces stillatus*** Nees – mixed and coniferous forest, peatbog, city park; on wood; saprobic; spring, spring to autumn (Apr., May, Aug., Sept.); frequent (8).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jablonka road, 15 Sept. 2011, leg. *Mi. Lysek*, KRAM F-49446; **EG 30-04**: Nowy Targ, park, on stump, ca 600 m, 15 Apr. 1986, leg. *W. Wojewoda*, KRAM F-26381; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on *Picea abies* stump, 25 May 1971, leg. *Z. Heinrich*, KRAM F-11261; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, *CvP*, *PrS*, *VuP*, on conifer stump, branches and logs (Wojewoda et al. 2004); **EG 30-40**: Pasieczny Las (VII) forest, on right side of Ludźmierz–Maruszyna road, 49°26'41.11"N, 19°58'40.07"E, 612.5 m, pine-spruce forest, in brushwood with young *Picea*, on *Pinus* trunk, 14 Aug. 2011, leg. *H. Komorowska*, KRAM F-56831; **EG 30-41**: Pasieczny Las (VII) forest, S part, on left side of Ludźmierz–Maruszyna road, 49°26'20.54"N, 19°58'34.46"E, 615.1 m, edge of forest, birch and pine-spruce forest, *Rubus* sp., *Oxalis acetosella* and ferns, 14 Aug. 2011, leg. *H. Komorowska*, KRAM F-56836; **EG 30-58**: between road from Nowy Targ to Białka, and Gronków village, W of Gronków village, ca 620 m, spruce forest, on trunk of *Picea abies*, 7 May 1981, leg. *W. Wojewoda*, KRAM F-30090; **EG 31-27**: near Dębno on left bank of Białka river, small forest with *Pinus sylvestris* and *Juniperus communis* and *Picea abies*, on trunk of *P. abies*, 24 May 1984, leg. *W. Wojewoda*, KRAM F-26298.

**Dacryobolus karstenii** (Bres.) Oberw. ex Parmasto – E; pine forest; on wood; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest (CvP), on fallen dead *Pinus sylvestris* branch, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50621 (Wojewoda et al. 2004).

**Dacryobolus sudans** (Alb. & Schwein) Fr. – E; coniferous forest; on wood; saprobic; summer and autumn (Aug., Oct.); rare (3).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielek, on fallen *Picea abies* branch, 9 Oct. 2012, leg. D. Karasiński 8960 (KRAM F-58371); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.0"N, 20°02'07.0"E, on wood of fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. D. Karasiński 6613 (KRAM F-58380); Bór na Czerwonem (24) Nature Reserve, 49°27'33.4"N, 20°02'07.4"E, on wood of fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. D. Karasiński 6615 (KRAM F-58405); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest (CvP), on fallen dead *Pinus sylvestris* branch without bark, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50622 (Wojewoda et al. (2004).

**Daedaleopsis confragosa** (Bolton) J. Schröt. – various forest and brushwood; on wood of deciduous trees; parasitic and saprobic; spring, summer and autumn (Apr.–Sept., Nov.); frequent (18).

DISTRIBUTION. **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula ?pubescens*), on wood of deciduous tree, 11 Nov. 2011, leg. A. Sadowska, KRAM F-49782; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, on dead *Salix* twig, 4 Sept. 2011, leg. H. Komorowska, KRAM F-49791; on dead twigs, leg. M. Pilch, KRAM F-49792; **DG 38-48**: near Las Baligówka (IV) forest, at road near meadow, on living *Salix caprea*, ca 4.5 km NW of Czarny Dunajec, ca 17 km SW of Nowy Targ, ca 650 m, 18 Apr. 1986, leg. W. Wojewoda, KRAM F-26397; **DG 38-68**: Bór za lasem Kaczmarka (13) peatbog, SW of Czarny Dunajec, 49°25'32.93"N, 19°48'33.99"E, 705.0 m, *Alin*, on dead part of living *Betula*, 2 Sept. 2012, leg. H. Komorowska, KRAM F-58110; **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in brushwood with *Sorbus*, *Salix* and *Sphagnum*, on *Salix*, 15 July 2012, leg. M. Pilch, KRAM F-49585; **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, brushwood and forest (*Salix* and young *Alnus*), 29 June 2011, leg. M. Lysek, KRAM F-56899; leg. H. Komorowska, KRAM F-58116; **DG 39-20**: Puścizna Rękowiańska (19) peatbog, NW of Czarny Dunajec, 49°28'22.38"N, 19°49'43.62"E, 654.9 m, on bark of dead trunk, 3 Sept. 2012, leg. M. Pilch, KRAM F-56841; **DG 39-83**: between Domański Wierch hill and Podczerwone village, ca 700 m, on bank of Czarny stream, ca 18 km SW of Nowy Targ, on lying *Alnus incana* trunk, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25601; **DG 48-29**: forest on bank of Czarny Dunajec river, NW of Chochołów, 49°22'27.79"N, 19°48'47.69"E, 731.8 m, sparse deciduous forest (*Alnus*, *Salix*, *Corylus*, *Betula*) with frequent shrubs, on living deciduous tree, 13 Nov. 2011, leg. M. Sadowski, KRAM F-56891; **EG 30-10**: between Bór Nowotarski (IX) forest and Ludźmierz, ca 4 km SW of Nowy Targ, ca 600 m, on bank of Czarny Dunajec river, *Alin*, on *Salix* sp., 13 May 1981, leg. W. Wojewoda, KRAM F-27103; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on *Salix ?caprea* log (Wojewoda et al. 2004); **EG 30-31**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'34.68"N, 19°59'23.49"E, 597.7 m, 2 May 2011, leg. M. Lysek, KRAM F-58084; **EG 30-39**: Torfowisko koło Księżęgo Boru (26), exploited peatland 49°27'15"N, 20°05'57.46"E, 585.3 m, on fallen twig, 30 Apr. 2011, leg. A. Sadowska, KRAM F-49187; **EG 30-43**: Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, on broken tree, 3 May 2011, leg. M. Lysek, KRAM F-58056; **EG 30-64**: Szafflary, ca 6 km S of Nowy Targ, ca 640 m, deciduous forest (*Alin*) on bank of Biały Dunajec river, on deciduous tree, 22 Apr. 1971, leg. Z. Heinrich, KRAM F-27105; **EG 31-12**: Łopuszna, on

bank of Dunajec river, ca 8 km E of Nowy Targ, ca 560 m, deciduous forest (*Alin*), on *Salix* sp., 14 Apr. 1972, leg. Z. Heinrich, KRAM F-27106; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, E part of forest, 28 June 2012, leg. Z. Heinrich, KRAM F-49571; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'42.1"N, 20°07'37.1"E, willow brushwood on bank of Białka river, on living *Salix eleagnos* tree trunk, 24 May 2012, leg. D. Karasiński 7065c (KRAM F-58635).

\****Datronia mollis*** (Sommerf.) Donk – deciduous and mixed forest and willow brushwood; on bark; saprobic; spring, autumn (May, Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on bark of fallen *Salix* sp. branches 8 Oct. 2012, leg. D. Karasiński 8867 (KRAM F-58292); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'41.7"N, 20°07'42.6"E, willow brushwood on bank of Białka river, on bark of *Salix eleagnos* branch, 24 May 2012, leg. D. Karasiński 7069b (KRAM F-58666).

***Deconica inquilina*** (Fr.: Fr.) Romagn. – coniferous forest, peatbog; on the ground and plant debris; saprobic; spring (May); rare (3).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, near Ludźmierz, in coniferous forest, on the ground, 31 May 1971, leg. W. Wojewoda, KRAM F-11297; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, VuP, in litter on plant debris (Wojewoda et al. 2004, as *Psilocybe inquilina* (Fr.: Fr.) Bres.); **EG 30-44**: edge of Bór na Czerwonem (X) forest (*Picea*, *Pinus*), near Szaflary Dolne, on the ground, 31 May 1971, leg. W. Wojewoda, KRAM F-11277.

!***Deconica subfusispora*** (F.H. Møller) E. Horak – peatbog; on peaty soil; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-46**: Bór na Czerwonem (25) peatbog, ca 4 km SE of Nowy Targ, ca 600 m, on peaty soil, 11 Aug. 1984, leg. Z. Heinrich, KRAM F-17273.

\****Dichomitus campestris*** (Quél.) Domański & Orlicz – V; riverside mountain alder; on trunk; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 39-57**: near Rogoźnik village, ca 8 km of Nowy Targ, ca 620 m, *Alin* on bank of Wielki Rogoźnik stream, on dead *Alnus incana* trunk, 7 June 1972, leg. Z. Heinrich, KRAM F-27104.

\****Diplomitoporus flavescens*** (Bres.) Domański – R; coniferous forest; on trunks; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.6"N, 19°42'14.7"E, on dead standing *Pinus xraetica* trunk, 27 Aug. 2010, leg. D. Karasiński 5846; in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'10.1"N, 19°42'19.8"E, on fallen *Pinus sylvestris* trunk, 27 Aug. 2010, leg. D. Karasiński 5863.

***Entoloma conferendum*** (Britzelm.) Noordel. – coniferous forest; on the ground; saprobic; summer (June); rare (2).

DISTRIBUTION. **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), between Szaflary Dolne and Nowy Targ, on the ground, 11 June 1971, leg. I. Jalocho, KRAM F-11352.

\****Entoloma cuspidiferum*** (Kühner & Romagn.) Noordel. – E; PP; coniferous forest; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 16 Oct. 1970, leg. Z. Heinrich, KRAM F-32479.

REMARKS. In Poland the species was known from only two localities in the Babia Góra massif (Bujakiewicz 1979, 1981; Stasińska 2020a).

\**Entoloma sericeum* Quél. – pasture; on the ground in grass; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 39-18**: between Krauszów and Długopole, pasture on bank of Czarny Dunajec river, ca 6 km W of Nowy Targ, 600–640 m, 11 July 1984, leg. *W. Wojewoda*, KRAM F-32538.

\**Entoloma sphagnum* (Romagn. & J. Favre) Bon. & Court. – **PP**; coniferous forest; on *Sphagnum*; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, 49°28'19.5"N, 19°44'32.11"E, 641.9 m, 30 June 2011, leg. *H. Komorowska*, KRAM F-57334).

REMARKS. In Poland the species was known only from Babia Góra National Park (Bujakiewicz 2004, 2018; Stasińska 2020b).

\**Entoloma vernum* S. Lundell – under birches; on dry grass; saprobic; spring (Apr.); rare (1).

DISTRIBUTION. **DG 39-51**: Czarny Dunajec, near cemetery, ca 14 km SW of Nowy Targ, 675 m, on dry grass, in group of birch trees, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-32537.

\**Exidia glandulosa* (Bull.) Fr. – **R**; mixed forest, willow scrub; on bark of *Salix*; saprobic; spring and summer (May, June); rare (2).

DISTRIBUTION. **DG-38-33**: Bór koło Chyżnego (II, Szalás) forest, ca 3 km SE of Jabłonka, 49°27'22.2"N, 19°44'14.5"E, mixed forest with pine, on dead attached *Salix aurita* branch, 12 June 2012, leg. *D. Karasiński* 7151 (KRAM F-58607); **EG-31-52**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.2"N, 20°07'41.1"E, willow bushes on bank of Białka river, on bark of fallen *Salix eleagnos* trunk, 24 May 2012, leg. *D. Karasiński* 7100 (KRAM F-58327).

REMARKS. The species is in the Red List as *Exidia truncata* Fr.

*Exidia pithya* (Alb. & Schwein.) Fr. – coniferous forest; on bark and wood; saprobic; spring to autumn (May, June, Sept., Oct.); frequent (8).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 2 km SW of Chyżne, spruce-pine forest, on bark of fallen *Picea abies* trunk, 23 May 2012, leg. *D. Karasiński* 7060 (KRAM F-58415); **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'02.8"N, 19°41'50.9"E, spruce forest, on bark of fallen *Picea abies* branch, 23 May 2012, leg. *D. Karasiński* 7028 (KRAM F-58667); Las Brzegi (I, near Wyzni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, on *Picea* stump, 14 Oct. 2010, leg. *H. Komorowska*, KRAM F-58130; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ city centre, ca 600 m, coniferous forest with *Picea abies*, on fallen dead *P. abies* twigs, 19 May 1981, leg. *W. Wojewoda*, KRAM F-29944; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on dead *Picea abies* branches lying on the ground (Wojewoda et al. 2004); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'53.7"N, 20°08'43.9"E, pine-spruce forest, on bark of fallen *Picea abies* trunk, 13 June 2012, leg. *D. Karasiński* 7170 (KRAM F-58598); **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 600 m, ca 7 km SE of Nowy Targ, spruce forest, on fallen dead *Picea abies* twigs, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-30017; Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, coniferous forest (*Picea abies*, *Pinus sylvestris*), on fallen *Picea abies* twigs, 12 Oct. 1988, leg. *W. Wojewoda*, KRAM F-29123; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, E part, on fallen twigs, 28 June 2012, leg. *Z. Heinrich*, KRAM F-49576; Łopuszna, Brzezcie forest, 49°27'22.6"N, 20°08'05.7"E, spruce forest with pine, on bark of fallen *P. abies* branch, 24 May 2012, leg. *D. Karasiński* 7102 (KRAM F-58270); **EG 31-41**: Bór Bielski (XII) forest, spruce forest, ca 1.5 km NW of Nowa Biała, ca 7.5 km SE of Nowy Targ, on fallen dead young *Picea abies* trunk, ca 590 m, 7 May 1981, leg. *W. Wojewoda*, KRAM F-18534.

**Exidia plana** (Wiggers) Donk – mixed forest and willow brushwood; on bark and wood of deciduous trees; saprobic; spring and summer (May, June); rare (4).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.2"N, 19°44'14.5"E, mixed forest with pine, on dead attached *Salix aurita* branch, 12 June 2012, leg. D. Karasiński 7151; **DG 39-51**: Czarny Dunajec, at road, on dead trunk of deciduous tree (*Fraxinus excelsior*?), 30 June 1971, leg. I. Jalocho, KRAM F-11380 (Wojewoda 1979); **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on stumps and fallen branches of deciduous trees and shrubs (Wojewoda et al. 2004); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.2"N, 20°07'41.1"E, willow brushwood on bank of Białka river, on bark of fallen *Salix eleagnos* trunk, 24 May 2012, leg. D. Karasiński 7100.

**Exidia saccharina** (Alb. & Schwein) Fr. – mixed and coniferous forest; on wood; saprobic; from spring to autumn (Apr.–June, Sept., Oct.); frequent (6).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.8"N, 19°44'19.6"E, mixed forest with pine, on fallen *Pinus sylvestris* trunk, 12 June 2012, leg. D. Karasiński 7159 (KRAM F-58597); **DG 38-42**: Bór koło Chyżnego (II) forest, between Jabłonka and Pieklielnik, near Pirogówka, ca 630 m, in coniferous forest, on stump (*Picea*), 14 Apr. 1972, leg. I. Jalocho, KRAM F-12677 (Wojewoda 1979); **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ city centre, ca 600 m, coniferous forest with *Pinus sylvestris*, on fallen dead *Pinus sylvestris* twigs, 13 May 1981, leg. W. Wojewoda, KRAM F-29962; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.7"N, 20°02'08.1"E, on bark of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6622 (KRAM F-58444); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest (CvP), on fallen dead *Pinus sylvestris* trunk, 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50616; on dead standing *Pinus sylvestris* trunk, leg. W. Wojewoda, KRAM F-50615 (Wojewoda et al. 2004); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.3"N, 20°09'01.7"E, pine-spruce forest, on fallen *Pinus sylvestris* trunk, 13 June 2012, leg. D. Karasiński 7212 (KRAM F-58324).

**Exidiopsis effusa** (Bref. ex Sacc.) F.H. Moll. – mixed forest; on fallen twig; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, on fallen dead twig of deciduous tree (*Betula* ?), 18 May 1973, leg. J. Kurzawiński, KRAM F-14274 (Wojewoda 1979).

REMARKS. Wojewoda (1977, 2003) reported this species from the KON but without a precise locality given.

\***Flammula alnicola** (Fr.: Fr.) P. Kumm. – coniferous forest; on rotten wood; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, 700–720 m, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-26331.

\***Flammula pinicola** (Jacobsson) Noordel. – coniferous forest; on rotten stump and in litter; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 31-31**: Bór Bielski (XII, Brzezic) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, on decayed stump, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49529; edge of spruce forest, in litter, leg. M. Pilch, KRAM F-56638.

REMARKS. In Poland the species was recorded only from Białowieża National Park and the Puszcza Knyszyńska forest (Gierczyk et al. 2014, 2017; Kujawa et al. 2019).

\***Flammulaster muricatus** (Fr.: Fr.) Watling – riverine scrub; on rotten wood; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-12**: on edge of small alder forest between Ludźmierz and Nowy Targ, ca 600 m, on bank of Czarny Dunajec river, 31 May 1971, leg. *W. Wojewoda*, KRAM F-32314.

\**Fomitiporia punctata* (P. Karst.) Murrill – mixed and deciduous forest and brushwood; on wood of deciduous trees; parasitic and saprobic; spring to summer and in autumn (Apr.–June, Oct.); frequent (7).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. *D. Karasiński* 8874a (KRAM F-58477); **DG 38-33**: Bór koło Chyżnego (II, Szalas) forest, ca 3 km SE of Jabłonka, 49°27'22.1"N, 19°44'14.6"E, mixed forest with pine, on dead standing *Salix aurita* trunk, 12 June 2012, leg. *D. Karasiński* 7148 (KRAM F-58588); **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, brushwood and forest (*Salix* and young *Alnus*), on *Salix*, 29 June 2011, leg. *M. Łysek*, KRAM F-56894; on living *Salix*, leg. *H. Komorowska*, KRAM F-58144; **EG 30-54**: near Szaflary, on bank of Biały Dunajec river, *Alin*, ca 5 km S of Nowy Targ, ca 640 m, on deciduous tree, 22 Apr. 1971, leg. *W. Wojewoda*, KRAM F-25956; **EG 31-12**: Łopuszna village, near church, on bank of Dunajec river, on lying trunk of deciduous tree, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-12682; **EG 31-45**: between Frydman and Krempachy, on bank of Przykopa stream, ca 12 km SE of Nowy Targ, ca 560 m, *Alin*, on living *Salix ?fragilis* trunk, 24 May 1984, leg. *W. Wojewoda*, KRAM F-25957; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'42.1"N, 20°07'37.1"E, willow brushwood on bank of Białka river, on living *Salix eleagnos* tree trunk, 24 May 2012, leg. *D. Karasiński* 7065b (KRAM F-58564).

*Fomitopsis pinicola* (Sw.) P. Karst. – various types of forest; on living trees and on wood of deciduous and coniferous trees; parasitic and saprobic; spring to autumn (Apr.–July, Sept., Nov.); frequent (18).

DISTRIBUTION. **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'31.71"N, 19°39'47.79"E, 639.9 m, spruce forest, in brushwood with *Sorbus*, *Rubus* and mosses, *Vaccinium*, *Fragaria* sp., 14 July 2012, leg. *M. Pilch*, KRAM F-49593; Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce, mosses and *Vaccinium*, on mossy trunk, 2 Sept. 2011, leg. *H. Komorowska*, KRAM F-49730; Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.9"N, 19°41'51.9"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, leg. *D. Karasiński* 7032c (KRAM F-58258); **DG 39-27**: Las Cyrła forest, SE part, near Długopole, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, spruce forest, on *Picea* trunk, 27 June 2012, leg. *B. Pleban*, KRAM F-49552; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, 15 Sept. 2011, leg. *Mi. Łysek*, KRAM F-49453; leg. *Mi. Łysek*, KRAM F-49454; **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, on wood of deciduous tree, 12 Nov. 2011, leg. *M. Sadowski*, KRAM F-49784; **DG 48-01**: Bór koło Chyżnego (II, Bucznik) forest, ca 4 km SE of Chyżne, 49°23'58.8"N, 19°42'06.1"E, coniferous forest, on *Picea abies* stump, 23 May 2012, leg. *D. Karasiński* 7054b; **DG 48-02**: Bór koło Chyżnego (II, Graniowa Droga) forest, SE of Chyżne, 49°23'32.52"N, 19°43'05.03"E, 706.9 m, in clearing in spruce forest, *Sphagnum* and *Vaccinium myrtillus*, *V. vitis-idaea* and planted *Abies alba*, on trunk, 2 Sept. 2011, leg. *M. Pilch*, KRAM F-49743; leg. *H. Komorowska*, KRAM F-49739; **EG 20-81**: Bór na Grelu (VIII) forest, N part, near Lasek railway station, on standing trunk, 29 Apr. 2011, leg. *H. Komorowska*, KRAM F-49194; on trunk, leg. *H. Komorowska*, KRAM F-49203; **EG 30-05**: Nowy Targ, confluence of Czarny Dunajec and Biały Dunajec rivers, ca 590 m, near mill, *Alin*, on wood of deciduous tree, 15 May 1970, leg. *W. Wojewoda*, KRAM F-27108; **EG 30-23**: Bór Nowotarski (IX) forest, N part (Do Boru), on trunk of felled tree, 49°28'00.93"N, 20°00'38.82"E, 602.0 m, 3 May 2011, leg. *M. Sadowski*, KRAM F-58063; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, N part, 49°27'54.87"N, 20°02'23.06"E, 600.0 m, 2 May 2011, leg. *M. Łysek*, KRAM F-58147; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on stumps and on dead and live trunks of conifers (Wojewoda et al. 2004); **EG 30-40**: Pasieczny Las (VII) forest (*Picea abies*), ca 2 km E of Rogoźnik, ca 6 km SW of Nowy Targ, on stump of *P. abies*, 7 June 1972, leg. *Z. Heinrich*, KRAM F-27107; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near



Szaflary), 49°26'44.67"N, 20°00'37.5"E, 564.5 m, young spruce forest with sparse old *Picea*, at base of trunk, 27 June 2012, leg. H. Komorowska, KRAM F-49570; Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, 3 May 2011, leg. M. Lysek, KRAM F-58050; **EG 31-13**: Bór Harklowski (XIII) forest, NW part (near Łopuszna), forest by wayside, 49°28'02.04"N, 20°08'29.99"E, 587.7 m, on trunk, 3 May 2011, leg. M. Lysek, KRAM F-58078; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'54.11"N, 20°07'10"E, 583.6 m, on *Picea* trunk, 30 Apr. 2011, leg. H. Komorowska, KRAM F-49192; on dead young *Picea*, 30 Apr. 2011, leg. M. Lysek, KRAM F-49193; Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus* and some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-49452; **EG 31-22**: Bór Bielski (XII) forest, coniferous forest, between Łopuszna and Nowy Targ, on dead standing *Pinus sylvestris* trunk, 20 July 1970, leg. I. Jalocho & W. Wojewoda, KRAM F-10928; **EG 31-23**: Bór Harklowski (XIII) forest, Harkłowa, 49°27'52.3"N, 20°08'45.2"E, pine-spruce forest, on fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7187a (KRAM F-58593); **EG 31-24**: Bór Harklowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m (*Picea abies*, *Pinus sylvestris*) forest, on stump of ?*P. sylvestris*, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-27109; **EG 31-33**: Bór Harklowski (XIII) forest, S part, near Nowa Biała, 49°27'03.82"N, 20°08'47.7"E, 591.4 m, on *Picea* trunk, 2 May 2011, leg. M. Lysek, KRAM F-58073; on *Picea* trunk, leg. A. Sadowska, KRAM F-58065.

\**Funalia trogii* (Berk.) Bondartsev & Singer – mixed forest; on trunk *Populus tremula*; saprobic; early summer (June); rare (1).

DISTRIBUTION. **DG 39-27**: Las Cyrla forest, near Długopole, SE part, spruce forest with some *Betula* sp. and *Populus tremula*, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, on fallen *P. tremula* trunk, 27 June 2012, leg. Z. Heinrich, KRAM F-49602.

\**Fuscoporia ferruginosa* (Schrad.) Murrill – brushwood along river; on fallen branch of deciduous tree; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'15.2"E, in *Salix eleagnos* and *Myricaria germanica* brushwood on bank of Białka river, on fallen branch of deciduous tree, 21 July 2012, leg. D. Karasiński 7485 (KRAM F-58322).

\**Galerina allospora* A.H. Sm. & Singer – peatbog and forest; on the ground and remnants of coniferous needles, on peat; saprobic; summer and autumn (July, Oct., Nov.); rare (3).

DISTRIBUTION. **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest with single deciduous trees (*Betula pubescens*), 11 Nov. 2011, leg. A. Sadowska, KRAM F-49937; **DG 38-55**: Puścizna Wielka (10) peatbog between Czarny Dunajec, Baligówka, and Piekielnik, on the ground, in peat, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-19463; **EG 30-01**: Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, pine-spruce forest, on remnants of conifer needles, 17 July 1985, leg. Z. Heinrich, KRAM F-26115.

REMARKS. In Poland the species was recorded only from Babia Góra National Park and Kampinos National Park (Bujakiewicz 2004, 2018; Karasiński et al. 2015).

*Galerina ampullaceocystis* P.D. Orton – E; marshy coniferous forest; on *Sphagnum* and on twigs; saprobic; spring, summer and autumn (May, July, Sept.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, on *Picea* twigs; 6 July 1970, leg. I. Jalocho, KRAM F-19121; **EG 30-23**: Bór Nowotarski (IX) forest, between Szaflary Dolne and Ludźmierz, in coniferous forest, in mossy place, 31 May 1971, leg. W. Wojewoda, KRAM F-11299 (Pl. V, 4); **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-19460; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, on *Sphagnum* (Grodzińska et al. 1973; Wojewoda 2003).

\**Galerina atkinsoniana* A.H. Sm. – coniferous forest; on the ground in moss; saprobic; summer and autumn (Aug., Sept.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, between Czarny Dunajec and Piekielek, pine-spruce forest, in moss, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-19456; **EG 31-15**: Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, in moss, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49954; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. H. Komorowska*, KRAM F-57957.

*Galerina calyptrata* P.D. Orton – peatbogs, marshy coniferous forest; on the ground in moss incl. *Sphagnum*; saprobic; summer to autumn (June–Oct.); frequent (10).

DISTRIBUTION. **DG 38-06**: the peatbog between Piekielek and Baligówka, in moss, 3 Aug. 1970, *leg. I. Jalocho*, KRAM F-19120; peatbog between Piekielek and Baligówka, near Czarny Dunajec, in moss, 30 July 1970, *leg. I. Jalocho*, KRAM F-19118; forest near Piekielek, in moss, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-19119; **DG 38-19**: Puścizna Rękowońska (19) peatbog, ca 2 km S of Załuczne, 650–660 m, 31 July 1984, *leg. Z. Heinrich*, KRAM F-34484; **DG 38-23**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, 49°28'19.5"N, 19°44'32.11"E, 641.9 m, 30 June 2011, *leg. H. Komorowska*, KRAM F-57983; **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jabłonka road, 15 Sept. 2011, *leg. M. Lysek*, KRAM F-49939; **EG 30-01**: Do Grela (30) peatbog, ca 2 km N of Ludźmierz, ca 600 m, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-34483; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, PrS, in *Sphagnum* sp. (Wojewoda et al. 2004); **EG 30-30**: Przymiarki (22) peatbog, SW of Ludźmierz, on peat dome, 28 June 2012, *leg. Z. Heinrich*, KRAM F-57937; **EG 30-55**: Bór na Czerwonem (X) forest, near Szaflary, coniferous forest (*Pinus*, *Picea*), on patch of wet soil, *Sphagnum* and *Polytrichum*, 30 July 1976, *leg. H. Komorowska*, KRAM F-19117; **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside, 28 June 2011, *leg. H. Komorowska*, KRAM F-56675; **EG 31-23**: Bór Harkłowski (XIII) forest, near Łopuszna, on forest path in dry place among *Polytrichum* and *Sphagnum*, 22 June 1970, *leg. W. Wojewoda*, KRAM F-19461.

\**Galerina calyptrospora* Kühner – coniferous forest, peatbog; among mosses, on peat; saprobic; summer and autumn (June, July, Sept.); rare (4).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekielek village, 650–670 m, ca 17 km SW of Nowy Targ, 6 July 1970, *leg. Z. Heinrich*, KRAM F-32331; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, pine forest (mosaic of *VuP* and *SP*) near peat dome, 16 Sept. 2011, *leg. H. Komorowska*, KRAM F-57956; **EG 31-14**: Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in brushwood with young *Picea abies* and *Carex* sp., 20 July 2010, *leg. M. Pilch*, KRAM F-56754; **EG 31-32**: Bór Bielski (XII, Brzezie) forest, E part, 49°27'16.44"N, 20°08'02.88"E, 591.8 m, on edge of spruce forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), 28 June 2012, *leg. H. Komorowska*, KRAM F-57933; *leg. H. Komorowska*, KRAM F-57935; in forest – young spruce forest with *Frangula alnus*, *leg. B. Pleban*, KRAM F-57934.

\**Galerina camerina* (Fr.) Kühner – coniferous forest; on rotting wood; saprobic; summer and autumn (July, Sept.); rare (2).

DISTRIBUTION. **DG 38-73**: Bór koło Chyżnego (II) forest, ca 4 km E of Chyżne village, S of Pirogówka mount, 640–710 m, ca 22 km SW of Nowy Targ, CvP, on decayed stump, 31 July 1984, *leg. W. Wojewoda*, KRAM F-34486; **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, spruce forest, on decayed stump, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-19455.

\**Galerina graminea* (Velen.) Kühner – pine-spruce forest; among grass and sedges; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-14**: Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in brushwood with young *Picea abies* and *Carex* sp., 20 July 2010, *leg. M. Pilch*, KRAM F-57994.

\**Galerina hypnorum* (Schrank: Fr.) Kühner – coniferous forest; in moss; saprobic; summer and autumn (July, Oct.); rare (2).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, edge of spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, leg. H. Komorowska, KRAM F-49997; **DG 38-06**: near Piekienik village, near Czarny Dunajec, pine-spruce forest, in moss, 3 July 1970, leg. I. Jalocha, KRAM F-19412.

*Galerina marginata* (Batsch) Kühner – coniferous forest; on woody debris or stumps; saprobic; autumn (Oct.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 4 km W of Czarny Dunajec, on stump, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-19195; Las Baligówka (IV) forest, between Czarny Dunajec and Piekienik, coniferous forest, on rotten stump, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-19125; **DG 39-48**: pine-spruce forest near Rogoźnik village, in vicinity of Nowy Targ, on remnants of wood, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-19194; Rogoźnik village, between Czarny Dunajec and Nowy Targ, in forest, on stump, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-19126; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on remains of twigs, needles and leaves (Wojewoda et al. 2004).

!*Galerina minima* (Peck) A.H. Sm. & Singer – spruce-fir forest; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in brushwood with *Sorbus*, *Salix* and *Sphagnum*, 15 July 2012, leg. M. Pilch, KRAM F-49941.

\**Galerina mniophila* (Lasch: Fr.) Kühner – forest; in *Sphagnum*; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-57**: on bank of Wielki Rogoźnik stream, between Rogoźnik village and mouth of Czarny Dunajec river in Ludźmierz, ca 8 km SW of Nowy Targ, 620–640 m, forest, in *Sphagnum*, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-32542.

*Galerina norvegica* A.H. Sm. – pine forest, peatbog; in *Sphagnum*; saprobic; autumn (Oct., Nov.); rare (2).

DISTRIBUTION. **DG 38-19**: near Puścizna Rękowiańska (19) peatbog, pine forest, in *Sphagnum*, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-25989; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, marshy pine forest, in *Sphagnum*, 21 Oct. 1983, leg. H. Komorowska, KRAM F-25316; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, PrS (Wojewoda et al. 2004).

REMARKS. In Poland the species was recorded only from the central part of the country (Grzesiak et al. 2015).

*Galerina paludosa* (Fr.) Kühner – **R**; coniferous forest, peatbogs; in *Sphagnum*; saprobic; summer to autumn (June–Oct.); frequent (19).

DISTRIBUTION. **DG 37-27**: near Otrębowski Brzegi (28) peatbog, SW of Jabłonka, 49°28'13.52"N, 19°38'59.25"E, 617.6 m, exploitation hollow (cutover peatland), among meadows and fields, *Salix*, mosses and *Sphagnum* in hollow, *Scirpus* on rim, 14 July 2012, leg. M. Pilch, KRAM F-49862; **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 29 July 2010, leg. Z. Heinrich, KRAM F-57910; **DG 38-06**: marshy pine-spruce forest, near Piekienik village, near Czarny Dunajec, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19135; leg. Z. Heinrich, KRAM F-19136; marshy pine-spruce forest, near Piekienik village, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19462; marshy pine-spruce forest, near Piekienik village, S of Jabłonka–Czarny Dunajec road, in *Sphagnum*, 3 July 1970, leg. I. Jalocha, KRAM F-19129; marshy pine-spruce forest, near Piekienik village, between Jabłonka and

Czarny Dunajec, in *Sphagnum*, 3 July 1970, *leg. I. Jalocha*, KRAM F-19130; marshy pine-spruce forest, near Piekielnik village, near Czarny Dunajec, in *Sphagnum*, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-19131; *leg. Z. Heinrich*, KRAM F-19132; marshy pine-spruce forest, near Piekielnik village, in *Sphagnum*, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-19449; *leg. Z. Heinrich*, KRAM F-19450; marshy pine-spruce forest, near Piekielnik village, S of Jablonka–Czarny Dunajec road, in *Sphagnum*, 3 Aug. 1970, *leg. I. Jalocha*, KRAM F-19128; **DG 38-19**: Puścizna Rękowiańska (19) peatbog, between Czarny Dunajec and Piekielnik, in *Sphagnum*, 15 June 1982, *leg. W. Wojewoda*, KRAM F-19176; *leg. W. Wojewoda*, KRAM F-19193; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, 4 Sept. 2011, *leg. M. Łysek*, KRAM F-57947; **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'56.8"N, 19°42'49.2"E, among *Sphagnum* sp., 27 Aug. 2010, *leg. D. Karasiński* 5873; **EG 30-01**: Bór na Grelu (VIII) forest, SW part (Grel), 49°28'55.9"N, 19°58'49.7"E, 627.2 m, spruce forest (with partial clearing), in brushwood with young *Picea* and *Vaccinium*, 16 July 2011, *leg. G. Końska*, KRAM F-57965; **EG 30-11**: Bór na Grelu (VIII) forest, S part (Grel), 49°28'39.84"N, 19°58'48.89"E, 606.2 m, 16 July 2011, *leg. H. Komorowska*, KRAM F-57972; **EG 30-23**: Bór Nowotarski forest, left side of Czarny Dunajec–Nowy Targ road, CvP, near shoe factory, in *Sphagnum*, 22 June 1970, *leg. W. Wojewoda*, KRAM F-19133 (Pl. V, 5); *leg. W. Wojewoda*, KRAM F-19134; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, PrS on *Sphagnum* (Wojewoda et al. 2004); **EG 30-30**: Przymiarki (22) peatbog, SW of Ludźmierz, edge of peat dome, 49°27'24.6"N, 19°58'19.5"E, 608.9 m, near birch forest with *Ledum palustre*, young *Betula* and *Pinus mugo*, in *Sphagnum*, 28 June 2012, *leg. H. Komorowska*, KRAM F-57931; Przymiarki (22) peatbog, S of Ludźmierz, 49°27'23.84"N, 19°58'25.76"E, 616.6 m, 17 July 2011, *leg. P. Roux*, KRAM F-57993; **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'03.7"N, 19°59'57.5"E, 630.0 m, 17 July 2011, *leg. H. Komorowska*, KRAM F-58001; Bór Nowotarski (IX) forest, W part (Do Boru), marshy old pine forest and sparse *Picea* with *Sphagnum*, 20 July 2010, *leg. M. Pilch*, KRAM F-56759; *leg. H. Komorowska*, KRAM F-56773; **EG 30-35**: Bór na Czerwonem (X) forest, near Nowy Targ, peatbog, in *Sphagnum*, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-25308; Bór na Czerwonem (X) forest, near Nowy Targ, peatbog, in *Sphagnum*, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-25307; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), young spruce forest with sparse old *Picea*, 27 June 2012, *leg. H. Komorowska*, KRAM F-57930; **EG 30-44**: Bór na Czerwonem (X) forest, near Szaflary Dolne, coniferous forest (*Pinus*, *Picea*), in *Sphagnum*, 30 July 1976, *leg. Z. Heinrich & H. Komorowska*, KRAM F-19127; **EG 30-45**: Bór na Czerwonem (X, Czerwony Bór) peatbog, SW part, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, 15 July 2011, *leg. G. Końska*, KRAM F-57998; *leg. G. Końska*, KRAM F 58395; **EG 31-14**: Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in brushwood with young *Picea abies* and *Carex* sp., 20 July 2010, *leg. M. Pilch*, KRAM F-56761; **EG 31-20**: Bór Ostrowski (XI, Księży Bór), W part (Czerwonka), SW of Łopuszna, spruce-pine forest with *Populus tremula*, *Sphagnum* sp. in undergrowth, 17 July 2010, *leg. M. Pilch*, KRAM F-57985; **EG 31-43**: Bór Harkłowski (XIII) forest, S part, N of Nowa Biała, in *Sphagnum*, 19 July 2010, *leg. H. Komorowska*, KRAM F-57984.

\**Galerina pumila* (Pers.: Fr.) M. Lange – marshy coniferous and mixed forest, peatbogs, meadows; in moss; saprobic; summer and autumn (Aug., Oct., Nov.); frequent (6).

DISTRIBUTION. **DG 29-91**: forest S of Odrowąż (between Matejówka and Na Kamieniu), 49°29'26.54"N, 19°50'33.55"E, 664.9 m, spruce forest (old *Picea*) with sparse *Pinus*, moss and *Vaccinium*, in dry undergrowth with many conifer needles and cones, in moss, 30 Oct. 2011, *leg. M. Sadowski*, KRAM F-57989; **DG 38-59**: Las Cikówka (V) forest, N part (near Las Baligówka forest), 49°26'03.97"N, 19°49'03.98"E, 682.2 m, spruce forest with *Betula*, sparse *Pinus*, frequent mosses and ferns, 29 Oct. 2011, *leg. A. Sadowska*, KRAM F-57999; **DG 38-61**: NW edge of Puścizna Jasiowska (4) peatbog, SE od Jablonki, 49°26'19.53"N, 19°42'02.76"E, 648.5 m, sparse *Pinus* and young *Picea*, with frequent *Calluna vulgaris*, 11 Nov. 2011, *leg. A. Sadowska*, KRAM F-49936; **DG 39-48**: forest on bank of Wielki Rogoźnik stream, ca 8 km SW of Nowy Targ, ca 620–640 m, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-34489; **EG 30-01**: Do Grela (30) peatbog, ca 2 km N of Ludźmierz, ca 600 m, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-34487; *leg. Z. Heinrich*, KRAM F-34488; **EG 31-10**: Bór Ostrowski (XI) forest, between Ostrowski and Łopuszna, marshy pine-spruce forest, in mosses, 25 Aug. 1981, *leg. Z. Heinrich*, KRAM F-19457.

\**Galerina sideroides* (Bull.) Kühner – **R**; coniferous forest; on wood; saprobic; spring and autumn (May, Nov.); rare (**2**).

DISTRIBUTION. **DG 49-11**: Dziurów Lasek forest, NE of Chochołów, 49°23'18.43"N, 19°50'56.19"E, 742.8 m, spruce forest, sparse deciduous trees, 12 Nov. 2011, leg. M. Sadowski, KRAM F-49935; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary Dolne, in coniferous forest (*Picea*, *Pinus*), on rotten stump, 31 May 1971, leg. W. Wojewoda, KRAM F-11274.

!\**Galerina similis* Kühner – young spruce forest; on mossy log; saprobic; summer (June); rare (**1**).

DISTRIBUTION. **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), young spruce forest with sparse old *Picea*, on mossy log, 27 June 2012, leg. B. Pleban, KRAM F-57936.

\**Galerina sphagnum* (Pers.: Fr.) Kühner – **R**; coniferous forest, meadows and peatbogs; in moss incl. *Sphagnum*; saprobic; spring to autumn (May–Aug., Oct.); frequent (**14**).

DISTRIBUTION. **DG 38-06**: forest between Piekienik and Czarny Dunajec, CvP, in *Sphagnum*, 22 June 1970, leg. W. Wojewoda, KRAM F-19152; the peatbog between Piekienik and Baligówka, ca 4 km NW of Czarny Dunajec, in *Sphagnum*, 22 June 1970, leg. W. Wojewoda, KRAM F-19151; leg. W. Wojewoda, KRAM F-19154; pine-spruce forest near Piekienik village, in *Sphagnum*, 3 July 1970, leg. I. Jalocho, KRAM F-19150; leg. I. Jalocho, KRAM F-19157; marshy pine-spruce forest near Piekienik village, near Czarny Dunajec, in *Sphagnum*, 3 July 1970, leg. I. Jalocho, KRAM F-19158; leg. I. Jalocho, KRAM F-19149; leg. I. Jalocho, KRAM F-19156; leg. Z. Heinrich, KRAM F-19160; leg. Z. Heinrich, KRAM F-19159; edge of pine-spruce forest near Piekienik village, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19448; pine-spruce forest near Piekienik village, in *Sphagnum*, 3 Aug. 1970, leg. Z. Heinrich; KRAM F-19446; leg. I. Jalocho, KRAM F-19447; **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, NW part of forest, 30 July 2010, leg. Z. Heinrich, KRAM F-57992; **DG 38-19**: Puścizna Rękowińska (19) peatbog, ca 2 km S of Załuczne, 650–660 m, 31 July 1984, leg. Z. Heinrich, KRAM F-34490; **DG 38-23**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, 49°28'19.5"N, 19°44'32.11"E, 641.9 m, 30 June 2011, leg. H. Komorowska, KRAM F-58002; **DG 38-33**: Bór koło Chyżnego (II, N part Szałas) forest, edge of forest by wayside, 49°27'28.36"N, 19°44'08.92"E, 654.7 m, pine forest with frequent young *Picea*, and sparse *Betula*, and mosses and *Vaccinium* (*VuP*), 30 Oct. 2011, leg. A. Sadowska, KRAM F-56756; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657.7 m, in clearing in spruce forest, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-56712; **EG 30-01**: Bór na Grelu (VIII) forest, near Ludźmierz, spruce forest (*Picea abies*), in mossy place (*Sphagnum*), 31 May 1971, leg. W. Wojewoda, KRAM F-11296; **EG 30-23**: Bór Nowotarski (IX) forest, left side of Czarny Dunajec–Nowy Targ road, CvP, in *Sphagnum*, 22 June 1970, leg. W. Wojewoda, KRAM F-19153; Bór Nowotarski (IX) forest, near Szaflary Dolne, in coniferous forest (*Picea*, *Pinus*), in mossy place, 31 May 1971, leg. W. Wojewoda, KRAM F-11308; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, marshy forest, in *Sphagnum*, 17 July 1985, leg. Z. Heinrich, KRAM F-26104; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, PrS, on *Sphagnum* sp. (Grodzińska et al. 1973; Wojewoda et al. 2004); **EG 30-30**: Przemiarki (22) peatbog, SW of Ludźmierz, edge of peat dome, 49°27'24.6"N, 19°58'19.5"E, 608.9 m, near birch forest with *Ledum palustre*, young *Betula* and *Pinus mugo*, in *Sphagnum*, 28 June 2012, leg. H. Komorowska, KRAM F-57928; **EG 30-35**: Bór na Czerwonem (24) peatbog, near Nowy Targ, PrS, in *Sphagnum*, 11 June 1971, leg. I. Jalocho, KRAM F-19148; **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*), between Szaflary Dolne and Nowy Targ, on mossy place, 11 June 1971, leg. Z. Heinrich, KRAM F-11346; Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), between Szaflary Dolne and Nowy Targ, on mossy place (*Sphagnum*), 11 June 1971, leg. Z. Heinrich, KRAM F-11359; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, W part (Czerwonka), SW of Łopuszna, spruce-pine forest with *Populus tremula*, *Sphagnum* sp. in undergrowth, 17 July 2010, leg. M. Pilch, KRAM F-57986; Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'50.46"N, 20°06'19.38"E, 597.2 m, spruce-pine forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), clearing, 28 June

2012, leg. H. Komorowska, KRAM F-57929; **EG 31-23**: Bór Harkłowski (XIII) forest, near Łopuszna, coniferous forest (*VuP*), in *Sphagnum* and *Polytrichum*, 22 June 1970, leg. W. Wojewoda, KRAM F-19155.

\***Galerina stordalii** A.H. Sm. – peatbog, marshy forest; in *Sphagnum*; saprobic; summer (July, Aug.); rare (3).

DISTRIBUTION. **DG 38-19**: Puścizna Rękowiańska (19) peatbog, ca 2 km S of Załuczne, 650–660 m, in *Sphagnum*, 31 July 1984, leg. Z. Heinrich, KRAM F-34491; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 4 km E of Chyżne village, S of Pirogówka mount, 640–710 m, ca 22 km SW of Nowy Targ, pine forest, 24 Aug. 1984, leg. Z. Heinrich, KRAM F-34492; **EG 30-30**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 4.5 km SW of Nowy Targ, 17 July 1985, leg. Z. Heinrich, KRAM F-26116; Przymiarki (22) peatbog, SW of Ludźmierz, 49°27'23.9"N, 19°58'19.7"E, 611.1 m, on peat dome, edge of birch forest with *Populus tremula*, in undergrowth clumps of peat and *Vaccinium vitis-idaea* and ferns, 16 July 2011, leg. G. Końska, KRAM F-57973.

REMARKS. In Poland the species was known only from Białowieża National Park, the Tatra Mts and Bieszczady Mts (Skirgiełło et al. 1992; Ronikier 2012; Gierczyk et al. 2019b).

!**Galerina subcerina** A.H. Sm. & Singer – coniferous forest; on mossy stump; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, coniferous forest (*Pinus*, *Picea*), on mossy stump, 6 July 1970, leg. Z. Heinrich, KRAM F-19458.

\***Galerina subclavata** Kühner – spruce forest; among grass and moss; saprobic; summer and autumn (June, Nov.); rare (2).

DISTRIBUTION. **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), in undergrowth – *Rubus*, mosses and ferns, 12 Nov. 2011, leg. A. Sadowska, KRAM F-49938; **EG 31-32**: Bór Bielski (XII, Brzezicze) forest, E part, 49°27'16.44"N, 20°08'02.88"E, 591.8 m, on edge of spruce forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), 28 June 2012, leg. H. Komorowska, KRAM F-57939.

**Galerina tibiicystis** (G.F. Atk.) Kühner – peatbogs and marshy coniferous forest; in *Sphagnum*; saprobic; summer to autumn (June–Oct.); frequent (9).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, leg. H. Komorowska, KRAM F-49998; **DG 38-06**: pine-spruce forest near Piekielnik village, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19161; pine-spruce forest near Piekielnik village, ca 5 km NW of Czarny Dunajec, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19164; leg. Z. Heinrich, KRAM F-19169; leg. I. Jalocho, KRAM F-19163; 3 Aug. 1970, leg. Z. Heinrich, KRAM F-19168; marshy pine-spruce forest near Piekielnik village, ca 5 km NW of Czarny Dunajec, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19165; leg. Z. Heinrich, KRAM 19167; pine-spruce forest near Piekielnik village, in vicinity of Czarny Dunajec, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19170; peatbog between Piekielnik and Baligówka, ca 4 km NW of Czarny Dunajec, in *Sphagnum*, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-19171; **DG 38-38**: Las Baligówka (IV) forest between Baligówka and Piekielnik, in *Sphagnum*, 3 July 1970, leg. Z. Heinrich, KRAM F-19162; **EG 30-25**: Bór na Czerwonym peatbog, near Nowy Targ, in *Sphagnum*, 21 Sept. 1983, leg. H. Komorowska, KRAM F-25244; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, *PrS* in *Sphagnum* sp. (Grodzińska et al. 1973; Wojewoda et al. 2004); **EG 30-30**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 4.5 km SW of Nowy Targ, 17 July 1985, leg. Z. Heinrich, KRAM F-26105; Przymiarki (22) peatbog, SW of Ludźmierz, on peat dome, 28 June 2012, leg. B. Pleban, KRAM F-57938; Przymiarki (22) peatbog, SW of Ludźmierz, 49°27'23.9"N, 19°58'19.7"E, 611.1 m, on peat dome, 16 July 2011, leg. H. Komorowska, KRAM F-57969; leg. Z. Heinrich, KRAM

F-57987; Przymiarki (22) peatbog, SW of Ludźmierz, 49°27'25"N, 19°58'26.4"E, 580.6 m, edge of birch forest with *Populus tremula* in undergrowth clumps of peat, *Vaccinium vitis-idaea* and ferns, 16 July 2011, leg. H. Komorowska, KRAM F-57968; Przymiarki (22) peatbog, S of Ludźmierz, 49°27'23.84"N, 19°58'25.76"E, 616.6 m, 17 July 2011, leg. H. Komorowska, KRAM F-58000; **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), marshy old pine forest with *Picea* and *Sphagnum*, 20 July 2010, leg. H. Komorowska, KRAM F-56754; leg. H. Komorowska, KRAM F-56755; leg. H. Komorowska, KRAM F-56757; **EG 30-34**: edge of Bór na Czerwonem peatbog, between Szaflary Dolne and Nowy Targ, in *Sphagnum*, 11 June 1971, leg. I. Jaloča, KRAM F-11361; **EG 31-14**: Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in brushwood with young *Picea abies* and *Carex* sp., 20 July 2010, leg. M. Pilch, KRAM F-56762; **EG 31-23**: Bór Harkłowski (XIII) forest, near Łopuszna, coniferous forest (*VuP*), in *Sphagnum* and *Polytrichum*, 22 June 1970, leg. W. Wojewoda, KRAM F-19166 (Pl. V, 2).

\**Galerina unicolor* (Vahl) Singer – coniferous forest, on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-01**: Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, 600–620 m, ca 3 km W of Nowy Targ, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-34493.

\**Galerina vittiformis* (Fr.) Singer var. *vittiformis* f. *bispora* A.H. Sm. & Singer – coniferous forest; among mosses; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-26**: Las Gajka (III) forest, S of Piekienik, coniferous forest, 28 July 2010, leg. Z. Heinrich, KRAM F-56774.

\**Galerina vittiformis* (Fr.) Singer var. *vittiformis* f. *tetraspora* A.H. Sm. & Singer – marshy coniferous forest, peatbog; on the ground; saprobic; summer to autumn (Aug.–Oct.); rare (4).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, N part, pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-49943; **EG 30-01**: Do Grela (30) peatbog, ca 2 km N of Ludźmierz, ca 600 m, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-34494; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., on the ground, under *Picea*, 16 Oct. 2010, leg. M. Pilch, KRAM F-49942; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, coniferous forest (*Pinus, Picea*), edge of burnt ground, 18 Aug. 1970, leg. Z. Heinrich, KRAM F-19459.

\**Ganoderma applanatum* (Pers.) Pat. – deciduous, mixed forest, post-peat area, roadside, riverbank; on stumps and trunks; parasitic and saprobic; spring to autumn (Apr., May, July–Sept.); frequent (6).

DISTRIBUTION. **DG 39-51**: Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 675 m, roadside, on stump of deciduous tree, 30 Sept. 1984, leg. W. Wojewoda, KRAM F-25592; **EG 30-10**: Ludźmierz, near road, on living trunk of *Betula verrucosa*, 31 May 1971, leg. W. Wojewoda, KRAM F-11276; Ludźmierz, ca 4.5 km SW of Nowy Targ, a stump of *Tilia* sp. near a church, ca 600 m, 11 July 1984, leg. W. Wojewoda, KRAM F-25958; **EG 30-39**: Torfowisko koło Księżego Boru (26), post-peat area 49°27'10.22"N, 20°06'01.21"E, 587.8 m, on trunk, 30 Apr. 2011, leg. H. Komorowska, KRAM F-49191; **EG 30-44**: Szaflary Dolne, roadside, on stump of *Populus nigra*, 31 May 1971, leg. W. Wojewoda, KRAM F-11275; **EG 30-49**: Gronków Środkowy village, SE of Nowy Targ, on bank of Leśnica river, 49°26'21.11"N, 20°05'24.73"E, 608.4 m, thicket: *Acer, Carpinus, Fraxinus, Ulmus, Salix* and *Asarum, Urtica dioica, Arctium, Rubus, Prunus padus*, on fallen trunk, 3 Sept. 2011, leg. H. Komorowska, KRAM F-49732; leg. H. Komorowska, KRAM F-56830; **EG 31-53**: near Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, on bank of Białka stream, in a mixed forest, on stump of coniferous tree, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25916.

***Geastrum fimbriatum* Fr. – R;** coniferous forest, thickets; on the ground; saprobic; summer (July, Aug.); rare (4).

DISTRIBUTION. ?**EG 30-25:** Bór na Czerwonym (24) Nature Reserve, CvP, in a dry place, on the ground (Wojewoda et al. 2004); **EG 30-35:** Bór na Czerwonym (24) Nature Reserve, ca 2.5 km S of Nowy Targ, ca 600 m, coniferous forest with *Pinus sylvestris*, *Picea abies*, on the ground under *P. abies*, 31 July 1976, leg. Z. Heinrich, KRAM F-25291 (Wojewoda 2000); **EG 31-27:** Dolina Białki p.a., SE of Dębno, 49°27'29.78"N, 20°12'42.08"E, 516.3 m, riverside thickets, on the ground, 14 Aug. 2012, leg. G. Końska, KRAM F-49544; **EG 31-62:** Przełom Białki pod Krempachami Nature Reserve, Mt. Kramnica, ca 650 m, in spruce forest with *Pinus sylvestris*, on calcareous soil, 23 Aug. 1968, leg. A. Środoń, KRAM-F 28785 (Wojewoda 2000).

***Geastrum quadrifidum* Pers.: Pers. – R; PP;** spruce forest; on the ground; saprobic; autumn (Sept.); rare (2).

DISTRIBUTION. ?**EG 30-25:** Bór na Czerwonym (24) Nature Reserve, CvP, on the ground, in litter (Wojewoda et al. 2004); **EG 31-32:** Bór Bielski (XII) forest, spruce forest on left side of Łopuszna–Nowa Biała road, ca 2 km NW of Nowa Biała, ca 8 km SE of Nowy Targ, ca 610 m, on the ground, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-19088 (Wojewoda 2000).

REMARKS. Information on the distribution of this partially protected species in Poland can be found in Kujawa (2020).

\****Gloeocystidiellum furfuraceum* (Bres.) Donk – E;** spruce forest; on decayed trunk; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-32:** Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 600 m, spruce forest, decayed trunk, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25611.

REMARKS. The species is in the Red List as *Boidinia furfuracea* (Bres.) Stalpers & Hjortstam.

\****Gloeocystidiellum ochraceum* (Fr.) Donk – R;** coniferous forest; on trunks and fallen twigs of coniferous trees; saprobic; autumn (Sept.); rare (2).

DISTRIBUTION. **DG 37-18:** forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on very decayed mossy trunk, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49747; **EG 31-31:** Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 580 m, ca 7 km SE of Nowy Targ, spruce forest with *Pinus sylvestris*, on dead fallen twigs of *Pinus sylvestris*, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25266.

\****Gloeocystidiellum porosum* (Berk. & M.A. Curtis in Berk. & Broome) Donk –** riverside mountain alder; on fallen twigs of *Alnus incana*; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 48-29:** between Chochołów and Koniówka, ca 20 km SW of Nowy Targ, ca 740 m, *Alin*, on dead *Alnus incana* twigs lying on the ground 31 Aug. 1984, leg. W. Wojewoda, KRAM F-26303.

***Gloeophyllum abietinum* (Bull.) P. Karst. –** coniferous forest; on wood; saprobic; spring and summer (Apr., May, Aug.); rare (4).

DISTRIBUTION. ?**EG 30-25:** Bór na Czerwonym (24) Nature Reserve, CvP, VuP, on coniferous stumps and logs (Wojewoda et al. 2004); **EG 31-04:** near Harkłowa, in riverine scrub (*Alnus incana*) on bank of Dunajec river, on fence post, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-11192; **EG 31-27:** between Dębno and Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25937; **EG 31-33:** Bór Harkłowski (XIII) forest, S part, near Nowa Biała, 49°27'03.82"N, 20°08'47.7"E, 591.4 m, on living *Picea*, 2 May 2011, leg. M. Lysek, KRAM F-58071.



**Gloeophyllum odoratum** (Wulfen) Imaz. – coniferous and mixed forest; on stumps and fallen trunks of *Picea abies*; saprobic; spring to autumn (Apr.–Oct.); frequent (13),

DISTRIBUTION. **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on very old trunk, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49744; **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. M. Pilch, KRAM F-49584; Las Brzegi (I) forest, ca 1.2 km SW of Chyżne, spruce forest with *Pinus* admixture, on stump, 18 June 2010, leg. H. Komorowska, KRAM F-59120; **DG 38-13**: Bór koło Chyżnego (II) forest (Księża Soślina), Piekiełnik, mixed forest, on *Picea abies* stump, 8 Oct. 2012, leg. D. Karasiński 8927 (KRAM F-58304); **DG 38-38**: Las Baligówka (IV) forest, NE part, NW of Czarny Dunajec, near parking lot, spruce forest, on rotten stump, 18 June 2010, leg. H. Komorowska, KRAM F-59127; **DG 38-90**: Las Brzegi (I) forest (Sławny Łęk), ca 4 km SE of Chyżne, 49°24'00.5"N, 19°42'01.4"E, coniferous forest, on stump of old *Picea abies* tree, 23 May 2012, leg. D. Karasiński 7053a (KRAM F-58349); **DG 48-02**: Bór koło Chyżnego (II) forest (Graniowa Droga), SE of Chyżne, 49°23'32.52"N, 19°43'05.03"E, 706.9 m, in clearing in spruce forest with *Carex*, *Sphagnum* and *Vaccinium myrtillus*, *V. vitis-idaea* and planted *Abies alba*, on trunk, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49759; **EG 20-81**: Bór na Grelu (VIII) forest, N part, near Lasek railway station, on trunk, 29 Apr. 2011, leg. M. Lysek, KRAM F-49188; **EG 20-91**: Bór na Grelu (VIII) forest, E part, near Trute–Nowy Targ road, on trunk, 29 Apr. 2011, leg. M. Lysek, KRAM F-49208; **?EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, on *Picea abies* stump (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonym (X, Czerwony Bór), peatbog, SW part (near Szaflary), 49°26'41.81"N, 20°01'47.16"E, 622.4 m, on trunk, 3 May 2011, leg. M. Lysek, KRAM F-58060; leg. M. Lysek, KRAM F-58066; **EG 31-32**: Bór Bielski (XII, Brzezie) forest, Łopuszna, 49°27'23.3"N, 20°07'56.5"E, spruce forest with pine, on rotten *Picea abies* stump, 24 May 2012, leg. D. Karasiński 7105 (KRAM F-58303); **EG 31-33**: Bór Harkłowski (XIII) forest, W part, 49°27'20.22"N, 20°08'49.2"E, 590.2 m, edge of pine-spruce forest (on edge – old *Pinus*, farther off – young and old *Picea*), on very decayed *Pinus* trunk, 28 June 2012, leg. H. Komorowska, KRAM F-49567; pine-spruce forest (on edge – old *Pinus*, farther off – young and old *Picea*), leg. H. Komorowska, KRAM F-49568; **EG 31-53**: near Nowa Biała, ca 10 km SE of Nowy Targ, on bank of Białka stream, ca 580 m, mixed forest, on stump of *Picea abies*, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25921.

**Gloeophyllum sepiarium** (Wulfen) P. Karst. – coniferous and mixed forest; on wood of coniferous trees; saprobic; spring to autumn (Apr.–Oct.); common (36).

DISTRIBUTION. **DG 29-90**: between Odrowąż and Żary, N of Czarny Dunajec, on right side of Odrowąż–Żary road, 49°29'26.82"N, 19°50'37.42"E, 657.9 m, spruce forest with single *Betula*, and *Sorbus*, *Vaccinium*, moss (partial clearing), 30 Aug. 2011, leg. H. Komorowska, KRAM F-49760; **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on trunk, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49736; **DG 37-76**: Las Brzegi (I) forest, Chyżne, vicinity of Zbiornik Orawski reservoir, near road, ca 7 km SW of Jabłonka, ca 30 km SW of Nowy Targ, ca 640 m, on fence post, 31 July 1984, leg. W. Wojewoda, KRAM F-27112; **DG 38-37**: Puścizna Mała (14) peatbog, between Piekiełnik and Czarny Dunajec, on roots of *Pinus* sp., 22 June 1970, leg. W. Wojewoda, KRAM F-11074; **DG 38-48**: Las Baligówka (IV) forest, ca 17 km SW of Nowy Targ, ca 650–670 m (*Picea abies*, *Pinus sylvestris*), on coniferous wood, 14 May 1971, leg. I. Jalocho, KRAM F-27113; Las Baligówka (IV) forest, 49°26'57.2"N, 19°48'03.5"E, spruce forest, on cut section of *Picea abies* stump, 22 May 2012, leg. D. Karasiński 7017 (KRAM F-58678); **DG 38-69**: Las Cikówka (V) forest, S part (Czarny Dunajec), 49°25'31.44"N, 19°49'01.29"E, 561.1 m, clearing in spruce forest with sparse *Betula*, on *Picea* stump, 29 Oct. 2011, leg. M. Sadowski, KRAM F-56889; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657.7 m, in clearing in spruce forest, on *Picea* stump, 14 Oct. 2010, leg. H. Komorowska, KRAM F-56732; **DG 39-25**: near Puścizna Długopole (20) peatbog between Wróblówka and Długopole, ca 640 m, in coniferous forest (*Picea abies*, *Pinus sylvestris*), on stump of coniferous tree, 18 Apr. 1986, leg. W. Wojewoda, KRAM

F-26393; **DG 39-27**: Las Cyrła forest, near Długopole, SE part, spruce forest, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, on *Picea* trunk, 27 June 2012, leg. B. Pleban, KRAM F-49553; **DG 39-35**: Puścizna Długopole (20) peatbog, SW of Długopole, S edge of peatbog, 15 Sept. 2011, leg. Mi. Lysek, KRAM F-49578; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, on fallen tree, 15 Sept. 2011, leg. Mi. Lysek, KRAM F-49579; Soślina (VI) forest, NE part, E of Czarny Dunajec, on *Picea* stump, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49198; **DG 48-02**: Bór koło Chyżnego (II, Graniowa Droga) forest, SE of Chyżne, 49°23'32.52"N, 19°43'05.03"E, 706.9 m, in clearing in spruce forest, *Sphagnum* and *Vaccinium myrtillus*, *V. vitis-idaea* and planted *Abies alba*, on trunk, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49776; **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, ca 700 m, deciduous forest on bank of Chichy stream (*Alin*), on lying *Alnus incana* trunk, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25604; **EG 20-81**: Bór na Grełu (VIII) forest, N part, near Lasek railway station, on *Picea* trunk, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49210; **EG 20-91**: Bór na Grełu (VIII) forest, E part, near Trute–Nowy Targ road, on trunk and twigs of *Picea*, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49206; Bór na Grełu (VIII) forest, N of Ludźmierz, E part, edge of forest, spruce forest with *Vaccinium* and *Sphagnum*, on *Picea* trunk, 20 July 2010, leg. M. Pilch, KRAM F-58103; on *Picea* broken stump, leg. H. Komorowska, KRAM F-58107; **EG 30-00**: Bór na Grełu (VIII) forest, N of Ludźmierz, on right side of Ludźmierz–Trute road, young forest (*Populus tremula* and single *Picea* sp.), on trunk, 20 July 2010, leg. M. Pilch, KRAM F-58111; **EG 30-01**: Bór na Grełu (VIII) forest, S part (Grel), 49°28'34.9"N, 19°58'51"E, 605.8 m, on trunk, 16 July 2011, leg. H. Komorowska, KRAM F-49797; Bór na Grełu (VIII) forest, SW part (Grel), 49°28'55.9"N, 19°58'49.7"E, 627.2 m, spruce forest (with partial clearing), in brushwood with young *Picea* and *Vaccinium*, 16 July 2011, leg. G. Końska, KRAM F-49798; **EG 30-23**: Bór Nowotarski (IX) forest, N part (Do Boru), 49°28'00.93"N, 20°00'38.82"E, 602.0 m, on trunk of felled tree, 3 May 2011, leg. M. Lysek, KRAM F-58046; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on coniferous stumps and logs (Wojewoda et al. 2004); **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), marshy old pine forest and sparse *Picea* with *Sphagnum*, on remnants of *Picea* wood, 20 July 2010, leg. M. Pilch, KRAM F-58106; Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'03.7"N, 19°59'57.5"E, 630.0 m, on trunk, 17 July 2011, leg. H. Komorowska, KRAM F-49796; **EG 30-33**: Bór Nowotarski (IX) forest, edge of forest, 49°27'07.7"N, 20°00'31.27"E, 621.5 m, on trunk, 12 Aug. 2012, leg. H. Komorowska, KRAM F-56840; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest (*CvP*), on fallen dead *Pinus sylvestris* trunk 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50613; Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on dead lying trunk of *Pinus*, 23 Sept. 2000, leg. W. Wojewoda, KRAM F-50568; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 620 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on stump of *P. abies*, 31 July 1971, leg. W. Wojewoda, KRAM F-27111; **EG 30-40**: Pasieczny Las (VII) forest, on right side of Ludźmierz–Maruszyna road, 49°26'41.11"N, 19°58'40.07"E, 612.5 m, pine-spruce forest, in brushwood with young *Picea*, on *Pinus* trunk, 14 Aug. 2011, leg. H. Komorowska, KRAM F-56839; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szafłary), 49°26'44.67"N, 20°00'37.5"E, 564.5 m, young spruce forest with sparse old *Picea*, on *Picea* roots, 27 June 2012, leg. H. Komorowska, KRAM F-49561; on old stump, 27 June 2012, leg. H. Komorowska, KRAM F-58119; **EG 30-44**: on edge of Bór na Czerwonem (X) forest, near Szafłary, on roots of *Picea abies*, 25 May 1971, leg. Z. Heinrich, KRAM F-11248 (Wojewoda et al. 2004); Bór na Czerwonem (X, Czerwony Bór) peatbog, SW part (near Szafłary), 49°26'41.81"N, 20°01'47.16"E, 622.4 m, on trunk, 3 May 2011, leg. M. Lysek, KRAM F-58061; **EG 30-46**: Bór na Czerwonem (X, Czerwony Bór), peatbog, SE part (near Bór), 49°26'32.97"N, 20°03'04.49"E, 642.4 m, 3 May 2011, leg. M. Lysek, KRAM F-58076; on dead twigs, leg. M. Lysek, KRAM F-58077; **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside, on fallen twig, 28 June 2011, leg. H. Komorowska, KRAM F-56850; **EG 30-64**: near Szafłary, in brushwood (*Alnus incana*) on bank of Biały Dunajec river, on *Picea abies* stump, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-11191; **EG 31-04**: Harkłowa near Nowy Targ, on bank of Dunajec river, in riverine scrub (*Alnus*, *Salix*), on dead trunk lying in litter, 22 June 1970, leg. W. Wojewoda, KRAM F-11073; **EG 31-14**: Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in brushwood with young *Picea abies* and *Carex* sp., on *Picea* trunk, 20 July 2010, leg. M. Pilch,

KRAM F-58104; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'50.46"N, 20°06'19.38"E, 597.2 m, spruce-pine forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), on trunk, 28 June 2012, leg. H. Komorowska, KRAM F-49560; Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'46.2"N, 20°06'23.1"E, 607.1 m, spruce-pine forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), on trunk, 28 June 2012, leg. H. Komorowska, KRAM F-49559; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, leg. H. Komorowska, KRAM F-49557; **EG 31-27**: between Dębno and Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on *Picea* stump, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25938; Dębno, ca 14 km E of Nowy Targ, ca 535 m, near road, on lying trunk of decayed pine tree (*Pinus sylvestris*), 6 Aug. 1985, leg. W. Wojewoda, KRAM F-27110; **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 590 m, spruce forest, on rick of cut *Picea abies* branches, 27 May 1986, leg. W. Wojewoda, KRAM F-26432; **EG 31-33**: Bór Harkłowski (XIII) forest, W part, 49°27'20.22"N, 20°08'49.2"E, 590.2 m, pine-spruce forest (on edge – old *Pinus*, farther off – young and old *Picea*), on lying ?*Picea* twig, 28 June 2012, leg. B. Pleban, KRAM F-49556; on *Picea* trunk, 28 June 2012, leg. H. Komorowska, KRAM F-49558; on stump, 28 June 2012, leg. H. Komorowska, KRAM F-58120; **EG 31-38**: riverine scrub on bank of Białka river, right side of Frydman–Dębno road, pine-spruce forest and *Sorbus*, on *Picea* trunk, 16 July 2010, leg. H. Komorowska, KRAM F-58105.

\**Gloeophyllum trabeum* (Pers.) Murrill – **R**; outside forest, riverside mountain alder; on timberwood; saprobic; summer (July–Aug.); rare (**3**).

DISTRIBUTION. **DG 37-76**: Las Brzegi (I) forest, Chyżne, vicinity of Zbiornik Orawski reservoir, near road, ca 30 km SW of Nowy Targ, ca 620 m, on pole (conifer wood), 31 July 1984, leg. W. Wojewoda, KRAM F-27115; **DG 39-90**: Podczerwone, in valley of Czarny Dunajec river, ca 720 m, ca 18 km SW of Nowy Targ, on beam of wooden bridge, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25603; **DG 49-11**: Ciche, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, *Alin* on bank of Cichy stream, ca 700 m, on lying *Alnus incana* trunk, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25602.

\**Gloeoporus dichrous* (Fr.) Bres. – **E**; mixed forest; on dead standing *Salix aurita* trunk; saprobic; early summer (June); rare (**1**).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (I, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.3"N, 19°44'14.8"E, mixed forest with pine, on dead standing *Salix aurita* trunk, 12 June 2012, leg. D. Karasiński 7143 (KRAM F-58589).

\**Gloeoporus taxicola* (Pers.) Gilb. & Ryvarden – **R**; coniferous and mixed forest; on fallen branches of *Pinus sylvestris* and *Pinus xrhoetica*; saprobic; summer and autumn (June, Aug., Oct.); rare (**4**).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.6"N, 19°44'20.1"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7160 (KRAM F-58575); **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.4"N, 19°42'14.8"E, on bark and wood of fallen *Pinus xrhoetica* trunk, 27 Aug. 2010, leg. D. Karasiński 5847; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.7"N, 20°02'08.3"E, on fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. D. Karasiński 6620 (KRAM F-58442); Bór na Czerwonem (24) Nature Reserve, 49°27'34.7"N, 20°02'08.2"E, on fallen *Pinus* branch, 17 Oct. 2011, leg. D. Karasiński 6623 (KRAM F-58451); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'43.0"N, 20°08'44.0"E, pine-spruce forest, on wood of fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7200 (KRAM F-58668).

\**Gomphidius glutinosus* (Schaeff.: Fr.) Fr. – **R**; coniferous forest; on the ground under coniferous trees; mycorrhizal; autumn (Sept., Oct.); rare (**3**).

DISTRIBUTION. **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, 580–595 m, ca 6 km SE of Nowy Targ, 1 Oct. 1967, leg. K. Szczepanek, KRAM F-32453; **EG 31-24**: Bór Harklowski (XIII) forest, between Harklowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-32452; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-32451.

**Gomphidius roseus** (Fr.) Fr. – **R**; coniferous forest; on the ground; mycorrhizal; summer to autumn (Aug.–Oct.); rare (**5**).

DISTRIBUTION. **DG 38-06**: coniferous forest (*Picea, Pinus*) near Piekienik village, ca 600 m, on edge of forest in *Sphagnum* and moss with *Suillus bovinus*, 5 Sept. 1977, leg. Z. Heinrich, KRAM F-17119; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, coniferous forest, on the ground under *Pinus sylvestris* and *Picea abies* (together with *Suillus bovinus*), 9 Oct. 2012, leg. D. Karasiński 8971 (KRAM F-58316); **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, 640–710 m, ca 22 km SW of Nowy Targ, pine forest, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-25584; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, 10 Aug. 1983, leg. H. Komorowska, KRAM F-32482; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under conifers (Grodzińska et al. 1973; Wojewoda et al. 2004); **EG 31-13**: Bór Harklowski (XIII) forest, between Harklowa and Łopuszna, in coniferous forest, in mossy place, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-11097.

\***Gymnopilus bellulus** (Peck) Murrill – marshy coniferous forest; on roots of *Picea*; saprobic; summer (July); rare (**1**).

DISTRIBUTION. **EG 20-91**: Bór na Grełu (VIII) forest, N of Ludźmierz, E part, edge of forest, spruce forest with *Vaccinium* and *Sphagnum*, on roots of *Picea*, 20 July 2010, leg. H. Komorowska, KRAM F-57904.

**Gymnopilus penetrans** (Fr.: Fr.) Murrill – coniferous forest; on rotten wood; saprobic; summer to autumn (June–Oct.); frequent (**14**).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, on wood remnants, 14 Oct. 2010, leg. M. Lysek, KRAM F-49982; **DG 38-06**: near Piekienik village, pine-spruce forest, 3 Aug. 1970, leg. I. Jalocho, KRAM F-19204; leg. I. Jalocho, KRAM F-19205; near Piekienik, pine-spruce forest, on remnants of wood, in moss, 3 July 1970, leg. Z. Heinrich, KRAM F-19200; leg. I. Jalocho, KRAM F-19199; **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, NW part of forest, 30 July 2010, leg. Z. Heinrich, KRAM F-57995; **DG 38-26**: Las Gajka (III) forest, pine forest ca 1 km S of Piekienik village, ca 650 m, on stump of coniferous tree, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-30023; Las Gajka (III) forest, pine forest, 1.5 km S of Piekienik village, 640–660 m, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-26316; **DG 38-43**: Bór koło Chyżnego forest, N part (II, near Borowy Potok), spruce forest with sparse *Pinus*, in brushwood *?Salix* and young *Picea*, on trunk, 17 Sept. 2011, leg. Mi. Lysek, KRAM F-57960; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne, S of Pirogówka mount, ca 22 km SW of Nowy Targ, 640–710 m, pine-spruce forest, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26317; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, pine forest, on stump, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25305; Bór na Czerwonem (X) forest, near Nowy Targ, pine forest, on stump, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25303; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten log (Wojewoda et al. 2004); **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), marshy old pine forest with sparse *Picea* with *Sphagnum*, on fallen twig, 20 July 2010, leg. B. Pleban, KRAM F-56770; **EG 30-34**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, on remnants of wood, 17 July 1985, leg. Z. Heinrich, KRAM F-26113; **EG 30-44**: Bór na Czerwonem (X) forest, between Szafłary Dolne and Nowy Targ, coniferous forest (*Pinus, Picea*), on dead roots of *Pinus sylvestris*, 11 June 1971, leg. Z. Heinrich, KRAM F-11329; **EG 31-15**: Bór Harklowski (XIII) forest, near Harklowa, 18 Aug. 1970, leg. I. Jalocho, KRAM F-19206; on stump, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-19202; coniferous forest (*Picea, Pinus*), on decayed stump, 17 Aug. 1970, leg.

*I. Jalocha*, KRAM F-19201; on decayed wood, leg. *Z. Heinrich*, KRAM F-19198; **EG 31-20**: Bór Ostrowski (XI) forest, between Ostrowsko and Łopuszna, on stump, 14 Aug. 1970, leg. *I. Jalocha*, KRAM F-19203; **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, E part of forest, 49°27'14.52"N, 20°07'52.44"E, 592.6 m, on edge of spruce forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), 28 June 2012, leg. *H. Komorowska*, KRAM F-57943; **EG 31-32**: Bór Bielski (XII) forest, on right side of Łopuszna–Nowa Biała road, pine-spruce forest, on decayed trunk, 14 Aug. 1970, leg. *Z. Heinrich*, KRAM F-19207; in grass, on remnants of wood, KRAM F-19208.

**Gymnopilus picreus** (Pers.: Fr.) P. Karst. – E; pine forest; on rotten wood; saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, near shoe factory, on rotten stump, 17 Oct. 1970, leg. *I. Jalocha*, KRAM F-19210; **EG 30-25**: Bór na Czerwonem (X) forest, ca 2 km S of Nowy Targ, pine forest (CvP), on remnants of wood, 10 Aug. 1983, leg. *H. Komorowska*, KRAM F-25319; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten *Picea abies* stump (Wojewoda et al. 2004, as *Gymnopilus liquiritiae* (Pers.: Fr.) P. Karst.).

\***Gymnopilus sapineus** (Fr.: Fr.) Maire – peatbog; on woody debris; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 30-45**: Bór na Czerwonem (X, Czerwony Bór) peatbog, SW part, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, in PrS, 15 July 2011, leg. *H. Komorowska*, KRAM F-57978.

\***Gymnopilus acervatus** (Fr.) Murrill – riparian forest; on the ground; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-10**: near Ludźmierz, on bank of Lepietnica stream and Czarny Dunajec river, ALPa, on deciduous tree, 31 May 1971, leg. *W. Wojewoda*, KRAM F-11313.

**Gymnopus androsaceus** (L.: Fr.) J.L. Mata & R.H. Petersen – coniferous forest, raised peatbog; on coniferous litter; saprobic; summer and autumn (June–Sept., Nov.); frequent (8).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 1.2 km SW of Chyżne, spruce forest with *Pinus* admixture, on fallen twigs of *Picea*, 18 June 2010, leg. *H. Komorowska*, KRAM F-59136; **DG 38-19**: Puszcza Rękowańska (19) peatbog, ca 2 km S of Zahuczne, pine forest near peatland, 11 Nov. 1960, leg. *W. Wojewoda*, KRAM F-25764; **DG 38-36**: Las Gajka (III) forest, pine-spruce forest, S of Piekielnik village, 3 July 1970, leg. *I. Jalocha*, KRAM F-25765; **DG 38-38**: Las Baligówka (IV) forest, NE part, NW of Czarny Dunajec, near parking lot, on coniferous litter, 18 June 2010, leg. *H. Komorowska*, KRAM F-59137; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on fallen needles of conifers (Wojewoda et al. 2004, as *Setulipes androsaceus* (L.: Fr.) Anton.); **EG 30-32**: Bór Nowotarski (IX) forest, W part, edge of forest, 49°27'03.59"N, 19°59'57.2"E, 614.2 m, clearing with single old *Picea*, in undergrowth (marshy place) with *Vaccinium myrtillus*, *Calluna vulgaris*, ferns, 12 Aug. 2012, leg. *H. Komorowska*, KRAM F-56690; **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside, 28 June 2011, leg. *M. Lysek*, KRAM F-49468; leg. *H. Komorowska*, KRAM F-49467; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. *H. Komorowska*, KRAM F-58143.

\***Gymnopus confluens** (Pers.: Fr.) Antonín, Halling & Noordel. – deciduous thicket; on litter; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-49**: Gronków Środkowy village, SE of Nowy Targ, on bank of Leśnica river, 49°26'21.11"N, 20°05'24.73"E, 608.4 m, thicket: *Acer*, *Carpinus*, *Fraxinus*, *Ulmus*, *Salix* and *Asarum*, *Urtica dioica*, *Arctium*, *Rubus*, *Prunus padus*, 3 Sept. 2011, leg. *M. Pilch*, KRAM F-56642 a, b.

***Gymnopus dryophilus*** (Bull.: Fr.) Murrill – *CvP*, pine-spruce forest, peatbog; on the ground, in litter among mosses; saprobic; summer (June, July); frequent (8).

DISTRIBUTION. **DG 38-19**: Pułczyńska Rękowiańska (19) peatbog, ca 2 km S of Załuczne, 31 July 1984, leg. *W. Wojewoda*, KRAM F-25742; **DG 38-36**: Las Gajka (III) forest, S of Piekelnik village, in mosses, 3 July 1970, leg. *Z. Heinrich*, KRAM F-25739; leg. *Z. Heinrich*, KRAM F-32263; **DG 39-21**: Pułczyńska Rękowiańska (19) peatbog, ca 3 km NW of Czarny Dunajec, 31 July 1970, leg. *I. Jalocha*, KRAM F-25741; **EG 30-01**: Bór na Grełu (VIII) forest, S part (Grel), 49°28'34.9"N, 19°58'51"E, 605.8 m, birch forest. 16 July 2011, leg. *H. Komorowska*, KRAM F-56656; **EG 30-20**: the edge of Przymiarki (22) peatbog, SW of Ludźmierz, on the ground, 15 June 1982, leg. *W. Wojewoda*, KRAM F-25740; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, *CvP*, on the ground in litter (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonym (X) forest, between Szaflary Dolne and Nowy Targ, edge of forest (*Pinus*, *Picea*), on stump of coniferous tree, 11 June 1971, leg. *I. Jalocha*, KRAM F-11348; **EG 30-45**: Bór na Czerwonym (X, Czerwony Bór) peatbog, SW part, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, 15 July 2011, leg. *P. Roux*, KRAM F-56655.

\****Gyrodon lividus*** (Bull.: Fr.) Sacc. – **R**; riverside mountain alder; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 39-90**: Podczerwone, on right bank of Czarny Dunajec river, *Alin*, on the ground, ca 18 km SW of Nowy Targ, ca 720 m, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25575.

\****Hapalopilus rutilans*** (Pers.) P. Karst. – forest; on wood of deciduous tree; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-41**: Pasieczny Las (VII) forest, S part, on left side of Ludźmierz–Maruszyna road, 49°26'20.54"N, 19°58'34.46"E, 615.1 m, edge of forest, birch and pine-spruce forest with *Rubus* sp., *Oxalis acetosella* and ferns, on log of deciduous tree, 14 Aug. 2011, leg. *H. Komorowska*, KRAM F-56828.

\****Hastodontia hastata*** (Litsch.) Hjortstam & Ryvarden – spruce forest; on fallen trunk of *Picea abies*; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-37**: Las Baligówka (IV) forest, 49°27'25.2"N, 19°47'52.9"E, spruce forest, on bark and wood of fallen *Picea abies* trunk, 22 May 2012, leg. *D. Karasiński* 6993a (KRAM F-58521).

REMARKS. The examined collection represents an old, sterile basidiome. In Poland the species was known from four localities (also as *Hyphodontia hastata* (Litsch.) J. Erikss.).

\****Hebeloma birrus*** (Fr.) Sacc. – pine-spruce forest; on burnt ground; mycorrhizal; summer (Aug.); rare (1)

DISTRIBUTION. **EG 31-15**: Bór Harkłowski (XIII) forest, near Harkłowa, in vicinity of Nowy Targ, pine-spruce forest, on old burnt ground, 21 Aug. 1970, leg. *Z. Heinrich*, KRAM F-25233.

\****Hebeloma circinans*** Quél. – spruce forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I. near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, on the ground in moss, 14 Oct. 2010, leg. *Z. Heinrich*, KRAM F-50000.

\****Hebeloma crustuliniforme*** (Bull.) Quél. s.l. – pine-spruce and mixed forest; on the ground; mycorrhizal; autumn (Oct.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, mixed forest, on the ground, 13 Oct. 1971, leg. *I. Jalocha*, KRAM F-25203; **DG 39-48**: near Rogoźnik, SW of Nowy Targ, pine-spruce forest, in needle litter, 3 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25202; **EG 31-14**: Bór Harkłowski (XIII)

forest, between Łopuszna and Harkłowa, ca 10 km SE of Nowy Targ, pine-spruce forest, on the ground, 16 Oct. 1970, leg. I. Jalocha, KRAM F-25204.

**Hebeloma helodes** J. Favre – coniferous forest; among *Sphagnum*; mycorrhizal; summer (June); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, VuP (Grodzińska et al. 1973); PrS, among *Sphagnum* (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, between Szaflary Dolne and Nowy Targ, coniferous forest (*Pinus*, *Picea*), in mossy place, among *Sphagnum*, 11 June 1971, leg. I. Jalocha, KRAM F-11350.

\***Hebeloma incarnatum** A.H. Sm. – marshy spruce and spruce-pine forest; on othe ground, in *Sphagnum*; mycorrhizal; summer and autumn (July, Sept., Oct.); frequent (6).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, marshy spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, in *Sphagnum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49969; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, 4 Sept. 2011, leg. H. Komorowska, KRAM F-57949; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, next to peat dome, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. H. Komorowska, KRAM F-57974; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., 16 Oct. 2010, leg. M. Pilch, KRAM F-49534; in *Sphagnum*, leg. M. Pilch, KRAM F-49532; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. R. Lysek, KRAM F-49536; in *Sphagnum*, leg. Z. Heinrich, KRAM F-49533; **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, NW part, wet spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, in *Sphagnum*, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49538; leg. Z. Heinrich, KRAM F-49537.

REMARKS. In Poland the species was known only from the Pojezierze Gnieźnieńskie lakeland, Wysoczyzna Belchatowska region (Adamów, Mt. Kamięńsk – opencast brown coal mines) and Słowiński National Park (Beker et al. 2016; Grilli et al. 2016; Kałucka et al. 2016).

\***Hebeloma mesophaeum** (Pers.) Quél. – young spruce forest; in coniferous litter; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, young spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, in conifer litter, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49971.

**Hebeloma sinapizans** (Paulet) Sacc. – coniferous and mixed forest; on the ground in litter; mycorrhizal; summer and autumn (July, Oct.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, W of Czarny Dunajec, in vicinity of Nowy Targ, mixed forest, in litter, 2 Oct. 1970, leg. I. Jalocha, KRAM F-25181; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, 17 July 1985, leg. Z. Heinrich, KRAM F-26138; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, on remnants of conifer needles, 17 July 1985, leg. Z. Heinrich, KRAM F-26137; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, on conifer needles and on moss, 17 July 1985, leg. Z. Heinrich, KRAM F-26139; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, under trees (Wojewoda et al. 2004); **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, in litter, 17 Oct. 2010, leg. M. Pilch, KRAM F-49535.

\***Hebeloma velutipes** Bruchet – spruce and young pine-spruce forest; on the ground; mycorrhizal; summer and autumn (July, Aug., Oct.); rare (5).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-56639; **DG 38-46**: edge of Puścizna Wielka (10) peatbog, ca 3 km S of Piekienik village, ca 670 m, marshy pine forest, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-26368; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, in *Polytrichum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-56630; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, on peat dome, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. G. Końska, KRAM F-57976; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, in litter (moss), 17 Oct. 2010, leg. M. Pilch, KRAM F-49509.

\**Helicogloea pinicola* (Bourdot & Galzin) Baker – E, coniferous forest; on fallen trunks and branches of *Pinus sylvestris*; saprobic; early summer (June); rare (1).

DISTRIBUTION. **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.9"N, 20°08'44.9"E, pine-spruce forest, on bark of fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7172a; Bór Harkłowski (XIII) forest, Harkłowa, 49°27'38.7"N, 20°09'05.6"E, pine-spruce forest, on bark and wood of fallen *Pinus sylvestris* trunk, 13 June 2012, leg. D. Karasiński 7218.

REMARKS. In Poland the species was known only from Tatra National Park (Wojewoda et al. 1986; Ronikier 2002, as *H. farinacea* (Höhn.) Donk. The species is in the Red List also as *H. farinacea*.

\**Hemimycena gracilis* (Quél.) Singer – spruce forest; on the ground, in litter of herbaceous plants and mosses; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 590 m, spruce forest, on the ground, in litter of plants and moss, 27 May 1986, leg. W. Wojewoda, KRAM F-26428.

*Heterobasidion annosum* (Fr.) Bref. s.s. – mixed and coniferous forest; on roots, stumps and fallen trunks of coniferous trees; parasitic and saprobic; spring, summer and autumn (Apr., May, July–Oct.); frequent (16).

DISTRIBUTION. **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'31.71"N, 19°39'47.79"E, 639.9 m, spruce forest, in brushwood (*Sorbus*, *Rubus* and mosses, *Vaccinium*, *Fragaria* sp.), on decayed trunk, 14 July 2012, leg. M. Sadowski, KRAM F-49587; **DG 37-89**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'42.87"N, 19°41'00.46"E, 664.3 m, spruce forest, *Sorbus*, *Rubus*, *Vaccinium*, and ferns, in dry undergrowth – conifer needles, on roots of living *Picea*, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49766; living trunk, leg. M. Pilch, KRAM F-49767; **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, mixed forest, on fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8919 (KRAM F-58627); **DG 38-43**: Bór koło Chyżnego forest, N part (II, near Borowy Potok), spruce forest with sparse *Pinus*, in brushwood with ?*Salix* and young *Picea*, 17 Sept. 2011, leg. M. Lysek, KRAM F-49444; **DG 38-90**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce and mosses and *Vaccinium*, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49731; **EG 30-01**: Bór na Grełu (VIII) forest, near Ludźmierz, on roots of coniferous tree, 31 May 1971, leg. W. Wojewoda, KRAM F-11300 (Skirgiełło 1977, as *H. annosus* s. lato); **EG 30-04**: centre of Nowy Targ, in park, on decaying stumps of coniferous trees (*Picea abies* and *Pinus sylvestris*), ca 600 m, 15 Apr. 1986, leg. W. Wojewoda, KRAM F-26388; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 620 m, pine-spruce forest, on roots of living *Picea abies*, 24 July 1971, leg. W. Wojewoda, KRAM F-13726 (Skirgiełło 1977, as *H. annosus* s. lato); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, in forest with *Pinus sylvestris*, *Vaccinium myrtillus*, *Calamagrostis villosa*, *Deschampsia* and *Holcus* (?CvP), on roots of living *Pinus sylvestris*, 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50610 (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X, Czerwony Bór), SW part of forest near Szafłary, 49°26'41.81"N, 20°01'47.16"E, 622.4 m, 17 Sept. 2011, leg. Mi. Lysek, KRAM F-49450; Bór



na Czerwonem (X, Czerwony Bór) peatbog, SW part (near Szaflary), 49°26'41.81"N, 20°01'47.16"E, 622.4 m, edge of forest, 3 May 2011, *leg. A. Sadowska*, KRAM F-58052; **EG 30-46**: Bór na Czerwonem (X, Czerwony Bór), peatbog, SE part (near Bór), 49°26'32.97"N, 20°03'04.49"E, 642.4 m, 3 May 2011, *leg. Mi. Lysek*, KRAM F-58072; **EG 30-48**: Bór village, E of Szaflary, near Nowy Targ–Białka Tatrzańska road, 49°26'41.88"N, 20°04'30.73"E, 627.1 m, pine-spruce forest with *Betula* and *Vaccinium*, on *Picea* trunk, 13 Aug. 2011, *leg. H. Komorowska*, KRAM F-49790; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 km SE of Nowy Targ, ca 570 m, forest (*Picea abies*, *Pinus sylvestris*), on coniferous tree, 16 Oct. 1970, *leg. Z. Heinrich*, KRAM F-13746; *leg. Z. Heinrich*, KRAM F-11221 (Skirgiełło 1977, as *H. annosus* s. lato); **EG 31-27**: between Dębno and Nowa Biała, on bank of Białka river, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest (*Picea abies* and *Pinus sylvestris*), on stump (between roots) of *Picea*, 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25936; **EG 31-42**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 10 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on roots of coniferous tree, 31 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25925; **EG 31-54**: Dolina Białki p.a., Krempachy, on right side of Krempachy–Nowa Biała road, brushwood on bank of Białka river (*Alin*), wet place, on trunk, 19 July 2010, *leg. M. Pilch*, KRAM F-56735.

REMARKS. Wojewoda (2003) gives the species from the KON (near Nowy Targ). This information concerns the above-mentioned collections, but the record does not allow an unambiguous assignment to a specimen.

***Heterobasidion parviporum*** Niemelä & Korhonen – coniferous and mixed forest; on stumps and fallen trunks of *Picea abies*; parasitic and saprobic; from summer to autumn (June–Aug., Nov.); frequent (6).

DISTRIBUTION. **DG 49-11**: Dziurów Lasek forest, NE of Chochołów, 49°23'18.43"N, 19°50'56.19"E, 742.8 m, spruce forest, sparse deciduous trees, on old cut trunk of ?*Picea*, 12 Nov. 2011, *leg. A. Sadowska*, KRAM F-49786; on decayed trunk, *leg. M. Sadowski*, KRAM F-49785; **EG 30-48**: Bór village, E of Szaflary, near Nowy Targ–Białka Tatrzańska road, 49°26'41.88"N, 20°04'30.73"E, 627.1 m, pine-spruce forest with *Betula* and *Vaccinium*, 13 Aug. 2011, *leg. H. Komorowska*, KRAM F-56827; *leg. H. Komorowska*, KRAM F-581259; **EG 31-32**: Bór Bielski (XII, Brzezie) forest, NE part, 49°27'30.55"N, 20°07'56.61"E, 586.3 m, spruce forest with few *Pinus sylvestris*, in undergrowth with *Urtica dioica*, or only spruce needles, also wet (swampy) places with *Sphagnum*, on *Pinus* trunk, 13 Aug. 2011, *leg. M. Sadowski*, KRAM F-49789; Bór Bielski (XII, Brzezie) forest, S part, left side of Łopuszna–Nowa Biała road, pine-spruce forest, in brushwood: *Sorbus*, *Frangula alnus*, ?*Cornus*, on old ?*Picea* trunk, 17 July 2010, *leg. H. Komorowska*, KRAM F-56722; **EG 31-41**: Bór Bielski (XII, Brzezie) forest, S part, 49°26'55.08"N, 20°07'47.34"E, 599.2 m, spruce-pine forest, in brushwood with many young *Picea* and *Vaccinium* sp., 28 June 2012, *leg. H. Komorowska*, KRAM F-58109; **EG 31-53**: Dolina Białki Natura 2000 p. a., Nowa Biała, forest on bank of Białka river, pine-spruce forest with single *Larix*, 19 July 2010, *leg. M. Pilch*, KRAM F-56713; **EG 31-54**: Dolina Białki Natura 2000 p. a., Krempachy, on right side of Krempachy–Nowa Biała road, brushwood on bank of Białka river (*Alin*), wet place, on decayed trunk, 19 July 2010, *leg. M. Pilch*, KRAM F-56729.

REMARKS. Wojewoda (2003) gives the species from the KON (near Nowy Targ), but there is no herbarium specimen collected by him in KRAM.

\****Hydnellum concrescens*** (Pers.) Banker – E; SP; coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa in vicinity of Nowy Targ, coniferous forest, on the ground, 21 Aug. 1970, *leg. Z. Heinrich*, KRAM F-25535.

REMARKS. Information on the distribution of this species in Poland can be found in Pawłowska and Okraśińska (2020).

***Hydnum repandum*** L. – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Oct.); rare (5).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, near Nowy Targ, in coniferous forest (*Pinus, Picea*), on the ground, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-10936; **DG 39-48**: Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-33047; **?EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, 580–600 m, 14 Aug. 1970, leg. I. Jalocha, KRAM F-33048; **EG 31-32**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, coniferous forest (*Picea, Pinus*), 300 m from Nowa Biała–Łopuszna road (left side), ca 600 m, on the ground, in litter of conifer needles, 30 Aug. 1977, leg. H. Komorowska, KRAM F-17124.

\**Hydnum rufescens* Fr. – forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-48**: Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-33049.

\**Hygroaster asterosporus* (J.E. Lange) Singer – E; raised peatbog; among mosses; saprobic; autumn (Nov.); rare (2).

DISTRIBUTION. **DG 38-19**: Puścizna Rękowańska (19) peatbog, ca 2 km S of Załuczne village, 650–660 m, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-25803; **DG 39-39**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 620 m, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-25802.

REMARKS. The species is in the Red List as *Omphaliaster asterosporus* (J.E. Lange) Lamoure.

*Hygrocybe conica* (Schaeff.: Fr.) P. Kumm. var. *pseudoconica* J.E. Lange – peatbog, meadow; on the ground; saprobic; summer (June); rare (2).

DISTRIBUTION. **?EG 30-25**: Bór na Czerwonym (24) Nature Reserve, on border of PrS and CvP, on the ground, in moss (Wojewoda et al. 2004, as *H. conica* (Schaeff.: Fr.) P. Kumm.); **EG 30-44**: between Szaflary Dolne and Nowy Targ, on bank of Biały Dunajec river, on meadow, 11 June 1971, leg. Z. Heinrich, KRAM F-11356.

\**Hygrocybe miniata* (Fr.: Fr.) P. Kumm. – meadow; on the ground in grass; probably saprobic; summer (June); rare (1).

DISTRIBUTION. **EG 30-44**: near Szaflary Dolne, on meadow, in grass, 11 June 1971, leg. I. Jalocha, KRAM F-11347.

\**Hygrocybe pratensis* (Pers.: Fr.) Murrill – R; meadow next to forest; on the ground; probably saprobic; autumn (Sept., Oct.); rare (1).

DISTRIBUTION. **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, edge of coniferous forest (*Picea*), on the ground, 16 Oct. 1970, leg. Z. Heinrich, KRAM F-11092; Bór Harkłowski (XIII) forest, edge of forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-32315.

REMARKS. The species is in the Red List as *Camarophyllus pratensis* (Pers.) P. Kumm.

\**Hygrocybe virginea* (Wulfen: Fr.) P.D. Orton & Watling var. *virginea* – meadows; on the ground; probably saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-38**: near Las Baligówka (IV) forest, on meadow, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-12058; **DG 39-71**: near Czarny Dunajec, on meadow, 1 Aug. 1970, leg. I. Jalocha, KRAM F-11093.

*Hygrophoropsis aurantiaca* (Wulfen: Fr.) Maire – pine forest; on the ground in mosses; saprobic; summer (Aug.); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, in moss (Wojewoda et al. 2004); **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-32447.

\***Hygrophorus agathosmus** (Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-40**: Pasieczny Las (VII) forest, near Rogoźnik (ca 2 km E of village), coniferous forest, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-25866; Pasieczny Las (VII) forest, coniferous forest near Rogoźnik village, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-25867.

\***Hygrophorus aureus** Arrh. – peatbog (with *Pinus* and young *Picea*); on the ground; mycorrhizal; autumn (Nov.); rare (1).

DISTRIBUTION. **DG 38-61**: NW edge of Puścizna Jasiowska (4) peatbog, SE of Jabłonka, 49°26'19.53"N, 19°42'02.76"E, 648.5 m, sparse *Pinus* and young *Picea*, frequent *Calluna vulgaris*, 11 Nov. 2011, leg. M. Sadowski, KRAM F-49475.

REMARKS. In Poland the species was recorded only from Krościenko nad Dunajcem, the Jelonka Reserve (Białowieża Primeval Forest) and Lubogóra (Wielkopolska region) (Skirgiello 1959, as *H. hypothejus* var. *aureus* (Arrh. ex Fr.) Imler; Kałucka 2009; Gierczyk and Ślusarczyk 2020).

\***Hygrophorus hyacinthinus** Quéł. – E; coniferous forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-01**: Bór na Grełu (VIII) forest, ca 2 km N of Ludźmierz, 600–620 m, ca 3 km W of Nowy Targ, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-32297; leg. Z. Heinrich, KRAM F-32298.

**Hygrophorus hypothejus** (Fr.: Fr.) Fr. – I; coniferous and mixed forest; on the ground, in moss; mycorrhizal; summer and autumn (July, Sept.–Nov.); frequent (9).

DISTRIBUTION. **DG 37-88**: Las Brzegi (I) forest, SW of Chyżne. 49°24'43.97"N, 19°39'41.13"E, 577.9 m, spruce forest with sparse *Pinus*, near old *Picea* trunk, 11 Nov. 2011, leg. M. Sadowski, KRAM F-49474; **DG 38-06**: forest near Piekielnik, in mossy place, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-12054; **DG 38-61**: NW edge of Puścizna Jasiowska (4) peatbog, SE of Jabłonka, 49°26'19.53"N, 19°42'02.76"E, 648.5 m, sparse *Pinus* and young *Picea*, frequent *Calluna vulgaris*, in moss, 11 Nov. 2011, leg. M. Sadowski, KRAM F-49473; **DG 38-69**: Las Cikówka (V) forest, near Czarny Dunajec, ca 2 km SW of Czarny Dunajec, ca 16 km SW of Nowy Targ, 680–710 m, pine forest, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-32296; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, in mixed forest (*Picea*, *Pinus*, *Betula*), on trunk of *Betula* sp., 17 Oct. 1970, leg. Z. Heinrich, KRAM F-11076; on the ground, leg. I. Jalocho, KRAM F-11091; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, 21 July 1971, leg. Z. Heinrich, KRAM F-32301; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP (Grodzińska et al. 1973); CvP, on the ground, under trees (Wojewoda et al. 2004); **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., 16 Oct. 2010, leg. Z. Heinrich, KRAM F-56771; **EG 31-26**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, E edge of spruce forest with *Pinus sylvestris*, 23 Sept. 1981, leg. M. Czerwieniec, KRAM F-18573; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-32295; **EG 31-31**: Bór Bielski (XII, Brzezic) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-59033.

**Hygrophorus olivaceoalbus** (Fr.: Fr.) Fr. – CvP, coniferous forest; on the ground, in moss; mycorrhizal; summer and autumn (July–Oct.); frequent (6).

DISTRIBUTION. **DG 39-57**: on bank of Wielki Rogoźnik stream, between Rogoźnik village and mouth of Czarny Dunajec river in Ludźmierz, spruce forest, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-32300; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, 24 July 1971, leg. Z. Heinrich, KRAM F-32305; Bór na Czerwonem (X) forest near Nowy Targ, ca 610 m, CvP, in moss, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17147 (Gumińska 1997); ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, under trees (Grodzińska et al. 1973; Wojewoda et al. 2004); **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest, in mossy place, 17 Aug. 1970, leg. I. Jatocha, KRAM F-11095; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, 580–595 m, ca 6 km SE of Nowy Targ, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-32299; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Łysek, KRAM F-49671; **EG 31-32**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-32303; Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25931.

\***Hygrophorus pustulatus** (Pers.:Fr.) Fr. – coniferous forest; on the ground; in moss under conifers; mycorrhizal; autumn (Nov.); rare (2).

DISTRIBUTION. **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula pubescens*), in moss, under young *Picea*, 11 Nov. 2011, leg. A. Sadowska, KRAM F-49476; **DG 49-11**: Dziurów Lasek forest, NE of Chochołów, 49°23'18.43"N, 19°50'56.19"E, 742.8 m (743 m), edge of spruce forest with *Sorbus* and ferns, 12 Nov. 2011, leg. A. Sadowska, KRAM F-49477.

\***Hymenochaete tabacina** (Sowerby) Lév. – R; mixed forest; on dead attached and fallen branches or twigs of deciduous trees; saprobic; summer, autumn (June, Oct.); rare (3).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, 49°28'01.8"N, 19°44'48.3"E, on fallen *Salix* sp. twig, 9 Oct. 2012, leg. D. Karasiński 8970 (KRAM F-58438); **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.2"N, 19°44'15.0"E, mixed forest with pine, on dead attached *Salix aurita* branches, 12 June 2012, leg. D. Karasiński 7144 (KRAM F-58659); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'33.6"N, 20°02'04.7"E, on fallen *Betula* trunk, 17 Oct. 2011, leg. D. Karasiński 6612 (KRAM F-58357).

\***Hypoderma argillaceum** (Bres.) Donk – mixed forest; on fallen trunks of coniferous trees; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8902b (KRAM F-58512); Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, mixed forest, on fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8914 (KRAM F-58329).

\***Hypoderma mutatum** (Peck) Donk – deciduous brushwood along river; on fallen branch of *Salix eleagnos*; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.9"N, 20°12'11.3"E, in *Salix eleagnos* and *Myricaria germanica* brushwood on bank of Białka river, on bark of fallen branch of *S. eleagnos*, 21 July 2012, leg. D. Karasiński 7498 (KRAM F-58496).

**Hyphoderma setigerum** (Fr.) Donk – various types of forest and scrub; on bark and wood of stumps, fallen trunks and branches of deciduous and coniferous trees; saprobic; spring to autumn (May, June, Aug.–Oct.); frequent (17).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on fallen *Picea abies* branch, 8 Oct. 2012, *leg. D. Karasiński* 8921a (KRAM F-58473); *leg. D. Karasiński* 8922 (KRAM F-58294); on fallen *Alnus incana* branch, 8 Oct. 2012, *leg. D. Karasiński* 8893 (KRAM F-58382); on bark of fallen *Picea abies* branch, 8 Oct. 2012, *leg. D. Karasiński* 8923 (KRAM F-58288); **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.4"N, 19°44'13.4"E, mixed forest with pine, on fallen trunk of young *Pinus sylvestris* tree, 12 June 2012, *leg. D. Karasiński* 7137 (KRAM F-58581); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'58.3"N, 19°42'43.6"E, on wood of fallen *Betula pubescens* trunk, 27 Aug. 2010, *leg. D. Karasiński* 5870a; Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'56.7"N, 19°42'49.3"E, on wood of fallen *Pinus x rhaetica* trunk, 27 Aug. 2010, *leg. D. Karasiński* 5872; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.6"N, 19°41'52.2"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7039 (KRAM F-7039); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.5"N, 19°41'51.9"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7040 (KRAM F-58679); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.9"N, 19°41'51.9"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7032a (KRAM F-58301); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'00.2"N, 19°42'00.4"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7052 (KRAM F-58273); **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, thickets with *Salix* sp. and young *Alnus* sp., 29 June 2011, *leg. H. Komorowska*, KRAM F-58134; **DG 39-48**: *Alin* on bank of Wielki Rogoźnik stream, ca 1 km NE of Rogoźnik village, ca 7 km SW of Nowy Targ, ca 620 m, on dead *Alnus incana* twig lying on the ground, 7 June 1972, *leg. Z. Heinrich*, KRAM F-25278; **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on left bank of Czarny Dunajec river, ca 16 km SW of Nowy Targ, 700 m, dead barkless twig lying on the ground, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25640; **DG 39-83**: Domański Wierch hill near Stare Bystre village, ca 14 km SW of Nowy Targ, ca 740 m, spruce forest with *Alnus incana*, dead twigs of *Alnus* lying on the ground, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25639; **DG 49-11**: Ciche village, ca 17 km SW of Nowy Targ, ca 700 m, *Alin* in valley of Cichy stream, on dead trunks and fallen twigs of *Alnus incana* lying on the ground, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25638; **EG 30-10**: brushwood (*Alin*) between Ludźmierz and Bór Nowotarski, ca 3 km SW of Nowy Targ centre, ca 600 m, dead *Alnus incana* twig lying on the ground, 1 Sept. 1983, *leg. H. Komorowska*, KRAM F-25636; dead twigs of deciduous tree or shrub (?*Salix* sp.), *leg. Z. Heinrich & H. Komorowska*, KRAM F-25637; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ city centre, ca 600 m, pine forest, dead fallen twigs of *Pinus sylvestris*, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25279; pine-spruce forest, on dead barkless twigs lying on the ground, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25277; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'39.1"N, 20°02'13.4"E, on bark and wood of hanging *Pinus sylvestris* trunk, 17 Oct. 2011, *leg. D. Karasiński* 6597 (KRAM F-58379); Bór na Czerwonem (24) Nature Reserve, 49°27'43.3"N, 20°02'20.4"E, on bark of fallen *Pinus* trunk, 17 Oct. 2011, *leg. D. Karasiński* 6626 (KRAM F-58386); Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, pine forest, admixture *Alnus incana*, on fallen twig of *A. incana*, 20 Sept. 1973, *leg. W. Wojewoda*, KRAM F-17153; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten twigs lying on the ground (Wojewoda et al. 2004). **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'27.0"N, 20°02'04.1"E, on wood of hanging *Pinus sylvestris* log, 17 Oct. 2011, *leg. D. Karasiński* 6603 (KRAM F-58440); Bór na Czerwonem (24) Nature Reserve, 49°27'27.6"N, 20°02'03.6"E, bark of hanging *Pinus sylvestris* log, 17 Oct. 2011, *leg. D. Karasiński* 6604 (KRAM F-58430); **EG 30-44**: near Szaflary Dolne, on bank of Biały Dunajec river, *AlPa*, on fallen *Alnus incana* branch, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11301; **EG 30-45**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), on bark of *Pinus sylvestris* trunk, 11 June 1971, *leg. I. Jalocho & W. Wojewoda*, KRAM F-11353; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.6"N, 20°08'45.2"E, on fallen *Picea abies* trunk, 13 June 2012, *leg. D. Karasiński* 7184 (KRAM F-58255); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'38.8"N, 20°09'05.6"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7217 (KRAM F-58582); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.2"N, 20°09'01.3"E, pine-spruce forest, on fallen *Pinus sylvestris* trunk, 13 June 2012, *leg. D. Karasiński* 7211 (KRAM F-58611); **EG 31-27**: Dębno, ca 13 km SE of Nowy Targ,

ca 535 m, dead trunk of old *Pinus sylvestris* lying by Nowy Targ–Krościenko road, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-26308; between Dębno and Frydman, on bank of Białka river, ca 14 km SE of Nowy Targ, ca 540 m, Alin, on fallen twigs of *Alnus incana*, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-26307.

\**Hyphodermella corrugata* (Fr.) J. Erikss. & Ryvar den – Ex; *Salix eleagnos* and *Myricaria germanica* brushwood; on bark and wood of fallen deciduous twigs; saprobic; summer (July); rare (1).

DISTRIBUTION. EG 31-27: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.7"N, 20°12'13.6"E, in *Salix eleagnos* and *Myricaria germanica* brushwood on bank of Białka river, on bark and wood of fallen deciduous twigs, 21 July 2012, leg. D. Karasiński 7493 (KRAM F-58495); leg. D. Karasiński 7494 (KRAM F-58497).

REMARKS. In Poland the species was known only from a historical locality in the vicinity of Międzyrzec Podlaski (Bresadola 1903, as *Odontia corrugata* Fr.; Flisińska 2004).

\**Hyphodontia alutaria* (Burt) J. Erikss.– coniferous forest; on woody debris lying on the ground; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. EG 31-14: Bór Harkłowski (XIII) forest, ca 1 km S of Harkłowa, ca 10 km E of Nowy Targ, ca 570 m, spruce forest, piece of wood lying on the ground, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-25250.

\**Hyphodontia pallidula* (Bres.) J. Erikss. – coniferous and mixed forest; on stumps, fallen *Picea abies* trunks and twigs; saprobic; spring and autumn (May, Sept, Oct.); rare (3).

DISTRIBUTION. DG 38-13: Piekienik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on dead *Gloeophyllum odoratum* basidiome growing on rotten *Picea abies* stump (coexisting with *Mucronella bresadolae*), 8 Oct. 2012, leg. D. Karasiński 8928b (KRAM F-58297); DG 38-90: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'03.0"N, 19°41'51.0"E, spruce forest, on strongly rotted *Picea abies* wood, 23 May 2012, leg. D. Karasiński 7025 (KRAM F-58276); EG 31-31: Bór Bielski (XII) forest, ca 7 km SE of Nowy Targ, ca 580 m, coniferous forest, decayed trunk, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-13802; Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 580–600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on fallen *Picea abies* twigs, 12 Oct. 1988, leg. W. Wojewoda, KRAM F-29121.

!\**Hyphodontiella multiseptata* Å. Strid – coniferous forest; on fallen twigs of *Vaccinium*; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. DG 38-61: in vicinity of Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, ca 3 km NE of Chyżne, 49°26'12.9"N, 19°42'11.5"E, coniferous forest, on *Vaccinium* fallen twigs, 27 Aug. 2010, leg. D. Karasiński 5842.

*Hypholoma capnoides* (Fr.: Fr.) P. Kumm. – coniferous forest; on rotten stumps; saprobic; spring, and summer to autumn (May, July–Nov.); common (23).

DISTRIBUTION. DG 37-89: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, on trunk, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49976; on *Picea* trunk, leg. M. Lysek, KRAM F-49977; DG 38-06: in mixed forest near Piekienik village, on rotten trunk, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-15497; marshy spruce-pine forest near Piekienik village, between Czarny Dunajec and Jabłonka, on decayed remnants of wood, Sept. 1977, leg. Z. Heinrich, KRAM F-16369; DG 38-23: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, coniferous forest, on *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8942 (KRAM F-58290); DG 38-38: Las Baligówka (IV) forest, pine forest, near Czarny Dunajec, near Podczerwone village, on decayed wood, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-15496; Las Baligówka (IV) forest, in

spruce forest, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15889; Las Baligówka (IV) forest, coniferous forest (*Pinus, Picea*), between Czarny Dunajec and Pieklielik near Puścizna Mała (14) peatbog, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15898; Las Baligówka (IV) forest, near Czarny Dunajec (*Picea abies, Pinus sylvestris*), on remnants of coniferous tree, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15899; Las Baligówka (IV) forest, in mixed forest, near Czarny Dunajec, on roots of dead coniferous tree trunk, 1 Aug. 1970, *leg. I. Jalocha*, KRAM F-11108; Las Baligówka (IV) forest, near Czarny Dunajec, in mixed forest, on decayed trunk, 13 Oct. 1971, *leg. I. Jalocha*, KRAM F-15502; Las Baligówka (IV) forest, W of Czarny Dunajec near Nowy Targ, 23 Sept. 1981, *leg. H. Czerwieńiec*, KRAM F-25329; **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, pine forest, on trunk of coniferous tree, 2 Oct. 1970, *leg. I. Jalocha*, KRAM F-15495; Las Baligówka (IV) forest, N part, 49°26'54.21"N, 19°48'18.31"E, 658.9 m, spruce forest, sparse *Larix, Pinus*, young *Betula*, on old spruce trunk, 29 Oct. 2011, *leg. M. Sadowski*, KRAM F-57991; **DG 38-69**: Cikówka (V) forest, S part, 49°25'31.5"N, 19°49'01.8"E, 677.6 m, spruce forest, 14 Oct. 2010, *leg. Z. Heinrich*, KRAM F-49972; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 6 km SE of Jabłonka, CvP, on remnants of wood, 31 July 1984, *leg. W. Wojewoda*, KRAM F-27053; Bór koło Chyżnego (II) forest, ca 6 km SE of Jabłonka, CvP, on remnants of wood, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-27047; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657.7 m, in clearing in spruce forest, 14 Oct. 2010, *leg. M. Lysek*, KRAM F-49985; by forest wayside, on remnants of wood, *leg. Z. Heinrich*, KRAM F-49975; *leg. Z. Heinrich*, KRAM F-49983; **DG 39-48**: mixed forest between Rogoźnik and Nowy Targ (nearer Rogoźnik), on decayed wood, 3 Oct. 1970, *leg. I. Jalocha*, KRAM F-15509; forest near Rogoźnik village, on trunk of coniferous tree, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15493; **DG 39-57**: on bank of Wielki Rogoźnik stream, ca 6 km SW of Nowy Targ, pine-spruce forest, on remnants of wood, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27052; on bank of Wielki Rogoźnik stream, ca 6 km SW of Nowy Targ, pine-spruce forest, on remnants of wood, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27051; on bank of Wielki Rogoźnik stream, ca 2 km SW of Ludźmierz, ca 5.5 km SW of Nowy Targ, pine-spruce forest, on remnants of wood, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27054; **DG 49-11**: Dziurów Lasek forest, NE of Chochołów, 49°23'18.43"N, 19°50'56.19"E, 742.8 m, spruce forest, sparse deciduous trees, 12 Nov. 2011, *leg. M. Sadowski*, KRAM F-49516; **EG 20-91**: Bór na Grelu (VIII) forest, N of Ludźmierz, E part, edge of forest, 16 Oct. 2010, *leg. Z. Heinrich*, KRAM F-56683; *leg. Z. Heinrich*, KRAM F-56747; *leg. M. Pilch*, KRAM F-56685; *leg. H. Komorowska*, KRAM F-56684; **EG 30-01**: Bór na Grelu (VIII) forest, near Ludźmierz, in coniferous forest, on decayed trunk, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11283; Bór na Grelu (VIII) forest, 1 km NW of Ludźmierz, ca 3.5 km W of Nowy Targ, pine-spruce forest, on trunk, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27050; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, pine-spruce forest, on trunk of coniferous tree, 1 Sept. 1983, *leg. Z. Heinrich*, KRAM F-25193; Bór Nowotarski (IX) forest, near Szaflary (near Nowy Targ–Zakopane railway), VmP, on decayed trunk, 17 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15511; Bór Nowotarski (IX) forest, near shoe factory, pine forest (VmP), on trunk of coniferous tree, 17 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15492; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, in litter of conifer needles, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26123; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on rotten stumps (Wojewoda et al. 2004, as *Psilocybe capnoides*); **EG 30-48**: near Gronków village, left side of Nowy Targ–Bukowina road, pine-spruce forest, on trunk, 7 May 1981, *leg. W. Wojewoda*, KRAM F-25456; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., 16 Oct. 2010, *leg. M. Pilch*, KRAM F-49490; in *Sphagnum*, *leg. Z. Heinrich*, KRAM F-56746; Bór Harkłowski (XIII) forest, 8 km E of Nowy Targ, coniferous forest (*Pinus, Picea*), vicinity of Harkłowa, on moss, 16 Oct. 1970, *leg. Z. Heinrich*, KRAM F-15861; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, coniferous forest (*Pinus sylvestris, Picea abies*), on remnants of wood, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-15518; Bór Harkłowski (XIII) forest, near Harkłowa, coniferous forest, on decayed trunk, 16 Oct. 1970, *leg. I. Jalocha*, KRAM F-15521; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, on bark of trunk, 2 May 2011, *leg. M. Lysek*, KRAM F-56657; **EG 31-20**: Bór Ostrowski (XI) forest, pine-spruce forest, between Ostrowsko and Łopuszna, on trunk, 25 Aug. 1981, *leg. Z. Heinrich*, KRAM F-25465; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010,

leg. R. Łysek, KRAM F-49515; leg. M. Pilch, KRAM F-56681; **EG 31-22**: Bór Bielski (XII) forest, near Łopuszna, coniferous forest (*Pinus sylvestris*, *Picea abies*), on remnants of wood, 8 Sept. 1972, leg. I. Jalocho, KRAM F-15494; Bór Bielski (XII) forest, near Łopuszna, ca 550 m, on decayed trunk, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-15428; Bór Bielski (XII) forest, near Łopuszna, coniferous forest with *Pinus* and *Picea*, on decayed remnants of wood, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-16125; **EG 31-32**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, spruce forest, decayed trunk, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-19175.

\***Hypholoma dispersum** Quél. – wet spruce forerst, young pine-spruce forest; on woody debris, among mosses; saprobic; autumn (Oct.). frequent (7).

DISTRIBUTION. **DG 38-43**: Bór koło Chyźnego (II, near Sabałówka) forest, N part, 49°26'58.46"N, 19°44'01.32"E, 646.9 m, thicket in spruce-pine forest, wet undulating terrain, frequent mosses, 30 Oct. 2011, leg. M. Sadowski, KRAM F-57996; **DG 38-69**: Las Cikówka (V) forest, S part (Czarny Dunajec), 49°25'31.44"N, 19°49'01.29"E, 561.1 m, spruce forest (clearing) with sparse *Betula* and frequently cut spruces, on old spruce trunk, 29 Oct. 2011, leg. A. Sadowska, KRAM F-57997; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyźne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, spruce forest with sparse *Pinus*, by forest wayside, on remnants of wood and needles of *Pinus* and *Picea*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49994; on remnants of wood, leg. Z. Heinrich, KRAM F-49979; in clearing in spruce forest, leg. Z. Heinrich, KRAM F-56711; leg. M. Łysek, KRAM F-49978; **EG 20-91**: Bór na Grełu (VIII) forest, N of Ludźmierz, E part, edge of forest, 16 Oct. 2010, leg. M. Pilch, KRAM F-56745; **EG 30-40**: spruce forest on bank of Rogoźnik Wielki river, ca 6 km SW of Nowy Targ, on remnants of wood, in moss, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-27035; leg. Z. Heinrich, KRAM F-27036; leg. Z. Heinrich, KRAM F-27037; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49492; leg. Z. Heinrich, KRAM F-49519; **EG 31-31**: Bór Bielski (XII, Brzezio) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49491; leg. Z. Heinrich, KRAM F-56742; Bór Bielski (XII) forest, in *Sphagnum*, 12 Oct. 1988, leg. W. Wojewoda, KRAM F-29689.

**Hypholoma elongatum** (Pers.) Ricken – R; coniferous forest and peatbog; in *Sphagnum*; saprobic; summer to autumn (June–Nov.); frequent (18).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyźne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, in mosses and *Sphagnum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49991; **DG 38-06**: coniferous forest near Piekielnik village, in *Sphagnum*, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-25312; leg. Z. Heinrich, KRAM F-25317; small wet pine-spruce forest near Piekielnik village (in vicinity of Czarny Dunajec), in *Sphagnum*, Sept. 1977, leg. Z. Heinrich, KRAM F-16367; leg. Z. Heinrich, KRAM F-16380; leg. Z. Heinrich, KRAM F-16399; leg. Z. Heinrich, KRAM F-16737; leg. Z. Heinrich, KRAM F-16739; leg. M. Mizianty, KRAM F-16368; leg. M. Mizianty, KRAM F-16381; **DG 38-13**: Bór koło Chyźnego (II, Księża Soślina) forest, SE of Jabłonka, NW part of forest, 30 July 2010, leg. Z. Heinrich, KRAM F-58003; **DG 38-55**: Puścizna Wielka (10) peatbog between Czarny Dunajec and Piekielnik villages, in *Sphagnum* sp., 13 Oct. 1971, leg. I. Jalocho, KRAM F-25314; Puścizna Wielka peatbog between Piekielnik and Czarny Dunajec villages in vicinity of Nowy Targ, in *Sphagnum*, 13 Oct. 1971, leg. I. Jalocho, KRAM F-25486; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyźne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, 14 Oct. 2010, leg. H. Komorowska, KRAM F-49995; leg. H. Komorowska, KRAM F-49996; leg. Z. Heinrich, KRAM F-56682; leg. Z. Heinrich, KRAM F-56743; **DG 39-10**: Puścizna Rękowiańska (19) peatbog, ca 4.5 km NW from Czarny Dunajec village, ca 15 km of Nowy Targ, in *Sphagnum* and *Calliergon stramineum*, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-27029; **DG 39-22**: Puścizna Rękowiańska (19) peatbog near Czarny Dunajec village, on edge of exploited peatbog, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-18528; **DG 39-57**: on bank of Rogoźnik Wielki stream, ca 6 km SW of Nowy Targ, pine-spruce forest, in *Sphagnum*, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-27022; leg. Z. Heinrich, KRAM F-27024; leg. Z. Heinrich, KRAM F-27026; leg. Z. Heinrich, KRAM F-27023; leg. Z. Heinrich, KRAM F-27021;



leg. Z. Heinrich, KRAM F-27025; leg. Z. Heinrich, KRAM F-27027; between Rogoźnik Wielki stream and Skalka Rogoźnicka Reserve, SW of Nowy Targ, pine-spruce forest, in *Sphagnum*, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-27028; **EG 30-11**: Do Grela (30) peatbog, ca 1 km NE of Ludźmierz, near Nowy Targ, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-27017; leg. Z. Heinrich, KRAM F-27018; leg. Z. Heinrich, KRAM F-27019; leg. Z. Heinrich, KRAM F-27020; Bór na Grelu (VIII) forest, ca 1 km NE of Ludźmierz near Nowy Targ, on edge of forest, in wet place with *Sphagnum*, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-27030; leg. Z. Heinrich, KRAM F-27031; leg. Z. Heinrich, KRAM F-27032; leg. Z. Heinrich, KRAM F-27033; leg. Z. Heinrich, KRAM F-27034; Bór na Grelu (VIII) forest, ca 1 km NE of Ludźmierz near Nowy Targ, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-27016; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, pine-spruce forest, in *Sphagnum*, 1 Sept. 1983, leg. Z. Heinrich, KRAM F-25176; leg. Z. Heinrich, KRAM F-25192; Bór Nowotarski (IX) forest, near Nowy Targ, forest in wet place (soil), in *Sphagnum*, 1 Sept. 1983, leg. Z. Heinrich, KRAM F-25185; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, in *Sphagnum*, 17 July 1985, leg. Z. Heinrich, KRAM F-26106; leg. Z. Heinrich, KRAM F-26120; Bór na Czerwonem (24) peatbog, near Nowy Targ, in *Sphagnum*, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25518; leg. H. Komorowska, KRAM F-25245; leg. H. Komorowska, KRAM F-25519; edge of Bór na Czerwonem (24) peatbog, in *Sphagnum*, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-25006; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, PrS, VuP in *Sphagnum* (Wojewoda et al. 2004, as *Psilocybe elongata* (Pers.: Fr.) J.E. Lange); **EG 30-35**: Bór na Czerwonem (24) peatbog, in *Sphagnum*, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-17956 (Grodzińska et al. 1973, as *H. elongatipes* (Peck) A.H. Sm.); Bór na Czerwonem (24) Nature Reserve, on edge of peatbog and forest, ca 620 m, in *Sphagnum*, 6 Sept. 1973, leg. W. Wojewoda, KRAM F-17165; leg. W. Wojewoda, KRAM F-17164; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Scirpus* sp., *Eriophorum* sp., in *Sphagnum*, 16 Oct. 2010, leg. Z. Heinrich, KRAM F-56701; leg. Z. Heinrich, KRAM F-56702; leg. Z. Heinrich, KRAM F-56703; leg. Z. Heinrich, KRAM F-56704; leg. Z. Heinrich, KRAM F-56705; leg. Z. Heinrich, KRAM F-56706; leg. Z. Heinrich, KRAM F-56707; leg. Z. Heinrich, KRAM F-56708; leg. Z. Heinrich, KRAM F-56709; leg. Z. Heinrich, KRAM F-56710; leg. Z. Heinrich, KRAM F-56749; leg. M. Pilch, KRAM F-49502; leg. M. Pilch, KRAM F-49521; leg. M. Pilch, KRAM F-49522; leg. M. Pilch, KRAM F-49523; leg. M. Pilch, KRAM F-56748; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, coniferous forest (*Pinus sylvestris*, *Picea abies*), spruce forest, in *Sphagnum*, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-17900; **EG 31-20**: Bór Ostrowski (XI) forest, between Ostrowsko and Łopuszna, marshy pine-spruce forest, in *Sphagnum*, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-25462; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. M. Pilch, KRAM F-49487; leg. M. Pilch, KRAM F-56740; leg. M. Pilch, KRAM F-56741; leg. Z. Heinrich, KRAM F-49498; leg. Z. Heinrich, KRAM F-49499; leg. Z. Heinrich, KRAM F-49505; leg. Z. Heinrich, KRAM F-49524; leg. Z. Heinrich, KRAM F-49526; leg. Z. Heinrich, KRAM F-49527; Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, few *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-49520; leg. M. Lysek, KRAM F-49950; **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, in moss, 17 Oct. 2010, leg. M. Pilch, KRAM F-49503; leg. Z. Heinrich, KRAM F-49500; leg. Z. Heinrich, KRAM F-49501; leg. Z. Heinrich, KRAM F-49525; **EG 31-33**: Bór Harkłowski (XIII) forest, W part, 49°27'20.22"N, 20°08'49.2"E, 590.2 m, pine-spruce forest (on edge – old *Pinus*, farther off – young and old *Picea*), in moss. 28 June 2012, leg. B. Pleban, KRAM F-57922.

REMARKS. The species is in the Red List as *Psilocybe elongata* (Pers.: Fr.) J.E. Lange.

\**Hypholoma ericaeoides* P.D. Orton – E; pine, pine-spruce forest; on remnants of conifer needles and peaty soil (on *Sphagnum*); saprobic; summer to autumn (July–Oct.); frequent (6).

DISTRIBUTION. **DG 38-06**: pine-spruce forest near Piekienik village, in vicinity of Czarny Dunajec, 3 Aug. 1970, leg. I. Jatocha, KRAM F-25489; near Piekienik village, in coniferous forest, in mossy place (*Sphagnum*), 3 Aug. 1970, leg. I. Jatocha, KRAM F-11109; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches

of *Sphagnum*, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, 4 Sept. 2011, leg. M. Pilch, KRAM F-57948; **EG 30-11**: Do Grela (30) peatbog, ca 1 km NE of Ludźmierz, ca 3.5 km W of Nowy Targ, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-27135; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, spruce forest with *Pinus sylvestris*, on remnants of conifer needles, 23 Sept. 1981, leg. M. Czewieniec, KRAM F-25318; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, pine-spruce forest, in *Sphagnum*, 20 Sept. 1973, leg. Z. Heinrich, KRAM F-17166; Bór na Czerwonem (24) Nature Reserve, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. P. Roux, KRAM F-57977; Bór na Czerwonem (X) forest, near Nowy Targ, wet pine-spruce forest, on remnants of conifer needles, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25520; leg. H. Komorowska, KRAM F-25310; **EG 31-20**: Bór Ostrowski (XI) forest, between Ostrowsko and Łopuszna, marshy pine-spruce forest, on remnants of conifer needles, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-25461.

**Hypholoma fasciculare** (Huds.: Fr.) P. Kumm. var. **fasciculare** – coniferous forest, spruce forest with *Alnus*; on rotten trunks and stumps of conifers and remnants of wood (woody debris) of *Alnus incana*; saprobic; from spring to autumn (Apr.–Oct.); frequent (15).

DISTRIBUTION. **DG 38-06**: near Piekelnik village, in coniferous forest, on dead trunk, 3 Aug. 1970, leg. I. Jalocha, KRAM F-11106; **DG 38-43**: Bór koło Chyżnego forest, N part (II, near Sabałówka), 49°26'58.46"N, 19°44'01.32"E, 646.9 m, thicket in spruce-pine forest, wet undulating terrain, frequent mosses, 30 Oct. 2011, leg. M. Sadowski, KRAM F-57982; **DG 39-48**: Rogoźnik village near Czarny Dunajec, spruce-pine forest, on *Picea* stump, 7 June 1972, leg. I. Jalocha, KRAM F-16477; **DG 39-83**: Domański Wierch hill near Stare Bystre village, ca 700 m, ca 17 km SW of Nowy Targ, spruce forest with *Alnus*, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-27038; Domański Wierch hill near Miętustwo, ca 700 m, ca 3.5 km SE of Czarny Dunajec, spruce forest with *Alnus*, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-27039; **DG 49-11**: Ciche, ca 6 km S of Czarny Dunajec village, on bank of Cichy stream, *Alnus incanae*, on remnants of wood, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-27138; **EG 20-91**: Bór na Grelu (VIII) forest, N of Ludźmierz, E part, edge of forest, on dead *Picea*, 16 Oct. 2010, leg. M. Pilch, KRAM F-56686; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, near Nowy Targ–Czarny Dunajec road, ca 610 m, pine-spruce forest, trunk of coniferous tree, 13 May 1981, leg. W. Wojewoda, KRAM F-25467; Bór Nowotarski (IX) forest, near Nowy Targ, on trunk of coniferous tree, 1 Sept. 1983, leg. Z. Heinrich, KRAM F-25235; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, PrS, VuP, on rotten stumps (Wojewoda et al. 2004, as *Psilocybe fascicularis* (Huds.: Fr.) Noordel.); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 610 m, pine-spruce forest, on remnants of wood, 17 July 1970, leg. I. Jalocha, KRAM F-16482; **EG 31-20**: Bór Ostrowski (XI) forest, between Ostrowsko and Łopuszna, on trunk, 14 Aug. 1970, leg. I. Jalocha, KRAM F-16492; Bór Ostrowski (XI) forest, between Ostrowsko and Łopuszna, pine-spruce forest, on remnants of wood, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-25464; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49486; Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'54.11"N, 20°07'10"E, 583.6 m, on *Pinus* trunk, 30 Apr. 2011, leg. H. Komorowska, KRAM F-49881; Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, few *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-57951; **EG 31-23**: Bór Harkłowski (XIII) forest, near Łopuszna, ca 600 m, spruce-pine forest, on decayed trunk, 14 Aug. 1970, leg. I. Jalocha, KRAM F-17186; **EG 31-27**: near Dębno, on left bank of Białka river, ca 13 km SE of Nowy Targ, cleared small forest with *Pinus sylvestris* and *Juniperus communis*, on decayed trunk, 24 May 1984, leg. W. Wojewoda, KRAM F-27041; between Dębno and Nowa Biała, on bank of Białka river, ca 11.5 km SE of Nowy Targ, pine-spruce forest, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-27042; **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, 17 Oct. 2010, leg. M. Pilch, KRAM F-56687; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, NE part, 49°27'30.55"N, 20°07'56.61"E, 586.3 m, spruce forest with few *Pinus sylvestris*, in undergrowth with *Urtica dioica* or only spruce needles, also wet (swampy) places with *Sphagnum*, 13 Aug. 2011, leg. H. Komorowska, KRAM F-57945.

REMARKS. Wojewoda (2003) provides the species locality as 'KON, alt. 600 m' (as '*Psilocybe*' ?*Hypholoma elaeodes* (Fr.) Gillet), without more precise information about the location.

\**Hypholoma fasciculare* (Huds.: Fr.) P. Kumm. var. *subviride* (Berk. & M.A. Curtis) Krieglst. – coniferous forest; on rotten wood, on stumps and roots; saprobic; from spring to autumn (May–Sept.); frequent (18).

DISTRIBUTION. **DG 38-06**: pine-spruce forest near Piekienik village, in vicinity of Czarny Dunajec, on stump, Sept. 1977, leg. Z. Heinrich, KRAM F-16366; **DG 38-38**: Las Baligówka (IV) forest, in spruce forest, 6 July 1970, leg. Z. Heinrich, KRAM F-15886; Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, 650–670 m, ca 17 km SW of Nowy Targ, spruce forest, on *Picea* trunk, 15 June 1982, leg. W. Wojewoda, KRAM F-32294; **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, ca 600 m, on decayed trunk, 6 July 1970, leg. I. Jalocha, KRAM F-17907; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 6 km SE of Jabłonka, CvP, on mossy remnants of wood, 31 July 1984, leg. W. Wojewoda, KRAM F-27045; **DG 39-80**: between Czarny Dunajec and Podczerwone, ca 20 km SW of Nowy Targ, right bank of Czarny Dunajec river, brushwood with *Alnus incana*, on trunk, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-27044; **DG 48-29**: between Chochołów and Koniówka, ca 7 km SE of Czarny Dunajec village, on right bank of Czarny Dunajec river (*Alnus incana* and *Picea abies*), 31 Aug. 1984, leg. W. Wojewoda, KRAM F-27046; **EG 30-00**: Bór na Grelu (VIII) forest, N of Ludźmierz, on right side of Ludźmierz–Trute road, young forest (*Populus tremula* and *Picea* sp.), on trunk, 20 July 2010, leg. M. Pilch, KRAM F-56760; **EG 30-23**: Bór Nowotarski (IX) forest, left side of Czarny Dunajec–Nowy Targ road, near shoe factory, CvP, on trunk, 22 June 1970, leg. W. Wojewoda, KRAM F-25497; **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), marshy old pine forest and sparse *Picea* with *Sphagnum*, on *Picea* trunk, 20 July 2010, leg. H. Komorowska, KRAM F-56763; **EG 30-40**: Pasieczny Las (VII) forest between Zaskale and Rogoźnik, ca 5 km SW of Nowy Targ, ca 620 m, spruce forest, on decayed trunk of (? *Picea*), 13 May 1981, leg. W. Wojewoda, KRAM F-25466; **EG 30-43**: Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, 3 May 2011, leg. M. Sadowski, KRAM F-57912; **EG 30-44**: Bór na Czerwonem (X) forest, near Szaflary Dolne, in coniferous forest, on dead roots of *Picea abies*, 25 May 1971, leg. Z. Heinrich, KRAM F-11255; **EG 30-45**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), on stump of deciduous tree (*Betula* sp.), 11 June 1971, leg. Z. Heinrich, KRAM F-11340; **EG 30-64**: near Szaflary, in coniferous forest (*Picea*, *Pinus*), on decayed *Picea* trunk, 25 May 1971, leg. Z. Heinrich, KRAM F-1126; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, on rotten stump, 21 Aug. 1970, leg. I. Jalocha, KRAM F-16475; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'50.46"N, 20°06'19.38"E, 597.2 m, spruce-pine forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), edges of clearing, on *Pinus* roots, 28 June 2012, leg. B. Pleban, KRAM F-57924; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-57952; **EG 31-27**: between Dębno and Nowa Biała, on bank of Białka river, ca 11.5 km SE of Nowy Targ, pine-spruce forest, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-27043.

*Hypholoma lateritium* (Schaeff.: Fr.) P. Kumm. – mixed and spruce forest; on decayed stump and remnants of wood; saprobic; autumn (Sept.–Nov.); rare (3).

DISTRIBUTION. **DG 38-06**: near Piekienik village, in mixed forest, on decayed stump, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-12059; **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest, sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, on old stump, 12 Nov. 2011, leg. M. Sadowski, KRAM F-49493; leg. M. Sadowski, KRAM F-49517; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, on remnants of wood, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17167; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on rotten stumps (Wojewoda et al. 2004, as *Psilocybe lateritia* (Schaeff.: Fr.) Noordel.).

*Hypholoma polytrichi* (Fr.) Ricken – R; coniferous forest; in *Polytrichum*, in *Sphagnum*; saprobic; summer to autumn (June–Nov.); frequent (15).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, in *Sphagnum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49959; leg. Z. Heinrich, KRAM F-49960; leg. Z. Heinrich, KRAM

F-49970; in *Polytrichum*, leg. Z. Heinrich, KRAM F-49980; **DG 38-06**: coniferous forest S of Piekienik village between Jabłonka and Czarny Dunajec, on moss, 3 July 1970, leg. Z. Heinrich, KRAM F-15888; small forest near Piekienik village between Czarny Dunajec and Jabłonka, on edge of wet ditch (old drainage, in *Sphagnum*), 3 July 1970, leg. I. Jalocho, KRAM F-15899; small forest near Piekienik between Czarny Dunajec and Jabłonka, in spruce forest, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-15531; leg. Z. Heinrich, KRAM F-15900; **DG 38-36**: Las Gajka (III) forest, ca 2 km S of Piekienik, spruce-pine forest, by way-side, in undergrowth – mosses and *Vaccinium* sp., 1 Sept. 2012, leg. H. Komorowska, KRAM F-56680; **DG 38-38**: Las Baligówka (IV) forest, coniferous forest (*Pinus, Picea*) between Czarny Dunajec and Piekienik near Puścizna Mała (14) peatbog, 22 June 1970, leg. W. Wojewoda, KRAM F-15908; **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula ?pubescens*), 11 Nov. 2011, leg. A. Sadowska, KRAM F-49518; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, wet spruce forest, in *Sphagnum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49992; in clearing in spruce forest, KRAM F-56744; **EG 30-23**: Bór Nowotarski (IX) forest, between Nowy Targ and Ludźmierz, coniferous forest (CvP), 22 June 1970, leg. W. Wojewoda, KRAM F-15885; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, in moss, 17 July 1985, leg. Z. Heinrich, KRAM F-26114; Bór na Czerwonem (X) forest, near Nowy Targ, pine-spruce forest, in *Polytrichum*, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25517; Bór na Czerwonem (24) Nature Reserve, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. G. Końska, KRAM F-57966; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, among *Polytrichum* (Wojewoda et al. 2004, as *Psilocybe polytrichi* Pears. & Dennis); **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus, Picea*), between Szaflary Dolne and Nowy Targ, on mossy place (*Sphagnum*), 11 June 1971, leg. I. Jalocho, KRAM F-11360; **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside, 28 June 2011, leg. H. Komorowska, KRAM F-56674; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 600 m, spruce forest, in moss (*Sphagnum, Polytrichum*), 22 Sept. 1966, leg. W. Wojewoda, KRAM F-17896; **EG 31-22**: Bór Bielski (XII) forest, near Łopuszna, marshy spruce forest with admixture of *Pinus*, in moss, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-16128; leg. Z. Heinrich, KRAM F-16129; **EG 31-23**: Bór Harkłowski (XIII) forest, near Łopuszna, on wet place, in *Sphagnum* and *Polytrichum*, 22 June 1970, leg. W. Wojewoda, KRAM F-15903; **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, 17 Oct. 2010, leg. Z. Heinrich, KRAM F-49504; Bór Bielski (XII) forest, pine-spruce forest, in moss and needles, 3 Aug. 1977, leg. Z. Heinrich, KRAM F-16755; **EG 31-32**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, spruce forest, in moss, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-19172; Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, spruce forest, in moss, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-19173; Bór Bielski (XII, Brzezcie) forest, E part of forest, 49°27'16.44"N, 20°08'02.88"E, 591.8 m, on edge of spruce forest, in brushwood (*Sorbus, Rubus, Vaccinium*), in moss, 28 June 2012, leg. B. Pleban, KRAM F-57940.

REMARKS. The species is in the Red List as *Psilocybe polytrichi* Pears. & Dennis.

\**Hypholoma radicosum* J.E. Lange – pine-spruce forest; on rotten stumps; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, on stump, 6 July 1970, leg. Z. Heinrich, KRAM F-25002; **EG 31-22**: Bór Bielski (XII) forest, near Łopuszna, pine-spruce forest, on stump of coniferous tree, ca 600 m, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-16126.

\**Hypholoma subericaeum* (Fr.) Kühner – R; wet spruce forest; in *Sphagnum*; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, wet spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, in *Sphagnum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49952; spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, in *Sphagnum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49986.

REMARKS. The species is in the Red List as *Psilocybe subericaea* (Fr.) Sacc.

***Hypholoma udum*** (Pers.: Fr.) Kühner – R; peatbogs and marshy coniferous forest; in *Sphagnum*; saprobic; summer to autumn (June–Nov.); frequent (14).

DISTRIBUTION. **DG 38-06**: coniferous forest near Piekielek village, on dead trunk, 3 Aug. 1970, leg. I. Jalocho, KRAM F-11107; near Piekielek village, marshy pine-spruce forest, in *Sphagnum*, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-15901; coniferous forest (*Picea, Pinus*) S of Piekielek village between Jablonka and Czarny Dunajec, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-15879; edge of pine-spruce forest near Piekielek village, in *Sphagnum*, 3 Aug. 1970, leg. I. Jalocho, KRAM F-25510; near Piekielek village, marshy pine-spruce forest, in *Sphagnum*, 3 Aug. 1970, leg. I. Jalocho, KRAM F-25514; pine-spruce forest near Piekielek village, 3 Aug. 1970, leg. I. Jalocho, KRAM F-25513; near Piekielek village, in *Sphagnum*, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-25515; **DG 38-35**: Puścizna Wielka (10) peatbog, ca 1,5 km S of Piekielek, on peaty soil, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-27059; leg. W. Wojewoda, KRAM F-27060; **DG 38-55**: Puścizna Wielka (10) peatbog between Czarny Dunajec and Piekielek, in *Sphagnum*, 13 Oct. 1971, leg. I. Jalocho, KRAM F-25312; leg. I. Jalocho, KRAM F-25313; Puścizna Wielka (10) peatbog between Czarny Dunajec and Piekielek, in *Sphagnum* and on peaty soil, 13 Oct. 1971, leg. I. Jalocho, KRAM F-25311; **DG 39-22**: Puścizna Rękowiańska (10) peatbog near Czarny Dunajec, on edge of exploited peatbog, 11 Nov. 1960, leg. W. Wojewoda, KRAM F-18527; **DG 39-39**: Przymiarki (22) peatbog, SW of Ludźmierz, 17 July 1985, leg. Z. Heinrich, KRAM F-26118; Przymiarki (22) peatbog, SW of Ludźmierz, in *Sphagnum*, 17 July 1985, leg. Z. Heinrich; KRAM F-26108; **EG 30-01**: Do Grela (30) peatbog, ca 2 km N of Ludźmierz, 17 July 1985, leg. Z. Heinrich, KRAM F-26122; Do Grela (30) peatbog, ca 2 km N of Ludźmierz, in *Sphagnum*, 17 July 1985, leg. Z. Heinrich, KRAM F-26119; leg. Z. Heinrich, KRAM F-26121; Bór na Grelu (VIII) forest, SW part (Grel), 49°28'55.9"N, 19°58'49.7"E, 627.2 m, spruce forest (with partial clearing), in brushwood with young *Picea* and *Vaccinium*, 16 July 2011, leg. H. Komorowska, KRAM F-57971; **EG 30-11**: Do Grela (30) peatbog, ca 1 km NE of Ludźmierz, near Nowy Targ, on peat, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-27056; leg. Z. Heinrich, KRAM F-27057; leg. Z. Heinrich, KRAM F-27058; Do Grela (30) peatbog between Ludźmierz and Nowy Targ, 22 June 1970, leg. W. Wojewoda, KRAM F-15887; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, pine-spruce forest, in *Sphagnum* and *Polytrichum*, 1 Sept. 1983, leg. Z. Heinrich, KRAM F-25179; **EG 30-25**: Bór na Czerwonem (24) peatbog, near Nowy Targ, in *Sphagnum*, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25516; Bór na Czerwonem (24) peatbog, near Nowy Targ, ca 620 m, in *Sphagnum*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17163; Bór na Czerwonem (24) Nature Reserve, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. P. Roux, KRAM F-57970; leg. G. Końska, KRAM F-57964; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, PrS, VuP, in *Sphagnum* sp. (Wojewoda et al. 2004, as *Psilocybe uda* (Pers.: Fr.) Gill.); **EG 30-30**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 4.5 km SW of Nowy Targ, 17 July 1985, leg. Z. Heinrich, KRAM F-26134; **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'03.7"N, 19°59'57.5"E, 630.0 m, 17 July 2011, leg. G. Końska, KRAM F-57973; leg. G. Końska, KRAM F-57975; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), young spruce forest with sparse old *Picea*, 27 June 2012, leg. H. Komorowska, KRAM F-57923; Bór Nowotarski (IX) forest, S part (near Szaflary), forest near railway, 20 July 2010, leg. H. Komorowska, KRAM F-56752; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., 16 Oct. 2010, leg. M. Pilch, KRAM F-49488; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part. Spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-57954.

REMARKS. The species is in the Red List as *Psilocybe uda* (Pers.: Fr.) Gill.

\****Hypochnicium albostramineum*** (Bres.) Hallenb. – coniferous forest; on fallen trunks of coniferous trees; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, coniferous forest, between Piekielek and Czarny Dunajec, on trunk of coniferous tree, 18 May 1973, leg. I. Jalocho, KRAM F-14270; Las Baligówka (IV) forest, ca 2 km W of Czarny Dunajec, ca 15 km SW of Nowy Targ, ca 670 m, coniferous forest, on trunk, 18 May 1973, leg. W. Wojewoda, KRAM F-25286.

REMARKS. In Poland the species was recorded from four localities.

***Hypochnicium bombycinum*** (Sommerf.) J. Erikss. – deciduous and coniferous forest; mostly on fallen *Pinus sylvestris* trunks, occasionally on deciduous wood; saprobic; from summer to autumn (Aug., Oct.); rare (3).

DISTRIBUTION. **DG 49-11**: Ciche village, ca 18 km SW of Nowy Targ, ca 700 m, *Alin* on bank of Cichy stream, trunk of deciduous tree, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26309 (Wojewoda 2003); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'46.6"N, 20°02'18.6"E, on wood of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, *leg. D. Karasiński* 6595 (KRAM F-58524); Bór na Czerwonem (24) Nature Reserve, 49°27'34.9"N, 20°02'08.1"E, on wood of fallen *Pinus* trunk, 17 Oct. 2011, *leg. D. Karasiński* 6624 (KRAM F-58523); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.7"N, 20°02'06.4"E, on bark of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, *leg. D. Karasiński* 6600 (KRAM F-58525).

\****Hypochnicium cremicolor*** (Bres.) H. Nilsson & Hallenb. – coniferous forest; on fallen *Pinus sylvestris* branch; saprobic; summer (June); rare (1).

DISTRIBUTION. **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'43.5"N, 20°08'43.4"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7196 (KRAM F-58528).

REMARKS. The species belongs to the *Hypochnicium punctulatum* complex and is characterized by small, weakly ornamented basidiospores and thin-walled subicular hyphae. The very similar *H. wakefieldiae* has slightly larger basidiospores and distinctly thick-walled subicular hyphae. In Poland the species was recorded only from Międzyrzec Podlaski and Kampinos National Park (Bresadola 1903, as *Hypochnus cremicolor* Bres.; Karasiński et al. 2015).

\****Hypochnicium erikssonii*** Hallenb. & Hjortstam – coniferous forest; on fallen trunks and stumps of coniferous trees; saprobic; spring and autumn (May, Oct.); rare (2).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, on rotten *Picea abies* stump, 9 Oct. 2012, *leg. D. Karasiński* 8940 (KRAM F-58527); **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ city centre, ca 600 m, pine forest, dead trunks of *Pinus sylvestris* lying on the ground, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25285.

***Hypochnicium geogenium*** (Bres.) J. Erikss. – coniferous forest and peatbogs; on wood; saprobic; from spring to autumn (Apr.–June, Sept.–Nov.); frequent (6).

DISTRIBUTION. **DG 38-21**: between Jabłonka and Piekienik, on side of Borowy stream, ca 22 km W of Nowy Targ, pine forest, on dead *Pinus sylvestris* twig lying on the ground, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-25283; **DG 39-20**: edge of Puścizna Rękowiańska (19) peatbog, ca 4 km NW of Czarny Dunajec, ca 650 m, on partly burnt wood, 15 June 1982, *leg. W. Wojewoda*, KRAM F-19077; **DG 39-51**: Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 670 m, cemetery, on conifer twigs lying on the ground, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-25284; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ (E of shoe factory), spruce forest and *Pinus sylvestris*, 23 Sept. 1981, *leg. M. Czewieniec*, KRAM F-18575; Bór Nowotarski (IX) forest, ca 3 km SW of Nowy Targ centre, ca 620 m, pine-spruce forest near shoe factory, on dead twig lying on the ground, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25252; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, in coniferous forest, on stump of coniferous tree, 8 Nov. 1972, *leg. I. Jalocho*, KRAM F-13570; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CyP*, on rotten stump (Wojewoda et al. 2004); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.7"N, 20°02'03.6"E, on wood of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, *leg. D. Karasiński* 6606 (KRAM F-58526).

\****Hypochnicium karstenii*** (Bres.) Hallenb. – coniferous forest; on fallen trunks of coniferous trees; saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.4"N, 19°42'16.6"E, on wood of fallen *Pinus xraetica* trunk, 27 Aug. 2010, *leg. D. Karasiński* 5853; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.6"N, 20°02'06.4"E, on wood of fallen

*Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6601 (KRAM F-58433); Bór na Czerwonem (24) Nature Reserve, 49°27'28.6"N, 20°02'06.3"E, on wood of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6602 (KRAM F-58522).

REMARKS. In Poland the species was recorded from four localities.

\**Hypochnicium punctulatum* (Cooke) J. Erikss. – deciduous forest along rivers; on decayed wood; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 39-52**: between Czarny Dunajec and Podczerwone, ca 15 km SW of Nowy Targ, ca 680 m, *Alin* on left bank of Czarny Dunajec river, on decayed mossy trunk, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25642; **EG 31-37**: Dolina Białki p.a., left side (beyond bridge) of Frydman–Dębno road, forest (*Alin*) with single *Pinus*, *Picea*, *Larix*, *Salix*, 16 July 2010, leg. H. Komorowska, KRAM F-56716.

\**Hypochnicium wakefieldiae* (Bres.) J. Erikss. – pine-spruce forest; on wood; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, S part, left side of Łopuszna–Nowa Biała road, pine-spruce forest, in brushwood: *Sorbus*, *Frangula alnus*, ?*Cornus*, 17 July 2010, leg. H. Komorowska, KRAM F-56717.

REMARKS. In Poland the species was recorded from five localities.

*Infundibulicybe gibba* (Pers.: Fr.) Harmaja – pine-spruce forest and riverside mountain alder; on the ground; saprobic; summer (July, Aug.); rare (3).

DISTRIBUTION. **DG 49-11**: Ciche village, *Alin* on bank of stream, ca 6 km S of Czarny Dunajec village, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25722; **EG 30-10**: Ludźmierz ca 4 km SW of Nowy Targ, *Alin* on left bank of Czarny Dunajec river, 11 July 1984, leg. W. Wojewoda, KRAM F-25723; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, on burnt ground, 21 July 1971, leg. I. Jalocho, KRAM F-32259; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground, under trees (Wojewoda et al. 2004, as *Clitocybe gibba* (Pers.: Fr.) P. Kumm.).

\**Infundibulicybe squamulosa* (Pers.: Fr.) Harmaja – alder grove; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-27**: near Dębno, alder grove on bank of Białka stream, ca 14 km E of Nowy Targ, ca 535 m, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-33289.

\**Inocybe assimilata* Britzelm. – spruce and pine-spruce forest; on the ground; mycorrhizal; summer (June–Aug.); rare (3).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. M. Pilch, KRAM F-49944; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne (near Bory koło Podczerwonego), S of Pirogówka mount, 640–710 m, pine-spruce forest, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-26371; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'50.46"N, 20°06'19.38"E, 597.2 m, spruce-pine forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), on the ground, 28 June 2012, leg. B. Pleban, KRAM F-57942.

*Inocybe asterospora* Quéł. – pine and pine spruce forest; on the ground; mycorrhizal; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 49-11**: ca 1 km N of Ciche village, ca 5 km S of Czarny Dunajec, 788 m, small spruce forest, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-26372; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, pine-spruce forest, 21 July 1971, leg. W. Wojewoda, KRAM F-25187; Bór na Czerwonem (X)

forest, near Nowy Targ, pine forest, on the ground, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-25309; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP* with *Alnus*, on the ground (Wojewoda et al. 2004).

\**Inocybe calida* Velen. – spruce forest with *Pinus*, *Sorbus* and *Betula*; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. P. Roux*, KRAM F-57958.

\**Inocybe calospora* Quéél. – V; riverine scrub; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-49**: Gronków Środkowy village, SE of Nowy Targ, on bank of Leśnica river, 49°26'21.11"N, 20°05'24.73"E, 608.4 m, thicket: *Acer*, *Carpinus*, *Fraxinus*, *Ulmus*, *Salix* and *Asarum*, *Urtica dioica*, *Arctium*, *Rubus*, on the ground, 3 Sept. 2011, *leg. M. Pilch*, KRAM F-49951.

\**Inocybe flavella* P. Karst. – spruce-pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, on the ground in moss, 4 Sept. 2011, *leg. M. Pilch*, KRAM F-57917.

REMARKS. According to Knudsen and Vesterholt (2012) the species occurs under deciduous trees such as *Betula* and *Populus*, often in humid habitats. In Poland it was recorded only from Gryżyński Landscape Park and from Poznań (Lasek Marcelesiński forest) (Ślusarczyk 2019; Gierczyk and Ślusarczyk 2020).

\**Inocybe jacobii* Kühner – E; pine-spruce forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne, S of Pirogówka mount, ca 22 km SW of Nowy Targ, 640–710 m, pine-spruce forest, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26377.

*Inocybe lacera* (Fr.: Fr.) P. Kumm. var. *lacera* – coniferous forest; on the ground; mycorrhizal; from spring to autumn (May–Sept.); frequent (8).

DISTRIBUTION. **DG 38-06**: near Piekielnik, W of Nowy Targ, coniferous forest, 3 July 1970, *leg. Z. Heinrich*, KRAM F-25232; **DG 38-36**: Las Gajka (III) forest, pine forest, 1.5 km S of Piekielnik village, 640–660 m, 24 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26376; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekielnik village, 650–670 m, ca 17 km SW of Nowy Targ, 1 July 1970, *leg. I. Jalocha*, KRAM F-32336; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, 4 Sept. 2011, *leg. M. Pilch*, KRAM F-57915; **DG 39-37**: S of Długopole village, 49°27'43.68"N, 19°55'47.34"E, 622.5 m, young spruce forest with sparse old *Pinus*, near melioration ditch, 27 June 2012, *leg. H. Komorowska*, KRAM F-57944; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary Dolne, coniferous forest, by forest road, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11294; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, between Szaflary Dolne and Nowy Targ, coniferous forest (*Pinus*, *Picea*), on the ground, 11 June 1971, *leg. Z. Heinrich*, KRAM F-11366.

*Inocybe lanuginosa* (Bull.: Fr.) P. Kumm. – coniferous forest; on the ground; mycorrhizal; summer and autumn (June, July, Sept.); frequent (6).

DISTRIBUTION. **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 29 July 2010, *leg. Z. Heinrich*, KRAM F-57911; **DG 39-27**: Las Cyrla forest, near Długopole, SE part, 49°28'01.98"N,



19°55'36.3"E, 637.6 m, spruce forest, 27 June 2012, leg. B. Pleban, KRAM F-57925; **EG 30-01**: Bór na Grełu (VIII) forest, SW part (Grel), 49°28'55.9"N, 19°58'49.7"E, 627.2 m, spruce forest (with partial clearing), in brushwood with young *Picea* and *Vaccinium*, 16 July 2011, leg. H. Komorowska, KRAM F-57980; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, pine-spruce forest, on the ground, 24 July 1971, leg. W. Wojewoda, KRAM F-25177; Bór na Czerwonem (X) forest, near Szaflary, coniferous forest (*Pinus, Picea*), in wet place (soil), in *Sphagnum*, 31 July 1976, leg. H. Komorowska & Z. Heinrich, KRAM F-25182; Bór na Czerwonem (X) forest, near Nowy Targ, marshy pine-spruce forest, in *Sphagnum*, 21 July 1971, leg. W. Wojewoda, KRAM F-25178; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, few *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Łysek, KRAM F-57955; **EG 31-43**: Bór Harkłowski (XIII) forest, S part, N of Nowa Biała, 19 July 2010, leg. H. Komorowska, KRAM F-57905.

\**Inocybe mixtilis* (Britzelm.) Sacc. – coniferous forest, on the ground; mycorrhizal; summer and autumn (June, Aug.); rare (2).

DISTRIBUTION. **DG 39-27**: Las Cyrla forest, near Długopole, SE part, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, spruce forest. 27 June 2012, leg. B. Pleban, KRAM F-57921; **DG 49-11**: ca 1 km N of Ciche village, ca 5 km S of Czarny Dunajec, 788 m, small forest, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-26375.

\**Inocybe napipes* J.E. Lange – spruce forest with single *Betula* sp. and *Populus tremula*; on the ground; mycorrhizal; summer (June); rare (1).

DISTRIBUTION. **DG 39-27**: Las Cyrla forest, SE part, near Długopole, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, spruce forest with single *Betula* and *Populus tremula*, on the ground, 27 June 2012, leg. H. Komorowska, KRAM F-57926.

\**Inocybe praetervisa* Quél. – forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 49-11**: ca 1 km N of Ciche village, ca 5 km S of Czarny Dunajec, 788 m, small forest, on the ground, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-26370.

\**Inocybe proximella* P. Karst. – marshy spruce and spruce-pine forest; on the ground; mycorrhizal; summer and autumn (June, Sept.); rare (2).

DISTRIBUTION. **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, spruce-pine forest and *Vaccinium, Calluna vulgaris*, moss, patches of *Sphagnum*, on the ground, 4 Sept. 2011, leg. H. Komorowska, KRAM F-57946; **DG 39-37**: S of Długopole village, 49°27'45.36"N, 19°55'41.7"E, 616.6 m, young spruce forest with sparse old *Pinus*, near melioration ditch, 27 June 2012, leg. B. Pleban, KRAM F-57927.

REMARKS. In Poland the species was recorded from four localities.

\**Inocybe relicina* (Fr.) Quél. – marshy coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-06**: near Piekienik, W of Nowy Targ, coniferous forest, wet place (soil), on the ground among *Sphagnum*, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-25231.

\**Inocybe sindonia* (Fr.) P. Karst. – pine-spruce forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, pine-spruce forest, on the ground among moss, 30 Aug. 1977, leg. Z. Heinrich, KRAM F-25174.

\**Inocybe soluta* Velen. – coniferous forest; on the ground; mycorrhizal; summer (July); rare (1).

DISTRIBUTION. **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), forest near railway, on the ground, 20 July 2010, *leg. H. Komorowska*, KRAM F-57906.

\**Inocybe subcarpta* Kühner & Boursier – spruce forest with *Alnus* and coniferous forest on peatbog; on the ground; mycorrhizal; summer (Aug.); rare (2).

DISTRIBUTION. **DG 39-83**: Domański Wierch hill, ca 3 km SE of Czarny Dunajec, 753 m, spruce forest with *Alnus incana*, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26373; **EG 30-25**: Bór na Czerwonym (24) Nature Reserve, edge of forest, 49°27'55.27"N, 20°02'22.73"E, 604.9 m, 13 Aug. 2011, *leg. H. Komorowska*, KRAM F-57916.

\**Inocybe umbratica* Quéf. – spruce forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 49-11**: ca 1 km N of Ciche village, ca 5 km S of Czarny Dunajec, 788 m, small spruce forest, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26374.

*Inonotus triquetter* (Fr.) P. Karst. – V; coniferous forest; on rotten stump; saprobic; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, on rotten *Pinus* sp. stump (Wojewoda et al. 2004).

\**Ischnoderma benzoinum* (Wahlenb.) P. Karst. – V; mixed forest; on fallen trunk of *Betula* sp.; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, in mixed forest (*Pinus*, *Picea*, *Betula* sp.), on dead trunk of *Betula* sp., 17 Oct. 1970, *leg. Z. Heinrich*, KRAM F-10948.

\**Kneiffiella abieticola* (Bourdot & Galzin) Jülich & Stalpers – coniferous and mixed forest; on decayed wood of coniferous trees (*Picea abies*); saprobic; spring, summer and autumn (May, Aug., Sept.); rare (4).

DISTRIBUTION. **DG 49-11**: Ciche village, ca 17 km SW of Nowy Targ, ca 700 m, *Alin* on bank of Cichy stream, on decayed trunk, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25664; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on decayed trunk, 25 May 1971, *leg. Z. Heinrich*, KRAM F-11246; **EG 31-14**: Bór Harkłowski (XIII) forest, ca 1 km S of Harkłowa, ca 10 km E of Nowy Targ, ca 570 m, pine-spruce forest, *Picea abies* trunk, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-25625; **EG 31-31**: Bór Bielski (XII) forest, ca 7 km SE of Nowy Targ, ca 580 m, pine-spruce forest, decayed trunk, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-25624.

\**Kneiffiella floccosa* (Bourdot & Galzin) Jülich & Stalpers – coniferous and mixed forest, on wood of coniferous trees (*Pinus sylvestris*); saprobic; summer and autumn (June, Sept.); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, *leg. H. Komorowska*, KRAM F-49451; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.1"N, 20°08'58.1"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7209b (KRAM F-58529).

REMARKS. In Poland the species was recorded only from the Kashubian Landscape Park and Kampinos National Park (Karasiński et al. 2015; Karasiński 2016).

***Kneiffiella subalutacea*** (P. Karst.) Jülich & Stalpers – mixed and coniferous forest; on fallen trunks, branches and twigs of coniferous trees, mostly *Pinus sylvestris*; saprobic; spring, summer and autumn (Apr.–June, Aug., Sept., Nov.); frequent (6).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.3"N, 19°44'18.7"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7157 (KRAM F-58530); **DG 38-47**: Las Gajka (III) forest, 49°27'08.2"N, 19°47'18.3"E, pine forest, on fallen trunk of young *Pinus sylvestris* tree, 22 May 2012, leg. D. Karasiński 6996 (KRAM F-58531); **DG 38-69**: Las Cikówka (V) forest, ca 2 km SW of Czarny Dunajec, ca 700 m, pine forest with *Picea abies*, fallen branches of *Pinus sylvestris*, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-25629; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 22 km SW of Nowy Targ, between Chyżne and Podczerwone, ca 670 m, pine-spruce forest, conifer twig lying on the ground (?*Pinus sylvestris*), 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25630; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 620 m, pine forest, fallen twig of *Pinus sylvestris*, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-25281; Bór na Czerwonem (X) forest, near Nowy Targ, in coniferous forest, on fallen twig of *Pinus sylvestris*, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-13568; Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, CvP, on fallen twig of *Pinus*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17156; leg. W. Wojewoda, KRAM F-17155; Bór na Czerwonem (X) forest, near Nowy Targ, ca 610 m, pine forest, on fallen twig of *Pinus*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17154; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stump (Wojewoda et al. 2004, as *Hyphodontia subalutacea*); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 km SE of Nowy Targ, ca 570 m, coniferous forest, fallen twig, 27 Apr. 1981, leg. H. Komorowska, KRAM F-25282.

***Kuehneromyces mutabilis*** (Schaeff.: Fr) Singer & A.H. Sm. – coniferous forest, riverine scrub; on rotten stump of deciduous trees; saprobic; spring to summer (May–Aug.); frequent (8).

DISTRIBUTION. **DG 39-18**: fields between Krauszów and Długopole, ca 6.5 km W of Nowy Targ, ca 600 m, 11 July 1984, leg. W. Wojewoda, KRAM F-26335; **DG 39-61**: between Czarny Dunajec and Podczerwone, ca 16 km SW of Nowy Targ, 700 m, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26336; **DG 49-11**: Ciche village, on bank of Cichy stream, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, 700–720 m, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-26334; **EG 30-10**: Ludźmierz, at roadside, 31 May 1971, leg. W. Wojewoda, KRAM F-11279; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on stumps of deciduous trees (Wojewoda et al. 2004, as *Pholiota mutabilis* (Scop.: Fr.) P. Kumm.). **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), between Szaflary Dolne and Nowy Targ, on rotten log, 11 June 1971, leg. I. Jalocha, KRAM F-11349; **EG 30-54**: Szaflary Dolne willage, 6 km S of Nowy Targ, at roadside, 31 May 1971, leg. W. Wojewoda, KRAM F-11298; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.5"N, 20°07'40.5"E, willow bushes on bank of Białka river, on rotten wood, 24 May 2012, leg. D. Karasiński 7091b (KRAM F-58571).

***Laccaria amethystina*** Cooke – spruce forest; on the ground; mycorrhizal; autumn (Sept., Oct.); rare (4).

DISTRIBUTION. **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by wayside, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, spruce-pine forest and *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnum*, hollow with *Sphagnum* sp., 4 Sept. 2011, leg. M. Pilch, KRAM F-56688; **DG 38-90**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce and mosses and *Vaccinium*, 2 Sept. 2011, leg. M. Pilch, KRAM F-56689; **EG 30-40**: Pasieczny Las (VII) forest, spruce forest on bank of Wielki Rogoźnik river, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-25751; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 16 Oct. 1970, leg. I. Jalocha, KRAM F-13761 (Skirgiełło 1977).

\****Laccaria bicolor*** (Maire) P.D. Orton – peatbog; on the ground; mycorrhizal; autumn (Nov.); rare (1).

DISTRIBUTION. **DG 38-61**: NW edge of Puścizna Jasiowska (4) peatbog, SE of Jabłonka, 49°26'19.53"N, 19°42'02.76"E, 648.5 m, sparse *Pinus* and young *Picea*, frequent *Calluna vulgaris*, 11 Nov. 2011, leg. A. Sadowska, KRAM F-49478.

**Laccaria laccata** (Scop.: Fr.) Cooke – coniferous forest; on the ground, among mosses, wet and mossy litter; mycorrhizal; summer and autumn (June–Oct.); frequent (16).

DISTRIBUTION. **DG 37-56**: pine-alder forest near Zbiornik Orawski reservoir, ca 5 km SW of Jabłonka village, 29 Sept. 1974, leg. M. Mitka, KRAM F-26001; **DG 38-26**: Las Gajka (III) forest, mixed forest near Piekielek (S of village), in wet, mossy place, 13 Oct. 1971, leg. I. Jalocha, KRAM F-25756; Las Gajka (III) forest, forest S of Piekielek village, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-32234; **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas). Pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. G. Końska, KRAM F-49648; leg. Mi. Lysek, KRAM F-49650 (as *Laccaria laccata* var. *pallidifolia* (Peck) Peck); **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekielek village, 2 Sept. 1970, leg. Z. Heinrich, KRAM F-32231; leg. Z. Heinrich, KRAM F-32232; **DG 38-48**: Las Baligówka (IV) forest, 4 km SE of Piekielek village, 2 Sept. 1970, leg. I. Jalocha, KRAM F-32223; in moss, KRAM F-32229; **DG 38-73**: Bór koło Chyżnego (II) forest, CvP, 22 June 1970, leg. W. Wojewoda, KRAM F-32228; Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, pine forest with *Sphagnum*, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-32230; Bór koło Chyżnego (II) forest, pine-spruce forest, wet place (soil), in *Sphagnum*, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25758; Bór koło Chyżnego (II) forest, dry forest ca 4 km E of Chyżne village, S of Pirogówka mount, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-32234; Bór koło Chyżnego (II) forest, pine-spruce forest, in dry place, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-32233; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, at forest path, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-56643; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, spruce-pine forest, 15 Sept. 2011, leg. Mi. Lysek, KRAM F-49649; Soślina (VI) forest, E of Czarny Dunajec, 15 Sept. 2011, leg. M. Lysek, KRAM F-49669; leg. M. Lysek, KRAM F-49651 (as *Laccaria laccata* var. *pallidifolia* (Peck) Peck); **EG 30-01**: Bór na Grelu (VIII) forest, near Ludźmierz, spruce-pine forest, in *Sphagnum*, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-25753; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, in *Sphagnum*, 21 July 1971, leg. Z. Heinrich, KRAM F-32226; Bór na Czerwonem (X) forest, pine-spruce forest, in *Sphagnum*, 20 Sept. 1973, leg. Z. Heinrich, KRAM F-25755; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 30-40**: Pasieczny Las (VII) forest, edge of forest near Wielki Rogoźnik river, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-25752; **EG 31-14**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, on edge of forest, 16 Oct. 1970, leg. I. Jalocha, KRAM F-32224; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, near Nowy Targ, 16 Oct. 1970, leg. Z. Heinrich, KRAM F-32225; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-25757; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, in *Sphagnum* and on conifer needles, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-32222; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 18 Aug. 1970, leg. Z. Heinrich, KRAM F-32221; leg. Z. Heinrich, KRAM F-32227; **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, spruce forest, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25754; **EG 31-42**: Bór Bielski (XII) forest, near Nowa Biała, spruce forest, 30 Aug. 1977, leg. H. Komorowska, KRAM F-49987.

**Laccaria proxima** (Boud.) Pat. – mixed forest; on the ground, in *Sphagnum*; mycorrhizal; summer and autumn (Aug.–Oct.); rare (5).

DISTRIBUTION. **DG 37-56**: pine-alder forest near Zbiornik Orawski reservoir, ca 5 km SW of Jabłonka village, 29 Sept. 1974, leg. M. Mitka, KRAM F-26002; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielek, coniferous forest, on the ground among grasses under *Picea abies* and *Pinus sylvestris*, 9 Oct. 2012, leg. D. Karasiński 8942b (KRAM F-58264); **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, in *Sphagnum*, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25760;

**EG 30-25:** Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, in *Sphagnum*, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-32235; leg. *Z. Heinrich*, KRAM F-32236; Bór na Czerwonem (24) peatbog, 21 Sept. 1983, leg. *H. Komorowska*, KRAM F-49988; leg. *H. Komorowska*, KRAM F-49989; leg. *H. Komorowska*, KRAM F-49990; ?**EG 30-25:** Bór na Czerwonem (24) Nature Reserve, *VuP*, on the ground (Wojewoda et al. 2004); **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, in *Sphagnum*, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25759.

\***Laccaria tortilis** (Bolton) Cooke – pine forest; on the ground; mycorrhizal; summer (June); rare (1).

DISTRIBUTION. **DG 37-97:** Las Brzegi (I) forest, Chyżne, forest near border crossing, *CvP*, 22 June 1970, leg. *W. Wojewoda*, KRAM F-25761.

\***Lacrymaria lacrymabunda** (Bull.: Fr.) Pat. – pine-spruce forest; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-20:** Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, 580–595 m, ca 6 km SE of Nowy Targ, pine-spruce forest, 25 Aug. 1981, leg. *Z. Heinrich*, KRAM F-32545.

\***Lactarius aurantiacus** (Pers.: Fr.) Gray s.l. – pine-spruce forest; on the ground; mycorrhizal; autumn (Sept., Oct.); rare (3).

DISTRIBUTION. **EG 30-01:** Bór na Grełu (VIII) forest, ca 2 km N of Ludźmierz, ca 4 km W of Nowy Targ, pine-spruce forest, 11 Oct. 1984, leg. *Z. Heinrich*, KRAM F-26210; **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, ca 10 km SE of Nowy Targ, 8 Sept. 1972, leg. *I. Jalocha*, KRAM F-26211; **EG 31-42:** Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, pine-spruce forest, 8 Sept. 1972, leg. *Z. Heinrich*, KRAM F-26209.

\***Lactarius cf. deliciosus** (L.: Fr.) Gray – coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 48-29:** between Chochołów and Koniówka, on right bank of Czarny Dunajec river, ca 4 km SW of Czarny Dunajec village, in small spruce forest, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-26182.

**Lactarius flexuosus** (Pers.: Fr.) Gray – pine forest; on the ground among mosses under *Betula*; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25:** Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine forest, ca 610 m, on the ground, in moss, under *Betula*, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17151; ?**EG 30-25:** Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004).

\***Lactarius glycosmus** (Fr.: Fr.) Fr. – pine-spruce forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-23:** Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, pine-spruce forest, 24 Sept. 1981, leg. *M. Czerwiniak*, KRAM F-18571.

**Lactarius helvus** (Fr.: Fr.) Fr. – coniferous forest; on the ground under *Betula*, *Picea* or *Pinus*; mycorrhizal; summer to autumn (Aug.–Oct.); frequent (15).

DISTRIBUTION. **DG 38-06:** near Piekienik village, in coniferous forest, on the ground, 3 Aug. 1970, leg. *I. Jalocha*, KRAM F-11180; forest near Piekienik village, on edge of forest, 13 Oct. 1971, leg. *Z. Heinrich*, KRAM F-12053; **DG 38-26:** Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekienik village, 3 Aug. 1970, leg. *I. Jalocha*, KRAM F-26186; **DG 38-33:** Bór koło Chyżnego forest, N part (II, Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. *M. Lysek*, KRAM F-49849; leg.

*M. Lysek*, KRAM F-49853; *leg. G. Końska*, KRAM F-58011; **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, ca 4 km SE of Piekienińnik village, ca 17 km SW of Nowy Targ, on the ground, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-26195; **DG 38-43**: Bór koło Chyżnego (II) forest, N part (near Borowy Potok), spruce forest with sparse *Pinus*, in brushwood with ?*Salix* and young *Picea*, 17 Sept. 2011, *leg. G. Końska*, KRAM F-58014; *leg. M. Lysek*, KRAM F-58017; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, 15 Sept. 2011, *leg. M. Lysek*, KRAM F-49852; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, pine-spruce forest, 17 Oct. 1970, *leg. I. Jalocha*, KRAM F-26188; *leg. I. Jalocha*, KRAM F-26189; *leg. I. Jalocha*, KRAM F-26190; *leg. Z. Heinrich*, KRAM F-26193; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, 21 Sept. 1983, *leg. H. Komorowska*, KRAM F-26184; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, near Bór na Czerwonem (24) Nature Reserve, 21 Sept. 1983, *leg. H. Komorowska*, KRAM F-26185; Bór na Czerwonem (X), ca 2.5 km S of Nowy Targ, ca 610 m, *VuP*, with *Ledum palustre* and *Vaccinium uliginosum*, on the ground, among mosses, 23 Aug. 2000, *leg. W. Wojewoda*, KRAM F-50569; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *PrS*, *VuP*, on the ground (Wojewoda et al. 2004); **EG 30-32**: Bór Nowotarski (IX) forest, W part, edge of forest, 49°27'10.74"N, 20°00'15.96"E, 610.2 m, old spruce forest, 12 Aug. 2012, *leg. G. Końska*, KRAM F-49513; *leg. G. Końska*, KRAM F-49514; **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest, on the ground, 16 Oct. 1970, *leg. I. Jalocha*, KRAM F-11179; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, ca 10 km SE of Nowy Targ, 16 Oct. 1970, *leg. Z. Heinrich*, KRAM F-26192; *leg. Z. Heinrich*, KRAM F-26194; *leg. I. Jalocha*, KRAM F-26191; **EG 31-15**: Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, 16 Sept. 2011, *leg. Mi. Lysek*, KRAM F-58010; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, pine-spruce forest, 16 Oct. 1970, *leg. I. Jalocha*, KRAM F-26187; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. G. Końska*, KRAM F-40850; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, pine-spruce forest, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-26196; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, E edge of pine-spruce forest, 23 Sept. 1981, *leg. M. Czerwieniec*, KRAM F-18572; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, *leg. G. Końska*, KRAM F-49497; *leg. G. Końska*, KRAM F-49644.

\**Lactarius lacunarum* Hora – E; peat dome and spruce forest with sparse *Pinus* and single *Betula* and *Sorbus*, pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, pine forest near peat dome, by viewing platform, 16 Sept. 2011, *leg. G. Końska*, KRAM F-56699; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. G. Końska*, KRAM F-56697; *leg. G. Końska*, KRAM F-56698.

*Lactarius lignyotus* Fr. – coniferous forest; on the ground under *Picea*; mycorrhizal; summer to autumn (June, Aug.–Oct.); frequent (11).

DISTRIBUTION. **DG 38-28**: Las Baligówka (IV) forest, E part, 49°27'37.92"N, 19°48'17.16"E, 664.4 m, 11 Aug. 2012, *leg. G. Końska & P. Roux*, KRAM F-49494; **DG 38-82**: Bór koło Chyżnego (II) forest, W part (Nowa Droga), 49°25'00.87"N, 19°43'32.47"E, 695.8 m, 30 June 2011, *leg. H. Komorowska*, KRAM F-58012; **DG 39-55**: Soślina (VI, Soślina) forest, ca 1 km W of Rogoźnik village, pine-spruce forest, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-26199; **DG 39-71**: near Czarny Dunajec, in coniferous forest, on the ground, 2 Oct. 1970, *leg. I. Jalocha*, KRAM F-11174; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, pine-spruce forest, 1 Sept. 1983, *leg. Z. Heinrich*, KRAM F-26200; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973); *CvP*, on the ground (Wojewoda et al. 2004); **EG 30-40**: Pasiczny Las (VII) forest, on edge of forest, on bank of Wielki Rogoźnik river, ca 2 km E of Rogoźnik village, pine-spruce forest, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-26202; Pasiczny Las (VII) forest, on right side of Ludźmierz–Maruszyna road, 49°26'41.11"N, 19°58'40.07"E, 612.5 m,

pine-spruce forest, in brushwood with young *Picea*, 14 Aug. 2011, leg. M. Sadowski, KRAM F-49840; **EG 30-41**: Pasieczny Las (VII) forest, S part, on left side of Ludźmierz–Maruszyna road, 49°26'20.54"N, 19°58'34.46"E, 615.1 m, edge of forest, birch and pine-spruce forest with *Rubus* sp., *Oxalis acetosella* and ferns, 14 Aug. 2011, leg. M. Sadowski, KRAM F-49839; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, pine-spruce forest, 21 Aug. 1970, leg. I. Jalocha, KRAM F-26198; leg. Z. Heinrich, KRAM F-26203; leg. W. Wojewoda, KRAM F-26204; **EG 31-32**: Bór Bielski (XII, Brzezie) forest, E part, 49°27'16.44"N, 20°08'02.88"E, 591.8 m, on edge of spruce forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), 28 June 2012, leg. B. Pleban, KRAM F-58146; Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25953; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, pine-spruce forest, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26201; pine-spruce forest, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-26197.

**Lactarius lilacinus** (Lasch) Fr. – **R**; riverside mountain alder; on the ground; mycorrhizal; summer (Aug.); rare (**2**).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on right bank of Czarny Dunajec river, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25582; **DG 49-11**: Ciche village, left bank of Cichy stream, *Alin*, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25583.

REMARKS. Wojewoda (2003) mentioned the species from the KON without giving a specific locality (as 'KON, leg. W. Wojewoda, KRAM'). This information concerns the above-mentioned collections, but the record does not allow an unambiguous assignment to a specimen.

**Lactarius mammosus** (Weinm.) Fr. – coniferous forest; on the ground under *Pinus*; mycorrhizal; summer to autumn (Aug.–Oct.); rare (**5**).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, ca 17 km SW of Nowy Targ, on the ground, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-26208; **DG 38-67**: Bór koło Chyżnego (II) forest, near railway to Puścizna Wielka (10) peatbog, 49°25'37.73"N, 19°47'11.59"E, 700.2 m, 2 Sept. 2012, leg. M. Pilch, KRAM F 56692; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, coniferous forest, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26206; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km of Nowy Targ, pine forest, near Bór na Czerwonem (24) peatbog, 6 Sept. 1973, leg. W. Wojewoda, KRAM F-26207; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under *Pinus* sp. (Wojewoda et al. 2004); **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, pine-spruce forest, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-26205.

REMARKS. Rymkiewicz (1981) reported the species (as *L. fuscus* Rolland) with the information 'KON near Nowy Targ', without an exact location.

**Lactarius necator** (Bull.: Fr.) Pers. – coniferous forest; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (**5**).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jabłonka road, 15 Sept. 2011, leg. M. Łysek, KRAM F-56694; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, spruce-pine forest, on the ground, in litter of conifer needles, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17143; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under *Betula* sp. and *Picea abies* (Wojewoda et al. 2004); **EG 30-32**: Bór Nowotarski (IX) forest, W part, edge of forest, 49°27'08.58"N, 20°00'03.78"E, 608.9 m, young pine-spruce forest, marshy place, on the ground, 12 Aug. 2012, leg. G. Końska, KRAM F-49577; **EG 31-20**: Bór Ostrowski (XI) forest, between Łopuszna and Ostrowsko, in coniferous forest, on the ground, 14 Aug. 1970, leg. I. Jalocha, KRAM F-11178; **EG 31-21**: Bór Ostrowski (XI, Książy Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Łysek, KRAM F-49646.

\**Lactarius picinus* Fr. – R; pine-spruce forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, spruce-pine forest, 30 Aug. 1977, *leg. Z. Heinrich*, KRAM F-26212.

\**Lactarius pubescens* (Schrad.) Fr. – riverine scrub; on the ground under *Betula*; mycorrhizal; summer (Aug.); rare (1);

DISTRIBUTION. **DG 39-90**: Podczerwone, ca 18 km SW of Nowy Targ, on left bank of Czarny Dunajec river, under *Betula* sp., 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26215.

\**Lactarius pyrogalus* (Bull.: Fr.) Fr. – pine-spruce forest; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, pine-spruce forest, 1 Sept. 1983, *leg. Z. Heinrich*, KRAM F-26214; **EG 31-20**: Bór Ostrowski (XI) forest, pine-spruce forest, ca 1 km SE of Ostrowsko village, ca 5 km SE of Nowy Targ, 28 Aug. 1981, *leg. Z. Heinrich*, KRAM F-26213.

*Lactarius rufus* (Scop.: Fr.) Fr. – coniferous forest, peatbog; on the ground, under *Pinus* and *Picea*; mycorrhizal; summer and autumn (June–Oct.); frequent (14).

DISTRIBUTION. **DG 38-19**: Puścizna Rękówiańska (19) peatbog, ca 2 km S of Załuczne, 650–660 m, 31 July 1984, *leg. W. Wojewoda*, KRAM F-26217; **DG 38-28**: Las Baligówka (IV) forest, E part, forest, 49°27'37.92"N, 19°48'17.16"E, 664.4 m, 11 Aug. 2012, *leg. G. Końska & P. Roux*, KRAM F-4949, *leg. G. Końska & P. Roux*, KRAM F-49496; **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, ca 17 km SW of Nowy Targ, 6 July 1970, *leg. I. Jalocha*, KRAM F-26229; *leg. I. Jalocha*, KRAM F-26230; **DG 38-48**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, 650–670 m, ca 17 km SW of Nowy Targ, 22 June 1979, *leg. W. Wojewoda*, KRAM F-26226; **DG 39-55**: Soślina (VI, Soślina) forest, ca 4 km E of Czarny Dunajec village, ca 670 m, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-26219; Soślina (VI, Soślina) forest, between Rogoźnik and Czarny Dunajec, ca 4 km E of Czarny Dunajec village, ca 670 m, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-26221; **EG 30-01**: Do Greła (30) peatbog, ca 2 km N of Ludźmierz, ca 600 m, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-26216; Bór na Grełu (VIII) forest, ca 2 km N of Ludźmierz, pine-spruce forest, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26127; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, 17 Oct. 1970, *leg. Z. Heinrich*, KRAM F-26224; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, 21 July 1971, *leg. Z. Heinrich*, KRAM F-26218; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, marshy forest, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-26222; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on the ground under *Pinus* sp. (Wojewoda et al. 2004); **EG 30-30**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 4.5 km SW of Nowy Targ, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26128; **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest, on the ground, 22 June 1970, *leg. W. Wojewoda*, KRAM F-11175; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-26227; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, 580–595 m, ca 6 km SE of Nowy Targ, 14 Aug. 1970, *leg. Z. Heinrich*, KRAM F-26225; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49645; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 21 Aug. 1970, *leg. Z. Heinrich*, KRAM F-26220; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 17 Aug. 1970, *leg. Z. Heinrich*, KRAM F-26223; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25932.



\**Lactarius scrobiculatus* (Scop.: Fr.) Fr. – pine forest; on the ground; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-55**: Soślina (VI, Soślina) forest, ca 4 km E of Czarny Dunajec village, ca 670 m, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-26231.

*Lactarius tabidus* Fr. – pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 620 m, CvP, in moss and litter of conifer needles, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17145; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on the ground under *Betula* sp., *Picea abies* and *Pinus* sp. (Wojewoda et al. 2004, as *Lactarius thejogalus* (Bull.: Fr.) Gray).

\**Lactarius torminosus* (Schaeff.: Fr.) Pers. – peatbog; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 39-20**: Puścizna Rękowiańska (19) peatbog, NW of Czarny Dunajec, 49°28'10"N, 19°49'37.6"E, 650.4 m, in brushwood with *Potentilla erecta*, 3 Sept. 2012, leg. Z. Heinrich, KRAM F-56695.

\**Lactarius trivialis* (Fr.: Fr.) Fr. – R; pine-spruce forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, ca 580–600 m, pine-spruce forest, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-26232.

\**Lactarius uvidus* (Fr.: Fr.) Fr. – pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest (CvP), on the ground, under *Betula pendula* and *Pinus sylvestris*, 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50619.

\**Lactarius vellereus* (Fr.: Fr.) Fr. – coniferous forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 38-67**: Bór koło Chyżnego (II) forest, near railway to Puścizna Wielka (10) peatbog, 49°25'36.5"N, 19°47'19.92"E, 693.8 m, on the ground, 2 Sept. 2012, leg. H. Komorowska, KRAM F-56696.

*Lactarius vietus* (Fr.: Fr.) Fr. – marshy pine-spruce forest on border of peatbog and woods; on the ground, under *Alnus* and *Betula*; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–620 m, marshy pine-spruce forest on edge of peatbog and forest, under *Betula* sp., 6 Sept. 1973, leg. W. Wojewoda, KRAM F-26233; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, VuP, on the ground under *Alnus* sp. and *Betula* sp. (Wojewoda et al. 2004).

*Leccinum scabrum* (Bull.: Fr.) Gray – peat bog; on the ground; mycorrhizal; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under *Betula* sp. (Wojewoda et al. 2004).

\**Leccinum versipelle* (Fr. & Hök) Snell – forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-20**: Bór Ostrowski (XI) forest, near Ostrowsko village near Nowy Targ, 14 Aug. 1970, leg. Z. Heinrich & I. Jalocha, KRAM F-13631.

\**Lentinellus cochleatus* (Pers.) P. Karst. – coniferous forest; on decayed stump; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-32**: Bór Bielski (XII) forest, spruce forest on right side of Łopuszna–Nowa Biała road, ca 2 km NW of Nowa Biała, ca 8 km SE of Nowy Targ, ca 590 m, on decayed stump (of ?*Picea*), 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-19091.

*Lentinus lepideus* (Fr.) Fr. – coniferous forest also outside forest; on wood of conifers; saprobic; spring and summer (May, June, Aug.); rare (5).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on stump of coniferous tree (*Wojewoda et al.* 2004); **EG 30-44**: near Szaflary Dolne, on stump of *Larix* sp., 25 May 1971, leg. *Z. Heinrich*, KRAM F-11263; edge of Bór na Czerwonem (X) forest (*Picea, Pinus*), near Szaflary Dolne, on *Picea abies* stump, 31 May 1971, leg. *W. Wojewoda*, KRAM F-11280; **EG 30-45**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus, Picea*), on *Picea abies* stump, 11 June 1971, leg. *Z. Heinrich*, KRAM F-11339; **EG 31-23**: Bór Harkłowski (XII) forest, near Łopuszna, at road, on stump, 22 June 1970, leg. *W. Wojewoda*, KRAM F-32289; **EG 31-27**: Dębno, ca 14 km E of Nowy Targ, ca 540 m, on telephone line pole (?*Picea*), 6 Aug. 1985, leg. *W. Wojewoda*, KRAM F-32333.

*Lentinus torulosus* (Pers.) Lloyd – **R**; mixed forest; on stump; saprobic; autumn (Sept.); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump of deciduous tree (*Wojewoda et al.* 2004); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, in S part of reserve, forest with *Pinus sylvestris, Vaccinium myrtillus, Calamagrostis villosa, Deschampsia, Holcus* (and *Betula pendula*), on *B. pendula* stump, 19 Sept. 2000, leg. *W. Wojewoda*, KRAM F-50611.

\**Lenzites betulina* (L.) Fr. – riverside mountain alder; on *Alnus incana* trunk; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'00.4"N, 19°41'56.4"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, leg. *D. Karasiński* 7048a (KRAM F-58259).

\**Lepiota cristata* (Bolton: Fr.) P. Kumm. – riverside mountain alder; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec village, *Alin*, 700–720 m, ca 17 km SW of Nowy Targ, 28 Aug. 1984, leg. *W. Wojewoda*, KRAM F-32681.

\**Lepiota tomentella* J.E. Lange – **E**; riverside thickets, on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 39-52**: Czarny Dunajec, near Nowy Targ, on bank of Czarny Dunajec river, in riverine scrub (*AlPa*), on the ground, 30 July 1970, leg. *I. Jalocho*, KRAM F-10971.

\**Lepista flaccida* (Sowerby: Fr.) Pat. – pine-spruce forest; on the ground; saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, pine-spruce forest, 1 Aug. 1970, leg. *I. Jalocho*, KRAM F-25726; **DG 39-55**: Soślina (VI, Soślina) forest, near Rogoźnik village, 3 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25725.

\**Lepista gilva* (Pers.: Fr.) Pat. – spruce forest; on the ground; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, spruce forest, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-25762.

\***Lepista nuda** (Bull.: Fr.) Cooke – coniferous forest; on the ground; saprobic; autumn (Sept., Oct.); rare (2).

DISTRIBUTION. **EG 31-24**: Bór Harkłowski (XIII) forest, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25763; Bór Harkłowski (XIII) forest, 6 Oct. 1970, leg. *I. Jalocha*, KRAM F-32237.

**Leptosporomyces galzinii** (Bourdot) Jülich – mixed and coniferous forest; on fallen twigs, branches and trunks; saprobic; spring to autumn (May–Aug., Nov.); frequent (7).

DISTRIBUTION. **DG 38-43**: Bór koło Chyżnego (II, Siedlcowa Soślina) forest, ca 3 km SE of Jabłonka, 49°27'23.8"N, 19°44'19.8"E, mixed forest with pine, on *Salix aurita* trunk, 12 June 2012, leg. *D. Karasiński* 7163 (KRAM F-58602); ca 3 km SE of Jabłonka, Bór koło Chyżnego (II, Siedlcowa Soślina) forest, on fallen *Sorbus aucuparia* branch, 12 June 2012, leg. *D. Karasiński* 7158 (KRAM F-58333); **DG 39-20**: edge of Puścizna Rękowiańska (19) peatbog, ca 4 km NW of Czarny Dunajec, ca 650 m, young small forest with *Pinus*, fallen twigs of *Pinus*, 15 June 1982, leg. *W. Wojewoda*, KRAM F-19073; **EG 30-23**: Bór Nowotarski (IX) forest, ca 3 km SW of Nowy Targ centre, ca 600 m, coniferous forest, admixture *Betula pendula*, on fallen dead twigs of *Betula pendula*, 31 May 1971, leg. *W. Wojewoda*, KRAM F-25644; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ centre, 630 m, coniferous forest, on dead *Pinus sylvestris* twig lying on the ground, 8 Nov. 1972, leg. *Z. Heinrich*, KRAM F-26311; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 630 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), near Szafłary Dolne, on dead twig of coniferous tree (?*Picea*) lying on the ground, 31 July 1976, leg. *Z. Heinrich*, KRAM F-25646; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stump (Wojewoda et al. 2004); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.1"N, 20°08'57.3"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. *D. Karasiński* 7208 (KRAM F-58625); **EG 31-27**: between Dębno and Nowa Biała, on bank of Białka river, ca 11 km SE of Nowy Targ, ca 560 m, pine-spruce forest with *Juniperus communis*, dead twigs of *Juniperus* lying on the ground, 26 Aug. 1985, leg. *W. Wojewoda*, KRAM F-26310; **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 600 m, spruce-pine forest (more *Picea abies*), dead twigs of *Picea* lying on the ground, 24 May 1984, leg. *W. Wojewoda*, KRAM F-25647.

\***Leptosporomyces raunkiaerii** (M.P. Christ.) Jülich – coniferous forest; on fallen branches; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekiełnik, coniferous forest, on fallen *Pinus sylvestris* branch, 9 Oct. 2012, leg. *D. Karasiński* 8945 (KRAM F-58532); Bór koło Chyżnego (II, Ucinki) forest, Piekiełnik, coniferous forest, on bark of fallen *Picea abies* branch, 9 Oct. 2012, leg. *D. Karasiński* 8931 (KRAM F-58533).

REMARKS. In Poland the species was recorded only from the Kashubian Landscape Park and Kampinos National Park (Karasiński et al. 2015; Karasiński 2016).

\***Leratiomyces squamosa** (Pers.: Fr.) Bridge & Spooner – I; pasture; in grass; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-48**: Rogoźnik village, pasture on bank of Wielki Rogoźnik stream, ca 8 km SW of Nowy Targ, 620–640 m, 2. Oct. 1984, leg. *Z. Heinrich*, KRAM F-27726.

REMARKS. The species is in the Red List as *Psilocybe squamosa* P.D. Orton.

**Lichenomphalia umbellifera** (L.: Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys – R; coniferous forest, raised peatbog; in needle litter among mosses and *Sphagnum*, on peaty soil and rotten stump; lichenized; summer and autumn (July–Sept.); frequent (7).

DISTRIBUTION. **DG 38-19**: Puścizna Rękowańska (19) peatbog, ca 2 km S of Załuczne, on peat, 31 July 1984, *leg. W. Wojewoda*, KRAM F-25807; **DG 38-26**: Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekielek village, in *Sphagnum*, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-25806; **DG 38-73**: Bór koło Chyżnego (II) forest, pine-spruce forest (CvP), 4 km E of Chyżne village, S of Pirogówka mount, forest road, on the ground, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25812; Bór koło Chyżnego (II) forest, pine-spruce forest (CvP), 4 km E of Chyżne village, S of Pirogówka mount, on decayed trunk of *Picea*, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25808; **DG 38-90**: Las Brzegi (I, Sławny Lęk) forest, SE of Chyżne, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce with mosses and *Vaccinium*, on rotten stump, 2 Sept. 2011, *leg. M. Pilch*, KRAM F-59351; **DG 39-39**: Przemiarki (22) peatbog, SW of Ludźmierz, in *Sphagnum*, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26131; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, pine forest, in litter of conifer needles and moss, 20 Sept. 1973, *leg. W. Wojewoda*, KRAM F-17144; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground in mosses (Wojewoda et al. 2004, as *Omphalina umbellifera* (L.: Fr.) Quél.); **EG 30-43**: Bór Nowotarski (IX) forest, 49°27'01.8"N, 20°00'45.78"E, 629.8 m, old spruce forest, on rotten stump, 12 Aug. 2012, *leg. H. Komorowska*, KRAM F-56644.

*Lycoperdon excipuliforme* (Scop.) Pers. – coniferous forest, edge of forest near meadow, post-peat area; on the ground, in moss; saprobic; spring and autumn (Apr., Sept., Oct.); rare (4).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground in moss (Wojewoda et al. 2004, as *Calvatia excipuliformis* (Scop.) Perdeck); **EG 30-39**: Torfowisko koło Księżego Boru (26), post-peat area, 49°27'10.22"N, 20°06'01.21"E, 587.8 m, 30 Apr. 2011, *leg. Mi. Łysek*, KRAM F-49209; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 550 m, edge of coniferous forest, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-13249; Bór Harkłowski (XIII) forest, near Harkłowa, on edge of coniferous forest and meadow, 16 Oct. 1970, *leg. Z. Heinrich*, KRAM F-13244; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'54.11"N, 20°07'10"E, 583.6 m, edge of forest, 30 Apr. 2011, *leg. Mi. Łysek*, KRAM F-49195.

\**Lycoperdon molle* Pers. – coniferous forest; on the ground; saprobic; spring (Apr.); rare (2).

DISTRIBUTION. **DG 38-21**: between Jabłonka and Piekielek, ca 25 km W of Nowy Targ, ca 600–680 m, coniferous forest (*Picea*, *Abies*), 24 Apr. 1972, *leg. W. Wojewoda*, KRAM F-32666; **EG 30-64**: Szaflary, ca 6 km S of Nowy Targ, ca 640 m, edge of young spruce forest near Dunajec river, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-32665.

*Lycoperdon perlatum* Pers. – mixed and coniferous forest, riverside mountain alder and riverine scrub; on the ground, conifer litter and rotten stump; saprobic; summer to autumn (Aug.–Nov.); frequent (7).

DISTRIBUTION. **DG 37-76**: Las Brzegi (I) forest, pine-alder forest in vicinity of Zbiornik Orawski reservoir, between Chyżne and Jabłonka, ca 30 km SW of Nowy Targ, ca 600 m, 29 Sept. 1974, *leg. M. Mitka*, KRAM F-32656; *leg. M. Mitka*, KRAM F-32655; **DG 38-38**: Las Bałigówka (IV) forest, ca 4 km SE of Piekielek village, ca 17 km SW of Nowy Targ, 650–670 m, on litter of conifer needles, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-32661; *leg. Z. Heinrich*, KRAM F-32663; *leg. Z. Heinrich*, KRAM F-32664; 14 Nov. 1971 (specimens from 1970), *leg. Z. Heinrich*, KRAM F-32662; **DG 39-48**: Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-32658; **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on left bank of Czarny Dunajec river, ca 16 km SW of Nowy Targ, 675–720 m, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-32659; *leg. W. Wojewoda*, KRAM F-32660; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stump of deciduous tree (Wojewoda et al. 2004); **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 16 Oct. 1970, *leg. Z. Heinrich*, KRAM F-32657; **EG 31-27**: between Dębno and Frydman, young pine forest on bank of Białka river, ca 15 km SE of Nowy Targ, 525–535 m, 6 Aug. 1985, *leg. W. Wojewoda*, KRAM F-32654.

\**Lycoperdon pyriforme* Schaeff. – riverine scrub, park; on wood; saprobic; spring and summer (Apr., Aug.); rare (3).

DISTRIBUTION. **DG 38-21**: between Jabłonka and Piekelnik, ca 25 km W of Nowy Targ, ca 600–680 m, on *Salix* sp., 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-32673; **DG 39-90**: between Podczerwone and Czarny Dunajec, ca 16 km SW of Nowy Targ, ca 675–720 m, *Alin*, 30 Aug. 1984, leg. *W. Wojewoda*, KRAM F-32670; **EG 30-04**: Nowy Targ, park, ca 600 m, on living trunk of *Salix* sp., 5 Apr. 1986, leg. *W. Wojewoda*, KRAM F-26382.

\**Lycoperdon umbrinum* Pers. – coniferous forest; on the ground; saprobic; autumn (Sept., Oct.); rare (2).

DISTRIBUTION. **EG 30-01**: Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, ca 3 km W of Nowy Targ, 600–620 m, 11 Oct. 1984, leg. *Z. Heinrich*, KRAM F-32669; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 8 Sept. 1972, leg. *Z. Heinrich*, KRAM F-32668.

\**Lycoperdon utriforme* Bull. – grassland and marshy meadow; on the ground; saprobic; spring, summer to autumn (Apr., July–Sept.); rare (4).

DISTRIBUTION. **DG 38-48**: edge of Las Baligówka forest, near Czarny Dunajec village, 6 July 1970, leg. *Z. Heinrich*, KRAM F-13203; **EG 30-10**: marshy meadow near peatbog near Ludźmierz, ca 4 km SW of Nowy Targ, 600–610 m, 21 Sept. 1983, leg. *H. Komorowska*, KRAM F-32649; **EG 31-22**: between Bór Bielski (XII) forest and Łopuszna, at roadside, 14 Aug. 1970, leg. *I. Jalocho*, KRAM F-13201; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, edge of forest, 22 Apr. 1971, leg. *Z. Heinrich*, KRAM F-32650.

\**Lyomyces sambuci* (Pers.) P. Karst. – mixed and deciduous forest, riverside thickets; on fallen twigs and branches; saprobic; summer and autumn (July, Aug., Oct.); rare (4).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on bark of fallen *Salix* sp. twig, 8 Oct. 2012, leg. *D. Karasiński* 8877 (KRAM F-58377); leg. *D. Karasiński* 8878a (KRAM F-58458); leg. *D. Karasiński* 8879 (KRAM F-58344); **DG 39-70**: between Czarny Dunajec and Podczerwone, ca 16 km SW of Nowy Targ, ca 680 m, right bank of Czarny Dunajec river, *Alin*, dead twigs of deciduous tree (?*Alnus incana*) lying on the ground, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25648; **DG 48-09**: Koniówka village near Chochołów, ca 18 km SW of Nowy Targ, ca 730 m, right bank of Czarny Dunajec river, in *Alin*, dead, not fallen twigs of *Sambucus nigra* 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25649; **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'15.1"E, in *Salix eleagnos* and *Myricaria germanica* brushwood on bank of Białka river, on fallen branch of deciduous tree, 21 July 2012, leg. *D. Karasiński* 7489 (KRAM F-58277).

\**Lyophyllum anthracophilum* (Lasch) M. Lange & Sivertsen – forest; on burnt ground; saprobic; summer (June, July); rare (2).

DISTRIBUTION. **DG 39-48**: near Rogóżnik-Gęsiówka village, ca 11 km SW of Nowy Targ, in forest on burnt ground, 7 June 1972, leg. *Z. Heinrich*, KRAM F-25844; **EG 20-95**: between Robów (in vicinity of Nowy Targ) and Kotlarka glade, ca 700 m, on burnt ground, 18 July 1974, leg. *I. Jalocho*, KRAM F-52350.

*Lyophyllum palustre* (Peck) Singer – V; coniferous forest, peatbog; in moss incl. *Sphagnum*; saprobic (?parasitic); summer to autumn (June–Sept.); frequent (14).

DISTRIBUTION. **DG 38-19**: Puścizna Rękowońska (19) peatbog, ca 2 km S of Załuczne, in *Sphagnum*, 31 July 1984, leg. *W. Wojewoda*, KRAM F-32249; **DG 38-26**: Las Sosnówka forest, small forest near Piekelnik village (ca 1 km S of village), in moss, 3 Aug. 1970, leg. *Z. Heinrich*, KRAM F-25847; Las Sosnówka forest, near Piekelnik (between Piekelnik village and Las Gajka (III) forest), 3 July 1970,

*leg. I. Jalocha*, KRAM F-32250; Las Sosnówka forest, near Piekienik, in *Sphagnum*, 3 July 1970, *leg. I. Jalocha*, KRAM F-25845; **DG 38-27**: Puścizna Mała (14) peatbog, 2 km SE of Piekienik, on left side of Czarny Dunajec–Jablonka road, on peat dome (*Pinus*, *Betula*, *Vaccinium uliginosum*, *Vaccinium vitis-idaea*, *Calluna vulgaris*, *Oxycoccus*, and ferns), in moss, 1 Sept. 2012, *leg. A. Sadowska*, KRAM F-58155; **DG 38-28**: Baligówka (18) peatbog, between Baligówka and Piekienik villages, in *Sphagnum*, 22 June 1970, *leg. W. Wojewoda*, KRAM F-25852A; *leg. W. Wojewoda*, KRAM F-25852B; **DG 38-73**: Bór koło Chyżnego (II) forest, CvP, in moss, 31 July 1984, *leg. W. Wojewoda*, KRAM F-25849; **DG 39-10**: Puścizna Rękowańska (19) peatbog, in *Sphagnum*, 31 July 1984, *leg. Z. Heinrich*, KRAM F-25851; **DG 39-48**: marshy forest on bank of Wielki Rogoźnik stream, near Rogoźnik-Gęsiówka village, ca 11 km SW of Nowy Targ, *Alin*, *Picea* admixture, *Pinus*, in *Sphagnum*, 7 June 1972, *leg. Z. Heinrich*, KRAM F-25853; **DG 39-55**: Soślina (VI) forest, between Stare Bystre and Czarny Dunajec, spruce forest, on litter in wet place with *Sphagnum*, 18 June 2010, *leg. Z. Heinrich*, KRAM F-59138; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, marshy pine-spruce forest, in moss, 1 Sept. 1983, *leg. Z. Heinrich*, KRAM F-25848; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, in moss, 11 June 1971, *leg. I. Jalocha*, KRAM F-25846; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-25850; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, marshy pine-spruce forest, in *Sphagnum*, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26132; *leg. Z. Heinrich*, KRAM F-26110; *leg. Z. Heinrich*, KRAM F-26125; Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, peatbog, PrS, in *Sphagnum*, 23 Aug. 2000, *leg. W. Wojewoda*, KRAM F-50570 (Wojewoda et al. 2004); Bór na Czerwonem (24) Nature Reserve, pine forest near peat dome, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49628; Bór na Czerwonem (24) Nature Reserve, on peat dome, 16 Sept. 2011, *leg. H. Komorowska*, KRAM F-49629; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, VuP, among *Sphagnum* (Grodzińska et al. 1973, as *Tephroclype palustris* (Peck) Donk; **EG 30-30**: Przymiarki (22) peatbog, ca 4.5 km SW of Nowy Targ, near Ludźmierz, in *Sphagnum*, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26112; *leg. Z. Heinrich*, KRAM F-26133; Przymiarki (22) peatbog, ca 4.5 km SW of Nowy Targ, SW of Ludźmierz, in *Sphagnum*, 17 July 1985, *leg. Z. Heinrich*, KRAM F-26109; *leg. Z. Heinrich*, KRAM F-26111; **EG 30-35**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 610 m, pine forest, in *Sphagnum*, 20 Sept. 1973, *leg. W. Wojewoda*, KRAM F-17149; **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), between Szaflary Dolne and Nowy Targ, in mosses, 11 June 1971, *leg. Z. Heinrich*, KRAM F-11333; **EG 31-23**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, near Łopuszna, pine-spruce forest, wet place, among *Sphagnum*, 22 June 1970, *leg. W. Wojewoda*, KRAM F-25854.

\**Lyophyllum tylicolor* (Fr.: Fr.) M. Lange & Sivertsen – coniferous forest; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, near Piekienik, between Las Gajka (III) forest and Piekienik village, 3 July 1970, *leg. Z. Heinrich*, KRAM F-25856.

*Macrolepiota procera* (Scop.: Fr.) Singer – coniferous forest; on the ground; saprobic; summer and autumn (Aug., Sept.); rare (3).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest (*Picea abies*, *Pinus sylvestris*), ca 670 m, ca 17 km SW of Nowy Targ, 1 Aug. 1970, *leg. I. Jalocha*, KRAM F-27152; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 SE of Nowy Targ, ca 580 m, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-27143.

*Marasmiellus perforans* (Hoffm.: Fr.) Antonin, Halling & Noordel. – coniferous forest; on fallen needles; saprobic; spring and summer (May–July); rare (5).

DISTRIBUTION. **DG 38-36**: Las Gajka (III) forest, pine-spruce forest, S of Piekienik village, 3 July 1970, *leg. Z. Heinrich*, KRAM F-25776; **DG 38-38**: Las Baligówka (IV) forest, N part, NW of Czarny Dunajec, pine-spruce forest, on fallen spruce needles, 18 June 2010, *leg. H. Komorowska*, KRAM F-59252; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on needles, 25 May

1971, *leg. I. Jalocha*, KRAM F-11254; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP, VuP*, on the ground (Wojewoda et al. 2004); **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, on fallen needles of *Picea*, 24 May 1984, *leg. W. Wojewoda*, KRAM F-25777.

\***Marasmiellus ramealis** (Bull.: Fr.) Singer – spruce forest; on litter; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 39-43**: on bank of Czarny Dunajec river, between Czarny Dunajec and Wróblówka (Bugaj), 49°26'37.81"N, 19°52'09.43"E, 666.2 m, spruce forest and young *Corylus avellana* in brushwood, 29 June 2011, *leg. M. Łysek*, KRAM F-49458.

\***Marasmiellus cf. tricolor** (Alb. & Schwein.: Fr.) Singer – riverine scrub; on fallen twigs; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-10**: near Ludźmierz, on bank of Lepietnica stream and Czarny Dunajec river, on dead fallen twig, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11312.

\***Marasmius oreades** (Bolton: Fr.) Fr. – pasture, roadside, grass (lawn) and balk; on the ground; parasitic; summer (July, Aug.); frequent (13).

DISTRIBUTION. **DG 37-29**: Otrębowa (27) peatbog, SW of Jabłonka, 25 July 2010, *leg. Z. Heinrich*, KRAM F-59128; on grassy spots, 25 July 2010, *leg. Z. Heinrich*, KRAM F-59013; **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, NW part, SE of Jabłonka, 30 July 2010, *leg. Z. Heinrich*, KRAM F-59015; **DG 38-26**: Las Gajka (III) forest, S of Piekielnik, 28 July 2010, *leg. Z. Heinrich*, KRAM F-59016; **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekielnik village, on edge of young spruce forest, 6 July 1970, *leg. Z. Heinrich*, KRAM F-32240; **DG 38-39**: at road between Czarny Dunajec and Las Baligówka (IV) forest, in grass, 6 July 1970, *leg. Z. Heinrich*, KRAM F-32241; **DG 38-48**: Las Baligówka (IV) forest, 4 km SE of Piekielnik village, 3 July 1970, *leg. Z. Heinrich*, KRAM F-25766; **DG 38-61**: near Puścizna Jasiowska (4) peatbog SE of Jabłonka, 27 July 2010, *leg. Z. Heinrich*, KRAM F-59014; *leg. Z. Heinrich*, KRAM F-59017; **DG 39-18**: Krauszów, pasture on bank of Czarny Dunajec river, 11 July 1984, *leg. W. Wojewoda*, KRAM F-25768; **DG 39-31**: between Czarny Dunajec village and Puścizna Rękowońska (19) peatbog, by field road, 31 July 1970, *leg. I. Jalocha*, KRAM F-32239; **DG 39-61**: Czarny Dunajec, Kmietowicza street, in grass, 1 Aug. 1970, *leg. I. Jalocha*, KRAM F-32243; **DG 39-62**: Czarny Dunajec, on right bank of Czarny Dunajec river, on pasture, 30 July 1970, *leg. I. Jalocha*, KRAM F-32238; **DG 39-90**: between Podczerwone and Las Cikówka (V) forest, balk (adjacent to fields), 1 July 1970, *leg. Z. Heinrich*, KRAM F-32242; **EG 31-14**: on meadow, between Bór Harkłowski (XIII) forest and Łopuszna–Harkłowa road, 18 Aug. 1970, *leg. I. Jalocha*, KRAM F-25767.

\***Marasmius rotula** (Scop.: Fr.) Fr. – pine-spruce forest, mixed forest and riverside mountain alder; on trunk of deciduous trees, on litter; saprobic; summer (June–Aug.); frequent (7).

DISTRIBUTION. **DG 39-34**: on bank of Czarny Dunajec river, N of Wróblówka, 49°27'37.83"N, 19°53'49.52"E, 639.4 m, pine-spruce forest and brushwood – young *Picea*, *Vaccinium* and *Sphagnum*, 29 June 2011, *leg. M. Łysek*, KRAM F-49654; **DG 39-43**: on bank of Czarny Dunajec river, between Czarny Dunajec and Wróblówka (Bugaj), 49°26'37.81"N, 19°52'09.43"E, 666.2 m, *Larix*, single *Betula*, young *Acer*, *Salix* and mosses, 29 June 2011, *leg. H. Komorowska*, KRAM F-49463; **DG 39-90**: between Podczerwone and Czarny Dunajec village, *Alin* on bank of Czarny Dunajec river, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26069; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, 21 July 1971, *leg. Z. Heinrich & I. Jalocha*, KRAM F-25770; **EG 30-59**: Gronków Środkowy village, forest on bank of Leśnica stream, 49°26'15.42"N, 20°05'17.66"E, 603.8 m (?pine-) spruce forest, 28 June 2011, *leg. H. Komorowska*, KRAM F-49462; **EG 31-27**: Dębno, *Alnus* forest on bank of Dunajec river, on trunk of deciduous forest and on the ground, 27 June 1972, *leg. Z. Heinrich*, KRAM F-25769; **EG 31-53**: Nowa Biała, Dolina Białki p.a., forest on bank of Białka river, alderwood (*Alnus*, *Salix* and young *Picea*), on litter (grass and twigs), 19 July 2010, *leg. H. Komorowska*, KRAM F-59135.

\**Melanoleuca amica* (Fr.) Singer – riverside mountain alder; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 39-90**: between Podczerwone and Czarny Dunajec village, *Alin* on bank of Czarny Dunajec river, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25789.

REMARKS. In Poland the species was recorded only from the Góry Świętokrzyskie Mts (Łuszczyński 2007, 2008).

\**Melanoleuca brevipes* (Bull.: Fr.) Pat. – alder forest; on the ground; saprobic; spring (Apr.); rare (1).

DISTRIBUTION. **EG 30-64**: little alder forest between Bór na Czerwonem (X) forest and Szaflary, ca 6 km S of Nowy Targ, on bank of Biały Dunajec, 22 Apr. 1971, *leg. Z. Heinrich*, KRAM F-25774.

\**Melanoleuca melaleuca* (Pers.: Fr.) Murill s. lato – meadow; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 39-18**: between Długopole and Krauszów, on meadow, 11 July 1984, *leg. W. Wojewoda*, KRAM F-25775.

\**Melanoleuca metrodii* Bon – riverside mountain alder; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on bank of Czarny Dunajec river, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25788.

\**Melanoleuca* cf. *oreina* (Fr.) Kühner & Maire sensu Metrod 1948 – pine-alder forest; on the ground; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 37-56**: pine-alder forest near Zbiornik Orawski reservoir, ca 5 km SW of Jabłonka village, 29 Sept. 1974, *leg. M. Mitka*, KRAM F-25868.

REMARKS. Knudsen and Vesterholt (2012) treat *M. oreina* (Fr.) Kühner & Maire as a synonym of *M. polioleuca* (Fr.: Fr.) Kühner & Maire, but the latter lacks resinaceous hyphae. Our specimen has resinaceous hyphae. In Poland *M. oreina* was recorded only from the Góry Świętokrzyskie Mts (Łuszczyński 2007).

\**Melanoleuca strictipes* (P. Karst.) Murrill – **R**; meadow; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-10**: on meadow, between Bór Ostrowski (XI) and Ostrowsko–Łopuszna road, 18 Aug. 1970, *leg. I. Jalocho*, KRAM F-26098.

\**Merismodes anomala* (Pers.: Fr.) Singer – mixed forest and willow brushwood; on wood of *Salix* sp.; saprobic; spring and summer (May, June); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.2"N, 19°44'14.7"E, mixed forest with pine, on dead attached *Salix aurita* branch, 12 June 2012, *leg. D. Karasiński* 7147 (KRAM F-58661); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.8"N, 20°07'42.1"E, willow brushwood on bank of Białka river, on bark of fallen *Salix eleagnos* twig and trunk, 24 May 2012, *leg. D. Karasiński* 7074 (KRAM F-58570).

\**Merismodes fasciculata* (Schwein.) Donk – mixed forest; on bark of fallen *Salix* sp. branch; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, on bark of fallen *Salix* sp. branch, 8 Oct. 2012, *leg. D. Karasiński* 8871a (KRAM F-58456).



\**Mucronella bresadolae* (Quél.) Corner – mixed forest; on dead *Gloeophyllum odoratum* basidiome and rotten *Picea abies* stump; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on dead *Gloeophyllum odoratum* basidiome, on rotten *Picea abies* stump, 8 Oct. 2012, leg. D. Karasiński 8928.

REMARKS. In Poland the species was recorded only from Cieszyn, the Kashubian Landscape Park and Ustronie (Chachula et al. 2015, 2021; Karasiński 2016).

\**Mucronella calva* (Alb. & Schwein.) Fr. – E; coniferous forest; on fallen branches and trunks of *Pinus sylvestris* and *Picea abies*; saprobic; summer and autumn (June, Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, 49°28'37.9"N, 19°43'53.2"E, on very rotted wood of fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8913; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'53.1"N, 20°08'45.4"E, pine-spruce forest, on wood of fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7177.

\**Mycena acicula* (Schaeff.) P. Kumm. – coniferous forest; on mossy litter; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 1.2 km SW of Chyżne, spruce forest with *Pinus* admixture, on mossy litter, 18 June 2010, leg. H. Komorowska, KRAM F-59125.

\**Mycena aciculata* (A.H. Sm.) Desjardin & E. Horak – coniferous forest; on litter; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 1.2 km SW of Chyżne, spruce forest with *Pinus* admixture, 18 June 2010, leg. H. Komorowska, KRAM F-59132.

\**Mycena adonis* (Bull.: Fr.) Gray – R; wet coniferous forest; on fallen needles; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, E of Nowy Targ, marshy coniferous forest, on fallen needles, 17 Aug. 1970, leg. Z. Heinrich, KRAM F-25240.

*Mycena epipterygia* (Scop.: Fr.) Gray var. *epipterygia* (incl. *M. viscosa* Maire, *M. epipterygia* var. *viscosa* (Maire) Ricken) – coniferous forest, raised peatbog; in litter on fallen needles, leaves and twigs; saprobic; summer to autumn (Aug.–Nov.); frequent (9).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekienik village, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-25798; **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekienik village, in litter of conifer needles, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-25817; **DG 38-61**: NW edge of Puścizna Jasiowska (4) peatbog, SE of Jabłonka, 49°26'19.53"N, 19°42'02.76"E, 648.5 m, sparse *Pinus* and young *Picea*, frequent *Calluna vulgaris*, 11 Nov. 2011, leg. M. Sadowski, KRAM F-49470; **DG 39-48**: forest on bank of Wielki Rogoźnik stream, ca 2 km E of Rogoźnik village, spruce forest, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-25780; **DG 49-10**: between Koniówka and Ciche, small spruce forest by road, hill 788 m, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25816; **EG 30-01**: Do Grela (30) peatbog, ca 2 km N of Ludźmierz, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-25779; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, VuP, in litter, on litter of fallen needles, leaves and twigs (Wojewoda et al. 2004, as *M. epipterygia* var. *epipterygia* and *M. epipterygia* var. *viscosa*); **EG 30-34**: Bór na Czerwonym (X) forest, pine forest with admixture of *Picea*, ca 3 km S of Nowy Targ, 21 Sept. 1983, leg. H. Komorowska, KRAM F-25778; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, coniferous forest, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-25781;

REMARKS. *Mycena epipterygia* is a highly variable species (possibly many closely related species are involved), with many varieties and forms described based on unstable characters. Apart from the typical variety, Knudsen and Vesterholt (2012: 419) recognize two varieties with 2-spored basidia: *M. epipterygia* var. *epipterygioides* (A. Pearson) Kühner and *M. epipterygia* var. *badiceps* M. Lange.

\**Mycena filopes* (Bull.: Fr.) P. Kumm. – spruce forest with sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*); in litter; saprobic; autumn (Nov.); rare (1).

DISTRIBUTION. **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns (and *Rubus*), in litter, 12 Nov. 2011, leg. A. Sadowska, KRAM F-49469.

*Mycena galericulata* (Scop.: Fr.) Gray – deciduous, coniferous, mixed forest and riverside mountain alder; on wood; saprobic; spring to autumn (May–Sept. Nov.); frequent (9).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on left bank of Czarny Dunajec river, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25814; on trunk, KRAM F-32246; **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, 12 Nov. 2011, leg. M. Sadowski, KRAM F-49465; leg. M. Sadowski, KRAM F-49466; on old, mossy ?*Picea* trunk, leg. A. Sadowska, KRAM F-49464; **DG 49-11**: Ciche village, *Alin* on bank of Cichy stream, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25813; Ciche, ca 6 km of Czarny Dunajec village, *Alin* on bank of Cichy stream, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-32247; **EG 30-10**: alder brushwood on right side of Czarny Dunajec river, between Ludźmierz and Nowy Targ, near shoe factory, on trunk, 1 Sept. 1983, leg. H. Komorowska, KRAM F-25782; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stumps of deciduous trees (Wojewoda et al. 2004); **EG 30-34**: between Szaflary and Nowy Targ, near Bór na Czerwonem (X) forest, *Alin* on right bank of Biały Dunajec river, on decayed *Alnus* trunk, 21 July 1971, leg. I. Jalocho, KRAM F-25783; on remnants of wood, KRAM F-25785; between Szaflary and Nowy Targ, near Bór na Czerwonem (X) forest, ca 2.5 km S of Nowy Targ, little alder forest on bank of Biały Dunajec river, 21 July 1971, leg. I. Jalocho, KRAM F-32245; between Szaflary and Nowy Targ, *Alin* on bank of Biały Dunajec river, on decayed *Alnus* trunk, 21 July 1971, leg. I. Jalocho, KRAM F-25786; leg. I. Jalocho, KRAM F-25784; **EG 30-44**: Bór na Czerwonem (X) forest, between Szaflary Dolne and Nowy Targ, in coniferous forest, on decayed trunk, 11 June 1971, leg. I. Jalocho, KRAM F-11355; **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, in deciduous forest, on stump of *Alnus incana*, 31 May 1971, leg. W. Wojewoda, KRAM F-11271; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, on remnants of wood, 18 Aug. 1970, leg. I. Jalocho, KRAM F-25787.

*Mycena galopus* (Pers.: Fr.) P. Kumm. var. *galopus* – coniferous and deciduous forest; on the ground on fallen needles, twigs, cones, stumps; saprobic; spring to autumn (May–Aug., Oct.); frequent (14).

DISTRIBUTION. **DG 38-06**: near Piekienik, on edge of coniferous forest, on the ground, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-11112; in coniferous forest near Piekienik, on burnt ground, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-12055; **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, pine-spruce forest, in needle litter, 1 Aug. 1970, leg. I. Jalocho, KRAM F-25792; **DG 38-48**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, pine-spruce forest, 6 July 1970, leg. I. Jalocho, KRAM F-25791; leg. I. Jalocho, KRAM F-32248; **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in brushwood with *Sorbus*, *Salix*, and *Sphagnum*, on bark, in hollow of big trunk, 15 July 2012, leg. M. Sadowski, KRAM F-49659; on litter, 15 July 2012, leg. M. Sadowski, KRAM F-49833; leg. M. Pilch, KRAM F-49655; leg. M. Pilch, KRAM F-49656; **DG 39-35**: Puścizna Długopole (20) peatbog, SW of Długopole, S edge of peatbog, near fallen *Picea*, 15 Sept. 2011, leg. Mi. Lysek, KRAM F-49657; **EG 30-22**: Bór Nowotarski (IX) forest, NW part, in vicinity of factory, on *Picea* stump, 18 June 2010, leg. Z. Heinrich, KRAM F-59131; **EG 30-23**: Bór

Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on the ground, 25 May 1971, *leg. Z. Heinrich*, KRAM F-11245; Bór Nowotarski (IX) forest, pine-spruce forest, ca 2 km SW of Nowy Targ, on the ground, *leg. I. Jalocha*, KRAM F-25790; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, in litter, on remains of fallen needles, leaves and twigs (Wojewoda et al. 2004); **EG 30-34**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, coniferous forest, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-25793; **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest, between Szaflary Dolne and Nowy Targ, on mossy place, 11 June 1971, *leg. Z. Heinrich*, KRAM F-11344; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, on trunk, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49658; on litter, *leg. M. Lysek*, KRAM F-49663; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, in litter of conifer needles, 19 Aug. 1970, *leg. I. Jalocha*, KRAM F-25794; **EG 31-33**: Bór Harkłowski (XIII) forest, W part, 49°27'20.22"N, 20°08'49.2"E, 590.2 m, pine-spruce forest (on edge – old *Pinus*, farther off – young and old *Picea*), in moss, 28 June 2012, *leg. B. Pleban*, KRAM F-58142; **EG 31-54**: Dolina Białki p.a., near Krempachy, on right side of Krempachy–Nowa Biała road, brushwood on bank of Białka river (*Alin*), wet place, on litter, 19 July 2010, *leg. H. Komorowska*, KRAM F-59133.

REMARKS. Some authors treat the white and the dark forms of *M. galopus* as varieties (viz. var. *candida* J.E. Lange and var. *leucogala* (Cooke) J.E. Lange) or even as species (*M. leucogala* (Cooke) Sacc.). Knudsen and Vesterholt (2012) do not follow this point of view. The varieties of *M. galopus* presented below are taken from Robich (2003).

\**Mycena galopus* var. *candida* J.E. Lange – spruce-fir forest; in litter; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in the underwood *Sorbus* and *Salix*, below *Sphagnum*, 15 July 2012, *leg. M. Sadowski*, KRAM F-49834.

REMARKS. This variety of *M. galopus* was adopted after Robich (2003). In Poland the variety is reported only from the Dezydery Chłapowski Landscape Park (wielkopolskie voivodship) and the Kaczawskie Mts in the Sudetes (Kujawa 2009; Gierczyk et al. 2018). Perhaps it is more common, but since it is usually not distinguished from the typical variety, its actual distribution in Poland is unknown.

\**Mycena galopus* var. *leucogala* (Cooke) J.E. Lange. – spruce and spruce-fir forest; on litter; saprobic; summer and autumn (June, July, Sept.); frequent (7).

DISTRIBUTION. **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'31.71"N, 19°39'47.79"E, 639.9 m, spruce forest, in underwood *Sorbus* below *Rubus*, mosses, *Vaccinium* and *Fragaria* sp., 14 July 2012, *leg. M. Sadowski*, KRAM F-49831; **DG 38-23**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, 49°28'19.5"N, 19°44'32.11"E, 641.9 m, 30 June 2011, *leg. M. Lysek*, KRAM F-57344; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, on bank of Borcok stream, edge of forest, 49°26'58.95"N, 19°42'50.05"E, 629.1 m, 4 Sept. 2011, *leg. M. Pilch*, KRAM F-57345; **DG 38-49**: Las Baligówka (IV) forest, E part (Górne Pole), 49°27'03.94"N, 19°48'43.61"E, 696.2 m, on litter, 30 June 2011, *leg. H. Komorowska*, KRAM F-57343; **DG 38-61**: Puścizna Jasiowska (4) peatbog, SE of Jabłonka. 27 July 2010, *leg. Z. Heinrich*, KRAM F-57347; **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in the underwood – *Sorbus* and *Salix*, below *Sphagnum*, 15 July 2012, *leg. M. Pilch*, KRAM F-49805; **EG 30-45**: Bór na Czerwonem (24, Czerwony Bór) peatbog, SW part, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, 15 July 2011, *leg. H. Komorowska*, KRAM F-57363.

REMARKS. This variety of *M. galopus* was adopted after Robich (2003).

*Mycena haematopus* (Pers.: Fr.) P. Kumm. – riverside mountain alder and coniferous forest; on rotten stumps; saprobic; summer (July, Aug.); rare (3).

DISTRIBUTION. **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, pine-spruce forest, *CvP*, on *Picea* stump, 31 July 1984, *leg. W. Wojewoda*, KRAM F-25797

(as *M. hematopus* var. *marginata* J.E. Lange); **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on left bank of Czarny Dunajec river, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25818; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stumps (Wojewoda et al. 2004).

***Mycena megaspora*** Kauffman – **V**; peatbog; in *Sphagnum*; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, on raised peatbog dome, in *Sphagnum*, 2 Sept. 1981, *leg. H. Komorowska*, KRAM F-25815; **?EG 30-25**: *PrS* among *Sphagnum* sp. (Wojewoda et al. 2004).

REMARKS. Grodzińska et al. (1973) did not mention this species from the Bór na Czerwonem Reserve, as cited by Wojewoda (2003) and Wojewoda et al. (2004).

\****Mycena metata*** (Fr.: Fr.) P. Kumm. – coniferous forest; on grass, on *Picea* stump; saprobic; spring to autumn (May, July, Oct.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, on edge of pine-spruce forest, in grass, 13 Oct. 1971, *leg. Z. Heinrich*, KRAM F-25819; Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, pine-spruce forest, in grass, 6 July 1970, *leg. Z. Heinrich*, KRAM F-25820 (as *M. phyllogena* (Pers.) Singer ss. Singer); **DG 38-73**: Bór koło Chyżnego (II) forest, pine-spruce forest, 4 km E of Chyżne village, S of Pirogówka mount, *CvP*, on *Picea* stump, 31 July 1984, *leg. W. Wojewoda*, KRAM F-25796; **EG 31-33**: Bór Harkłowski (XIII) forest, S part, near Nowa Biała, 49°27'03.82"N, 20°08'47.7"E, 591.4 m, in moss and *Vaccinium*, under *Picea*, 2 May 2011, *leg. A. Sadowska*, KRAM F-58044.

\****Mycena niveipes*** (Murrill) Murrill – riparian forest and riverside thickets; on stump and twig; saprobic; spring and summer (May, July); rare (3).

DISTRIBUTION. **DG 37-26**: W of Jabłonka, near Murowanica, 49°27'59.81"N, 19°38'27.96"E, 603.5 m, riverside thickets (*Salix*, *Arctium*) on bank of Lipnica river, grass and in some places moss, on fallen twig, 14 July 2012, *leg. M. Pilch*, KRAM F-49662; **DG 39-48**: near Rogoźnik village, on bank of Rogoźnik Wielki river, *ALPa*, on stump of *Alnus incana*, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11286; **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, *ALPa*, on stump of *Alnus incana*, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11270; near Szaflary, on bank of Biały Dunajec river, in riparian forest (*ALPa*), on decayed *Alnus incana* trunk, 25 May 1971, *leg. Z. Heinrich*, KRAM F-11260.

***Mycena plumipes*** (Kalchbr.) P.A. Moreau – **R**; coniferous forest; on cones of *Picea abies*; saprobic; spring (Apr., May); rare (3).

DISTRIBUTION. **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973, as *M. strobilicola* J. Favre & Kühner); *CvP*, on fallen (sometimes earth-covered) cones of *Picea abies* (Wojewoda et al. 2004, as *M. strobilicola*); **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, in coniferous forest, on buried cones of *Picea abies*, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-11187; **EG 31-53**: Dolina Białki p.a., forest on bank of river, between Nowa Biała and Krempachy, on exposed cones of *Picea abies*, 49°26'12.19"N, 20°08'55.95"E, 599.4 m, 2 May 2011, *leg. M. Lysek*, KRAM F-58029.

REMARKS. The species is in the Red List as *Mycena strobilicola*.

\****Mycena pura*** (Pers.: Fr.) P. Kumm. – coniferous forest and riverside mountain alder; on woody debris in litter; saprobic; summer (Aug.); rare (4).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, *Alin* on left bank of Czarny Dunajec river, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25822; between Czarny Dunajec and Podczerwone, young pine forest, on bank of Czarny Dunajec river, on remnants of wood, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25823; **DG 48-09**: on bank of Czarny Dunajec river, between Chochołów and Podczerwone, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25824; **EG 31-24**: Bór Harkłowski (XIII) forest, between

Harklowa and Nowa Biała, pine-spruce forest, 18 Aug. 1970, leg. I. Jalocha, KRAM F-2582; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25928.

\***Mycena rosella** (Fr.) P. Kumm. – mixed forest; in litter; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), edge of forest by wayside, 49°27'28.36"N, 19°44'08.92"E, 654.7 m, pine forest and frequent young *Picea*, and sparse *Betula*, with mosses and *Vaccinium*, under young *Picea*, 30 Oct. 2011, leg. M. Sadowski, KRAM F-48817.

**Mycena sanguinolenta** (Alb. & Schwein.: Fr.) P. Kumm. – coniferous forest and riverside mountain alder; on needle litter and fallen twigs, sometimes on rotten coniferous stump; saprobic; spring to autumn (May–July, Sept., Oct.); frequent (7).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, NE part, NW of Czarny Dunajec, near parking lot, on fallen spruce twigs, 18 June 2010, leg. H. Komorowska, KRAM F-59134; **DG 38-48**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, pine-spruce forest, 6 July 1970, leg. I. Jalocha, KRAM F-25799; **EG 30-22**: Bór Nowotarski (IX) forest, NW part, in vicinity of factory, on fallen spruce needles, 18 June 2010, leg. Z. Heinrich, KRAM F-59130; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, in litter, on fallen leaves and twigs, sometimes also on rotten stumps (Wojewoda et al. 2004); **EG 30-40**: Pasiczny Las (VII) forest, on bank of Wielki Rogoźnik river, ca 2 km E of Rogoźnik village, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-25800; **EG 30-44**: Bór na Czerwonem (X, Czerwony Bór) forest, SW part of forest, near Szaflary, 49°26'41.81"N, 20°01'47.16"E, 622.4 m, 17 Sept. 2011, leg. Mi. Lysek, KRAM F-49664; Bór na Czerwonem (X) forest, near Szaflary Dolne, in coniferous forest, on stump of coniferous tree, 31 May 1971, leg. W. Wojewoda, KRAM F-11292; **EG 31-54**: Krempachy, Dolina Białki p.a., on right side of Krempachy–Nowa Biała road, brushwood on bank of Białka river (*Alin*), wet place, on litter, 19 July 2010, leg. H. Komorowska, KRAM F-59119.

\***Mycena speirea** (Fr.: Fr.) Gillet – riparian forest and riverside mountain alder; on rotten trunk; saprobic; spring and summer (May, Aug.); rare (2).

DISTRIBUTION. **EG 30-10**: Ludźmierz, on bank of Lepietnica stream, *AlPa*, on dead trunk, 31 May 1971, leg. W. Wojewoda, KRAM F-11290; **EG 31-27**: ca 1 km S of Dębno, *Alin* on bank of Białka river, ca 10 km SE of Nowy Targ, ca 540 m, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-27144.

**Mycena stipata** Maas Geest. & Schwöbel – pine forest; on rotten stump; saprobic; spring (May); rare (2).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, ca 600–620 m, 13 May 1981, leg. W. Wojewoda, KRAM F-32676; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on rotten stumps (Wojewoda et al. 2004).

\***Mycena urania** (Fr.: Fr.) Quél. – E; peatbog; in moss; saprobic; autumn (Nov.); rare (1).

DISTRIBUTION. **DG 38-61**: NW edge of Puścizna Jasiowska (4) peatbog, SE of Jabłonka, 49°26'19.53"N, 19°42'02.76"E, 648.5 m, sparse *Pinus* and young *Picea*, frequent *Calluna vulgaris*, in moss, 11 Nov. 2011, leg. M. Sadowski, KRAM F-49829.

REMARKS. In Poland the species is reported only from Babia Góra Mt., Babia Góra National Park and the vicinity of Lublin (Bujakiewicz 1979, 2004, 2018; Flisińska 2004).

\***Mycena viridimarginata** (P. Karst.) Gill. – spruce forest; on rotten *Picea abies* stump; saprobic; summer and autumn (June, Sept.); rare (2).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, ca 4 km W of Czarny Dunajec, ca 670 m, spruce forest, decayed trunk of *Picea abies*, 15 June 1982, leg. W. Wojewoda, KRAM F-19076; **EG 31-32**: Bór

Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 1 km NW of Nowa Biała, spruce forest, on decayed trunk, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-25801.

***Mycena zephrus*** (Fr.: Fr.) P. Kumm. – pine forest; on litter; saprobic; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, *CvP*, in litter, on fallen needles and leaves (*Wojewoda et al.* 2004).

\****Mycetinis scorodonius*** (Fr.: Fr.) Wilson & Desjardin – coniferous forest; on litter (coniferous needles, sticks); saprobic; summer (July, Aug.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekielnik village, 6 July 1970, leg. *Z. Heinrich*, KRAM F-25772; Las Baligówka (IV) forest, forest 4 km SE of Piekielnik village, on litter, 1 Aug. 1970, leg. *Z. Heinrich*, KRAM F-25771; **DG 38-48**: Las Baligówka (IV) forest, 4 km SE of Piekielnik village, 650–670 m, ca 17 km SW of Nowy Targ, 6 July 1970, leg. *I. Jalocha*, KRAM F-32244; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 18 Aug. 1970, leg. *I. Jalocha*, KRAM F-25773.

\****Myxomphalia maura*** (Fr.: Fr.) Hora – I; mixed and coniferous forest; on burnt ground; saprobic; autumn (Sept., Oct.); rare (4).

DISTRIBUTION. **DG 38-06**: Piekielnik forest, near Piekielnik, in mixed forest, on burnt ground (*Geopyxidatum carbonariae*), 13 Oct. 1971, leg. *Z. Heinrich*, KRAM F-12056; **EG 30-25**: Bór na Czerwonym (X) forest, ca 3 km S of Nowy Targ, on burnt ground, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17148; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, on burnt ground, 8 Sept. 1972, leg. *Z. Heinrich*; KRAM F-25843; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, in coniferous forest (*Picea abies*, *Pinus sylvestris*), on burnt ground, 12 Oct. 1988, leg. *W. Wojewoda*, KRAM F-29124.

REMARKS. The species is in the Red List as *Fayodia maura* (Fr.) Singer.

\****Naucoria bohémica*** Velen. – mixed forest; on the ground under birch; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-48**: Bór village, E of Szaflary, near Nowy Targ–Białka Tatrzańska road, 49°26'41.88"N, 20°04'30.73"E, 627.1 m, pine-spruce forest with *Betula* and *Vaccinium*, 13 Aug. 2011, leg. *H. Komorowska*, KRAM F-57990.

\****Naucoria striatula*** P.D. Orton – alder brushwood; on the ground; under *Alnus*; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-27**: near Dębno, alder brushwood near mouth of Białka to Dunajec river, 6 Aug. 1985, leg. *W. Wojewoda*, KRAM F-26107.

\****Naucoria subconspersa*** P.D. Orton – alder forest; on the ground under *Alnus*; mycorrhizal; summer (June); rare (1).

DISTRIBUTION. **DG 39-48**: near Rogoźnik village, little alder forest on bank of Wielki Rogoźnik stream, on the ground, 7 June 1972, leg. *Z. Heinrich*, KRAM F-19413.

\****Oligoporus rennyi*** (Berk. & Broome) Donk – peatbog; on fallen *Pinus x-rhaetica* trunk; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-51**: ca 2.5 km NE of Chyżne, in vicinity of Puścizna Jasiowska (4) peatbog, on bark and wood of fallen *Pinus x-rhaetica* trunk, 27 Aug. 2010, leg. *D. Karasiński* 5840.

\**Oxyporus populinus* (Schum.) Donk – riverside mountain alder; on trunks of deciduous trees (e.g. *Alnus incana*); parasitic and saprobic; spring (Apr., May); rare (2).

DISTRIBUTION. **EG 30-05**: Nowy Targ, confluence of Czarny Dunajec and Biały Dunajec rivers, ca 585 m, *Alin*, on lying trunk of deciduous tree (?*Alnus incana*), 15 May 1970, leg. *W. Wojewoda*, KRAM F-27116; **EG 31-04**: Harkłowa, on bank of Dunajec river, ca 12 km E of Nowy Targ, ca 550 m, *Alin*, on *Alnus incana* trunk, 22 Apr. 1971, leg. *W. Wojewoda*, KRAM F-27117.

\**Panaeolina foenicicii* (Pers.: Fr.) Maire – meadow, pasture, pine-spruce forest, brushwood on riverside; on the ground; saprobic; summer (June–Aug.); rare (5).

DISTRIBUTION. **DG 39-17**: Długopole, on riverside of Czarny Dunajec river, ca 8 km W of Nowy Targ, 600 m, pasture, 11 July 1984, leg. *W. Wojewoda*, KRAM F-32534; **DG 39-34**: on bank of Czarny Dunajec river, N of Wróblówka, 49°27'37.83"N, 19°53'49.52"E, 639.4 m, pine-spruce forest and brushwood – young *Picea*, *Vaccinium* and *Sphagnum*, in litter, 29 June 2011, leg. *M. Łysek*, KRAM F-56650; **DG 39-71**: near Czarny Dunajec, on meadow, on the ground, 31 July 1970, leg. *I. Jalocha*, KRAM F-11081; **EG 30-10**: Ludźmierz, ca 4 km SW of Nowy Targ, 600–610 m, pasture, 11 July 1984, leg. *W. Wojewoda*, KRAM F-32535; **EG 31-28**: pasture on bank of Bialka stream, ca 14 km SW of Nowy Targ, 535 m, 6 Aug. 1985, leg. *Z. Heinrich*, KRAM F-32533.

\**Panaeolus acuminatus* (Schaeff.) Quél. – manured soil; on burnt ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-62**: between Piekienik village and Bór koło Chyżnego, ca 6 km SE of Jabłonka, on burnt ground, 30 Aug. 1984, leg. *W. Wojewoda*, KRAM F-26401.

\**Panaeolus cinctulus* (Bolton) Sacc. – coniferous forest; in grass; saprobic; summer (June); rare (1).

DISTRIBUTION. **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szafłary), young spruce forest with sparse old *Picea*, by wayside, in grass, 27 June 2012, leg. *H. Komorowska*, KRAM F-57920.

*Panaeolus papilionaceus* (Bull.: Fr.) Quél. var. *papilionaceus* – **R**; meadow, post-peat areas and forest edges; on the ground and dung; saprobic; spring and summer (May–July); frequent (9).

DISTRIBUTION. **DG 37-18**: meadows E of Jabłonka, 26 July 2010, leg. *Z. Heinrich*, KRAM F-56758; leg. *Z. Heinrich*, KRAM F-57907; **DG 37-29**: Otrębowa (27) peatbog, SW of Jabłonka, 25 July 2010, leg. *Z. Heinrich*, KRAM F-56765, leg. *Z. Heinrich*, KRAM F-56766; **DG 38-26**: meadow near Las Gajka (III) forest, 28 July 2010, leg. *Z. Heinrich*, KRAM F-57909; **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest (*Picea*, *Pinus*), on the ground, 6 July 1970, leg. *I. Jalocha* & *Z. Heinrich*, KRAM F-11078; on fields near Las Baligówka (IV) forest (*Picea*, *Pinus*), on the ground, 30 June 1971, leg. *Z. Heinrich*, KRAM F-11379; **DG 38-48**: field (meadow) near peatbog, between Baligówka and Czarny Dunajec, 650–670 m, ca 15 km SW of Nowy Targ, 14 May 1971, leg. *I. Jalocha*, KRAM F-32531; **DG 38-61**: Puścizna Jasiowska (4) peatbog, SE of Jabłonka, 27 July 2010, leg. *Z. Heinrich*, KRAM F-57908; **DG 39-71**: near Czarny Dunajec, on meadow, on the ground, 31 July 1970, leg. *I. Jalocha* & *Z. Heinrich*, KRAM F-11080; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, spruce-pine forest, 15 May 1970, leg. *I. Jalocha*, KRAM F-32530; leg. *I. Jalocha*, KRAM F-32532; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, edge of CvP, on cow dung (Wojewoda et al. 2004, as *Panaeolus sphinctrinus* (Fr.) Quél.); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'42.5"N, 20°08'36.6"E, pine-spruce forest, among grasses on forest road, 13 June 2012, leg. *D. Karasiński* 7220 (KRAM F-58578).

\**Panellus mitis* (Pers.: Fr.) Singer – pine-spruce forest; on trunk and fallen twig; saprobic; autumn (Oct., Nov.); rare (2).

DISTRIBUTION. **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.4"N, 20°02'08.3"E, on bark of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6617 (KRAM F-58366); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, pine-spruce forest, fallen twig of *Pinus sylvestris*, 4 Nov. 1981, leg. M. Czerwieniec, KRAM F-25239.

\**Panellus stipticus* (Bull.: Fr.) P. Karst. – riparian forest; on stump; saprobic; spring and summer (May, Aug.); rare (2).

DISTRIBUTION. **DG 39-52**: Czarny Dunajec, ca 14 km SW of Nowy Targ, little alder forest on bank of Czarny Dunajec river, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25825; **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, in riparian forest (*AlPa*), on stump of *Alnus incana*, 25 May 1971, leg. Z. Heinrich, KRAM F-11253.

\**Parasola auricoma* (Pat.) Redhead, Vilgalys & Hopple – riparian forest; on the ground; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-10**: near Ludźmierz, on bank of Lepietnica stream, *AlPa* (riparian forest), on the ground, 31 May 1971, leg. W. Wojewoda, KRAM F-11295.

\**Parasola plicatilis* (Curtis: Fr.) Redhead, Vilgalys & Hopple – brushwood (*Alnus*, *Salix*); on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 39-52**: Czarny Dunajec, on bank of Czarny Dunajec river, in brushwood (*Alnus* sp., *Salix* sp.), on the ground, 30 Aug. 1970, leg. I. Jalocho, KRAM F-11079.

*Paulliticium pearsonii* (Bourdot) J. Erikss. – peatbog; on rotten wood; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, near Nowy Targ, ca 630 m, on peatbog, on fence post, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-14376 (Wojewoda et al. 2004).

REMARKS. In Poland the species is reported only from Ojców National Park (Wojewoda 1974).

*Paxillus involutus* (Batsch: Fr.) Fr. ss. lato – coniferous forest, raised peatbog; on the ground and trunk; mycorrhizal; summer to autumn (July–Oct.); frequent (9).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-56646; **DG 38-36**: Las Gajka (III) forest, pine forest, 1.5 km S of Piekienik village, 640–660 m, on trunk of *Pinus silvestris*, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-26319; **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, near Nowy Targ, in coniferous forest (*Pinus*, *Picea*), on the ground, 2 Oct. 1970, leg. I. Jalocho, KRAM F-11103; **EG 30-01**: Do Grela (30) peatbog, ca 2 km N of Ludźmierz, ca 600 m, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-32448; leg. Z. Heinrich, KRAM F-32449; **EG 30-11**: Do Grela (30) peatbog, ca 5.5 km of Nowy Targ, 17 July 1985, leg. Z. Heinrich, KRAM F-26156; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, 17 July 1985, leg. Z. Heinrich, KRAM F-26135; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50571 (Wojewoda et al. 2004); **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest (*Pinus*, *Picea*), on the ground, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-11104; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-32450.

*Peniophora cinerea* (Pers.) Cooke – mixed and deciduous forest; on fallen twigs and branches of deciduous trees; saprobic; from spring to autumn (May–Aug., Oct.); frequent (9).



DISTRIBUTION. **DG 38-13**: Piekielnik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. D. Karasiński 8866b (KRAM F-58346); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'58.4"N, 19°42'43.7"E, on bark of fallen *Betula pubescens* trunk, 27 Aug. 2010, leg. D. Karasiński 5871a; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.7"N, 19°41'52.3"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, leg. D. Karasiński 7033a (KRAM F-58244); **DG 39-90**: between Podczerwone and Czarny Dunajec village, ca 16 km SW of Nowy Targ, ca 675–720 m, *Alin*, on fallen twig of deciduous tree ?*Alnus incana*, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25651; **EG 30-21**: alderwood on right bank of Czarny Dunajec river, near mouth of Wielki Rogoźnik at Czarny Dunajec river, ca 4 km SW of Nowy Targ, 600–610 m, fallen *Salix* branch, 13 May 1981, leg. W. Wojewoda, KRAM F-25650; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on fallen dead branches of deciduous trees and shrubs (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, on edge of forest (*Pinus*, *Picea*), on fallen *Alnus incana* branch, 11 June 1971, leg. Z. Heinrich, KRAM F-11330; **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.7"N, 20°12'13.6"E, on fallen deciduous branch, 21 July 2012, leg. D. Karasiński 7492a (KRAM F-58464); Dolina Białki p.a., in vicinity of Dębno, 49°27'26.4"N, 20°12'16.5"E, on bark of fallen branch of deciduous tree, 21 July 2012, leg. D. Karasiński 7482 (KRAM F-58481); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.9"N, 20°07'42.1"E, willow brushwood on bank of Białka river, on bark of fallen *Salix eleagnos* branch, 24 May 2012, leg. D. Karasiński 7073 (KRAM F-58664).

\**Peniophora erikssonii* Boidin – riparian deciduous forest and riparian brushwood along rivers, on dead attached or fallen twigs of *Alnus incana*; saprobic; summer to autumn (Aug., Sept.); rare (3).

DISTRIBUTION. **EG 30-10**: alder brushwood near Ludźmierz, on bank of Czarny Dunajec river, ca 4 km SW of Nowy Targ, 600–610 m, on *Alnus* sp., 1 Sept. 1983, leg. Z. Heinrich, KRAM F-25652; **EG 31-27**: between Dębno and Krempachy, *Alin* on bank of Białka river, ca 13 km SE of Nowy Targ, ca 560 m, on dead but not fallen twigs of *Alnus incana*, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-25960; **EG 31-53**: near Nowa Biała, ca 10 km SE of Nowy Targ, on bank of Białka river, ca 560 m, *Alin*, on fallen dead twigs of *Alnus incana*, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25909.

*Peniophora incarnata* (Pers.) P. Karst. – deciduous, mixed forest and riverside mountain alder; on fallen trunks, branches and twigs of deciduous trees, occasionally on wood of coniferous trees, once on *Rosa* sp. twig; saprobic; from spring to autumn (Apr., May, Aug.–Oct.); frequent (12).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Salix* sp. trunk and branch, 8 Oct. 2012, leg. D. Karasiński 8882 (KRAM F-58260); **DG 38-21**: forest between Jabłonka and Piekielnik, ca 25 km W of Nowy Targ, 600–680 m, on *Picea*, 14 Apr. 1972, leg. W. Wojewoda, KRAM F-25653; forest between Jabłonka and Piekielnik, ca 25 km W of Nowy Targ, ca 600–680 m, on twigs, 18 May 1973, leg. W. Wojewoda, KRAM F-25654; **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), 49°16'22"N, 19°26'27.03"E, pine forest with single *Picea* and *Populus tremula*, on fallen twig of *P. tremula*, 17 Sept. 2011, leg. H. Komorowska, KRAM F-58113; **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'58.4"N, 19°42'43.7"E, on bark of fallen *Betula pubescens* trunk, 27 Aug. 2010, leg. D. Karasiński 5871; **DG 39-52**: Czarny Dunajec, near Nowy Targ, on bank of Czarny Dunajec river, on fallen branch of deciduous tree, 2 Aug. 1970, leg. I. Jalocho, KRAM F-10938; **DG 39-80**: near Podczerwone, ca 18 km SW of Nowy Targ, ca 720 m, *Alin*, fallen twig of *Salix*, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25658; **DG 48-09**: Koniówka village, between Chochołów and Czarny Dunajec, ca 20 km SW of Nowy Targ, ca 740 m, *Alin*, on fallen twig, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25656; **DG 48-29**: between Chochołów and Koniówka, on right bank of Czarny Dunajec river, ca 20 km SW of Nowy Targ, ca 740–760 m, brushwood, dead, not fallen twig of *Rosa* sp., 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25657; **EG 30-04**: Nowy Targ, park, ca 600 m, on fallen dead twig of deciduous tree, 15 Apr. 1986, leg. W. Wojewoda, KRAM F-26383; **EG 30-22**: alderwood on bank of Czarny Dunajec river, near shoe factory in Nowy Targ, on *Salix*, 13 May 1981,

leg. *W. Wojewoda*, KRAM F-25655; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on fallen branch of deciduous trees or shrubs (Wojewoda et al. 2004); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.3"N, 20°07'41.0"E, willow brushwood on bank of Białka river, on fallen *Salix eleagnos* branch, 24 May 2012, leg. *D. Karasiński* 7088a (KRAM F-58351).

\****Peniophora limitata*** (Chaillat) Cooke – outside forest, on roadside, on fallen *Fraxinus excelsior* branch; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-64**: between Szaflary and Nowy Targ, at Nowy Targ–Zakopane road, ca 6 km S of Nowy Targ, 640 m, on fallen twig of *Fraxinus excelsior*, 31 May 1971, leg. *Z. Heinrich*, KRAM F-25659.

\****Peniophora nuda*** (Fr.) Bres. – riverine scrub; on wood; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, thickets and forest (*Salix* and young *Alnus*). 29 June 2011, leg. *Z. Heinrich*, KRAM F-58127.

***Peniophora pini*** (Schleich. ex DC.) Boidin – coniferous forest, peatbog; on fallen twigs and trunk; saprobic; spring and autumn (May, Sept.); rare (2).

DISTRIBUTION. **DG 38-22**: in coniferous forest, between Jablonka and Piekelnik, on fallen twig of *Pinus*, 18 May 1973, leg. *J. Kurzawiński*, KRAM F-14268; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, pine forest on edge of peatbog, fallen twig of *Pinus*, 6 Sept. 1973, leg. *W. Wojewoda*, KRAM F-25660; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on *Pinus* sp. trunks and branches (Wojewoda et al. 2004).

\****Peniophora pithya*** (Pers.) J. Erikss. – E; coniferous forest, on fallen branches *Picea abies* and *Pinus sylvestris*; saprobic; spring and summer (May, June); rare (5).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 2 km SW of Chyżne, 49°24'50.1"N, 19°39'05.8"E, spruce-pine forest, on wood of fallen *Pinus sylvestris* branch, 23 May 2012, leg. *D. Karasiński* 7064 (KRAM F-58280); **DG 38-21**: forest between Jablonka and Piekelnik, ca 25 km W of Nowy Targ, ca 600–680 m, on twig of *Picea*, 18 May 1973, leg. *W. Wojewoda*, KRAM F-25685; **DG 39-48**: forest near Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, twig of *Picea*, 18 May 1973, leg. *W. Wojewoda*, KRAM F-25686; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.8"N, 20°08'45.2"E, pine-spruce forest, on wood of fallen *Pinus sylvestris* trunk, 13 June 2012, leg. *D. Karasiński* 7178 (KRAM F-58535); **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, Łopuszna, 49°27'22.8"N, 20°08'01.4"E, spruce forest with pine, on bark and wood of fallen *Picea abies* branch, 24 May 2012, leg. *D. Karasiński* 7104 (KRAM F-58663).

\****Peniophora polygonia*** (Pers.) Bourdot & Galzin – forest with *Populus tremula*, on fallen twig of *Populus tremula*; saprobic; spring and autumn (May, Sept.); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), 49°16'22"N, 19°26'27.03"E, pine forest with single *Picea* and *Populus tremula*, on fallen twig of *Populus tremula*, 17 Sept. 2011, leg. *H. Komorowska*, KRAM F-58114; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, fallen twig of *Populus tremula*, 18 May 1973, leg. *Z. Heinrich*, KRAM F-25687.

\****Peniophora violaceolivida*** (Sommerf.) Masee – mixed and deciduous forest; on fallen or attached branches and twigs of *Salix* sp., more rarely on *Populus tremula*, sometimes on fallen branches; saprobic; from spring to autumn (May, June, Aug.–Oct.); rare (5).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, on wood of fallen *Populus tremula* branch, 8 Oct. 2012, leg. *D. Karasiński* 8858 (KRAM F-58317); **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jablonka, 49°27'22.2"N, 19°44'14.1"E, mixed forest with pine, on dead attached *Salix aurita* branch, 12 June 2012, leg. *D. Karasiński*

7150 (KRAM F-58579); Bór koło Chyżnego forest, N part (II, Szałas), 49°16'22"N, 19°26'27.03"E, pine forest with single *Picea* and *Populus tremula*, on fallen twig of *P. tremula*, 17 Sept. 2011, leg. H. Komorowska, KRAM F-58126 (together with *Schizophyllum commune* Fr.); **EG 30-10**: between Ludźmierz and Nowy Targ, on bank of Czarny Dunajec river, near Bór Nowotarski (IX) forest, ca 2.5 km of Nowy Targ centre, in a deciduous forest (?*Alin*), ca 600 m, on fallen dead twig of *Salix*, 1 Sept. 1983, leg. H. Komorowska, KRAM F-27166; **EG 30-34**: between Szaflary Dolne and Nowy Targ, *AlPa*, on bank of Biały Dunajec river, on fallen *Salix* sp. branch, 31 May 1971, leg. W. Wojewoda, KRAM F-11311; **EG 31-45**: between Frydman and Krepachy, on bank of Przykopa stream, ca 12 km SE of Nowy Targ, ca 560 m, in deciduous forest (?*Alin*), on hanging, dead twigs of *Salix* sp., 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25912.

\***Peniophorella pallida** (Bres.) K.H. Larss. – coniferous forest; on fallen trunks of coniferous trees; saprobic; spring and autumn (May, Sept., Oct.); rare (**3**).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekieleń, 49°28'37.9"N, 19°43'53.2"E, on fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8899 (KRAM F-58538); on fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8916 (KRAM F-58537); **EG 30-01**: Bór na Grelu (VIII) forest, ca 4 km W of Nowy Targ, ca 620 m, spruce forest, on very decayed trunk of *Picea abies*, 31 May 1971, leg. W. Wojewoda, KRAM F-25263; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 SE of Nowy Targ, ca 570 m, coniferous forest, decayed trunk (? *Picea abies*), 8 Sept. 1972, leg. Z. Heinrich, KRAM F-25267.

**Peniophorella praetermissa** (P. Karst.) K.H. Larss. – coniferous and mixed forest and deciduous brushwood; on decayed wood of coniferous trees, more rarely on wood of deciduous trees; saprobic; from spring to autumn (Apr.–Nov.); frequent (**20**).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekieleń, 49°28'37.9"N, 19°43'53.2"E, on wood of fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8900 (KRAM F-58343), leg. D. Karasiński 8901a (KRAM F-58469); **DG 38-22**: in coniferous forest, between Jabłonka and Piekieleń, on stump, 18 May 1973, leg. W. Wojewoda, KRAM F-14269; in coniferous forest, between Jabłonka and Piekieleń, on *Picea* stump, 18 May 1973, leg. I. Jalocho, KRAM F-14275; coniferous forest between Jabłonka and Piekieleń, ca 2 km N of Pirogówka summit, ca 23 km SW of Nowy Targ, ca 630 m, on decayed trunk, 18 May 1973, leg. W. Wojewoda, KRAM F-25269; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekieleń, 49°28'01.8"N, 19°44'48.3"E, on *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8943 (KRAM F-58320); on fallen *Picea abies* trunk, 9 Oct. 2012, leg. D. Karasiński 8969 (KRAM F-58355); **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.4"N, 19°44'13.4"E, mixed forest with pine, on fallen trunk of young *Pinus sylvestris* tree, 12 June 2012, leg. D. Karasiński 7138 (KRAM F-58609); Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.0"N, 19°44'12.4"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7129 (KRAM F-58652); **DG 38-38**: Las Baligówka (IV) forest, 49°27'20.1"N, 19°48'00.0"E, spruce forest, on fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6978 (KRAM F-58262); Las Baligówka (IV) forest, 49°27'20.2"N, 19°48'00.0"E, spruce forest, on fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6979 (KRAM F-58365); Las Baligówka (IV) forest, 49°27'21.4"N, 19°47'58.5"E, spruce forest, on fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6986 (KRAM F-58654); Las Baligówka (IV) forest, ca 4 km SE of Piekieleń village, ca 17 km SW of Nowy Targ, 660 m, spruce forest, on *Picea abies* trunk, 14 May 1971, leg. Z. Heinrich, KRAM F-25274; **DG 38-47**: Las Gajka (III) forest, 49°26'54.7"N, 19°47'29.4"E, pine forest, on bark of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7013 (KRAM F-58653); Las Gajka (III) forest, 49°26'53.0"N, 19°47'56.4"E, pine forest, on bark of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7016 (KRAM F-58651); **DG 38-73**: Bór koło Chyżnego (II) forest, between Jabłonka and Piekieleń, ca 23 km SW of Nowy Targ, ca 630 m, pine forest, on lying twig of *Pinus sylvestris*, 14 Apr. 1972, leg. W. Wojewoda, KRAM F-25271; Bór koło Chyżnego (II) forest, ca 23 km SW of Nowy Targ, ca 670 m, pine-spruce forest, on fallen twigs without bark, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26306; **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, brushwood and forest (*Salix* and young

*Alnus*), on *Salix*, 29 June 2011, leg. Z. Heinrich, KRAM F-56897; **DG 39-71**: between Czarny Dunajec and Podczerwone, ca 15 km SW of Nowy Targ, ca 680 m, *Alin* on left bank of Czarny Dunajec river, decayed trunk, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25632; **DG 48-29**: between Chochołów and Koniówka, ca 20 km SW of Nowy Targ, ca 740 m, *Alin* on bank of Czarny Dunajec river, lying on the ground, decayed twigs, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25633; **DG 49-11**: Ciche village, ca 17 SW of Nowy Targ, ca 700 m, *Alin* on bank of Cichy stream, on dead deciduous (?*Alnus incana*) twigs lying on the ground, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25631; **EG 30-01**: Bór na Grełu (VIII) forest, ca 2 km N of Ludźmierz, ca 3.5 km W of Nowy Targ centre, ca 600 m, coniferous forest, on trunk of coniferous tree, 31 May 1971, leg. W. Wojewoda, KRAM F-25273; Bór na Grełu (VIII) forest, near Ludźmierz, in coniferous forest (*Picea*, *Pinus*), on decayed trunk of coniferous tree, 31 May 1971, leg. W. Wojewoda, KRAM F-11309; **EG 30-04**: Nowy Targ, in park, on decaying stump, ca 600 m, 15 Apr. 1986, leg. W. Wojewoda, KRAM F-26385; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ city centre, ca 600 m, pine-spruce forest, on trunk, 13 May 1981, leg. W. Wojewoda, KRAM F-25268; on twigs of coniferous tree lying on the ground, 13 May 1981, leg. W. Wojewoda, KRAM F-25270; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 620 m, coniferous forest, on trunk of coniferous tree, 24 July 1971, leg. W. Wojewoda, KRAM F-25272; Bór na Czerwonem (X) forest, in coniferous forest, near Nowy Targ, on fallen twig of *Pinus sylvestris*, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-13565; Bór na Czerwonem (X) forest, near Nowy Targ, ca 630 m, in CvP, on dead trunk of *Betula*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-14373; Bór na Czerwonem (24) Nature Reserve, 49°27'47.2"N, 20°02'26.6"E, on rotten fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. D. Karasiński; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on dead fallen branches (Wojewoda et al. 2004, as *Hyphoderma praetermissum* P. Karst.) J. Erikss. & Å. Strid.); **EG 30-45**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), on dead trunk of deciduous tree (?*Betula* sp.), 11 June 1971, leg. Z. Heinrich, KRAM F-11338; **EG 30-64**: Szaflary, ca 6 km S of Nowy Targ, ca 640 m, *Alin* on bank of Biały Dunajec river, fallen dead twigs, 18 May 1973, leg. W. Wojewoda, KRAM F-25275; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.6"N, 20°08'45.2"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7186 (KRAM F-58574); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'51.8"N, 20°08'44.5"E, pine-spruce forest, on wood of fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7189b (KRAM F-58610); **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'15.1"E, on fallen *Salix eleagnos* branch, 21 July 2012, leg. D. Karasiński 7488 (KRAM F-58384; leg. D. Karasiński 7491 (KRAM F-58413); Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'09.6"E, on wood of very rotted stump, 21 July 2012, leg. D. Karasiński 7512 (KRAM F-58412); between Dębno and Nowa Biała, on bank of Białka river, ca 560 m, ca 10 km SE of Nowy Targ, in coniferous forest (*Picea abies*, *Pinus sylvestris*), on dead stump of ?coniferous tree, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25906; **EG 31-61**: Przełom Białki pod Kremiachami Nature Reserve, 49°25'39.1"N, 20°07'40.9"E, willow brushwood on bank of Białka river, on fallen trunk of young *Salix eleagnos* tree, 24 May 2012, leg. D. Karasiński 7085 (KRAM F-58573).

REMARKS. This taxon represents a complex of cryptic species. The specimen collected from *Salix eleagnos* (on fallen trunk of young tree) in willow brushwood on the bank of the Białka river (KRAM F-58573) fits the species concept quite well but differs by having a slightly thicker basidiome with a more compact texture of hyphae than usual, and cream ochraceous hymenophore.

***Peniophorella pubera*** (Fr.) P. Karst. – coniferous, mixed and deciduous forest; on decayed wood of coniferous and deciduous trees; saprobic; from spring to autumn (Apr., May, July, Aug., Oct.); frequent (10).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, mixed forest, on fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8910 (KRAM F-58390); leg. D. Karasiński 8911 (KRAM F-58319); leg. D. Karasiński 8888 (KRAM F-58350); Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Alnus incana* branch, 8 Oct. 2012, leg. D. Karasiński 8894 (KRAM F-58282); leg. D. Karasiński 8896 (KRAM F-58411); on bark of fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8912 (KRAM F-58291); **DG 38-22**: in coniferous forest, between Jabłonka and

Piekielnik, on dead fallen twig of *Pinus*, 18 May 1973, leg. *W. Wojewoda*, KRAM F-14273; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.8"N, 19°41'52.0"E, *Alin*, on wood remnants lying on the ground, 23 May 2012, leg. *D. Karasiński* 7035 (KRAM F-58331); **DG 39-17**: Długopole village, ca 8 km W of Nowy Targ, ca 600 m, *Alin* on right bank of Czarny Dunajec river, on *Salix* sp. trunk, 11 July 1984, leg. *W. Wojewoda*, KRAM F-25634; **DG 49-11**: Ciche village, ca 17 km SW of Nowy Targ, ca 700 m, *Alin* on bank of Cichy stream, on *Alnus incana* trunk, 31 July 1984, leg. *W. Wojewoda*, KRAM F-25635; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump (Wojewoda et al. 2004, as *Hyphoderma puberum* (Fr.) Wallr.); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.0"N, 20°02'04.1"E, on fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. *D. Karasiński* 6608 (KRAM F-58448); **EG 31-12**: Łopuszna, *Alin* on right bank of Dunajec river, ca 8 km E of Nowy Targ, ca 560 m, dead twigs of deciduous tree lying on the ground, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-25276; **EG 31-27**: between Dębno and Nowa Biała, on bank of the river Białka, ca 10 km SE of Nowy Targ, ca 560 m, in coniferous forest (*Picea abies*, *Pinus sylvestris*), on dead stump of ?coniferous tree, 26 Aug. 1985, leg. *W. Wojewoda*, KRAM F-25907A; **EG 31-53**: near Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, on bank of Białka river, in mixed forest, on dead stump, 26 Aug. 1985, leg. *W. Wojewoda*, KRAM F-25907B.

\***Phaeogalera stagnina** (Fr.: Fr.) Pegler & T.W.K. Young – peatbog, mossy spruce forest; on moss; saprobic; autumn (Oct.); rare (2).

DISTRIBUTION. **DG 38-35**: edge of Puścizna Wielka (10) peatbog, ca 3 km S of Piekielnik, 620–680 m, 13 Oct. 1971, leg. *I. Jalocha*, KRAM F-32332; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, mossy spruce forest, 14 Oct. 2010, leg. *Z. Heinrich*, KRAM F-49993.

REMARKS. In Poland the species was reported only from Łeba, Białowieża National Park and central Poland (Dominik and Pachlewski 1955, as *Tubaria stagnina* (Fr.) Gillet; Skirgiełło et al. 1992; Grzesiak et al. 2015, as *Galerina stagnina* (Fr.: Fr.) Küner).

\***Phaeolus schweinitzii** (Fr.) Pat. – edge of forest; on trunk of *Larix*; parasitic and saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, between Nowy Targ and Ludźmierz, edge of forest, at road, in hollow of *Larix* trunk, 11 July 1984, leg. *W. Wojewoda*, KRAM F-25543.

\***Phaeomarasmius erinaceus** (Fr.: Fr.) Kühner – **R**; mixed forest, raised peatbog; on fallen twigs or still attached branches of *Salix aurirta*; saprobic; summer (June, July); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.2"N, 19°44'14.7"E, mixed forest with pine, on dead attached *Salix aurirta* branches, 12 June 2012, leg. *D. Karasiński* 7142 (KRAM F-58576); **EG 30-44**: edge of Bór na Czerwonem (X), peatbog, on fallen twigs, 21 July 1971, leg. *I. Jalocha*, KRAM F-25234.

**Phanerochaete laevis** (Fr.) J. Erikss. & Ryvarden – deciduous and mixed forest; on decayed wood of deciduous trees; saprobic; summer (Jun, July); rare (3).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten branches lying on the ground (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, between Szaflary Dolne and Nowy Targ, on dead lying trunk of *Betula* sp. 11 June 1971, leg. *Z. Heinrich*, KRAM F-11343; **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.7"N, 20°12'13.6"E, on fallen branch and twig of deciduous tree, 21 July 2012, leg. *D. Karasiński* 7495 (KRAM F-58503).

**Phanerochaete sanguinea** (Fr.) Pouzar – coniferous and mixed forest and peatbogs; on fallen trunks, dead branches and twigs of coniferous and deciduous trees; saprobic; spring to autumn (May–Oct.); frequent (10).

DISTRIBUTION. **DG 38-23**: between Jabłonka and Piekielek, in coniferous forest, on fallen *Pinus* branch, 18 May 1973, leg. *W. Wojewoda*, KRAM F-14272; **DG 38-33**: Bór koło Chyżnego (II, Szalas) forest, ca 3 km SE of Jabłonka, 49°27'21.7"N, 19°44'13.4"E, mixed forest with pine, on fallen trunk of young *Pinus sylvestris* tree, 12 June 2012, leg. *D. Karasiński* 7136 (KRAM F-58677); **DG 38-38**: Las Baligówka (IV) forest, 49°27'29.4"N, 19°48'29.9"E, spruce forest, on bark and wood of fallen *Picea abies* trunk, 22 May 2012, leg. *D. Karasiński* 6971 (KRAM F-58247); **DG 38-47**: Las Gajka (III) forest, 49°26'54.6"N, 19°47'29.1"E, pine forest, on wood of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. *D. Karasiński* 7012 (KRAM F-58641); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'54.2"N, 19°42'53.8"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. *D. Karasiński* 5878a; **DG 38-69**: Las Cikówka (V) forest, 2 km SW of Czarny Dunajec, ca 16 km SW of Nowy Targ, 680–710 m, pine forest, on decayed trunk, 24 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25598; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 30 km SW of Nowy Targ, 600–680 m, fallen twig of coniferous tree, 30 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25599; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.7"N, 20°02'08.3"E, on fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. *D. Karasiński* 6619 (KRAM F-58441); Bór na Czerwonem (X) forest, near Nowy Targ, coniferous forest near reserve, on *Betula* sp. stem, 30 July 1976, leg. *Z. Heinrich*, KRAM F-25684; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on rotten conifer branches lying on the ground (Wojewoda et al. 2004); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ city centre, ca 600 m, in fine forest (*CvP?*), on fallen dead *Pinus sylvestris* trunk, 19 Sept. 2000, leg. *W. Wojewoda*, KRAM F-50614; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.7"N, 20°08'44.8"E, pine-spruce forest, on bark of fallen *Picea abies* branch, 13 June 2012, leg. *D. Karasiński* 7173 (KRAM F-58612).

**Phanerochaete sordida** (P. Karst.) J. Erikss. & Ryvarden – deciduous, mixed and coniferous forest; on decayed wood of deciduous and more rarely on coniferous trees; saprobic; from spring to autumn (Apr.–Aug., Oct.); frequent (9).

DISTRIBUTION. **DG 38-13**: Piekielek, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on dead standing *Alnus incana* trunk, 8 Oct. 2012, leg. *D. Karasiński* 8895 (KRAM F-58539); Piekielek, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. *D. Karasiński* 8925 (KRAM F-58345); **DG 38-33**: Bór koło Chyżnego (II, Szalas) forest, ca 3 km SE of Jabłonka, 49°27'21.5"N, 19°44'13.7"E, mixed forest with pine, on fallen trunk of young *Pinus sylvestris* tree, 12 June 2012, leg. *D. Karasiński* 7140 (KRAM F-58577); **DG 38-47**: Las Gajka (III) forest, 49°26'57.1"N, 19°47'27.6"E, pine forest, on wood of fallen *Pinus sylvestris* branch, 22 May 2012, leg. *D. Karasiński* 7010 (KRAM F-58567); **DG 38-73**: N edge of Bór koło Chyżnego (II) forest, near Piekielek, ca 30 km SW of Nowy Targ, 600–680 m, fallen twig of *Alnus incana*, on bank of stream, 18 May 1973, leg. *W. Wojewoda*, KRAM F-25682; **DG 39-18**: fields between Krauszów and Długopole, ca 6 km W of Nowy Targ, 600–640 m, trunk of deciduous tree, 11 July 1984, leg. *W. Wojewoda*, KRAM F-25683; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, near Szaflary, 600–640 m, fallen twig of coniferous tree, 31 May 1971, leg. *W. Wojewoda*, KRAM F-25681; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten branches lying on the ground (Wojewoda et al. 2004); **EG 30-45**: Bór na Czerwonem (X) forest, near reserve, ca 4 km S of Nowy Targ, ca 630 m, spruce forest, admixture *Betula pendula*, on fallen twigs of *Betula*, 22 Apr. 1971, leg. *W. Wojewoda*, KRAM F-19491; **EG 30-54**: in vicinity of Szaflary, ca 5 km S of Nowy Targ, *AlPa* near Biały Dunajec river, on dead fallen twig of deciduous tree (*?Alnus*, *?Salix*), 31 May 1971, leg. *W. Wojewoda*, KRAM F-11310; **EG 31-27**: near Dębno, ca 14 km E of Nowy Targ, on bank of Dunajec river, ca 530 m, *Alin*, on fallen twig of deciduous tree (*?Alnus incana*), 6 Aug. 1985, leg. *W. Wojewoda*, KRAM F-27163; Dolina Białki p.a., in vicinity of Dębno, 49°27'26.7"N, 20°12'13.6"E, on fallen branch of deciduous tree, 21 July 2012, leg. *D. Karasiński* 7492b (KRAM F-58465).

\***Phanerochaete tuberculata** (P. Karst.) Parmasto – deciduous and mixed forest; on fallen trunks, branches and twigs of deciduous trees; saprobic; spring to autumn (May, June, Sept.); rare (4).

DISTRIBUTION. **EG 30-59**: Gronków Środkowy village, forest on bank of Leśnica stream, 49°26'15.42"N, 20°05'17.66"E, 603.8 m, 28 June 2011, *leg. H. Komorowska*, KRAM F-56837; **EG 30-64**: Szaflary, near Bór na Czerwonym (X) forest, ca 6 km S of Nowy Targ, 640 m, *Alin*, fallen twig of deciduous tree, 31 May 1971, *leg. W. Wojewoda*, KRAM F-25679; Szaflary, ca 6 km S of Nowy Targ, 640 m, in little alder forest, 31 May 1971, *leg. W. Wojewoda*, KRAM F-25678; **EG 31-27**: Dębno, small *Alnus* forest on bank of Dunajec river, ca 14 km E of Nowy Targ, 535 m, on lying twigs of *Alnus*, 6 Sept. 1973, *leg. W. Wojewoda*, KRAM F-25680; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.3"N, 20°07'41.2"E, willow brushwood on bank of Białka river, on wood of fallen *Salix eleagnos* twig, 24 May 2012, *leg. D. Karasiński* 7081 (KRAM F-58541); Przełom Białki pod Krempachami Nature Reserve, 49°25'38.6"N, 20°07'40.9"E, willow brushwood on bank of Białka river, on fallen deciduous (*Salix?*) trunk, 24 May 2012, *leg. D. Karasiński* 7095 (KRAM F-58540).

\**Phanerochaete velutina* (DC.) P. Karst. – coniferous forest, on fallen twig of coniferous tree; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, ca 600–620 m, spruce-pine forest, heap of twigs, lying conifer twig, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25677.

\**Phellinus alni* (Bondartsev) Parmasto – riparian forest; on wood of deciduous trees; parasitic and saprobic; from spring to autumn (Apr.–June, Sept., Oct.); frequent (6).

DISTRIBUTION. **DG 39-48**: Rogoźnik village, ca 11 km SW of Nowy Targ, ca 620 m, on bank of Wielki Rogoźnik stream, *Alin* (*Alnus incana*, *Salix ?fragilis*), on living *Alnus incana* trunk, 3 Oct. 1970, *leg. I. Jalocho & Z. Heinrich*, KRAM F-10931; **EG 30-15**: Nowy Targ, on bank of Biały Dunajec river, *Alin*, on living *Alnus incana* trunk, ca 580 m, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-25589; **EG 30-31**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'34.68"N, 19°59'23.49"E, 597.7 m, 2 May 2011, *leg. M. Lysek*, KRAM F-58074; **EG 30-44**: near Szaflary Dolne, on bank of Biały Dunajec river, *ALPa*, on living *Alnus incana* trunk, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11304; **EG 30-49**: Gronków Środkowy village, SE of Nowy Targ, on bank of Leśnica river, 49°26'21.31"N, 20°05'25.99"E, 616.3 m, on *Alnus* sp., 3 Sept. 2011, *leg. M. Pilch*, KRAM F-49729; **EG 31-12**: by Łopuszna–Harkłowa road, near Nowy Targ, on dead trunk, 22 June 1970, *leg. W. Wojewoda*, KRAM F-11063.

\**Phellinus conchatus* (Pers.) Quél. – deciduous brushwood, on fallen *Salix eleagnos* branch; parasitic and saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.4"N, 20°07'40.6"E, willow brushwood on bank of Białka river, on fallen *Salix eleagnos* branch, 24 May 2012, *leg. D. Karasiński* 7090 (KRAM F-58354).

\**Phellinus igniarius* (L.) Quél. – riparian forest along rivers and streams and outside forest, e.g. on roadsides; exclusively on living or dead *Salix* sp.; parasitic and saprobic; from spring to summer (Apr., May, July, Aug.); rare (4).

DISTRIBUTION. **EG 30-39**: Torfowisko koło Księżego Boru (26), exploited peatland 49°27'15"N, 20°05'57.46"E, 585.3 m, on dead *Salix*, 30 Apr. 2011, *leg. A. Sadowska*, KRAM F-49199; on living *Salix*, *leg. H. Komorowska*, KRAM F-49189; **EG 31-37**: Dolina Białki p.a., left side (beyond bridge) of Frydman–Dębno road, 49°45'40.5"N, 20°05'09.47"E, 372.3 m, forest (*Alin*), *Pinus*, *Picea*, *Larix*, *Salix*, on dead *Salix viminalis*, 16 July 2010, *leg. H. Komorowska*, KRAM F-56730; **EG 31-45**: between Frydman and Krempachy, on bank of Przykopa stream, ca 12 km SE of Nowy Targ, ca 560 m, *Alin*, on trunk of living *Salix ?fragilis*, 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25933; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'42.1"N, 20°07'37.1"E, willow brushwood on bank of Białka river, on living *Salix eleagnos* tree trunk, 24 May 2012, *leg. D. Karasiński* 7065a (KRAM F-58352).

\**Phellinus tremulae* (Bondartsev) Bondartsev & Borissov – **E**; outside forest; on living trees; parasitic and saprobic; spring (Apr.); rare (**1**).

DISTRIBUTION. **EG 31-12**: Łopuszna, near church, on bank of Dunajec river, ca 550 m, on living trunk of *Populus tremula*, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-6842.

\**Phlebia aurea* (Fr.) Nakasone – **E**; mixed forest, on fallen *Populus tremula* branch; saprobic; autumn (Oct.); rare (**1**).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Populus tremula* branch, 8 Oct. 2012, leg. *D. Karasiński* 8885 (KRAM F-58486).

REMARKS. The species is in the Red List as *Mycoacia aurea* (Fr.) J. Erikss. & Ryvardeen.

\**Phlebia nitidula* (P. Karst.) Ryvardeen. – mixed forest, on bark of fallen *Salix aurita* branch; saprobic; early summer (June); rare (**1**).

DISTRIBUTION. **DG 38-43**: Bór koło Chyżnego (II, Siedlcowa Soślina) forest, ca 3 km SE of Jabłonka, 49°27'22.1"N, 19°44'14.5"E, mixed forest with pine, on bark of fallen *Salix aurita* branch, 12 June 2012, leg. *D. Karasiński* 7146b.

REMARKS. In Poland the species is reported only from Kampinos National Park (Karasiński et al. 2015).

\**Phlebia rufa* (Pers.) M.P. Christ. – **R**; deciduous brushwood; on fallen twig of *Myricaria germanica*; saprobic; summer (July); rare (**1**).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'23.6"N, 20°12'00.0"E, in *Salix eleagnos* and *Myricaria germanica* brushwood on bank of Białka river, on fallen twig of *Myricaria germanica*, 21 July 2012, leg. *D. Karasiński* 7519 (KRAM F-58310).

*Phlebia tremellosa* (Schrad.) Nakasone & Burds. – deciduous forest, on decayed wood of deciduous trees; saprobic; spring (Apr.); rare (**2**).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump (Wojewoda et al. 2004); **EG 31-12**: Łopuszna, on right bank of Dunajec river, brushwood (*Alin*), ca 8 km E of Nowy Targ, ca 560 m, on decayed trunk, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-12678; Łopuszna, near church, on bank of Dunajec river, ca 550 m, on lying trunk of deciduous tree, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-12686.

\**Phlebiella fibrillosa* (Hallenb.) K.H. Larss. – coniferous forest, on fallen *Pinus sylvestris* branch; saprobic; early summer (June); rare (**1**).

DISTRIBUTION. **EG 31-23**: Harkłowa, Bór Harkłowski (XIII) forest, on *Pinus sylvestris* branch, 13 June 2012, leg. *D. Karasiński* 7176 (KRAM F-58536).

REMARKS. In Poland the species is reported only from the Kashubian Landscape Park (Karasiński 2011; Karasiński 2016).

*Phlebiella sulphurea* (Pers.) Ginns & M.N.L. Lefebvre – peatbogs, in coniferous and mixed forest; on decayed wood of conifers and deciduous trees; saprobic; from spring to late autumn (May, June, Aug.–Nov.); frequent (**6**).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekelnik, coniferous forest, on fallen *Picea abies* branch, 9 Oct. 2012, leg. *D. Karasiński* 8957 (KRAM F-58299); **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.0"N, 19°44'12.2"E, mixed forest with pine, on fallen, partly burned *Pinus sylvestris* branch, 12 June 2012, leg. *D. Karasiński* 7127 (KRAM F-58601); **DG 38-38**: Las Baligówka (IV) forest, 49°27'23.7"N, 19°48'24.2"E, spruce forest, on bark of fallen *Picea abies* trunk, 22 May 2012, leg. *D. Karasiński* 6976b; **DG 38-61**: Puścizna Jasiowska (4)



peatbog, ca 3 km NE of Chyżne, 49°25'58.3"N, 19°42'43.6"E, on wood of fallen *Betula pubescens* trunk, 27 Aug. 2010, leg. D. Karasiński 5870; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 4 km E of Chyżne village, 640–710 m, ca 22 km SW of Nowy Targ, pine-spruce forest, lying twig of coniferous forest, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25665; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, on fallen twig of *Pinus sylvestris*, 8 Nov. 1972, leg. Z. Heinrich, KRAM F-13569; Bór na Czerwonem (X) forest, near Nowy Targ, on fallen twig of *Pinus sylvestris*, 8 Nov. 1972, leg. I. Jalocho, KRAM F-13572; Bór na Czerwonem (X) forest, near Nowy Targ, ca 610 m, pine forest, admixture *Alnus glutinosa*, *Salix cinerea*?, on fallen twig of *Salix*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17152; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *VuP*, on rotten branches lying on the ground (Wojewoda et al. 2004).

**Phlebiella tulasnelloidea** (Höhn. & Litsch.) Ginns & M.N.L. Lefebvre – coniferous forest; on fallen twig of *Betula*; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 630 m, *CvP*, on dead fallen twig of *Betula*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-14372; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten branches lying on the ground (Wojewoda et al. 2004).

**Phlebiopsis gigantea** (Fr.) Jülich – coniferous forest; on stumps and fallen trunks of coniferous trees; saprobic; from spring to autumn (May–Oct.); frequent (14).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, in mixed forest, near Czarny Dunajec, 13 Oct. 1971, leg. Z. Heinrich, KRAM F-25690; **DG 38-47**: Las Gajka (III) forest, 49°26'51.6"E 19°47'29.7"E, pine forest, on wood of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7015 (KRAM F-58672); **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, 640–710 m, ca 22 km SW of Nowy Targ, spruce-pine forest, fallen trunk of *Pinus sylvestris*, 18 May 1973, leg. W. Wojewoda, KRAM F-14012; **DG 39-51**: Czarny Dunajec, near Nowy Targ, in cemetery, on bark of *Picea abies* trunk lying on the ground, 31 July 1970, leg. Z. Heinrich, KRAM F-10942; **DG 48-01**: Bór koło Chyżnego (II, Bucznik) forest, ca 4 km SE of Chyżne, 49°23'58.8"N, 19°42'06.1"E, coniferous forest, on *Picea abies* snag, 23 May 2012, leg. D. Karasiński 7054a (KRAM F-58249); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.4"N, 20°02'06.9"E, on bark of hanging *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6599 (KRAM F-58425); Bór na Czerwonem (24) Nature Reserve, on bark of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6630 (KRAM F-58407); ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *VuP*, on stump of *Pinus* sp. (Wojewoda et al. 2004, as *Phanerochaete gigantea* (Fr.) Rattan); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'27.6"N, 20°02'03.6"E, on bark of hanging *Pinus sylvestris* log, 17 Oct. 2011, leg. D. Karasiński 6604a (KRAM F-58426); **EG 30-45**: Bór na Czerwonem (X) forest, near Szaflary, in coniferous forest, on decayed trunk of *Pinus sylvestris*, 25 May 1971, leg. Z. Heinrich, KRAM F-11251; **EG 31-20**: Bór Ostrowski (XI) forest, ca 590 m, ca 2 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, pine-spruce forest, on *Pinus sylvestris* twigs lying on the ground, 7 May 1981, leg. W. Wojewoda, KRAM F-19492; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'34.9"N, 20°08'47.4"E, pine-spruce forest, on bark of fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7204 (KRAM F-58614); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'38.7"N, 20°09'02.7"E, pine-spruce forest, on bark of fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7213 (KRAM F-58347); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'48.4"N, 20°08'46.7"E, on *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7192 (KRAM F-58326); **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, trunk of coniferous tree, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-25689; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'00.18"N, 20°10'43.56"E, 552.6 m, pine-spruce forest and sparse *Betula*, on old trunk of coniferous tree, 14 Aug. 2012, leg. H. Komorowska, KRAM F-49592; **EG 31-27**: Dębno, ca 14 km E of Nowy Targ, ca 530 m, near road, on lying trunk of old dead *Pinus sylvestris*, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-27164; **EG 31-53**: near Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, on bank of Białka river, in coniferous forest, on dead *Picea abies* stump, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25911.

\**Pholiota adiposa* (Batsch: Fr.) P. Kumm. – **R**; deciduous forest; on stem of living tree; parasitic and saprobic; autumn (Sept., Nov.); rare (**2**).

DISTRIBUTION. **DG 48-29**: forest on bank of Czarny Dunajec river, NW of Chochołów, 49°22'27.79"N, 19°48'47.69"E, 731.8 m, sparse deciduous forest (*Alnus*, *Salix*, *Corylus*, *Betula*) with frequent shrubs, on living trunk of deciduous tree, 13 Nov. 2011, leg. M. Sadowski, KRAM F-58008; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 610 m, on bank of Biały Dunajec river, by road, on living *Salix*, 20 Sept. 1973, leg. Z. Heinrich, KRAM F-17169.

\**Pholiota flammans* (Batsch: Fr.) P. Kumm. – coniferous forest; on more or less rotten wood; saprobic; summer and autumn (June, Aug., Sept.); rare (**5**).

DISTRIBUTION. **DG 38-32**: on edges of forest, S of Jabłonka, W of Puścizna Wielka (10) peatbog, pine forest, 22 June 2002, leg. J. Lichoń, KRAM F-52330; **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. Mi. Łysek, KRAM F-57959; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, ca 22 km SW of Nowy Targ, pine-spruce forest, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26329; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, pine-spruce forest, 1 Sept. 1983, leg. Z. Heinrich, KRAM F-26330; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with sparse *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Łysek, KRAM F-57953.

\**Pholiota henningsii* (Bres.) P.D. Orton – **E**; peatbog; in *Sphagnum*; saprobic; summer (Aug.); rare (**1**).

DISTRIBUTION. **DG 38-46**: Puścizna Wielka (10) peatbog, ca 3 km S of Piekienik, near Las Gajka (III) forest, ca 670 m, in *Sphagnum*, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-26322.

REMARKS. In Poland the species was recorded from four localities.

*Pholiota highlandensis* (Peck) Quadr. – coniferous forest and clearing; on burnt ground and wood; saprobic; summer to autumn (June–Oct.); frequent (**9**).

DISTRIBUTION. **DG 38-06**: forest near Piekienik village, on edge of coniferous forest, on burnt wood, 2 Aug. 1970, leg. I. Jalocha, KRAM F-11110; **DG 38-48**: Las Baligówka (IV) forest, in coniferous forest (*Pinus*, *Picea*), on burnt ground, 30 June 1971, leg. I. Jalocha, KRAM F-11379; **DG 38-62**: between Piekienik and Bór koło Chyżnego (II) forest, ca 6 km SE of Jabłonka, on burnt ground, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26402; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, 22 km SW of Nowy Targ, 640–710 m, pine-spruce forest, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-26333; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657.7 m, in clearing in spruce forest, wet place, in *Polytrichum*, 14 Oct. 2010, leg. Z. Heinrich, KRAM F-49968; **EG 30-01**: Bór na Grełu (VIII) forest, ca 2 km N of Ludźmierz, 600–620 m, pine-spruce forest, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-26332; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on remains of burned branches left from fire (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, coniferous forest (*Pinus*, *Picea*), on remnants of burnt wood, 30 July 1976, leg. Z. Heinrich, KRAM F-32286; **EG 31-32**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, ca 7 km SE of Nowy Targ, left side of Łopuszna–Nowa Biała road, spruce forest, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-26327.

\**Pholiota lenta* (Pers.: Fr.) Singer – mixed forest; on rotten stump; saprobic; autumn (Nov.); rare (**1**).

DISTRIBUTION. **DG 39-83**: Forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, 12 Nov. 2011, leg. M. Sadowski, KRAM F-49506; leg. M. Sadowski, KRAM F-49507; leg. M. Sadowski, KRAM F-49531; on decayed stump, leg. M. Pilch, KRAM F-49530.

\**Pholiota lucifera* (Lasch) Quél. – deciduous forest; on rotten mossy log; saprobic; autumn (Nov.); rare (1).

DISTRIBUTION. **DG 48-29**: forest on bank of Czarny Dunajec river, NW of Chochołów, 49°22'27.79"N, 19°48'47.69"E, 731.8 m, sparse deciduous forest (*Alnus*, *Salix*, *Corylus*, *Betula*) with frequent shrubs, on old, mossy stump, 13 Nov. 2011, leg. *M. Sadowski*, KRAM F-58006.

\**Pholiota mixta* (Fr.) Kuyper & Tjall.-Beuk. – pine-spruce forest; on the ground; saprobic; summer and autumn (June, Oct.); rare (2).

DISTRIBUTION. **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside, 28 June 2011, leg. *H. Komorowska*, KRAM F-56659; **EG 31-21**: Bór Ostrowski (XI, Książy Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, leg. *Z. Heinrich*, KRAM F-49508.

*Pholiota spumosa* (Fr.: Fr.) Singer – spruce, pine-spruce and alder forest; on woody debris of conifers in litter; saprobic; summer to autumn (Aug.–Oct.); frequent (7).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, small forest, ca 1 km S of Piekielnik village, ca 650 m, 13 Oct. 1971, leg. *I. Jalocha*, KRAM F-26318; **DG 39-48**: pine-spruce forest near Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, 2 Oct. 1984, leg. *Z. Heinrich*, KRAM F-32306; **DG 39-52**: Czarny Dunajec, ca 14 km SW of Nowy Targ, little alder forest on bank of Czarny Dunajec river, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-26328; **DG 39-83**: Domański Wierch hill, 753 m, ca 3 km SE of Czarny Dunajec village, near Podczerwone village, 28 Aug. 1984, leg. *W. Wojewoda*, KRAM F-26326; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, coniferous forest (*Pinus*, *Picea*), on remnants of wood on the ground, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17168; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, among remains of wood on the ground (Wojewoda et al. 2004); **EG 31-22**: Bór Bielski (XII) forest, near Łopuszna, pine-spruce forest, on the ground, 14 Aug. 1970, leg. *Z. Heinrich*, KRAM F-25393; **EG 31-32**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, 7. Sept. 1982, leg. *W. Wojewoda*, KRAM F-32304.

*Pholiotina aporos* (Kit van Wav.) Cléménçon – pine-spruce and alder forest; on the ground; saprobic; spring (May); rare (2).

DISTRIBUTION. **EG 30-03**: Nowy Targ, alder forest on bank of Czarny Dunajec river, on the ground, 13 May 1981, leg. *W. Wojewoda*, KRAM F-25327; **EG 30-23**: Bór Nowotarski (IX) forest, at Nowy Targ–Ludźmierz road, pine-spruce forest, on the ground, 13 May 1981, leg. *W. Wojewoda*, KRAM F-25326 (Wojewoda 2003, as *Conocybe aporus* Kits van Wav.).

*Pholiotina filipes* (G.F. Atk.) Singer – mixed forest; on the ground and needles; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, from Czarny Dunajec near Nowy Targ, mixed forest, on the ground and on needles, 5 July 1970, leg. *I. Jalocha*, KRAM F-25173 (Wojewoda 2003, as *Conocybe sulcatipes* (Peck) Kühner; Hausknecht 2009, with erroneous date: 6 July 1970).

\**Pholiotina sulcata* Arnolds & Hauskn. – coniferous forest; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest (*Picea*, *Pinus*), on the ground, 6 July 1970, leg. *I. Jalocha*, KRAM F-11105.

\**Phyllotopsis nidulans* (Pers.: Fr.) Singer – V; pine-spruce forest with single deciduous trees; on wood; saprobic; autumn (Nov.); rare (1);

DISTRIBUTION. **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula ?pubescens*), on log of (?*Picea*), 11 Nov. 2011, leg. *M. Sadowski*, KRAM F-49471.

***Physisporinus sanguinolentus*** (Alb. & Schwein.) Pilát – coniferous forest, on decayed stump of coniferous tree; saprobic; summer (June); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, in coniferous forest, between Szaflary Dolne and Nowy Targ, on decayed stump of coniferous tree, 11 June 1971, leg. *Z. Heinrich*, KRAM F-11331.

\****Physisporinus vitreus*** (Pers.) P. Karst. – **R**; spruce forest; on fallen trunk of *Picea abies*; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 38-90**: SE of Chyżne, Las Brzegi (I, Graniowa Droga) forest, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce with mosses and *Vaccinium*, on *Picea* trunk, 2 Sept. 2011, leg. *H. Komorowska*, KRAM F-49742.

\****Piloderma byssinum*** (P. Karst.) Jülich – coniferous forest; on decayed wood of coniferous trees; mycorrhizal; autumn (Oct.); rare (2).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekelnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on rotten *Picea abies* stump among mosses, 9 Oct. 2012, leg. *D. Karasiński* 8949 (KRAM F-58534); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'45.6"N, 20°02'25.2"E, on *Pinus* rotten branch in litter, 17 Oct. 2011, leg. *D. Karasiński* 6632 (KRAM F-58358); leg. *D. Karasiński* 6633 (KRAM F-58450).

\****Piloderma fallax*** (Lib.) Stalpers – spruce forest; on fallen trunk and litter; mycorrhizal; spring (May); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'19.7"N, 19°48'08.3"E, spruce forest, on fallen *Picea abies* trunk and litter, 22 May 2012, leg. *D. Karasiński* 6977 (KRAM F-58561).

***Piptoporus betulinus*** (Bull.) P. Karst. – coniferous and mixed forest, peatbog dome; on wood of *Betula*; parasitic and saprobic; spring and summer (Apr., June, Aug.); rare (3).

DISTRIBUTION. **DG 39-27**: Las Cyrla forest, near Długopole, SE part, spruce forest, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, on fallen *Betula* twig. 27 June 2012, leg. *B. Pleban*, KRAM F-49551; Puścizna Długopole (20) peatbog, NE of Czarny Dunajec, 49°28'04"N, 19°55'25"E, on peat dome (*Betula*, *Picea*, *Populus tremula*), on twig of *Betula*, 30 Aug. 2012, leg. *H. Komorowska*, KRAM F-56832; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on standing and dead lying trunks and on fallen branches of *Betula* sp. (Wojewoda et al. 2004); **EG 30-64**: near Szaflary, in spruce forest, on dead trunk of deciduous tree (*Betula*), 22 Apr. 1971, leg. *W. Wojewoda*, KRAM F-11204 (Skirgiełło 1977).

\****Pleurotus ostreatus*** (Jacq.: Fr.) P. Kumm. – fragments of riverside mountain alder, coniferous forest, by roadside between forests; on trunks of deciduous trees; saprobic; spring and autumn (May, Oct.); rare (3).

DISTRIBUTION. **EG 30-37**: between Nowy Targ and Gronków village, ca 3 km SE of Nowy Targ, between Bór Ostrowski (XI) and Bór na Czerwonem (X) forest, ca 620 m, stump by road (trunk) ?*Salix* sp., 7 May 1981, leg. *W. Wojewoda*, KRAM F-32337; **EG 30-59**: Gronków village, on bank of Leśnica stream, in vicinity of church, ca 6 km SE of Nowy Targ, ca 620 m, fragments of *Alin*, trunk of deciduous tree, 7 May 1981, leg. *W. Wojewoda*, KRAM F-32338; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, on trunk, 16 Oct. 1970, leg. *I. Jalocho*, KRAM F-32329.

\**Plicatura crispa* (Pers.) Rea – R; riverside mountain alder; on fallen trunks of *Alnus incana*; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.7"N, 19°41'52.3"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7038 (KRAM F-58274); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.3"N, 19°41'54.4"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7045a (KRAM F-58245).

\**Pluteus atromarginatus* (Konrad) Kühner – coniferous forest; on rotten *Picea abies* stump, on woody debris in litter; saprobic; summer and autumn (July, Sept.); rare (2).

DISTRIBUTION. **EG 30-44**: Bór na Czerwonem (X) forest, near Szaflary Dolne, coniferous forest (*Pinus*, *Picea*), on remnants of wood on the ground, 30 July 1976, *leg. H. Komorowska*, KRAM F-58166; **EG 31-32**: Bór Bielski (XII) forest, spruce forest on right side of Łopuszna–Nowa Biała road, ca 2 km NW of Nowa Biała, ca 8 km SE of Nowy Targ, ca 590 m, on decayed *Picea abies* stump, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-19087.

\**Pluteus cervinus* (Schaeff.) P. Kumm. – riparian forest; on woody debris of *Alnus incana* in litter; saprobic; summer (June); rare (1).

DISTRIBUTION. **EG 30-34**: between Szaflary Dolne and Nowy Targ, *AlPa*, on bank of Biały Dunajec river, on remnants *Alnus incana* wood, 11 June 1971, *leg. Z. Heinrich*, KRAM F-11328.

*Polyporus brumalis* (Pers.) Fr. – coniferous and deciduous forest, on fallen twigs and branches; saprobic; spring to autumn (Apr., May, July, Oct.); frequent (7).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, on fallen *Salix* sp. branch, 8 Oct. 2012, *leg. D. Karasiński* 8924 (KRAM F-58328); **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 620 m, pine-spruce forest, on fallen twig of deciduous tree, 21 July 1971, *leg. W. Wojewoda & Z. Heinrich*, KRAM F-27118; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on fallen dead branches of deciduous tree or shrub (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X, Czerwony Bór), peatbog, SW part (near Szaflary), 49°26'41.81"N, 20°01'47.16"E, 622.4 m, 3 May 2011, *leg. M. Łysek*, KRAM F-58064; **EG 30-64**: near Szaflary, in brushwood (*Alnus incana*) on bank of Biały Dunajec river, in brushwood (*Alnus incana*, *Salix* sp.), on fallen branch of deciduous tree, 22 Apr. 1971, *leg. W. Wojewoda & leg. Z. Heinrich*, KRAM F-11197; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part (near Łopuszna), forest by wayside, 49°28'02.04"N, 20°08'29.99"E, 587.7 m, on twig, under *Picea*, 3 May 2011, *leg. A. Sadowska*, KRAM F-58081; **EG 31-33**: Bór Harkłowski (XIII) forest, S part, near Nowa Biała, 49°27'03.82"N, 20°08'47.7"E, 591.4 m, 2 May 2011, *leg. M. Łysek*, KRAM F-58080; **EG 31-53**: Dolina Białki p.a., forest on bank of river, between Nowa Biała and Krempachy, 49°26'12.19"N, 20°08'55.95"E, 599.4 m, on twig, under *Sorbus*, near *Picea*, 2 May 2011, *leg. M. Sadowski*, KRAM F-58091.

\**Polyporus ciliatus* Fr. – deciduous and coniferous forest; on fallen trunks of deciduous trees; saprobic; spring and early summer (May–June); rare (2).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, in forest (*CvP*), by road to Nowy Targ, on remnants of wood, 22 June 1970, *leg. W. Wojewoda*, KRAM F-10925; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.4"N, 20°07'41.1"E, willow brushwood on bank of Białka river, on wood of *Salix eleagnos* fallen trunk, 24 May 2012, *leg. D. Karasiński* 7087 (KRAM F-58665).

\**Polyporus varius* (Pers.): Fr. – deciduous and mixed forest; on fallen twigs, branches and stumps of deciduous trees; saprobic; spring to summer (Apr.–Aug.); frequent (7).

DISTRIBUTION. **DG 48-29**: between Chochołów and Koniówka, ca 720 m, ca 20 km SW of Nowy Targ, *Alin* on bank of Czarny Dunajec river, on fallen twig of deciduous tree, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-27119; **EG 30-41**: Pasieczny Las (VII) forest, S part, on left side of Ludźmierz–Maruszyna road,

49°26'20.54"N, 19°58'34.46"E, 615.1 m, edge of forest, birch and pine-spruce forest with *Rubus* sp., *Oxalis acetosella* and ferns, 14 Aug. 2011, leg. H. Komorowska, KRAM F-56849; **EG 30-44**: Szaflary Dolne, at road, on living trunk of *Fraxinus excelsior*, 31 May 1971, leg. W. Wojewoda, KRAM F-11288; **EG 30-64**: Szaflary, ca 6 km S of Nowy Targ, ca 640 m, deciduous forest (*Alin*) on bank of Biały Dunajec river, on wood of deciduous tree, 22 Apr. 1971, leg. Z. Heinrich & W. Wojewoda, KRAM F-32288; **EG 31-27**: Dolina Białki p.a., SE of Dębno, 49°27'29.78"N, 20°12'42.08"E, 516.3 m, brushwood on bank of river (*Picea*, *Salix*), 14 Aug. 2012, leg. H. Komorowska, KRAM F-49545; **EG 31-32**: Bór Bielski (XII, Brzezie) forest, E part of forest, 49°27'16.44"N, 20°08'02.88"E, 591.8 m, on edge of spruce forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), in forest – young spruce forest with *Frangula alnus*, on fallen twig, 28 June 2012, leg. B. Pleban, KRAM F-49562; **EG 31-37**: Dolina Białki p.a., left side (beyond bridge) of Frydman–Dębno road, 49°45'40.5"N, 20°05'09.47"E, 372.3 m, forest (*Alin*), *Pinus*, *Picea*, *Larix*, *Salix*, on dead *Salix*, 16 July 2010, leg. H. Komorowska, KRAM F-56734;

**Porodaedalea chrysoloma** (Fr.) Fiasson & Niemelä – **V**; coniferous forest; on *Picea abies* fallen trunks and on living trees; parasitic and saprobic; from spring to summer (May, Aug.); rare (**3**).

DISTRIBUTION. **DG 38-37**: Las Baligówka (IV) forest, spruce forest, on trunk of living *Picea abies* tree, 22 May 2012, leg. D. Karasiński 6994 (KRAM F-58305); **DG 39-51**: Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 675 m, near cemetery, on lying trunk of coniferous tree (?*Picea abies*), 14 May 1971, leg. Z. Heinrich, KRAM F-27114; **DG 49-11**: between Ciche and Koniówka, hill without name, 788 m, ca 18 km SW of Nowy Targ, spruce forest, on dead lying trunk of *Picea abies*, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-34249.

REMARKS. Wojewoda (2003), cites the KRAM specimen of this species (as *Phellinus chrysoloma* (Fr.) Donk) from the KON, but without precise data. The species is in the Red List as *Ph. chrysoloma*.

**Porodaedalea pini** (Brot.) Murrill – **R**; coniferous forest, peat bog; on trunks of living and dead trees; parasitic and saprobic; summer to autumn (Aug.–Oct.); rare (**2**).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 630 m, CvP, on dead standing *Pinus sylvestris* trunk, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-14406; Bór na Czerwonem (24) Nature Reserve, 49°27'32.6"N, 20°02'04.2"E, on trunk of dead standing *Pinus sylvestris* tree, 17 Oct. 2011, leg. D. Karasiński 6611 (KRAM F-58381); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, on living trunk of *Pinus*, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50572 (Wojewoda et al. 2004 as *Phellinus pini* (Brot.) A. Ames).

REMARKS. The species is in the Red List as *Ph. pini*.

**Porphyrellus porphyrosporus** (Fr.) E.-J. Gilbert – **R**; coniferous and spruce with *Alnus incana* forest, peat bog; on the ground; mycorrhizal; summer and autumn (Aug., Sept.); rare (**4**).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 4 km SE of Piekielnik, ca 17 km SW of Nowy Targ, ca 660 m, pine-spruce forest, on the ground, 1 Aug. 1970, leg. Z. Heinrich, KRAM F-27122; **DG 39-83**: Domański Wierch hill, ca 740 m, ca 15 km SW of Nowy Targ, spruce forest with *Alnus incana*, on the ground, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-27121; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973, as *P. pseudoscaber* Singer); CvP, on the ground (Wojewoda et al. 2004); **EG 31-32**: Bór Bielski (XII) forest, spruce forest on left side of Łopuszna–Nowa Biała road, ca 2 km NW of Nowa Biała, ca 8 km SE of Nowy Targ, ca 610 m, on the ground, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-19090.

!\***Porpoloma** cf. **metapodium** (Fr) Sing. – spruce forest; on the ground; probably saprobic; autumn (Sept.); rare (**1**).

DISTRIBUTION. **EG 31-22**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 6 km E of Nowy Targ, spruce forest, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-37797.

\**Porpomyces mucidus* (Pers.) Jülich – R; coniferous forest; on stumps and decayed trunks; saprobic; spring, autumn (May, Sept.); rare (2).

DISTRIBUTION. **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, 580–600 m, pine-spruce forest, in *Sphagnum*, on trunk, 18 May 1973, leg. *W. Wojewoda*, KRAM F-32335; **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, decayed trunk, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-32334.

REMARKS. The species is in the Red List as *Ceriporiopsis mucida* (Pers.) Gilb. & Ryvarden.

\**Postia caesia* (Schrad.) P. Karst. – spruce forest; on stumps and fallen *Picea abies* twigs; saprobic; autumn (Sept., Oct.); rare (3).

DISTRIBUTION. **DG 38-69**: Las Cikówka (V) forest, N part, 49°25'31.5"N, 19°49'01.8"E, 677.6 m, spruce forest, 14 Oct. 2010, leg. *Z. Heinrich*, KRAM F-56724; **EG 30-01**: Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, ca 3 km W of Nowy Targ, spruce forest, on fallen *Picea abies* twigs, 11 Oct. 1984, leg. *W. Wojewoda*, KRAM F-27071; **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 580 m, ca 7 km SE of Nowy Targ, spruce forest, on *Picea abies* stump, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-27070.

\**Postia fragilis* (Fr.) Jülich – coniferous forest; on wood of coniferous trees; saprobic; autumn (Sept., Oct.); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, near Nowy Targ, in coniferous forest (*Picea*, *Pinus*), on dead trunk, 2 Oct. 1970, leg. *I. Jalocho* & *Z. Heinrich*, KRAM F-11071; **DG 38-43**: Bór koło Chyżnego forest, N part (II, near Borowy Potok), spruce forest with sparse *Pinus*, in brushwood with ?*Salix* and young *Picea*, on very decayed trunk, 17 Sept. 2011, leg. *H. Komorowska*, KRAM F-49580.

*Postia leucomallella* (Murrill) Jülich – coniferous forest, peat bogs; on wood of coniferous trees, on timberwood; saprobic; summer and autumn (June, Aug.–Oct.); rare (3).

DISTRIBUTION. **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.5"N, 19°42'12.9"E, on decayed wood of fallen *Pinus x rhaetica* trunk, 27 Aug. 2010, leg. *D. Karasiński* 5857; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'35.3"N, 20°02'09.6"E, on timberwood, 17 Oct. 2011, leg. *D. Karasiński* 6625; Bór na Czerwonem (X) forest, near Nowy Targ, ca 600 m, forest and peatbog, on lying stump, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17158; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *VuP*, on lying rotten trunk of *Pinus* sp. (Wojewoda et al. 2004, as *Oligoporus leucomallellus* (Murrill) Gilb. & Ryvarden); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.7"N, 20°08'45.0"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. *D. Karasiński* 7179 (KRAM F-58605).

\**Postia stiptica* (Pers.) Jülich – mixed and coniferous forest; on fallen *Picea abies* trunks and stumps, sometimes on living trees; saprobic; summer and autumn (July–Oct.); frequent (9).

DISTRIBUTION. **DG 29-90**: between Odrowąż and Żary, N of Czarny Dunajec, on right side of Odrowąż–Żary road, 49°29'26.82"N, 19°50'37.42"E, 657.9 m, spruce forest with *Betula*, and *Sorbus*, *Vaccinium*, moss (partial clearing), on *Picea* trunk, 30 Aug. 2011, leg. *H. Komorowska*, KRAM F-49769; **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on standing dead *Picea*, 2 Sept. 2011, leg. *H. Komorowska*, KRAM F-49748; **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., on trunk, 14 July 2012, leg. *M. Pilch*, KRAM F-49583; **DG 37-89**: Las Brzegi (I, Graniowa Droga) forest, SE of Chyżne, 49°24'42.87"N, 19°41'00.46"E, 664.3 m, spruce forest, *Sorbus*, *Rubus*, *Vaccinium*, ferns, in dry

undergrowth – conifer needles, 2 Sept. 2011, *leg. H. Komorowska*, KRAM F-49768; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, on base of living *Picea abies* tree, 9 Oct. 2012, *leg. D. Karasiński* 8955 (KRAM F-58629); **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jabłonka road, edge of forest, on trunk, 15 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49581; **EG 30-00**: Bór na Grelu (VIII) forest, N of Ludźmierz, on right side of Ludźmierz–Trute road, ?young forest (*Populus tremula* and *Picea* sp.) ?spruce forest (on old clearing), on *Picea* trunk, 20 July 2010, *leg. M. Pilch*, KRAM F-56736; **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 580 m, ca 7 km SE of Nowy Targ, spruce forest, on *Picea abies* stump, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-27073; spruce wood, on *Picea abies* stump, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-27072; **EG 31-32**: Bór Bielski (XII, Brzezie) forest, NE part, 49°27'32.69"N, 20°08'06.74"E, 575.7 m, on living *Picea*, 30 Apr. 2011, *leg. H. Komorowska*, KRAM F-49211.

\**Postia tephroleuca* (Fr.) Jülich – edge of young pine-spruce forest; on wood of deciduous tree; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, on wood of deciduous tree, 17 Oct. 2010, *leg. Z. Heinrich*, KRAM F-56725.

*Psathyrella candolleana* (Fr.: Fr.) Maire – riverine scrub and forest; on the ground and debris from deciduous tree; saprobic; spring to autumn (Apr., May, July–Sept.); frequent (7).

DISTRIBUTION. **DG 39-43**: on left bank of Czarny Dunajec river, between Czarny Dunajec and Chrace village, *Alin*, 21 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26416; **EG 30-10**: near Ludźmierz, on bank of Wielki Rogoźnik stream, *AlPa*, on the ground, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11278; **EG 30-12**: alder brushwood on bank of Czarny Dunajec river, between Ludźmierz and Nowy Targ, ca 2.5 km SW of Nowy Targ, 600–620 m, 1 Sept. 1983, *leg. Z. Heinrich*, KRAM F-32544; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on remains of wood and leaves (Wojewoda et al. 2004); **EG 30-34**: between Szaflary Dolne and Nowy Targ, *AlPa*, on debris of deciduous tree, 11 May 1971, *leg. Z. Heinrich*, KRAM F-11336; **EG 30-44**: little alder forest on bank of Biały Dunajec river, between Szaflary and Nowy Targ, near Bór na Czerwonem (X) forest, 21 July 1971, *leg. Z. Heinrich*, KRAM F-26418; **EG 31-04**: near Harkłowa, on bank of Dunajec river, in riverine scrub (*Alnus incana*), on the ground, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-11189.

\**Psathyrella fibrillosa* (Pers.: Fr.) Maire – pine-spruce forest; in litter; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekienik village, ca 650 m, 13 Oct. 1971, *leg. Z. Heinrich*, KRAM F-26399.

\**Psathyrella microrhiza* (Lasch: Fr.) Konrad & Maubl. – R; riverside mountain alder; in litter; saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 39-48**: Rogoźnik, ca 11 km SW of Nowy Targ, 620–640 m, *Alin* on bank of Rogoźnik stream, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-26398; **DG 39-71**: between Czarny Dunajec and Podczerwone, on bank of river, *Alin*, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26415.

\**Psathyrella pennata* (Fr.) A. Pearson & Dennis – pine-spruce forest; on litter and burnt ground; saprobic; summer (Aug.); rare (2).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekienik village, ca 650 m, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-26405; **DG 38-62**: between Piekienik and Bór koło (II) Chyżnego forest, ca 6 km SE of Jabłonka, on burnt ground, 30 Aug. 1984, *leg. W. Wojewoda*, KRAM F-26404.



\**Psathyrella potteri* A.H. Sm. – pine-spruce forest; on the ground; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 30-45**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, near Szaflary, 600–640 m, pine-spruce forest, on the ground, 31 July 1976, leg. H. Komorowska, KRAM F-26419.

\**Psathyrella pseudogracilis* (Romagn.) M.M Moser – riverside mountain alder; on the ground; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 39-43**: between Czarny Dunajec and Chraca, on left bank of Czarny Dunajec river, Alin, 21 Aug. 1984, leg. W. Wojewoda & Z. Heinrich, KRAM F-26417.

\**Psathyrella spadiceogrisea* (Schaeff.) Maire – alder forest; on the ground; saprobic; spring (May); rare (1).

DISTRIBUTION. **EG 30-44**: between Szaflary and Nowy Targ, near Bór na Czerwonem (X) forest, little alder forest on bank of Biały Dunajec river, 25 May 1971, leg. Z. Heinrich, KRAM F-26400.

*Pseudohydnum gelatinosum* (Scop.: Fr.) P. Karst. – coniferous forest; on fallen rotten trunks and stumps of coniferous trees, sometimes apparently on the ground (on wood buried in soil); saprobic; summer to autumn (Aug.–Oct.); frequent (8).

DISTRIBUTION. **DG 37-18**: Forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on *Picea* trunk, 2 Sept. 2011, leg. M. Pilch, KRAM F-49733; **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, near Nowy Targ, in coniferous forest (*Pinus*, *Picea*), on the ground, 2 Oct. 1970, leg. Z. Heinrich & I. Jalocho, on dead trunk of coniferous tree, KRAM F-10922 (Wojewoda 1979); **DG 39-48**: in coniferous forest (*Picea*, *Pinus* sp.), near Rogoźnik village, near Nowy Targ, on dead trunk of coniferous tree, 3 Oct. 1970, leg. I. Jalocho & Z. Heinrich, KRAM F-10919 (Wojewoda 1979); **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna near Nowy Targ, in coniferous forest (*Picea*, *Pinus* sp.), on dead trunk of coniferous tree, 18 Aug. 1970, leg. I. Jalocho, KRAM F-10920 (Wojewoda 1979); Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, near Nowy Targ, in coniferous (*Picea*, *Pinus* sp.) forest, on dead trunk of coniferous tree, 19 Aug. 1970, leg. I. Jalocho, KRAM F-10921 (Wojewoda 1979); **EG 31-24**: Bór Harkłowski (XIII) forest, rotten stump, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-14607; **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 600 m, spruce forest, on dead decayed ?*Picea abies* stump, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-30018; leg. W. Wojewoda, KRAM F-30019; **EG 31-32**: Bór Bielski (XII) forest between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m (*Pinus sylvestris* and *Picea abies*), on decayed stump of coniferous tree, 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25924; **EG 31-42**: Bór Bielski (XII) forest, near Nowa Biała, ca 600 m, spruce forest, rotten stump, 30 Aug. 1972, leg. Z. Heinrich, KRAM F-16200 (Wojewoda 1979).

*Pseudomerulius aureus* (Fr.) Jülich – R; coniferous forest; on decayed wood; saprobic; spring and autumn (May, Sept.); rare (2).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, near Księżówka) forest, between Jabłonka and Piekelnik, ca 21 km W of Nowy Targ, ca 625 m, pine forest, on dead twigs of *Pinus sylvestris* lying on the ground, 18 May 1973, leg. W. Wojewoda, KRAM F-19490; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, near Nowy Targ, ca 630 m, in peatbog, on fence post, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-14375 (Wojewoda 2003); ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, at edge of PrS and VuP, on lying fragments of dead coniferous tree trunk (Wojewoda et al. 2004).

\**Psilocybe coprophila* (Bull.: Fr.) P. Kumm. – R; coniferous forest; on horse dung; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest (*Picea*, *Pinus*), on horse dung, 6 July 1970, *leg. I. Jalocha & Z. Heinrich*, KRAM F-11072.

\**Psilocybe semilanceata* (Fr.) P. Kumm. – coniferous forest, in open area; in grass; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-01**: Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, ca 3 km W of Nowy Targ, ca 600–620 m, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27734; *leg. Z. Heinrich*, KRAM F-27735.

\**Psilocybe strictipes* Singer & A.H. Sm. – riverside mountain alder; among mosses; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-48**: *Alin* on bank of Wielki Rogoźnik stream, ca 8 km SW of Nowy Targ, 620–640 m, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-32680.

REMARKS. In Poland the species was recorded only from the Bory Tucholskie forest (Osiny Reserve) and from Bory Tucholskie National Park (Komorowska 2000; Grzesiak et al. 2017).

*Psilocybe turficola* J. Favre – E; peatbog; among mosses; saprobic; summer (June); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973, as *P. atrobrunnea* (Lasch) Gill. ss. auct.); *PrS*, among *Sphagnum* sp. (Wojewoda et al. 2004); **EG 30-44**: edge of Bór na Czerwonem (X) forest, between Szaflary Dolne and Nowy Targ, on peaty soil, in mossy place (*Sphagnum*), 11 June 1971, *leg. I. Jalocha*, KRAM F-11358.

\**Pycnoporus cinnabarinus* (Jacq.) P. Karst. – R; mixed and deciduous forest, peatbog; on fallen trunks, branches and twigs of deciduous trees; saprobic; from spring to autumn (Apr.–June, Aug.–Oct.); frequent (8).

DISTRIBUTION. **DG 38-13**: Piekielnik, Bór koło Chyżnego (II, Księża Soślina) forest, on fallen *Salix* sp. branch, 8 Oct. 2012, *leg. D. Karasiński* 8924b (KRAM F-58271); **DG 38-27**: Puścizna Mała (14) peatbog, 2 km SE of Piekielnik, on left side of Czarny Dunajec–Jabłonka road, on peat dome (*Pinus*, *Betula*, *Vaccinium uliginosum*, *V. vitis-idaea*, *Calluna vulgaris*, *Oxycoccus*, ferns), on fallen twig of *Betula*, 1 Sept. 2012, *leg. M. Sadowski*, KRAM F-56851; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'00.7"N, 19°41'57.2"E, *Alin*, on bark of dead hanging *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7049a (KRAM F-58307); **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, 700–720 m, on bank of Cichy stream, *Alin*, lying *Alnus incana* trunk, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25605; **EG 20-81**: Bór na Grelu (VIII) forest, N part, near Lasek railway station, on fallen twigs, 29 Apr. 2011, *leg. M. Lysek*, KRAM F-49207; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), 49°26'44.67"N, 20°00'37.5"E, 564.5 m, young spruce forest with sparse old *Picea*, on fallen twig of deciduous tree, 27 June 2012, *leg. B. Pleban*, KRAM F-49555; Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, on fallen twig, 3 May 2011, *leg. M. Sadowski*, KRAM F-58058; **EG 30-44**: Bór na Czerwonem (X, Czerwony Bór) forest, SW part of forest, near Szaflary, 49°26'41.81"N, 20°01'47.16"E, 622.4 m, on fallen twig, 17 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49481; **EG-31-52**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.0"N, 20°07'41.1"E, willow brushwood on bank of Białka river, on fallen *Salix eleagnos* trunk, 24 May 2012, *leg. D. Karasiński* 7099a (KRAM F-58445).

*Radulomyces confluens* (Fr.) M.P. Christ. – mixed and deciduous forest; on decayed wood; saprobic; spring and summer (Apr., Aug.); frequent (6).

DISTRIBUTION. **DG 39-51**: Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 670 m, cemetery, half-burnt stump, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-25255; **DG 49-11**: between Ciche and Podczerwone villages, hill without name, 788 m, ca 17 km SW of Nowy Targ, *Alin*, lying on the ground, dead decorticated *Picea abies* twigs, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25614; **EG 30-05**: Nowy Targ, *Alin* near

confluence of Biały Dunajec and Czarny Dunajec rivers, fallen twigs of deciduous tree, ca 580 m, 14 Apr. 1972, leg. W. Wojewoda, KRAM F-25256; **EG 30-23**: between Bór Nowotarski (IX) forest and Ludźmierz, on right bank of Czarny Dunajec, ca 600 m, Alin, trunk of deciduous tree, 14 Apr. 1972, leg. W. Wojewoda, KRAM F-25254; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on fallen decayed branches of deciduous tree or shrub (Wojewoda et al. 2004); **EG 31-12**: Łopuszna, the right bank of Dunajec river, ca 7 km E of Nowy Targ, ca 560 m, brushwood, on fallen twig of deciduous trees or shrubs, 14 Apr. 1972, leg. W. Wojewoda, KRAM F-25257.

\***Ramaria eumorpha** (P. Karst.) Corner – coniferous forest; on the ground and coniferous litter; mycorrhizal; summer (Aug.); rare (**3**).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, coniferous forest, near Czarny Dunajec, on the ground, 1 Aug. 1970, leg. Z. Heinrich, KRAM F-10946; **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'10.4"N, 19°42'10.5"E, on coniferous litter under *Pinus sylvestris* and *Pinus x rhaetica*, among grasses, 27 Aug. 2010, leg. D. Karasiński 5864; **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, in coniferous forest (*Picea*, *Pinus*), on the ground, 18 Aug. 1970, leg. I. Jalocha, KRAM F-11098.

**Resinicium bicolor** (Alb. & Schwein.) Parmasto – mixed and coniferous forest; on decayed wood of coniferous trees and *Salix* sp.; saprobic; spring to autumn (Apr.–Oct.); frequent (**12**).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, mixed forest, on fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8914b (KRAM F-58256); Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8915 (KRAM F-58266); on fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8892 (KRAM F-58428); leg. D. Karasiński 8898 (KRAM F-58360); 8904 (KRAM F-58389); 8906 (KRAM F-58374); leg. D. Karasiński 8907 (KRAM F-58443); leg. D. Karasiński 8909 (KRAM F-58373); **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on bark of *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8953 (KRAM F-58427); **DG 38-38**: Las Baligówka (IV) forest, between Piekielnik and Czarny Dunajec, on edge of coniferous forest, on trunk of *Picea abies*, 14 May 1971, leg. Z. Heinrich, KRAM F-11215; **DG 49-11**: Ciche village, ca 17 km SW of Nowy Targ, 700–720 m, on *Salix*, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-25675; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on *Picea* stump, 25 May 1971, leg. I. Jalocha, KRAM F-11250; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stump (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, ca 2 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, ca 590 m, spruce forest, on *Picea abies* twigs lying on the ground, 7 May 1981, leg. W. Wojewoda, KRAM F-19488; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'51.8"N, 20°08'44.5"E, pine-spruce forest, on wood of fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7189a (KRAM F-58604); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.7"N, 20°08'45.1"E, pine-spruce forest, on bark of fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7180 (KRAM F-58628); **EG 31-25**: Bór Harkłowski (XIII) forest, ca 3 km NE of Nowa Biała, ca 580 m, spruce forest, on right side of Nowa Biała–Dębno road, on trunk, 7 Apr. 1981, leg. H. Komorowska, KRAM F-19489; **EG 31-27**: between Dębno and Frydman, on bank of Białka stream, ca 15 km E of Nowy Targ, 525–535 m, lying trunk of coniferous tree, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-25673; **EG 31-32**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, on bark of dead *Picea abies* trunks lying on the ground, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25674; **EG 31-54**: Krempachy, Dolina Białki p.a., on right side of Krempachy–Nowa Biała road, brushwood on bank of Białka river (Alin), wet place, on trunk, 19 July 2010, leg. M. Pilch, KRAM F-56714.

\***Rhodocollybia butyracea** (Bull.: Fr.) Lennox f. *butyracea* – coniferous forest; on wet mossy litter; saprobic; autumn (Sept., Oct.); frequent (**6**).

DISTRIBUTION. **DG 38-26:** Las Gajka (III) forest near Piekienik village, in wet, mossy place, 13 Oct. 1971, *leg. I. Jalocha*, KRAM F-32260; **DG 38-38:** Las Baligówka (IV) forest, 4 km SE of Piekienik village, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-25732; **DG 38-48:** Las Baligówka (IV) forest, N part, 49°26'54.21"N, 19°48'18.31"E, 658.9 m, spruce forest, sparse *Larix*, *Pinus*, young *Betula*, on litter, 29 Oct. 2011, *leg. A. Sadowska*, KRAM F-58153; **EG 30-01:** Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-25729; **EG 30-40:** Pasieczny Las (VII) forest, ca 2 km E of Rogoźnik village, on the ground, 3 Oct. 1970, *leg. Z. Heinrich*, KRAM F-25734; **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-25731; 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-32262; *leg. I. Jalocha*, KRAM F-32261.

\**Rhodocollybia butyracea* (Bull.: Fr.) Lennox f. *asema* (Fr.: Fr.) Antonín, Halling & Noor-del. – coniferous forest; on litter; saprobic; summer and autumn (July, Aug., Oct., Nov.); frequent (9).

DISTRIBUTION. **DG 29-91:** forest S of Odrowąż (between Matejówka and Na Kamieniu), 49°29'26.54"N, 19°50'33.55"E, 664.9 m, spruce forest (old *Picea*) and sparse *Pinus*, with moss, *Vaccinium*, in dry undergrowth frequent conifer needles and cones, in moss, 30 Oct. 2011, *leg. M. Sadowski*, KRAM F-58152; **DG 38-38:** Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekienik village, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-25733; **DG 38-69:** Las Cikówka (V) forest, S part (Czarny Dunajec), 49°25'31.44"N, 19°49'01.29"E, 561.1 m, in spruce forest with sparse *Betula* sp. and frequent fallen spruces, among spruce needles, 29 Oct. 2011, *leg. A. Sadowska*, KRAM F-58151; **DG 38-73:** Bór koło Chyźnego (II) forest (CvP), 31 July 1984, *leg. W. Wojewoda*, KRAM F-25735; **DG 38-90:** Las Brzegi (I, near Wyżni Młyn) forest, S of Chyźne, 49°24'17.7"N, 19°41'20.4"E, 657.7 m, in clearing in spruce forest, 14 Oct. 2010, *leg. H. Komorowska*, KRAM F-58149; **DG 49-11:** Dziurów Lasek forest, NE of Chochołów, 49°23'18.43"N, 19°50'56.19"E, 742.8 m, spruce forest, sparse deciduous trees, 12 Nov. 2011, *leg. M. Sadowski*, KRAM F-49479; **EG 30-01:** Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-25730; **EG 31-31:** Bór Bielski (XII, Brzezine) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, 17 Oct. 2010, *leg. Z. Heinrich*, KRAM F-58148; **EG 31-32:** Bór Bielski (XII, Brzezine) forest, NE part, 49°27'30.55"N, 20°07'56.61"E, 586.3 m, spruce forest with few *Pinus sylvestris*, in undergrowth with *Urtica dioica* or only spruce needles, also wet (swampy) places with *Sphagnum*, 13 Aug. 2011, *leg. H. Komorowska*, KRAM F-56641.

*Rhodocollybia maculata* (Alb. & Schwein.: Fr.) Singer – coniferous forest; on the ground among mosses and peatmoss; on woody debris in needle litter; saprobic; summer to autumn (Aug.–Nov.); frequent (7).

DISTRIBUTION. **DG 38-36:** Las Gajka (III) forest, S of Piekienik village, in *Polytrichum*, 3 Aug. 1970, *leg. I. Jalocha*, KRAM F-25745; **EG 30-01:** Bór na Grelu (VIII) forest, ca 2 km N of Ludźmierz, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-25743; **EG 30-35:** Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, marshy coniferous forest (*VuP*), on the ground, in moss, 23 Aug. 2000, *leg. W. Wojewoda*, KRAM F-50565 (Wojewoda et al. 2004); Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, on remnants of wood and conifer needles, 8 Nov. 1973, *leg. Z. Heinrich*, KRAM F-25746; **EG 31-15:** Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, 16 Sept. 2011, *leg. M. Lysek*, KRAM F-49668; **EG 31-21:** Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of young pine-spruce forest, on litter (mosses, *Phragmites*), 17 Oct. 2010, *leg. R. Lysek*, KRAM F-58100; **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, in moss, 16 Oct. 1970, *leg. I. Jalocha*, KRAM F-25744; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-25747; **EG 31-42:** Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, spruce forest, 8 Sept. 1972, *leg. I. Jalocha*, KRAM F-32264.

\**Rhodocybe fallax* (Quél.) Singer – E; spruce forest; in litter; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-48**: between Frydman and Falsztyn, in coniferous forest (*Picea*), 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-11662.

\**Rickenella fibula* (Bull.: Fr.) Raithelh. – peatbog; on mossy woody debris; probably parasitic; summer (July); rare (2).

DISTRIBUTION. **DG 37-27**: near Otrębowski Brzegi (28) peatbog, SW of Jabłonka, 49°28'13.52"N, 19°38'59.25"E, 617.6 m, former peat dig among meadows and fields, in hollow with *Salix*, mosses and *Sphagnum*, on rim – *Scirpus*, 14 July 2012, leg. *M. Pilch*, KRAM F-49660; leg. *M. Pilch*, KRAM F-49661; **DG 38-29**: Puścizna Rękowiańska (19) peatbog, between Czarny Dunajec and Baligówka, on mossy remnants of wood, 31 July 1970, leg. *Z. Heinrich*, KRAM F-25241.

\**Roridomyces rorida* (Scop.: Fr.) Rexer – spruce, spruce-fir and pine-spruce forest; in litter among mosses; saprobic; summer (July); rare (5).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. *M. Pilch*, KRAM F-49811; **DG 37-88**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'31.71"N, 19°39'47.79"E, 639.9 m, spruce forest, in brushwood (*Sorbus*, *Rubus* and mosses, *Vaccinium*, *Fragaria* sp.), in litter under *Picea*, 14 July 2012, leg. *M. Pilch*, KRAM F-49813; **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in brushwood with *Sorbus*, *Salix* and *Sphagnum*, 15 July 2012, leg. *M. Sadowski*, KRAM F-49812; **DG 39-55**: Soślina (VI) forest, E of Czarny Dunajec, 49°26'22.68"N, 19°54'09.52"E, 660.6 m, on *Sphagnum*, 1 July 2011, leg. *H. Komorowska*, KRAM F-59011; **EG 30-23**: Bór Nowotarski (IX) forest, pine-spruce forest, ca 2 km SW of Nowy Targ, in moss, 11 July 1984, leg. *Z. Heinrich*, KRAM F-257951.

\**Rugosomyces carneus* (Bull.: Fr.) Bon – riverside mountain alder, on border between alder grove (with *Alnus incana*) and pasture; on the ground; saprobic; summer (July, Aug.); rare (2).

DISTRIBUTION. **DG 39-18**: near Długopole, 7 km of Nowy Targ, on right bank of Czarny Dunajec river, on border between brushwood with *Alnus incana* and pasture, on the ground, 11 July 1984, leg. *W. Wojewoda* & *H. Komorowska*, KRAM F-25541; **DG 39-43**: between Chraca village and Czarny Dunajec, on left bank of Czarny Dunajec river, *Alin*, on the ground, 21 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25715.

\**Russula aeruginea* Lindblad – young forest, peatbog; on the ground among mosses under *Betula* or *Pinus*; mycorrhizal; summer and autumn (Aug., Sept.); rare (3).

DISTRIBUTION. **DG 38-27**: Puścizna Mała (14) peatbog, 2 km SE of Piekienik, on left side of Czarny Dunajec–Jabłonka road, on peat dome (*Pinus*, *Betula*, *Vaccinium uliginosum*, *Vaccinium vitis-idaea*, *Calluna vulgaris*, *Oxycoccus*, ferns). 1 Sept. 2012, leg. *H. Komorowska*, KRAM F-56667; **DG 38-50**: Pustać Chyżne (5) peatbog, exploited peatland S of Jabłonka, 49°26'37.4"N, 19°42'00.7"E, 654.4 m, young pine forest, single old *Pinus* and mosses, *Sphagnum*, *Vaccinium myrtillus*, *V. uliginosum*, *V. vitis-idaea*, 4 Sept. 2012, leg. *A. Sadowska*, KRAM F-56876; **DG 38-73**: Bór koło Chyżnego (II) forest, ca 4 km E of Chyżne village, S of Pirogówka mount, ca 640–710 m, marshy young birch-pine forest, near Puścizna Wielka (10) peatbog, 24 Aug. 1984, leg. *W. Wojewoda*, KRAM F-26235.

\**Russula albonigra* (Krombh.) Fr. – coniferous forest; on the ground, under coniferous trees; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. *G. Końska*, KRAM F-49842.

\**Russula amethystina* Quéf. – coniferous forest; on the ground under *Picea* or *Pinus*; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, CvP, 1 Sept. 1983, leg. H. Komorowska, KRAM F-26234; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, ca 580–600 m, pine-spruce forest, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-26289.

\**Russula atrorubens* Quéf. – coniferous forest; on the ground under deciduous and coniferous trees; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-49857; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. P. Roux, KRAM F-49856.

\**Russula azurea* Bres. – pine-spruce forest; on the ground under *Picea abies*; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekieniak village, ca 17 km SW of Nowy Targ, 650–670 m, under *Picea abies*, 1 Aug. 1970, leg. I. Jalocho, KRAM F-26303.

\**Russula badia* Quéf. – peat dome and spruce forest; on the ground under *Picea* and *Pinus*; mycorrhizal; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-69**: Las Baligówka (IV) forest, N part, 49°25'31.5"N, 19°49'01.8"E, 677.6 m, spruce forest, 14 Oct. 2010, leg. M. Lysek, KRAM F-49611; **DG 39-27**: Puścizna Długopole (20) peatbog, NE of Czarny Dunajec. 49°28'04"N, 19°55'25"E, on peat dome, *Betula*, *Pinus* and *Oxycoccus*, *Calluna vulgaris*, *Ledum palustre*, 30 Aug. 2012, leg. H. Komorowska, KRAM F-56665.

\**Russula betularum* Hora – peat dome, coniferous forest; on the ground under *Betula*; mycorrhizal; summer and autumn (Aug., Sept.); rare (3).

DISTRIBUTION. **DG 38-28**: Baligówka (18) peatbog, NW of Czarny Dunajec, on peat dome, 11 Aug. 2012, leg. H. Komorowska, KRAM F-49542; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus* and some *Sorbus* and *Betula*, 16 Sept. 2011, leg. G. Końska, KRAM F-49843; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, leg. G. Końska, KRAM F-49541.

*Russula claroflava* Grove – coniferous forest; on the ground among mosses under *Pinus* sp.; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **DG 38-36**: Las Gajka (III) forest, ca 2 km S of Piekieniak, spruce-pine forest, by wayside, in undergrowth – mosses and *Vaccinium* sp., 1 Sept. 2012, leg. G. Końska, KRAM F-56661; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50574 (Wojewoda et al. 2004).

\**Russula cyanoxantha* (Schaeff.) Fr. – pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-56668.

*Russula decolorans* (Fr.: Fr.) Fr. – coniferous forest; on the ground among *Sphagnum* under *Pinus*; mycorrhizal; summer to autumn (July–Oct.); frequent (18).

DISTRIBUTION. **DG 29-91**: forest S of Odrowąż (between Matejówka and Na Kamieniu), 49°29'26.54"N, 19°50'33.55"E, 664.9 m, spruce forest (old *Picea*) and sparse *Pinus* with moss, *Vaccinium* sp., in dry undergrowth with frequent conifer needles and cones, 30 Oct. 2011, leg. M. Sadowski, KRAM F-56867; **DG 38-26**: Las Sosnówka forest, ca 1 km S of Piekienik village, ca 650 m, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-26243; **DG 38-36**: Las Gajka (III) forest, pine-spruce forest, ca 1.5 km S of Piekienik village, ca 640–660 m, 3 Aug. 1970, leg. I. Jalocha, KRAM F-26237; leg. Z. Heinrich, KRAM F-26240; leg. Z. Heinrich, KRAM F-26241; Las Gajka (III) forest, ca 2 km S of Piekienik, spruce-pine forest, by wayside, in undergrowth – mosses and *Vaccinium* sp., 1 Sept. 2012, leg. A. Sadowska, KRAM F-49963; **DG 38-50**: Pustać Chyżne (5) peatbog, exploited peatland S of Jablonka, 49°26'37.4"N, 19°42'00.7"E, 654.4 m, young pine forest, single old *Pinus*, and mosses, *Sphagnum*, *Vaccinium myrtillus*, *V. uliginosum*, *V. vitis-idaea*, 4 Sept. 2012, leg. M. Sadowski, KRAM F-49964; **DG 38-59**: Las Cikówka (V) forest, N part (near Las Baligówka (IV) forest), 49°26'03.97"N, 19°49'03.98"E, 682.2 m, spruce forest with *Betula*, sparse *Pinus*, frequent mosses and ferns, 29 Oct. 2011, leg. A. Sadowska, KRAM F-56866; **DG 39-35**: Puścizna Długopole (20) peatbog, SW of Długopole, S edge of peatbog, 15 Sept. 2011, leg. M. Lysek, KRAM F-49851; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, 15 Sept. 2011, leg. M. Lysek, KRAM F-49845; **EG 20-91**: Bór na Grelu (VIII) forest, N of Ludźmierz, E part, edge of forest, 16 Oct. 2010, leg. M. Pilch, KRAM F-49617; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, pine forest, 10 Aug. 1983, leg. H. Komorowska, KRAM F-26242; Bór na Czerwonem (X) forest, near Nowy Targ, ca 620 m, pine forest with *Sphagnum*, on the ground, in moss, 6 Sept. 1973, leg. W. Wojewoda, KRAM F-17139; Bór na Czerwonem (24) Nature Reserve, pine forest (SP), near peat dome, 16 Sept. 2011, leg. G. Końska, KRAM F-56868; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, VuP, on the ground (Wojewoda et al. 2004); **EG 30-32**: Bór Nowotarski (X) forest, edge of forest, 49°27'10.74"N, 20°00'15.96"E, 610.2 m, old spruce forest, 12 Aug. 2012, leg. G. Końska, KRAM F-49539; **EG 30-34**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, pine-spruce forest, 21 July 1971, leg. Z. Heinrich, KRAM F-26239; **EG 31-15**: Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, 16 Sept. 2011, leg. M. Lysek, KRAM F-56869; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, ca 580–595 m, 14 Aug. 1970, leg. I. Jalocha, KRAM F-26236; **EG 31-22**: Bór Bielski (XII, Brzezic) forest, NE part, near Łopuszna–Nowa Biała road, 16 Sept. 2011, leg. M. Lysek, KRAM F-56669; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, pine-spruce forest 570–580 m, 17 Aug. 1970, leg. Z. Heinrich, KRAM F-26238; CvP forest, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-26245; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'00.18"N, 20°10'43.56"E, 552.6 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, leg. G. Końska, KRAM F-49639; **EG 31-27**: Dolina Białki p.a., SE of Dębno, 49°27'29.78"N, 20°12'42.08"E, 516.3 m, brushwood on bank of river, 14 Aug. 2012, leg. G. Końska, KRAM F-49540; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25950.

\**Russula delica* Fr. – riverside thickets; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 49-11**: Ciche village, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, in riverside thickets with coniferous trees, 28 Aug. 1984, leg. W. Wojewoda, KRAM F-26244.

*Russula emetica* (Schaeff.: Fr.) Pers. – coniferous forest, raised peatbog; on the ground among mosses; mycorrhizal; summer to autumn (July–Oct.); frequent (14).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekienik village, ca 650 m, 13 Oct. 1971, leg. I. Jalocha, KRAM F-26258; **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. H. Komorowska, KRAM F-49860 – as *R. emetica* var. *emetica*; **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, ca 17 km SW of Nowy Targ, 650–670 m, pine-spruce forest, 13 Oct. 1971, leg. I. Jalocha, KRAM F-26253; 2 Oct. 1970, leg. Z. Heinrich, KRAM F-26255; **DG 38-51**: Pustać Chyżne (5) peatbog, exploited peatland S of Jablonka, 49°26'42.2"N, 19°42'2"E, 649.9 m, young pine forest, single old *Pinus*, and mosses,

*Sphagnum*, *Vaccinium myrtillus*, *V. uliginosum*, *V. vitis-idaea*, 4 Sept. 2012, leg. A. Sadowska, KRAM F-56663 – as *R. emetica* var. *emetica*; **DG 39-27**: Puścizna Długopole (20) peatbog, NE of Czarny Dunajec, 49°28'04"N, 19°55'25"E, on peat dome (*Betula*, *Picea*, *Populus tremula*), 30 Aug. 2012, leg. H. Komorowska, KRAM F-58096; leg. H. Komorowska, KRAM F-58097 (as var. ?*longipes*); **DG 39-55**: Soślina (VI, Sośnina) forest, marshy pine-spruce forest, ca 4 km S of Czarny Dunajec village, ca 670 m, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-26248; **EG 30-01**: Do Grela (30) peatbog, ca 2 km NE of Ludźmierz, ca 600 m, 11 Oct. 1984, leg. Z. Heinrich, KRAM F-26287; **EG 30-23**: Bór Nowotarski (IX) forest, 600–620 m, pine-spruce forest (*CvP*), 16 Oct. 1970, leg. I. Jalocho, KRAM F-26257; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, marshy pine-spruce forest, 24 July 1971, leg. W. Wojewoda, KRAM F-26247; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, marshy pine-spruce forest, 8 Sept. 1972, leg. Z. Heinrich; KRAM F-26249; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, pine forest with *Picea*, on the ground, in moss, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-17146; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, marshy pine forest, 10 Aug. 1983, leg. H. Komorowska, KRAM F-26251; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP* (Grodzińska et al. 1973); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50575 (Wojewoda et al. 2004); **EG 31-15**: Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, 16 Sept. 2011, leg. G. Końska, KRAM F-49844; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest (*CvP*), 22 Sept. 1966, leg. W. Wojewoda, KRAM F-26250; 18 Aug. 1970, leg. I. Jalocho, KRAM F-26259; marshy pine-spruce forest, 16 Oct. 1970, leg. I. Jalocho, KRAM F-26256; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, leg. W. Wojewoda, KRAM F-25951; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, ca 580–600 m, spruce forest with admixture of *Pinus*, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-26252; pine-spruce forest, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-26254.

\**Russula fellea* (Fr.: Fr.) Fr. – coniferous forest; on the ground under *Picea*; mycorrhizal; summer and autumn (July–Nov.); frequent (7).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., near felled tree, 14 July 2012, leg. M. Sadowski, KRAM F-49622; **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, ca 4 km SE of Piekienik village, ca 17 km SW of Nowy Targ, 650–670 m, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-26278; **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula ?pubescens*), near *Picea* trunk, 11 Nov. 2011, leg. M. Sadowski, KRAM F-49620; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., 16 Oct. 2010, leg. Z. Heinrich, KRAM F-49609; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, 580–595 m, pine-spruce forest, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-26277; **EG 31-22**: Bór Bielski (XII, Brzezic) forest, NE part, near Łopuszna–Nowa Biała road, 16 Sept. 2011, leg. M. Lysek, KRAM F-56671; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 21 Aug. 1970, leg. I. Jalocho, KRAM F-26279.

\**Russula foetens* Pers.: Fr. – coniferous forest; on the ground, under *Pinus* and *Picea*; mycorrhizal; autumn (Sept., Oct.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, ca 4 km SE of Piekienik village, 650–670 m, ca 17 km SW of Nowy Targ, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-26262; **EG 30-40**: Pasieczny Las (VII) forest, pine-spruce forest, ca 2 km E of Rogoźnik village, ca 640–660 m, 3 Oct. 1970, leg. I. Jalocho, KRAM F-26263; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, coniferous forest, 16 Oct. 1970, leg. Z. Heinrich, KRAM



F-26261; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, coniferous forest, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26260.

\**Russula fragilis* (Pers.: Fr.) Fr. – pine forest, raised peatbog; on the ground among mosses, under *Pinus*; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50576; **EG 31-15**: Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, 16 Sept. 2011, leg. G. Końska, KRAM F-49847.

\**Russula grisescens* (Bon & Gaugué) Marti – pine-spruce forest with *Betula*; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'00.18"N, 20°10'43.56"E, 552.6 m, pine-spruce forest and sparse *Betula*, under *Picea abies*; 14 Aug. 2012, leg. G. Końska, KRAM F-56670.

REMARKS. In Poland the species was recorded only from the Tatra Mts and from the Pogórze Izerskie foothills (Ronikier and Adamčík 2009; Gierczyk et al. 2018).

\**Russula integra* (L.) Fr. – pine-spruce forest; on the ground, among mosses, under conifers; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26270; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, 580–600 m, pine-spruce forest, 8 Sept. 1972, leg. I. Jalocho, KRAM F-26269.

!\**Russula longipes* (Singer) Moëne-Loec. & Raumaux – coniferous forest, peat dome; on the ground; mycorrhizal; summer to autumn (Aug.–Oct.); frequent (11).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, leg. M. Lysek, KRAM F-49616; **DG 38-27**: Puścizna Mała (14) peatbog, 2 km SE of Piekielnik, on left side of Czarny Dunajec–Jabłonka road, peat dome (*Pinus*, *Betula*, *Vaccinium uliginosum*, *Vaccinium vitis-idaea*, *Calluna vulgaris*, *Oxycoccus*, ferns), 1 Sept. 2012, leg. A. Sadowska, KRAM F-4996; **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-58095; **DG 38-50**: Pustać Chyżne (5) peatbog, exploited peatland S of Jabłonka, 49°26'37.4"N, 19°42'00.7"E, 654.4 m, young pine forest, single old *Pinus*, and mosses, *Sphagnum*, *Vaccinium myrtillus*, *V. uliginosum*, *V. vitis-idaea*, 4 Sept. 2012, leg. A. Sadowska, KRAM F-49967; **DG 38-56**: Puścizna Wielka (10) peatbog, W of Czarny Dunajec, peat dome with frequent *Pinus*, single *Picea* and *Ledum palustre*, *Calluna vulgaris*, *Lycopodium*, *Vaccinium vitis-idaea*, *V. uliginosum*, 49°26'11.51"N, 19°46'38.78"E, 679.6 m, 2 Sept. 2012, leg. A. Sadowska, KRAM F-56666; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, 14 Oct. 2010, leg. M. Lysek, KRAM F-49615; **DG 39-28**: Puścizna Franków (21) peatbog, on peat dome, 49°28'01"N, 19°56'15"E, *Pinus* and sparse *Betula* and *Calluna vulgaris*, *Ledum palustre*, 30 Aug. 2012, leg. A. Sadowska, KRAM F-49962; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., 16 Oct. 2010, leg. M. Pilch, KRAM F-49613; leg. M. Pilch, KRAM F-49614; **EG 31-15**: Bór Harkłowski (XIII) forest, S of Harkłowa, N part, pine-spruce forest, 16 Sept. 2011, leg. H. Komorowska, KRAM F-58094; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-49641; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, leg. G. Końska, KRAM F-49642; leg. G. Końska, KRAM F-49643.

REMARKS. Knudsen and Vesterholt (2012) distinguish neither the form *longipes* of *Russula emetica* nor *R. longipes*. In the collected material, many specimens with features of this form/species were identified; thus we adopted the name *R. longipes* after Index Fungorum for the specimens from the KON.

\**Russula maculata* Quéf. – coniferous forest with admixture of single deciduous trees; on the ground; mycorrhizal; autumn (Sept., Oct.); rare (3).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), 49°16'22"N, 19°26'27.03"E, pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. G. Końska, KRAM F-56672; **DG 38-69**: Las Cikówka IV forest, N part, 49°25'31.5"N, 19°49'01.8"E, 677.6 m, spruce forest, 14 Oct. 2010, leg. M. Lysek, KRAM F-49605; **EG 30-01**: Bór na Grełu (VIII) forest, N of Ludźmierz, E part, edge of forest, 16 Oct. 2010, leg. M. Pilch, KRAM F-49606.

\**Russula mustelina* Fr. – pine-spruce forest; on the ground, among mosses, under conifers; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, 580–595 m, pine-spruce forest, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-26285; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 22 Sept 1966, leg. W. Wojewoda, KRAM F-26265 (Pl. V, 6); leg. W. Wojewoda, KRAM F-26266; 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26267; leg. I. Jalocho, KRAM F-26271.

*Russula ochroleuca* Pers. – coniferous forest; on the ground among mosses, under conifers; mycorrhizal; summer to autumn (July–Nov.); frequent (12).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. M. Pilch, KRAM F-49621; leg. M. Sadowski, KRAM F-49623; **DG 38-26**: Las Sosnówka forest, little pine-spruce forest, ca 1 km S of Piekienik village, ca 650 m, 13 Sept. 1971, leg. I. Jalocho, KRAM F-26273; **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekienik village, ca 17 km SW of Nowy Targ, 650–670 m, 2 Sept. 1970, leg. Z. Heinrich, KRAM F-26276; **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest, on the ground, 2 Oct. 1970, leg. I. Jalocho, KRAM F-11181; **DG 38-67**: Bór koło Chyżnego (II) forest, near railway to Puścizna Wielka (10) peatbog, 49°25'37.74"N, 19°48'08.91"E, 694.5 m, 2 Sept. 2012, leg. H. Komorowska, KRAM F-56664; **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, 12 Nov. 2011, leg. M. Sadowski, KRAM F-49618; **EG 20-91**: Bór na Grełu (VIII) forest, N of Ludźmierz, E part, edge of forest, in litter (spruce needles), 16 Oct. 2010, leg. M. Pilch, KRAM F-49608; leg. R. Lysek, KRAM F-49607; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, E of shoe factory, 600–620 m, spruce forest, 23 Sept. 1981, leg. M. Czerwieniec, KRAM F-26292; Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, CvP, 1 Sept. 1983, leg. H. Komorowska, KRAM F-26246; Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, 600–620 m, pine-spruce forest, 17 Sept. 1970, leg. Z. Heinrich, KRAM F-26283; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, pine-spruce forest, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-26282; 24 July 1971, leg. W. Wojewoda, KRAM F-26272; marshy pine-spruce forest, 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26281; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP (Grodzińska et al. 1973); CvP, VuP, on the ground (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, 580–595 m, pine-spruce forest, 14 Aug. 1970, leg. I. Jalocho, KRAM F-26280; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-49635; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 16 Oct. 1970, leg. I. Jalocho, KRAM F-26274; 8 Sept. 1972, leg. Z. Heinrich, KRAM F-26275.

\**Russula olivacea* (Schaeff.) Pers. – pine-spruce forest; on the ground among mosses, under *Picea*; mycorrhizal; summer to autumn (Aug.–Oct.); rare (4).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-49846; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 8 Sept. 1982, leg. Z. Heinrich, KRAM F-26304; **EG 31-27**: Dolina Białki p.a., SE of Dębno, 49°27'29.78"N, 20°12'42.08"E, 516.3 m, riverside thickets with *Picea*, on bank of river near bridge, 14 Aug. 2012, leg. G. Końska, KRAM F-49640; **EG 31-31**: Bór Bielski (XII, Brzezcie) forest, NW part, spruce forest, sparse *Betula* sp. with mosses and *Vaccinium*, 17 Oct. 2010, leg. M. Pilch, KRAM F-49610.

*Russula paludosa* Britzelm. – coniferous forest, raised peatbog; on the ground, among *Sphagnum* or other mosses, under *Pinus*; mycorrhizal; summer to autumn (July–Oct.); frequent (15).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5 m, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. M. Pilch, KRAM F-49636; in *Vaccinium* shrubs, KRAM F-49638; **DG 38-19**: Puścizna Rękowiańska (19) peatbog, ca 2 km S of Załuczne, 650–660 m, 3 July 1970, leg. I. Jalocho, KRAM F-26286; **DG 38-36**: Las Gajka (III) forest, ca 2 km S of Piekielnik, spruce-pine forest, by wayside, in undergrowth – mosses and *Vaccinium* sp., 1 Sept. 2012, leg. A. Sadowska, KRAM F-56877; **DG 38-56**: Puścizna Wielka (10) peatbog, W of Czarny Dunajec, 49°26'11.51"N, 19°46'38.78"E, 679.6 m, peat dome with frequent *Pinus*, single *Picea* and *Ledum palustre*, *Calluna vulgaris*, *Lycopodium*, *Vaccinium vitis-idaea*, *V. uliginosum*, 2 Sept. 2012, leg. H. Komorowska, KRAM F-56878; **DG 38-61**: Bór koło Chyżnego (II) forest, ca 3 km NE of Chyżne, CvP, edge of forest, in *Sphagnum*, ca 640 m, 31 July 1984, leg. W. Wojewoda, KRAM F-25545; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne village, S of Pirogówka mount, 640–710 m, pine-birch forest, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-26290; **DG 38-79**: Las Cikówka (V) forest, SW part (Czarny Dunajec), 49°25'31.37"N, 19°48'47.86"E, 686.3 m, spruce-fir forest, in brushwood with *Sorbus*, *Salix*, and *Sphagnum*, 15 July 2012, leg. M. Pilch, KRAM F-49619; **DG 39-20**: Puścizna Rękowiańska (19) peatbog, NW of Czarny Dunajec, 49°28'22.38"N, 19°49'43.62"E, 654.9 m, 3 Sept. 2012, leg. M. Sadowski, KRAM F-49965; Puścizna Rękowiańska (19) peatbog, NW of Czarny Dunajec, 49°28'10"N, 19°49'37.6"E, 650.4 m, in brushwood – *Potentilla erecta*, 3 Sept. 2012, leg. M. Sadowski, KRAM F-49966; **DG 39-27**: Puścizna Franków (21) peatbog, near peat dome, 49°27'43"N, 19°56'07"E, forest (*Pinus* and young *Picea*) near peat dome, 30 Aug. 2012, leg. H. Komorowska, KRAM F-56881; **DG 39-35**: Puścizna Długopole (20) peatbog, SW of Długopole, S edge of peatbog, ferns, moss, 15 Sept. 2011, leg. M. Lysek, KRAM F-49838; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, 600–640 m, pine-spruce forest, 24 July 1971, leg. Z. Heinrich, KRAM F-26288; 10 Aug. 1983, leg. H. Komorowska, KRAM F-26294; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *VuP* (Grodzińska et al. 1973); *CvP*, *PrS*, *VuP*, on the ground under *Pinus* sp. (Wojewoda et al. 2004); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50577; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part, near Łopuszna–Harkłowa road, marshy spruce-pine forest, in undergrowth – mosses, sedges, *Eriophorum* sp., in moss, 16 Oct. 2010, leg. M. Pilch, KRAM F-49604; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-26291; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, leg. G. Końska, KRAM F-49637.

\**Russula puellaris* Fr. – coniferous forest; on the ground, under conifers; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-28**: Las Baligówka (IV) forest, 49°27'37.92"N, 19°48'17.16"E, 664.4 m, 11 Aug. 2012, leg. G. Końska & P. Roux, KRAM F-49858.

\**Russula queletii* Fr. – coniferous forest; on the ground, under *Picea*; mycorrhizal; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **EG 30-40**: Pasieczny Las (VII) forest, ca 2 km E of Rogoźnik village, 640–660 m, pine-spruce forest, 2 Oct. 1984, leg. Z. Heinrich, KRAM F-26268; **EG 31-27**: between Dębno and Nowa Biała, on bank of Białka river, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 26 Aug. 1985, leg. W. Wojewoda, KRAM F-27141.

\**Russula rhodopus* Zvára – R; coniferous forest with admixture of single deciduous trees, and in ?*Salix* brushwood and young *Picea* forest; on the ground in litter among mosses; mycorrhizal; autumn (Sept., Oct.); frequent (6).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II) forest, N part (Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-49859; leg. G. Końska, KRAM F-56873; Bór koło Chyżnego (II) forest, N part (Szałas), edge of forest by wayside, 49°27'28.36"N, 19°44'08.92"E, 654.7 m, pine forest with frequent young *Picea*, and sparse *Betula* with mosses and *Vaccinium*, 30 Oct. 2011, leg. M. Sadowski, KRAM F-56870; **DG 38-36**: Las Gajka (III) forest, ca 2 km S of Piekielnik, spruce-pine forest, by wayside, in undergrowth – mosses and *Vaccinium* sp., 1 Sept. 2012, leg. H. Komorowska, KRAM F-56660; **DG 38-38**: Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jablonka road, 15 Sept. 2011, leg. M. Lysek, KRAM F-49848; leg. M. Lysek, KRAM F-56673; **DG 38-43**: Bór koło Chyżnego forest, N part (II, near Borowy Potok), spruce forest and sparse *Pinus*, in brushwood with ?*Salix* and young *Picea*, 17 Sept. 2011, leg. G. Końska, KRAM F-56872; Bór koło Chyżnego forest, N part (II, near Sabalówka), 49°26'58.46"N, 19°44'01.32"E, 646.9 m, thicket in spruce-pine forest, wet undulating terrain, frequent mosses, 30 Oct. 2011, leg. A. Sadowska, KRAM F-56871; **DG 38-67**: Bór koło Chyżnego (II) forest, near railway to Puścizna Wielka (10) peatbog, 49°25'37.73"N, 19°47'11.59"E, 700.2 m, 2 Sept. 2012, leg. H. Komorowska, KRAM F-56662; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, 15 Sept. 2011, leg. M. Lysek, KRAM F-49841.

\**Russula sardonía* Fr. – mixed forest; on the ground under *Pinus*; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. M. Lysek, KRAM F-56875; **DG 38-43**: Bór koło Chyżnego forest, N part (II, near Borowy Potok), spruce forest with sparse *Pinus*, in brushwood with ?*Salix* and young *Picea*, 17 Sept. 2011, leg. H. Komorowska, KRAM F-56874.

\**Russula subfoetens* W.G. Sm. – mixed forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-28**: Las Baligówka (IV) forest, forest, 49°27'37.92"N, 19°48'17.16"E, 664.4 m, 11 Aug. 2012, leg. G. Końska, KRAM F-56879; leg. G. Końska & P. Roux, KRAM F-56880.

REMARKS. In Poland the species was recorded from four localities.

\**Russula turci* Bres. s. Maire – pine forest with single *Picea* and *Populus tremula*; on the ground, under conifers; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), pine forest with single *Picea* and *Populus tremula*, 17 Sept. 2011, leg. G. Końska, KRAM F-58098.

\**Russula vesca* Fr. – spruce forest, peatbog; on the ground, under conifers; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **DG 39-35**: Puścizna Długopole (20) peatbog, SW of Długopole, S edge of peatbog (*Pinus* sp., mosses and grass), 15 Sept. 2011, leg. M. Lysek, KRAM F-56700; **EG 31-32**: Bór Bielski (XII)

forest, ca 1 km N of Nowa Biała, ca 580–600 m, left side of Łopuszna–Nowa Biała road, spruce forest, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-26293.

\**Russula vinosa* Lindblad – pine-spruce forest, peatbog; on the ground among mosses, under conifers; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. **DG 39-35**: Puścizna Długopole (20) peatbog, SW of Długopole, S edge of peatbog, 15 Sept. 2011, *leg. M. Lysek*, KRAM F-56693; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, pine-spruce forest, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-26264.

*Russula virescens* (Schaeff.) Fr. – coniferous forest; on the ground, under trees; mycorrhizal; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under trees (Wojewoda et al. 2004).

\**Russula xerampelina* (Schaeff.) Fr. – coniferous forest; on the ground under conifers; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 31-36**: ca 10 km SE of Nowy Targ, coniferous forest (*Picea abies*, *Pinus sylvestris*) on bank of Białka river, ca 580 m, 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-27148.

*Schizophyllum commune* Fr. – coniferous, mixed and deciduous forest, also in town; on stumps, fallen branches and twigs of deciduous trees, more rarely on coniferous trees; saprobic and parasitic; spring to autumn (Apr., June–Sept.); frequent (10).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego forest, N part (II, Szałas), 49°16'22"N, 19°26'27.03"E, pine forest with single *Picea* and *Populus tremula*, on fallen twig of *Populus tremula*, 17 Sept. 2011, *leg. H. Komorowska*, KRAM F-58126 (with *Peniophora violaceolivida*); **DG 39-17**: Długopole village, on bank of Czarny Dunajec, ca 8 km W of Nowy Targ, ca 600 m, on fallen twigs of *Salix* sp., in deciduous forest (*Alin*), 11 July 1984, *leg. W. Wojewoda*, KRAM F-25959; **DG 39-52**: Czarny Dunajec near Nowy Targ, on *Picea abies* stump, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-10933 (Skirgiełło 1977); **EG 30-04**: Nowy Targ, centre of town, near old church, ca 600 m, on decaying stump of *Tilia*, 15 Apr. 1986, *leg. W. Wojewoda*, KRAM F-26387; **EG 30-15**: Nowy Targ, on bank of Biały Dunajec river, in deciduous forest (*Alin*), on fallen twig of *Alnus incana*, ca 600 m, 14 Apr. 1972, *leg. I. Jalocha*, KRAM F-6764; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, VuP, on stumps and dead lying branches of deciduous trees (Wojewoda et al. 2004); **EG 30-39**: Torfowisko koło Księżego Boru (26), post-peat area. 49°27'10.22"N, 20°06'01.21"E, 587.8 m, fallen twig of *Betula*, 30 Apr. 2011, *leg. A. Sadowska*, KRAM F-49204; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. G. Końska*, KRAM F-49482; Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'54.11"N, 20°07'10"E, 583.6 m, on fallen twigs, 30 Apr. 2011, *leg. H. Komorowska*, KRAM F-49196; **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'15.1"E, on fallen branch, 21 July 2012, *leg. D. Karasiński* 7497b (KRAM F-58461); **EG 31-42**: Bór Bielski (XII, Brzeznie) forest, S part, spruce-pine forest, in brushwood with many young *Picea* and *Vaccinium*, 28 June 2012, *leg. Z. Heinrich*, KRAM F-49554.

\**Schizopora flavipora* (Berk. & M.A. Curtis ex Cooke) Ryvarden – riverside mountain alder; on fallen *Alnus incana* trunk; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.7"N, 19°41'52.3"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7033b (KRAM F-58449).

***Schizopora paradoxa*** (Schrad.) Donk – coniferous forest; on wood; saprobic; rare (1).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on stumps, dead trunks and fallen branches of deciduous trees (Wojewoda et al. 2004, as *Hyphodontia paradoxa* (Schrad.) E. Langer & Vesterholt).

\****Schizopora radula*** (Pers.) Hallenb. – mixed and coniferous forest; on fallen branches and twigs of deciduous and coniferous trees; saprobic; summer and autumn (June, Sept., Oct.); rare (3).

DISTRIBUTION. **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on fallen twig, 2 Sept. 2011, leg. *H. Komorowska*, KRAM F-49746; **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekiełnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Salix* sp. twig, 8 Oct. 2012, leg. *D. Karasiński* 8876 (KRAM F-58279); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.9"N, 20°08'45.3"E, on bark of fallen *Pinus sylvestris* branch, 13 June 2012, leg. *D. Karasiński* 7175 (KRAM F-58323).

***Scleroderma citrinum*** Pers.: Pers. – pine forest; on the ground; mycorrhizal; autumn (Sept.); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004); **EG 31-21**: Bór Ostrowski (Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. *G. Końska*, KRAM F-49485.

!\****Scopuloides leprosa*** (Bourdot & Galzin) Boidin, Lanq. & Gilles.– riverside thickets; on wood; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'15.2"E, in *Salix eleagnos* and *Myricaria germanica* thickets on bank of Białka river, on fallen twig of deciduous tree, 21 July 2012, leg. *D. Karasiński* 7486 (KRAM F-58490); leg. *D. Karasiński* 7487 (KRAM F-58489).

\****Scopuloides rimosa*** (Cooke) Jülich – deciduous forest and brushwood along rivers; on decayed wood of deciduous trees; saprobic; spring and summer (May, July); rare (3).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.7"N, 19°41'52.2"E, *Alin*, on wood of fallen *Alnus incana* trunk, 23 May 2012, leg. *D. Karasiński* 7036 (KRAM F-58385); **EG 30-10**: between Ludźmierz and Nowy Targ, on bank of Czarny Dunajec river, near Bór Nowotarski (IX) forest, ca 2.5 km of Nowy Targ centre, in deciduous forest (?*Alin*), ca 600 m, on rotten stump, 11 July 1984, leg. *W. Wojewoda*, KRAM F-27165; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.3"N, 20°07'41.2"E, willow brushwood on bank of Białka river, on fallen *Salix eleagnos* branch, 24 May 2012, leg. *D. Karasiński* 7086 (KRAM F-58410); Przełom Białki pod Krempachami Nature Reserve, 49°25'39.3"N, 20°07'41.5"E, willow brushwood on bank of Białka river, on wood of fallen *Salix eleagnos* trunk, 24 May 2012, leg. *D. Karasiński* 7076 (KRAM F-58655).

\****Sebacina incrustans*** (Pers.) Tul. & C. Tul. – mixed and deciduous forest; on trunks, fallen branches and litter, also on living herbaceous plants; mycorrhizal; summer and autumn (July, Aug., Oct.); rare (3).

DISTRIBUTION. **DG 38-13**: Piekiełnik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. *D. Karasiński* 8866 (KRAM F-58263); **DG 49-11**: Ciche, ca 700 m, ca 6 km S of Czarny Dunajec village, ca 17 km SW of Nowy Targ, on bank of Cichy stream, in deciduous forest (*Alin*), inside decayed *Salix* trunk, 31 July 1984, leg. *H. Komorowska*, KRAM F-26102; **EG 31-27**: between Dębno and Nowa Biała, on bank of Białka river, in deciduous forest – *Alin* (*Alnus incana*, *Salix* sp.), on fallen leaves and on living herbaceous plants, 26 Aug. 1985, leg. *W. Wojewoda*, KRAM F-25908.

***Sistotrema brinkmannii*** (Bres.) J. Erikss. – coniferous, mixed and deciduous forest; on bark and wood of fallen twigs and branches of coniferous and deciduous trees; saprobic; spring to autumn (May–July, Oct.); frequent (6).

DISTRIBUTION. **DG 37-87**: ca 2 km SW of Chyżnego, Las Brzegi (I) forest, spruce-pine forest, on bark of fallen *Picea abies* twig, 23 May 2012, leg. D. Karasiński 7061 (KRAM F-58419); **DG 38-13**: Piekienik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Pinus sylvestris* branch, 8 Oct. 2012, leg. D. Karasiński 8862 (KRAM F-58293); Piekienik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. D. Karasiński 8865 (KRAM F-58318), leg. D. Karasiński 8873 (KRAM F-58298); leg. D. Karasiński 8878b (KRAM F-58459); **DG 38-38**: Las Baligówka (IV) forest, 49°27'28.1"N, 19°48'28.7"E, spruce forest, on bark of fallen *Picea abies* branch, 22 May 2012, leg. D. Karasiński 6972 (KRAM F-58272); **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on fallen branches of deciduous trees and shrubs (Wojewoda et al. 2004); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'39.5"N, 20°08'46.7"E, pine-spruce forest, on bark of fallen *Picea abies* branch, 13 June 2012, leg. D. Karasiński 7202 (KRAM F-58620); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.9"N, 20°08'44.9"E, pine-spruce forest, on bark of fallen *Picea abies* branch, 13 June 2012, leg. D. Karasiński 7172b (KRAM F-58585); **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'22.6"N, 20°12'00.1"E, on fallen twig of *Salix*, 21 July 2012, leg. D. Karasiński 7518 (KRAM F-58414).

!\****Sistotrema efbulatum*** (J. Erikss.) Hjortstam – coniferous forest; on wood and bark; saprobic; spring and summer (May, July); rare (2).

DISTRIBUTION. **DG 38-37**: near Las Baligówka (IV) forest, 49°27'25.1"N, 19°47'49.1"E, spruce forest, on fallen *Picea abies* branch in cavities made by insects (*Ips*?), 22 May 2012, leg. D. Karasiński 6995 (KRAM F-58544); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, coniferous forest (*Pinus*, *Picea*), on bark of fallen *Picea abies* branch, 30 July 1976, leg. Z. Heinrich, KRAM F-49116.

\****Sistotrema oblongisporum*** M.P. Christ. & Hauerslev – forest and brushwood, on bark and wood; saprobic; spring and autumn (May, Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on bark of fallen *Salix* sp. branch, 8 Oct. 2012, leg. D. Karasiński 8883 (KRAM F-58370); leg. D. Karasiński 8884 (KRAM F-58375); **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, Łopuszna, 49°27'22.7"N, 20°08'05.6"E, spruce forest with pine, on rotten *Picea abies* stump, 24 May 2012, leg. D. Karasiński 7101 (KRAM F-58619).

REMARKS. The species is usually collected on bark of dead but still attached branches or fallen branches of various deciduous trees, more rarely on coniferous trees (e.g. *Picea*) in initial or early stages of wood decomposition; not observed on substrate in late stage of decay. In Poland the species was recorded from five localities.

\****Sistotrema octosporum*** (J. Schröt. ex Höhn. & Litsch.) Hallenb. – coniferous forest, willow thickets; on bark; saprobic; spring and summer (May, June); rare (2).

DISTRIBUTION. **DG 38-43**: Bór koło Chyżnego (II, Siedlcowa Soślina) forest, ca 3 km SE of Jabłonka, 49°27'21.0"N, 19°44'13.4"E, on bark of *Pinus sylvestris* twigs in litter, 12 June 2012, leg. D. Karasiński 7135 (KRAM F-58545); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°27'20.0"N, 19°47'58.8"E, willow thickets, on bank of Białka river, on bark of fallen *Salix eleagnos* trunk, 24 May 2012, leg. D. Karasiński 7083 (KRAM F-58546).

REMARKS. The specimen collected on bark of *Salix eleagnos* (Karasiński 7083) differs from those described in the literature by its longer basidia (19–28 µm long), while the second collection (Karasiński 7135) has typical basidia (15–20 µm long) as given by Bernicchia and Gorjón (2010) for the species. In Poland the species was recorded from five localities.

!\**Sistotrema pinifoliae* Boidin & Gilles – coniferous forest; on bark; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 2 km SW of Chyżne, 49°24'49.2"N, 19°39'08.4"E, spruce-pine forest, on bark of fallen *Picea abies* trunk of young tree, 23 May 2012, leg. D. Karasiński 7062 (KRAM F-58547).

REMARKS. The specimen represents an acystidiate *Sistotrema* species from the group with a very thin basidiome, small basidia, small ellipsoid to ovoid basidiospores, and basal hyphae with oily content.

!\**Sistotrema pteriphilum* K.H. Larss. & Hjortstam – riverside thickets; on fallen leaves of *Populus alba*; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'27.8"N, 20°12'11.2"E, in *Salix eleagnos* and *Myricaria germanica* thickets on bank of Białka river, on fallen leaves of *Populus alba*, 21 July 2012, leg. D. Karasiński 7504 (KRAM F-58488).

REMARKS. This species is characterized by its thin basidiome, lack of cystidia, clamped hyphae and relatively large basidiospores. The micromorphologically similar *Sistotrema pyrosporium* Hauerslev has clampless hyphae, and *S. octosporum* (J. Schröt. ex Höhn. & Litsch.) Hallenb. has smaller basidiospores and basidia.

\**Sistotremastrum suecicum* Litsch. ex J. Erikss. – coniferous forest; on fallen branch of *Pinus sylvestris*; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Pinus sylvestris* branch, 9 Oct. 2012, leg. D. Karasiński 8934 (KRAM F-58548).

\**Skeletocutis alutacea* (Lowe) J. Keller – E; coniferous forest; on fallen *Pinus sylvestris* branch; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Pinus sylvestris* branch, 9 Oct. 2012, leg. D. Karasiński 8962 (KRAM F-58543).

REMARKS. *Skeletocutis alutacea* differs from similar species by its conspicuous white rhizomorphs on the basidiome margin. In Poland the species was recorded only from Białowieża National Park (Niemelä 2013). Ryvarden and Gilertson (1994: Fig. 330) recorded the species from Poland but without an exact location.

*Skeletocutis amorpha* (Fr.) Kotl. & Pouzar – mixed and coniferous forest, clearing; on stumps, fallen trunks and branches of conifers; saprobic; spring to autumn (Apr.–June, Aug.–Oct.); frequent (15).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, coniferous forest, on *Pinus sylvestris* stump, 9 Oct. 2012, leg. D. Karasiński 8941 (KRAM F-58476); Bór koło Chyżnego (II, Ucinki) forest, Piekienik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Picea abies* branch, 9 Oct. 2012, leg. D. Karasiński 8963c (KRAM F-58468); **DG 38-26**: forest between Jabłonka and Piekienik, ca 20 km W of Nowy Targ, ca 620–680 m, on *Pinus* trunk, 14 Apr. 1972, leg. Z. Mirek, KRAM F-32614; **DG 38-38**: Las Baligówka (IV) forest, 49°27'19.9"N, 19°47'59.4"E, spruce forest, on bark and wood of fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6980 (KRAM F-58649); **DG 38-61**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'14.3"N, 19°42'18.7"E, on wood of fallen *Pinus xraetica* trunk, 27 Aug. 2010, leg. D. Karasiński 5856; **DG 39-48**: forest near Rogoźnik village, near quarry, ca 8 km SW of Nowy Targ, 620–640 m, on *Pinus* trunk, 3 Oct. 1970, leg. Z. Heinrich, KRAM F-32615; **DG 48-01**: Bór koło Chyżnego (II, Bucznik) forest, ca 4 km SE of Chyżne, 49°23'56.9"N, 19°42'25.8"E, pine forest, on fallen *Pinus sylvestris* trunk, 23 May 2012, leg. D. Karasiński 7055 (KRAM F-58475); **EG 30-23**: Bór Nowotarski (IX) forest, N part (Do Boru), 49°28'00.93"N, 20°00'38.82"E, 602.0 m, 3 May 2011, leg. M. Łysek, KRAM F-58051; **EG 30-25**: Bór na Czerwonym (X) forest, ca 3 km S of Nowy Targ, 600–640 m, on forest path, on fallen twigs of *Pinus*, 15 May 1970, leg. W. Wojewoda, KRAM F-32612; **?EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, VuP, on rotten stumps of *Pinus* sp. (Wojewoda



et al. 2004); **EG 30-43**: Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, on trunk, 3 May 2011, leg. M. Lysek, KRAM F-58057; **EG 30-44**: on edge of Bór na Czerwonem (X) forest, near Szafłary, on dead trunk of *Pinus sylvestris*, 25 May 1971, leg. Z. Heinrich, KRAM F-11247; Bór na Czerwonem (X) forest, near Szafłary, in coniferous forest, on trunk of *Pinus*, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-11201; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 600 m, coniferous forest, on *Picea* cone, 22 Sept. 1966, leg. W. Wojewoda, KRAM F-14259; Bór Harkłowski (XIII) forest, near Harkłowa, in coniferous forest, on dead trunk of *Picea*, 17 Aug. 1970, leg. I. Jalocha, KRAM F-10927; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, on trunk, 2 May 2011, leg. M. Sadowski, KRAM F-58083; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, pine-spruce forest, on fallen *Pinus sylvestris* trunk, 13 June 2012, leg. D. Karasiński 7206 (KRAM F-58671); **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, on decayed trunk, 16 Oct. 1970, leg. I. Jalocha, KRAM F-32610; on trunk of coniferous tree, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-32613; **EG 31-27**: near Dębno, on left bank of Białka river, little pine forest, ca 14 km E of Nowy Targ, 535 m, on trunk of coniferous tree, 24 May 1984, leg. W. Wojewoda, KRAM F-32611.

\****Skeletocutis biguttulata*** (Romell) Niemelä – coniferous forest; on fallen trunks and branches of *Pinus sylvestris* and *P. xraetica*; saprobic; spring and summer (May, Aug.); rare (3).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'20.0"N, 19°47'58.8"E, spruce forest with *Pinus*, on fallen *P. sylvestris* branch, 22 May 2012, leg. D. Karasiński 6983 (KRAM F-58542); **DG 38-47**: Las Gajka (III) forest, 49°27'07.3"N, 19°47'19.3"E, pine forest, on fallen trunk of young *Pinus sylvestris* tree, 22 May 2012, leg. D. Karasiński 6997 (KRAM F-58650); **DG 38-61**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'00.6"N, 19°42'34.4"E, on wood of fallen *Pinus xraetica* trunk, 27 Aug. 2010, leg. D. Karasiński 5868.

\****Skeletocutis carneogrisea*** A. David – peatbogs and coniferous forest; on fallen trunks of coniferous trees decayed by *Trichaptum* spp., often directly on their dead basidiomata; saprobic; from spring to autumn (May, June, Aug., Oct.); rare (4).

DISTRIBUTION. **DG 38-47**: Las Gajka (III) forest, 49°26'57.2"N, 19°47'27.6"E, pine forest, on wood of fallen *Pinus sylvestris* trunk and dead *Trichaptum* sp., 22 May 2012, leg. D. Karasiński 7009 (KRAM F-58621); **DG 38-51**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°26'13.5"N, 19°42'12.9"E, on bark and wood of fallen *Pinus xraetica* trunk and dead *Trichaptum fuscoviolaceum* basidiome, 27 Aug. 2010, leg. D. Karasiński 5845; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.2"N, 20°02'28.8"E, on dead *Trichaptum fuscoviolaceum* basidiome and fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6596 (KRAM F-58452); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'41.0"N, 20°08'47.7"E, pine-spruce forest, on fallen *Pinus sylvestris* trunk and dead *Trichaptum* sp., 13 June 2012, leg. D. Karasiński 7201 (KRAM F-58632).

\****Skeletocutis nivea*** (Jungh.) Jean Keller – mixed and deciduous forest; on fallen branches of *Salix*; saprobic; from spring to autumn (May, Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. D. Karasiński 8874b (KRAM F-58478); **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.6"N, 20°07'40.7"E, willow brushwood on bank of Białka river, on fallen *Salix eleagnos* branch, 24 May 2012, leg. D. Karasiński 7094 (KRAM F-58287).

\****Steccherinum fimbriatum*** (Pers.) J. Erikss. – R; mixed forest; on fallen *Salix aurita* branch; saprobic; summer (June); rare (1).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szalas) forest, ca 3 km SE of Jabłonka, 49°27'23.7"N, 19°44'20.1"E, mixed forest with pine, on bark of fallen *Salix aurita* branch, 12 June 2012, leg. D. Karasiński 7161 (KRAM F-58669).

\**Steccherinum ochraceum* (Fr.) Gray – deciduous forest and brushwood along rivers; on fallen twigs of deciduous trees, also on fallen twig of *Rosa*; saprobic; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **DG 48-29**: between Chochołów and Koniówka, brushwood on right bank of Czarny Dunajec river, ca 20 km SW of Nowy Targ, ca 740–760 m, on dead, not fallen twig of *Rosa* sp., 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25591; **EG 30-49**: Gronków Środkowy village, SE of Nowy Targ, on bank of Leśnica river, 49°26'21.11"N, 20°05'24.73"E, 608.4 m, thicket/forest: *Acer*, *Carpinus*, *Fraxinus*, *Ulmus*, *Salix* and undergrowth with *Asarum europaeum*, *Urtica dioica*, *Arctium* sp., *Rubus* sp., *Prunus padus*, on fallen twig, 3 Sept. 2011, *leg. M. Pilch*, KRAM F-49735.

\**Steccherinum oreophilum* Lindsey & Gilb. – deciduous and mixed forest; on fallen or dead attached twigs of *Salix*; saprobic; summer (June, July); rare (2).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'22.0"N, 19°44'14.6"E, mixed forest with pine, on dead attached *Salix aurita* twigs, 12 June 2012, *leg. D. Karasiński* 7149 (KRAM F-58487); **EG-31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.9"N, 20°12'09.1"E, on fallen twig of *Salix*, 21 July 2012, *leg. D. Karasiński* 7513 (KRAM F-58491).

REMARKS. In Poland the species was recorded only from Kampinos National Park and the Kashubian Landscape Park (Karasiński et al. 2015; Karasiński 2016).

*Stereum hirsutum* (Willd.) Pers. – mixed and deciduous forest; on fallen trunks and branches of deciduous trees; saprobic; spring to autumn (May, June, Aug., Oct., Nov.); frequent (6).

DISTRIBUTION. **DG 38-13**: Pieklielik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, *leg. D. Karasiński* 8875a (KRAM F-58453); **DG 38-49**: Las Baligówka (IV) forest, E part (Górne Pole), 49°27'03.94"N, 19°48'43.61"E, 696.2 m, on dead twig of *Sorbus*, 30 June 2011, *leg. H. Komorowska*, KRAM F-58129; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.3"N, 19°41'54.4"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7045b (KRAM F-58647); **DG 39-83**: Domański Wierch hill, 753 m, ca 3 km SE of Czarny Dunajec village, ca 15 km SW of Nowy Targ, spruce forest with *Alnus incana*, on *A. incana*, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25670; forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, on fallen trunk, 12 Nov. 2011, *leg. A. Sadowska*, KRAM F-49787; **DG 48-29**: between Chochołów and Koniówka, ca 20 km SW of Nowy Targ, ca 740–760 m, *Alin*, on *Alnus incana* trunk, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25671; **?EG 30-25**: Bór na Czerwonym (24) Nature Reserve, *CvP*, on stumps, dead trunks and branches of deciduous trees and shrubs (Wojewoda et al. 2004).

*Stereum rugosum* Pers. – mixed and deciduous forest; on trunks, branches and stumps of deciduous trees; saprobic; spring to autumn (Apr.–July, Oct.); frequent (9).

DISTRIBUTION. **DG 38-13**: Pieklielik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on dead standing *Alnus incana* trunk, 8 Oct. 2012, *leg. D. Karasiński* 8889 (KRAM F-58283); **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'00.4"N, 19°41'56.4"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7048b (KRAM F-58275); Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.9"N, 19°41'51.9"E, *Alin*, on bark of dead standing *Alnus incana* trunk, 23 May 2012, *leg. D. Karasiński* 7032b (KRAM F-58648); **DG 39-43**: on bank of Czarny Dunajec river, between Czarny Dunajec and Wróblówka (Bugaj), 49°26'37.81"N, 19°52'09.43"E, 666.2 m, 29 June 2011, *leg. H. Komorowska*, KRAM F-56829; **DG 39-48**: near Rogoźnik village, on bank of Wielki Rogoźnik, *AlPa*, on *Alnus incana* trunk, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11287; **DG 39-51**: Czarny Dunajec, old cemetery near church, on living *Malus domestica* trunk, 31 July 1984,

leg. W. Wojewoda, KRAM F-25546; **EG 30-05**: Nowy Targ, confluence of Czarny Dunajec and Biały Dunajec rivers, ca 585 m, fragments of *Alin*, on *Alnus incana* trunk, 14 May 1971, leg. W. Wojewoda, KRAM F-19487; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on stumps, dead trunks and branches of deciduous trees and shrubs (Wojewoda et al. 2004); **EG 30-45**: Bór na Czerwonem (X) forest, in coniferous forest (*Pinus*, *Picea*), on stump of deciduous tree (*Betula* sp), 11 June 1971, leg. Z. Heinrich, KRAM F-11332; **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, on decayed trunk of *Picea abies*, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-11195.

**Stereum sanguinolentum** (Alb. & Schwein.) Fr. – mixed and coniferous forest; on stumps, fallen branches and trunks of coniferous trees; saprobic; spring to autumn (Apr.–Oct.); frequent (17).

DISTRIBUTION. **DG 38-13**: Piekielnik, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on fallen *Picea abies* branch, 8 Oct. 2012, leg. D. Karasiński 8861 (KRAM F-58361); **DG 38-23**: Bór koło Chyżnego (II, Księża Soślina) forest, SE of Jabłonka, 49°28'19.5"N, 19°44'32.11"E, 641.9 m, 30 June 2011, leg. M. Lysek, KRAM F-58139; **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.0"N, 19°44'13.4"E, mixed forest with pine, on fallen *Pinus sylvestris* branch (with *Tremella encephala* as parasite), 12 June 2012, leg. D. Karasiński 7134b (KRAM F-58631); **DG 38-38**: Las Baligówka (IV) forest, 49°27'24.6"N, 19°47'55.0"E, spruce forest, on bark of fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6992 (KRAM F-58670); **DG 38-51**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°26'13.3"N, 19°42'16.3"E, on bark of fallen *Pinus x rhaetica* branch, 27 Aug. 2010, leg. D. Karasiński 5850; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, *Picea* stump, 14 Oct. 2010, leg. H. Komorowska, KRAM F-58132; **DG 39-26**: Puścizna Długopole (20) peatbog, ca 8 km SW of Nowy Targ, ca 640 m, on a stump of *Pinus sylvestris* × *P. mugo*, [since the 1990s: *Pinus x rhaetica*] 18 Apr. 1986, leg. W. Wojewoda, KRAM F-26395; **DG 39-51**: Czarny Dunajec, Mościckiego Street, stored decorticated wood near cemetery, 49°26'44.92"N, 19°50'42.72"E, 671.3 m, on bark of *Pinus*, 31 Aug. 2011, leg. H. Komorowska, KRAM F-58124; Czarny Dunajec near cemetery, ca 670 m, lying trunks of *Picea abies*, 14 May 1971, leg. I. Jalocho, KRAM F-19486; **DG 39-90**: in vicinity of Podczerwone, on right bank of Czarny Dunajec river, ca 18 km SW of Nowy Targ, ca 720 m, the little coniferous forest, on dead trunk of young *Larix*, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-25600; **EG 20-91**: Bór na Grelu (VIII) forest, N of Ludźmierz, E part, edge of forest, spruce forest with *Vaccinium* and *Sphagnum*, on living *Picea*, in damaged place, 20 July 2010, leg. M. Pilch, KRAM F-56721; **EG 30-01**: Bór na Grelu (VIII) forest, ca 2.5 km W of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*), on stump of *P. abies*, 18 Apr. 1986, leg. W. Wojewoda, KRAM F-26396; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, on dead trunk of *Picea abies*, 17 Oct. 1970, leg. Z. Heinrich, KRAM F-10934; Bór Nowotarski (IX) forest, near Szaflary, in coniferous forest (*Picea*, *Pinus*), on *Picea* stump, 25 May 1971, leg. Z. Heinrich, KRAM F-11259; Bór Nowotarski (IX) forest, near Nowy Targ (E of shoe factory), spruce forest with *Pinus sylvestris*, 23 Sept. 1981, leg. M. Czewieniec, KRAM F-18574; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600–640 m, pine forest between sports airfield and peatbog, on lying branch, 21 Sept. 1983, leg. H. Komorowska, KRAM F-25668; Bór na Czerwonem (24) Nature Reserve, pine forest (SP) near peat dome, on fallen *Pinus* stump, 16 Sept. 2011, leg. H. Komorowska, KRAM F-58135 (with *Tremella encephala*); Bór na Czerwonem (24) Nature Reserve, 49°27'46.7"N, 20°02'25.9"E, on bark of fallen *Pinus sylvestris* trunk (with *Tremella encephala* as parasite), 17 Oct. 2011, leg. D. Karasiński 6638b (KRAM F-58463); ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, PrS, VuP, on stumps and dead trunks and branches of conifers (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'46.2"N, 20°06'23.1"E, 607.1 m, spruce-pine forest, in brushwood (*Sorbus*, *Rubus*, *Vaccinium*), on roots, 28 June 2012, leg. H. Komorowska, KRAM F-49563; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'53.1"N, 20°08'44.6"E, pine-spruce forest, on bark of fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7171 (KRAM F-58603); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.3"N, 20°08'45.2"E, pine-spruce forest, on fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7187c (KRAM F-58595); **EG 31-27**: between Dębno and Frydman, on bank of Białka stream, ca 15 km E of Nowy Targ, 525–535 m, lying trunk of *Picea*, 22 Sept.

1966, *leg. W. Wojewoda*, KRAM F-25669; **EG 31-54**: Krempachy, Dolina Białki p.a., on right side of Krempachy–Nowa Biała road, riverside mountain alder (*Alin*) on bank of Białka river, wet place, on fallen *Pinus* twig, 19 July 2010, *leg. H. Komorowska*, KRAM F-56733.

\***Stereum subtomentosum** Pouzar – riverside mountain alder; on living and fallen *Alnus incana* trunks; saprobic; spring and summer (May, July); rare (2).

DISTRIBUTION. **EG 30-10**: near mouth of Wielki Rogoźnik stream to Czarny Dunajec river, near Ludźmierz, ca 4 km SW of Nowy Targ, 600–610 m, *Alin*, living *Alnus incana*, 11 July 1984, *leg. W. Wojewoda*, KRAM F-25666; **EG 30-40**: Pasiczny Las (VII) forest, ca 2 km E of Rogoźnik village, ca 640 m, between Rogoźnik, and Zaskale, ca 6 km SW of Nowy Targ, on bank of little stream, on *Alnus incana* trunk, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25667.

**Strobilurus esculentus** (Wulfen: Fr.) Singer – coniferous forest; on fallen cones of *Picea abies*; saprobic; spring and autumn (Apr., Nov.); frequent (9).

DISTRIBUTION. **DG 38-40**: Bór koło Chyżnego (II. Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula pubescens*), on *Picea* cone, 11 Nov. 2011, *leg. M. Sadowski*, KRAM F-49459; **DG 38-42**: Bór koło Chyżnego (II) forest, between Jablonka and Piekienik, ca 630 m, near Pirogówka (651m), in spruce forest, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-12676 (Komorowska 2006); **DG 38-73**: Bór koło Chyżnego (II) forest, S of Pirogówka mount (651 m), pine-spruce forest, 4 km E of Chyżne village, on fallen cones of *Picea*, 14 Apr. 1972, *leg. I. Jalocho*, KRAM F-25827 (Komorowska 2006); **DG 39-83**: forest ca 1 km NE of Domański Wierch hill, S of Czarny Dunajec, 49°24'47.79"N, 19°52'49.67"E, 718.4 m, spruce forest (718 m), sparse *Pinus* and deciduous trees (*Salix*, *Alnus*, *Ulmus*), mosses, ferns and *Rubus*, 12 Nov. 2011, *leg. A. Sadowska*, KRAM F-49472; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on fallen cones, often covered with soil and litter, of *Pinus* sp. (Wojewoda et al. 2004); **EG 30-44**: Bór na Czerwonem (X) forest, pine-spruce forest, ca 3 km S of Nowy Targ, N of Szaflary, near Biały Dunajec river, 22 Apr. 1971, *leg. Z. Heinrich*, KRAM F-25826; Bór na Czerwonem (X) forest, near Szaflary, in vicinity of Biały Dunajec river, in coniferous forest, on the ground, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-11184 (Komorowska 2006); **EG 31-13**: Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, edge of forest, on cone of *Picea abies*, 22 Apr. 1971, *leg. Z. Heinrich*, KRAM F-11185 (Komorowska 2006); **EG 31-26**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 3.5 km NE of Nowa Biała, on right side of Nowa Biała–Dębno road, pine-spruce forest, 7 Apr. 1981, *leg. H. Komorowska*, KRAM F-25828 (Komorowska 2006); **EG 31-32**: Bór Bielski (XII) forest, pine-spruce forest, ca 1 km NW of Nowa Biała, on right side of Łopuszna–Nowa Biała road, 7 Apr. 1981, *leg. H. Komorowska*, KRAM F-25840; *leg. H. Komorowska*, KRAM F-25841 (Komorowska 2006).

**Strobilurus stephanocystis** (Hora) Singer – coniferous forest, alder grove, raised peatbog; on fallen cones of *Pinus*; saprobic; spring to summer (Apr.–June); frequent (19).

DISTRIBUTION. **DG 38-19**: Puścizna Rękowańska (19) peatbog, edge of peatbog near Czarny Dunajec–Piekienik road, little pine forest, on fallen *Pinus* cone, 15 June 1982, *leg. W. Wojewoda*, KRAM F-25835 (Komorowska 2006); **DG 38-22**: small forest between Jabłonka and Piekienik, on *Pinus* cone, 18 May 1973, *leg. I. Jalocho*, KRAM F-25838 (Komorowska 2006); **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, on the ground, 14 May 1971, *leg. Z. Heinrich*, KRAM F-11242A; Las Baligówka (IV) forest, pine-spruce forest, ca 4 km SE of Piekienik village, 14 May 1971, *leg. Z. Heinrich*, KRAM F-11242B; Las Baligówka (IV) forest, pine-spruce forest, ca 4 km SE of Piekienik village, 14 May 1971, *leg. Z. Heinrich*, KRAM F-11242C (Komorowska 2006); **DG 38-42**: Bór koło Chyżnego (II) forest, between Jabłonka and Piekienik, near Pirogówka (651 m), ca 630 m, in coniferous forest (*Pinetum*), 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-12675 (Komorowska 2006); **DG 38-73**: Bór koło Chyżnego (II) forest, *CvP*, on fallen cones of *Pinus*, 22 June 1970, *leg. W. Wojewoda*, KRAM F-25833 (Komorowska 2006); **DG 39-35**: Puścizna Długopole (20) peatbog, SW part, edge of forest, SW of Długopole, 29 Apr. 2011, *leg. M. Łysek*, KRAM F-49865; on the ground, *leg. M. Łysek*, KRAM F-49866; *leg. M. Łysek*, KRAM

F-49876; *leg. H. Komorowska*, KRAM F-49878; edge of pine-spruce forest, *leg. H. Komorowska*, KRAM F-49867; *leg. H. Komorowska*, KRAM F-49875; **DG 39-56**: Soślina (VI) forest, NE part, E of Czarny Dunajec, 29 Apr. 2011, *leg. M. Lysek*, KRAM F-49864; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, pine-spruce forest, 18 May 1973, *leg. I. Jalocha*, KRAM F-25837; Bór Nowotarski (IX) forest, near Szaflary Dolne, in coniferous forest (*Picea*, *Pinus*), on the ground, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11291 (Komorowska 2006); Bór Nowotarski (IX) forest, N part (Do Boru), 49°28'00.93"N, 20°00'38.82"E, 602.0 m, 3 May 2011, *leg. M. Lysek*, KRAM F-58040; *leg. A. Sadowska*, KRAM F-58039; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, near peatbog, pine-spruce forest, 15 May 1970, on cones of *Pinus*, *leg. I. Jalocha*, KRAM F-25831; *leg. I. Jalocha*, KRAM F-25832 (Komorowska 2006); Bór na Czerwonem (24) Nature Reserve, N part, 49°27'54.87"N, 20°02'23.06"E, 600.0 m, 2 May 2011, *leg. M. Lysek*, KRAM F-58041; edge of forest, in grass, under *Pinus*, *leg. M. Sadowski*, KRAM F-58037; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on fallen cones, often covered with soil and litter, of *Pinus* sp. (Wojewoda et al. 2004); **EG 30-43**: Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, 3 May 2011, *leg. M. Lysek*, KRAM F-58030; *leg. A. Sadowska*, KRAM F-58036; **EG 30-44**: little alder forest on bank of Biały Dunajec river, in Szaflary, near Bór na Czerwonem (X) forest, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-25830A; Szaflary, on bank of Biały Dunajec river, edge of Bór na Czerwonem (X) forest, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-25830B (Komorowska 2006); **EG 30-46**: Bór na Czerwonem (X, Czerwony Bór), peatbog, SE part (near Bór village), 49°26'32.97"N, 20°03'04.49"E, 642.4 m, edge of forest, at forest path, 3 May 2011, *leg. Mi. Lysek*, KRAM F-58038; **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, in coniferous forest, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-11182 (Komorowska 2006); **EG 31-13**: edge of Bór Harkłowski (XIII) forest, between Harkłowa and Łopuszna, on the ground, 22 Apr. 1971, *leg. W. Wojewoda*, KRAM F-11186 (Komorowska 2006); Bór Harkłowski (XIII) forest, NW part (near Łopuszna), forest by wayside, 49°28'02.04"N, 20°08'29.99"E, 587.7 m, 3 May 2011, *leg. M. Lysek*, KRAM F-58027; on cone, *leg. M. Lysek*, KRAM F-58034; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, on litter of coniferous tree, 2 May 2011, *leg. M. Sadowski*, KRAM F-58031; edge of forest, in grass, under *Pinus*, *leg. M. Lysek*, KRAM F-58026; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'54.11"N, 20°07'10"E, 583.6 m, edge of pine-spruce forest, 30 Apr. 2011, *leg. H. Komorowska*, KRAM F-49868; on *Pinus*, *leg. M. Lysek*, KRAM F-49870; pine-spruce forest, *leg. M. Lysek*, KRAM F-49880; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, 22 June 1970, *leg. W. Wojewoda*, KRAM F-25834; on *Pinus* cone, 18 May 1973, *leg. I. Jalocha*, KRAM F-25836 (Komorowska 2006); **EG 31-33**: Bór Harkłowski (XIII) forest, S part, near Nowa Biała, 49°27'03.82"N, 20°08'47.7"E, 591.4 m, edge of forest, under *Pinus*, 2 May 2011, *leg. M. Lysek*, KRAM F-58035; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, pine-spruce forest, on fallen cone of *Pinus*, 24 May 1984, *leg. W. Wojewoda*, KRAM F-25839 (Komorowska 2006).

***Strobilurus tenacellus*** (Pers.: Fr.) Singer – coniferous forest, raised peatbog; on cones of *Pinus*; saprobic; spring to summer (Apr.–June); frequent (9).

**DISTRIBUTION.** **DG 38-19**: Puścizna Rękowiańska (19) peatbog, edge of peatbog near Czarny Dunajec–Piekielek road, little pine forest, on fallen *Pinus* cone, 15 June 1982, *leg. W. Wojewoda*, KRAM F-25842 (Komorowska 2006); **DG 39-35**: Puścizna Długopole (20) peatbog, SW part, SW of Długopole, in hollow between spruces, 29 Apr. 2011, *leg. H. Komorowska*, KRAM F-49863; under *Picea*, on cones, KRAM F-49869; **EG 30-23**: Bór Nowotarski (IX) forest, near Szaflary Dolne, in coniferous forest, on the ground, 31 May 1971, *leg. W. Wojewoda*, KRAM F-11282 (Komorowska 2006); Bór Nowotarski (IX) forest, N part (Do Boru), 49°28'00.93"N, 20°00'38.82"E, 602.0 m, 3 May 2011, *leg. M. Lysek*, KRAM F-58043; *leg. A. Sadowska*, KRAM F-58022; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on fallen cones, often covered with soil and litter, of *Pinus* sp. (Wojewoda et al. 2004); **EG 30-31**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'34.68"N, 19°59'23.49"E, 597.7 m, edge of forest, in grass, 2 May 2011, *leg. M. Sadowski*, KRAM F-58024; **EG 30-43**: Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, 3 May 2011, *leg. A. Sadowska*, KRAM F-58042; **EG 30-45**: Bór na Czerwonem (X) forest, near Szaflary, spruce forest with single pines, on the ground,

25 May 1971, *leg. Z. Heinrich*, KRAM F-11269 (Komorowska 2006); **EG 31-13**: Bór Harklowski (XIII) forest, NW part (near Łopuszna), forest by wayside, 49°28'02.04"N, 20°08'29.99"E, 587.7 m, 3 May 2011, *leg. M. Lysek*, KRAM F-58028; *leg. M. Lysek*, KRAM F-58032; **EG 31-53**: Dolina Białki p.a., forest on bank of river, between Nowa Biała and Krempachy, 49°26'12.19"N, 20°08'55.95"E, 599.4 m, in moss, 2 May 2011, *leg. A. Sadowska*, KRAM F-58023; *leg. A. Sadowska*, KRAM F-58025.

***Stropharia aeruginosa*** (Curtis: Fr.) Quél. – coniferous forest; in litter on wood debris, needles and leaves; saprobic; autumn (Oct.); rare (2).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground, among wood remains and fallen leaves and needles (Wojewoda et al. 2004, as *Psilocybe aeruginosa* (Curtis: Fr.) Quél.); **EG 30-40**: Pasieczny Las (VII) forest, on bank of Wielki Rogoźnik river, ca 2 km E of Rogoźnik village, ca 6 km SW of Nowy Targ, ca 640–660 m, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27725.

\****Stropharia coronilla*** (Bull.: Fr.) Quél. – pasture; among grasses; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-48**: Rogoźnik village, pasture on bank of Wielki Rogoźnik stream, ca 8 km SW of Nowy Targ, 620–640 m, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-27724.

\****Stropharia cyanea*** (Bull.) Tuom. – riverside mountain alder; on the ground; saprobic; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 39-48**: edge of meadow and *Alin* on bank of Wielki Rogoźnik stream, between Rogoźnik village and mouth of Czarny Dunajec river in Ludźmierz, in brushwood, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-32313.

***Stropharia semiglobata*** (Batsch: Fr.) Quél. – open site on border of forest, by wayside, pasture, post-peat area; on horse and cow dung, on burnt ground; saprobic; spring to autumn (May–Oct.); frequent (9).

DISTRIBUTION. **DG 38-06**: Piekienik forest, ca 1.5 km S of Piekienik village, ca 650 m, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-38864; forest near Piekienik village, on horse dung, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-38859; **DG 38-38**: Las Baligówka (IV) forest, ca 5.5 km NW of Czarny Dunajec, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-38854; Las Baligówka (IV) forest, near Czarny Dunajec, 6 July 1970, *leg. I. Jalocha*, KRAM F-38842; Las Baligówka (IV) forest, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-38872; **DG 39-31**: near Puścizna Rękowiańska (19) peatbog, N of Czarny Dunajec village, meadow by road, 31 July 1970, *leg. I. Jalocha*, KRAM F-38846; **DG 39-48**: near Rogoźnik village near Nowy Targ, on dung, 3 Oct. 1970, *leg. I. Jalocha*, KRAM F-38843; Rogoźnik-Gęsiówka forest, on horse dung, 7 June 1972, *leg. Z. Heinrich*, KRAM F-38862; **DG 39-51**: Czarny Dunajec, near cemetery, on burnt ground, 31 July 1970, *leg. Z. Heinrich*, KRAM F-38847; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, pine forest, on forest path near sports airfield, on dung remnants, 15 May 1970, *leg. I. Jalocha*, KRAM F-38874; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, on edge of CvP, VuP, on forest roads, on horse and cow excrement (Wojewoda et al. 2004, as *Psilocybe semiglobata* (Batsch: Fr.) Noordel.); **EG 31-22**: Bór Bielski (XII) forest near Łopuszna, in *Sphagnum* on horse dung, 1 July 1970, *leg. I. Jalocha*, KRAM F-38861; **EG 31-23**: Bór Harklowski (XIII) forest, near Łopuszna, 22 June 1970, *leg. W. Wojewoda*, KRAM F-38857; Bór Harklowski (XIII) forest, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-38873; **EG 31-27**: pasture on bank of Białka river, between Dębno and Frydman, ca 9 km SE of Nowy Targ, ca 580 m, 6 Aug. 1985, *leg. Z. Heinrich*, KRAM F-27729.

\****Stypella vermiformis*** (Berk. & Broome) D.A. Reid – E; spruce forest; on decayed stump; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-14**: Bór Harkłowski (XIII) forest, ca 10 km E of Nowy Targ, ca 580 m, spruce forest, on decayed *Picea abies* stump, 6 Sept. 1973, leg. *W. Wojewoda*, KRAM F-18578.

REMARKS. In Poland the species was recorded from four localities.

\****Subulicystidium longisporum*** (Pat.) Parmasto – coniferous forest; on rotten *Picea abies* stump; saprobic; spring (May); rare (1).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, 49°27'27.6"N, 19°48'28.3"E, spruce forest, on rotten *Picea abies* stump, 22 May 2012, leg. *D. Karasiński* 6973 (KRAM F-58562).

***Suillus bovinus*** (L.: Fr.) Roussel – coniferous forest and peatbog edges; on the ground, in grass and mosses; under *Pinus*; mycorrhizal; summer to autumn (Aug.–Oct.); frequent (7).

DISTRIBUTION. **DG 38-06**: little coniferous forest near Piekielek village, ca 620 m, ca 20 km W of Nowy Targ, on the ground, 13 Oct. 1971, leg. *Z. Heinrich*, KRAM F-26154; little coniferous forest near Piekielek village, ca 620 m, ca 20 km W of Nowy Targ, on the ground, 13 Oct. 1971, leg. *I. Jalocha*, KRAM F-26150; coniferous forest (*Picea*, *Pinus*) near Piekielek village, ca 600 m, on edge of forest in *Sphagnum* and moss, with *Gomphidius roseus* (L.) Fr., 5 Sept. 1977, leg. *Z. Heinrich*, KRAM F-17123; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielek, coniferous forest, on the ground under *Pinus sylvestris* and *Picea abies* (together with *Gomphidius roseus*), 9 Oct. 2012, leg. *D. Karasiński* (8965 KRAM F-58254), leg. *D. Karasiński* 8971b (KRAM F-58340); **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekielek village, 650–670 m, ca 17 km SW of Nowy Targ, coniferous forest, on the ground, 2 Oct. 1970, leg. *Z. Heinrich*, KRAM F-26153; **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 600 m, pine forest between sports airport and peatbog, on the ground, 21 Sept. 1983, leg. *H. Komorowska*, KRAM F-26152; Bór na Czerwonem (X) forest, near Nowy Targ, ca 600 m, edge of peatbog and pine forest, under *Pinus*, 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-17142; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, under *Pinus* sp., 23 Aug. 2000, leg. *W. Wojewoda*, KRAM F-50578 (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, ca 590 m, coniferous forest, on the ground, 1 Oct. 1967, leg. *K. Szczepanek*, KRAM F-26148; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, coniferous forest, on the ground, 16 Oct. 1970, leg. *Z. Heinrich*, KRAM F-26155; 21 Aug. 1970, leg. *I. Jalocha*, KRAM F-26151; Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest, on the ground, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-26149.

***Suillus granulatus*** (L.: Fr.) Roussel – coniferous forest; on the ground, under *Pinus*; mycorrhizal; summer (Aug.); rare (3).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, pine-spruce forest, ca 3 km S of Nowy Targ, ca 620 m, 18 Aug. 1970, leg. *Z. Heinrich*, KRAM F-27123; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under *Pinus* sp. (Wojewoda et al. 2004); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 km E of Nowy Targ, ca 570 m, pine-spruce forest, 18 Aug. 1970, leg. *Z. Heinrich*, KRAM F-27124; **EG 31-27**: between Dębno and Nowa Biała, ca 12 km SE of Nowy Targ, ca 570 m, in young pine forest, under *Pinus sylvestris*, 6 Aug. 1985, leg. *W. Wojewoda*, KRAM F-27125.

***Suillus luteus*** (L.: Fr.) Roussel – coniferous forest; on the ground, under *Pinus*; mycorrhizal; summer (Aug.); rare (2).

DISTRIBUTION. **DG 38-26**: Las Sosnówka forest near Piekielek, ca 20 km SW of Nowy Targ, under *Pinus sylvestris*, ca 650 m, 3 Aug. 1970, leg. *I. Jalocha*, KRAM F-27132. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground under *Pinus* sp. (Wojewoda et al. 2004).

**Suillus variegatus** (Sw.: Fr.) Kuntze – mixed and coniferous forest; on the ground, in moss; mycorrhizal; summer and autumn (July, Aug., Oct.); frequent (8).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667.6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, leg. M. Lysiek, KRAM F-56856; **DG 38-26**: Las Sosnówka forest, ca 1 km S of Piekielek, ca 20 km SW of Nowy Targ, pine-forest, 3 Aug. 1970, leg. Z. Heinrich, KRAM F-27128; **EG 30-25**: Bór na Czerwonem (X) forest, near reserve, ca 3 km S of Nowy Targ, ca 620 m, pine-spruce forest, 10 Aug. 1983, leg. H. Komorowska, KRAM F-27129; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine-spruce forest, 17 July 1985, leg. Z. Heinrich, KRAM F-26124; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, in moss, under *Pinus* sp., 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50579 (Wojewoda et al. 2004); **EG 30-40**: Pasiczny Las (VII) forest, ca 2 km E of Rogoźnik, ca 6 km SW of Nowy Targ, ca 650 m, mixed forest, 13 Oct. 1971, leg. I. Jalocha, KRAM F-27133; **EG 31-14**: Bór Harklowski (XIII) forest, near Harkłowa, ca 10 km SE of Nowy Targ, ca 575 m, pine-spruce forest, 16 Oct. 1970, leg. I. Jalocha, KRAM F-27130; **EG 31-20**: Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, ca 6 km SE of Nowy Targ, ca 590 m, pine-spruce forest, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-27126; leg. Z. Heinrich, KRAM F-27127; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 590 m, pine-spruce forest, 14 Aug. 1970, leg. I. Jalocha, KRAM F-27131.

**Tapinella atrotomentosa** (Batsch: Fr.) Šutara – pine-spruce and mixed forest; on rotten stump, on woody debris in litter; saprobic; summer and autumn (Aug., Oct.); rare (5).

DISTRIBUTION. **DG 38-13**: Piekielek, Bór koło Chyżnego (II, Księża Soślina) forest, mixed forest, on rotten conifer stump, 8 Oct. 2012, leg. D. Karasiński 8887 (KRAM F-58342); **DG 38-38**: Las Baligówka (IV) forest, near Czarny Dunajec, in coniferous forest (*Pinus*, *Picea*), on wood, 2 Oct. 1970, leg. Z. Heinrich, KRAM F-11102; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stump (Wojewoda et al. 2004, as *Paxillus atrotomentosus* (Batsch: Fr.) Fr.); **EG 31-20**: Bór Ostrowski (XI) forest, between Łopuszna and Ostrowsko, in mixed forest (*Picea*, *Pinus*, *Populus tremula*, *Quercus* sp.), on the ground, 14 Aug. 1970, leg. I. Jalocha, KRAM F-11101; **EG 31-24**: Bór Harklowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 21 Aug. 1970, leg. I. Jalocha, KRAM F-33015.

\***Thelephora palmata** (Scop.): Fr. – coniferous forest, on the ground; mycorrhizal; summer and autumn (July–Sept.); rare (5).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, between Czarny Dunajec and Piekielek, coniferous forest, on the ground, in large group, 6 July 1970, leg. Z. Heinrich, KRAM F-25536; **EG 31-14**: Bór Harklowski (XIII) forest, S of Harkłowa, SE of Nowy Targ, coniferous forest, on the ground, 8 Sept. 1970, leg. Z. Heinrich, KRAM F-25537; **EG 31-20**: Bór Ostrowski (XI) forest, S of the Ostrowsko–Łopuszna road, coniferous forest, on the ground, in moss, 14 Aug. 1970, leg. Z. Heinrich, KRAM F-10944; **EG 31-27**: between Dębno and Nowa Biała, ca 10 km SE of Nowy Targ, on bank of Białka stream, ca 580 m, in coniferous forest (*Picea abies*, *Pinus sylvestris*), on the ground, 26 Aug. 1985, leg. W. Wojewoda, KRAM F-25917; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, NE part, 49°27'30.55"N, 20°07'56.61"E, 586.3 m, spruce forest with few *Pinus sylvestris*, in *Urtica dioica* undergrowth, or only spruce needles, also wet (swampy) places with *Sphagnum*, 13 Aug. 2011, leg. H. Komorowska, KRAM F-49802.

**Thelephora terrestris** Ehrh. – mixed and coniferous forest, on the ground and various wood remnants in litter; mycorrhizal; spring to autumn (May–Oct.); frequent (19).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, SW of Chyżne, 49°24'53.72"N, 19°39'08.67"E, 678.5, spruce forest, on edge of forest – young *Pinus* and *Picea*, in undergrowth with grass, moss and *Vaccinium* sp., 14 July 2012, leg. M. Sadowski, KRAM F-49569; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielek, coniferous forest, on rotten *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8944 (KRAM F-58286); Bór koło Chyżnego (II, Ucinki) forest, 31 July 2010, leg. Z. Heinrich, KRAM F-58117; **DG 38-26**:



Las Sosnówka forest, ca 1 km S of Piekielnik (left side of Czarny Dunajec–Jabłonka road), on the ground and on dead roots of coniferous tree, 3 July 1970, *leg. Z. Heinrich*, KRAM F-25540; **DG 38-38**: Las Baligówka (IV) forest, ca 17 km SW of Nowy Targ, coniferous forest, on burnt ground, and roots of coniferous tree, ca 650 m, 4 July 1970, *leg. Z. Heinrich*, KRAM F-25944; **DG 38-90**: Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, 14 Oct. 2010, *leg. Z. Heinrich*, KRAM F-49981; Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.8"N, 19°41'50.0"E, spruce forest, on *Picea abies* litter, 23 May 2012, *leg. D. Karasiński* 7029 (KRAM F-58645); **DG 39-55**: Soślina (VI) forest, between Stare Bystre and Czarny Dunajec, spruce forest, on *Vaccinium*, 18 June 2010, *leg. Z. Heinrich*, KRAM F-59124; on fallen twigs, 18 June 2010, *leg. H. Komorowska*, KRAM F-59123; **DG 39-83**: small forest, Domański Wierch hill, near Podczerwone village, ca 750 m, ca 14 km SW of Nowy Targ, coniferous forest, on fallen needles of *Picea abies*, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25947; Domański Wierch hill near Stare Bystre village, ca 740 m, ca 14 km SW of Nowy Targ, small spruce forest with *Alnus incana*, on the ground, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25945; **EG 30-00**: Bór na Grelu (VIII) forest, N of Ludźmierz, on right side of Ludźmierz–Trute road, forest, on trunks, 20 July 2010, *leg. M. Pilch*, KRAM F-56719; Bór na Grelu (VIII) forest, N of Ludźmierz, on right side of Ludźmierz–Trute road, young forest (*Picea* sp. and *Populus tremula*), near trunk, 20 July 2010, *leg. M. Pilch*, KRAM F-56727; **EG 30-22**: Bór Nowotarski (IX) forest, SE of Nowy Targ, coniferous forest (*Picea abies* and *Pinus sylvestris*), ca 580 m, in litter, *Polytrichum*, 1 Sept. 1983, *leg. H. Komorowska*, KRAM F-25942; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on the ground, grows through shoots and leaves of *Carex echinata*, 23 Aug. 2000, *leg. W. Wojewoda*, KRAM F-50580 (Wojewoda 2004); **EG 30-35**: edge of peatbog, Bór na Czerwonem (24) Nature Reserve, ca 3 km SE of Nowy Targ, ca 620 m, coniferous forest, roots of coniferous tree (*Picea abies* or *Pinus sylvestris*), 21 Sept. 1983, *leg. H. Komorowska*, KRAM F-25946; **EG 30-40**: Pasieczny Las (VII) forest, on bank of Wielki Rogoźnik stream, ca 6 km SW of Nowy Targ, ca 620 m, in spruce forest, on *Picea abies* stump, near ground, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-25943; Pasieczny Las forest, on right side of Ludźmierz–Maruszyna road, 49°26'41.11"N, 19°58'40.07"E, 612.5 m, pine-spruce forest, in brushwood with young *Picea*, on *Pinus* trunk, 14 Aug. 2011, *leg. H. Komorowska*, KRAM F-56838; **EG 31-20**: Bór Ostrowski (XI) forest, S of the Łopuszna–Ostrowsko road, coniferous forest, on the ground and fallen twigs of coniferous tree, 14 Aug. 1970, *leg. Z. Heinrich*, KRAM F-10945; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, *leg. Z. Heinrich*, KRAM F-49953; **EG 31-24**: Bór Harkłowski (XIII) forest, spruce forest, in wet place with *Sphagnum*, on the ground, fallen twigs of *Picea*, fallen needles, on *Polytrichum* and *Sphagnum*, 22 Sept. 1966, *leg. W. Wojewoda*, KRAM F-25539; Bór Harkłowski (XIII) forest, coniferous forest, fallen twig of *Pinus sylvestris*, 18 May 1983, *leg. W. Wojewoda*, KRAM F-25538; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, *leg. H. Komorowska*, KRAM F-49546; **EG 31-27**: between Dębno and Nowa Biała, ca 10 km SE of Nowy Targ, ca 580 m, coniferous forest (*Picea abies*, *Pinus sylvestris*) on bank of Białka river, on roots of *Picea abies*, 26 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25935; between Dębno and Nowa Biała, on bank of Białka river, ca 10 km SE of Nowy Targ, ca 580 m, young pine forest, on the ground, 6 Aug. 1985, *leg. W. Wojewoda*, KRAM F-26103; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce-pine forest, on the ground, 18 Aug. 1970, *leg. Z. Heinrich*, KRAM F-26300; spruce-pine forest, on the ground, 30 Aug. 1977, *leg. Z. Heinrich*, KRAM F-26299; **EG 31-32**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 8 km SE of Nowy Targ, ca 600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), 31 Aug. 1985, *leg. W. Wojewoda*, KRAM F-25934.

\**Tomentella radiosa* (P. Karst.) Rick – coniferous forest, on rotten wood; mycorrhizal; summer (June); rare (1).

DISTRIBUTION. **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.8"N, 20°08'45.4"E, on rotted wood of fallen *Picea abies* trunk, 13 June 2012, *leg. D. Karasiński* 7181 (KRAM F-58550).

REMARKS. In Poland the species was recorded from four localities.

\**Tomentella terrestris* (Berk. & Broome) M.J. Larsen – peatbog dome, on dead *Calluna vulgaris* twigs; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **G 38-61**: Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°25'53.3"N, 19°42'53.7"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. D. Karasiński 5890.

\**Tomentellopsis bresadolana* (Sacc. & Trotter) Jülich & Stalpers – coniferous forest; on fallen trunk; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina), forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, on fallen *Pinus sylvestris* trunk, 8 Oct. 2012, leg. D. Karasiński 8905 (KRAM F-58552).

REMARKS. In Poland the species was recorded only from the Kashubian Landscape Park (Karasiński 2016).

\**Tomentellopsis echinospora* (Ellis) Hjortstam – coniferous forest, peat bog; on the ground on underside of fallen branches; mycorrhizal; autumn (Oct.); rare (2).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekelnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Picea abies* branch, 9 Oct. 2012, leg. D. Karasiński 8933 (KRAM F-58348); on fallen *Pinus sylvestris* branch, 9 Oct. 2012, leg. D. Karasiński 8947 (KRAM F-58551); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.0"N, 20°02'07.0"E, on rotten *Picea abies* fallen branch, 17 Oct. 2011, leg. D. Karasiński 6614 (KRAM F-58429).

REMARKS. In Poland the species was recorded from five localities.

\**Tomentellopsis submollis* (Svrček) Hjortstam – peat bog; on bark and wood on underside of fallen branch and trunk; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'43.0"N, 20°02'20.5"E, on bark of fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6628 (KRAM F-58554); Bór na Czerwonem (24) Nature Reserve, 49°27'45.6"N, 20°02'25.5"E, on bark and wood of fallen *Pinus sylvestris* branch, 17 Oct. 2011, leg. D. Karasiński 6631 (KRAM F-58533).

\**Trametes gibbosa* (Pers.) Fr. – deciduous thickets; on fallen branch; saprobic; summer (July); rare (1).

DISTRIBUTION. **EG 31-27**: Dolina Białki p.a., in vicinity of Dębno, 49°27'26.7"N, 20°12'13.6"E, in *Salix eleagnos* and *Myricaria germanica* thickets on bank of Białka river, on fallen branch of deciduous tree, 21 July 2012, leg. D. Karasiński 7496 (KRAM F-58257).

*Trametes hirsuta* (Wulfen) Lloyd – mixed, deciduous and riparian forest, riverside thickets; on wood of deciduous trees; saprobic; spring to autumn (Apr.–Sept., Nov.); common (26).

DISTRIBUTION. **DG 37-26**: W of Jabłonka, near Murowanica. 49°27'59.81"N, 19°38'27.96"E, 603.5 m, dense thickets on bank of Lipnica river (*Salix, Arctium*), grass and in some places moss, on fallen twigs, 14 July 2012, leg. M. Pilch, KRAM F-49589; on fallen twigs of ?*Salix*, KRAM F-49590; leg. M. Sadowski, KRAM F-58133; **DG 38-40**: Bór koło Chyżnego (II, Kiecka) forest, S of Jabłonka, 49°26'56.3"N, 19°41'31.58"E, 646.5 m, spruce-pine forest and single deciduous trees (*Betula ?pubescens*). 11 Nov. 2011, leg. M. Sadowski, KRAM F-49783; **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'00.7"N, 19°41'57.2"E, Alin, on bark of dead hanging *Alnus incana* trunk, 23 May 2012, leg. D. Karasiński 7049b (KRAM F-58423); **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, riverside thickets and forest (*Salix* and young *Alnus*), 29 June 2011, leg. H. Komorowska, KRAM F-56893; **DG 39-20**: Puścizna Rękowońska (19) peatbog, NW of Czarny Dunajec, 49°28'22.38"N, 19°49'43.62"E, 654.9 m, 3 Sept. 2012, leg. M. Pilch, KRAM F-56842; **DG 39-27**: Las Cyrla forest, near Długopole, SE part, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, spruce forest, on lying *Betula* twig, 27 June 2012, leg. B. Pleban, KRAM F-49549; on *Populus tremula* trunk, KRAM F-49548;

on fallen twig of deciduous tree, KRAM F-49547; **DG 39-35**: Puścizna Długopole (20) peatbog, SW part, SW of Długopole, on young *Pinus* trunk, 29 Apr. 2011, *leg. H. Komorowska*, KRAM F-49879; **DG 39-43**: on bank of Czarny Dunajec river, between Czarny Dunajec and Wróblówka (Bugaj), 49°26'37.81"N, 19°52'09.43"E, 666.2 m, spruce forest with young *Corylus avellana*, 29 June 2011, *leg. M. Lysek*, KRAM F-56848; **DG 39-51**: Czarny Dunajec, near church, on stump of deciduous tree, ca 14 km SW of Nowy Targ, ca 670 m, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-27085; **DG 39-52**: Czarny Dunajec, on bank of Czarny Dunajec river, ca 14 km SW of Nowy Targ, ca 670 m, *Alin*, on fallen twigs of *Alnus incana*, 3 July 1970; *leg. Z. Heinrich & I. Jatocha*, KRAM F-27077; **DG 39-56**: Soślina (VI) forest, E of Czarny Dunajec, E part, spruce forest, with single *Pinus sylvestris*, on twig of deciduous tree, 31 Aug. 2011, *leg. M. Pilch*, KRAM F-49770; **DG 39-83**: between Domański Wierch hill and Podczerwone village, on bank of Czarny stream, ca 680 m, ca 18 km SW of Nowy Targ, on lying *Alnus incana* trunk, 28 Aug. 1984, *leg. W. Wojewoda*, KRAM F-27074; **DG 49-11**: Ciche, ca 17 km SW of Nowy Targ, ca 700 m, *Alin* on bank of Cichy stream, on deciduous tree stump, 2 Aug. 1984, *leg. W. Wojewoda*, KRAM F-27075; **EG 20-81**: Bór na Grelu (VIII) forest, N part, near Lasek railway station, on trunk, 29 Apr. 2011, *leg. M. Lysek*, KRAM F-49214; **EG 30-01**: Bór na Grelu (VIII) forest, S part (Grel), 49°28'34.9"N, 19°58'51"E, 605.8 m, spruce forest with *Vaccinium*, on fallen twigs, 16 July 2011, *leg. H. Komorowska*, KRAM F-49801; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on dead lying trunk of *Betula pendula*, 23 Aug. 2000, *leg. W. Wojewoda*, KRAM F-50581 (Wojewoda et al. 2004); Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 620 m, pine-spruce forest, 10 Aug. 1983, *leg. H. Komorowska*, KRAM F-27080; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), 49°26'44.67"N, 20°00'37.5"E, 564.5 m, young spruce forest with sparse old *Picea*, on fallen twigs, 27 June 2012, *leg. H. Komorowska*, KRAM F-49566; Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, on fallen twig, 3 May 2011, *leg. A. Sadowska*, KRAM F-58049; *leg. M. Lysek*, KRAM F-58047; *leg. M. Lysek*, KRAM F-58055; **EG 30-64**: near Szaflary, on bank of Biały Dunajec river, riparian forest (*AlPa*), on decayed *Alnus incana* trunk, 25 May 1971, *leg. I. Jatocha*, KRAM F-11249; **EG 31-04**: Harkłowa, on bank of Dunajec river, ca 12 km E of Nowy Targ, *Alin*, ca 550 m, on living *Alnus incana* trunk, 2 Apr. 1971, *leg. Z. Heinrich*, KRAM F-27078; **EG 31-13**: Bór Harkłowski (XIII) forest, NW part (near Łopuszna), forest by wayside, 49°28'02.04"N, 20°08'29.99"E, 587.7 m, on broken twig, 3 May 2011, *leg. M. Lysek*, KRAM F-58092; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'50.46"N, 20°06'19.38"E, 597.2 m, clearing in spruce-pine forest, underwood (*Sorbus*, *Rubus*, *Vaccinium*), on fallen *Betula* twig, 28 June 2012, *leg. H. Komorowska*, KRAM F-49565; **EG 31-26**: Bór Harkłowski (XIII) forest, between Nowa Biała and Dębno, marshy spruce forest, *Sphagnum*, 19 July 2010, *leg. M. Pilch*, KRAM F-56738; **EG 31-27**: Dębno, ca 14 km E of Nowy Targ, a deciduous forest (*Alin*) on bank of Dunajec river, ca 530 m, on deciduous tree stump, 27 June 1972, *leg. I. Jatocha*, KRAM F-27079; Dolina Białki p.a., in vicinity of Dębno, 49°27'26.8"N, 20°12'15.1"E, on fallen branch, 21 July 2012, *leg. D. Karasiński* 7490 (KRAM F-58424); *leg. D. Karasiński* 7497a (KRAM F-58460); **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, E part of forest, 28 June 2012, *leg. Z. Heinrich*, KRAM F-49572; *leg. Z. Heinrich*, KRAM F-49573; **EG 31-54**: Krempachy, Dolina Białki p.a., on right side of Krempachy–Nowa Biała road, riverside thickets and forest on bank of Białka river (*Alin*), wet place, on fallen twigs, 19 July 2010, *leg. M. Pilch*, KRAM F-56737; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.0"N, 20°07'41.1"E, willow thickets on bank of Białka river, on fallen *Salix eleagnos* trunk, 24 May 2012, *leg. D. Karasiński* 7099b (KRAM F-58330).

**Trametes ochracea** (Pers.) Gilb. & Ryvarden – coniferous, mixed and deciduous forest, on wood; saprobic; spring to autumn (Apr., May, Aug., Oct.); frequent (6).

DISTRIBUTION. **DG 38-42**: Bór koło Chyżnego (II) forest, between Jabłonka and Piekelnik, near Pirogówka, pine forest, ca 630 m, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-12683; **DG 39-90**: Podczerwone, between village and Czarny Dunajec river, *Alin*, ca 720 m, ca 18 km SW of Nowy Targ, on trunk of deciduous tree, 3 Aug. 1984, *leg. W. Wojewoda*, KRAM F-32618; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, in mixed forest (*Picea*, *Pinus*, *Betula*), on trunk of *Betula* sp., 17 Oct. 1970, *leg. Z. Heinrich*, KRAM F-11076; **?EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on stump

of deciduous trees (Wojewoda et al. 2004); **EG 30-34**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine forest, 600–640 m, near border of peatbog, on broken trunk of *Betula* sp., 15 May 1970, leg. I. Jalocho, KRAM F-32617; **EG 31-14**: near Harkłowa, by roadside, on dead trunk of deciduous tree, 18 Aug. 1970, leg. I. Jalocho, KRAM F-11075.

\**Trametes pubescens* (Schumach.: Fr.) Pilát – **R**; peatbog, on undetermined substrate; saprobic; summer (July); rare (**1**).

DISTRIBUTION. **DG 39-39**: Przymiarki (22) peatbog, SW of Ludźmierz, ca 620 m, 17 July 1985, leg. Z. Heinrich, KRAM F-26320.

\**Trametes suaveolens* (L.): Fr. – riverside deciduous thickets and forest; exclusively on *Salix*; parasitic and saprobic; spring and autumn (Apr., Oct.); rare (**2**).

DISTRIBUTION. **DG 39-48**: Rogoźnik village, ca 8 km SW of Nowy Targ, 620–640 m, in small *Alnus* forest, on bank of river, on *Salix*, 3 Oct. 1970, leg. Z. Heinrich & I. Jalocho, KRAM F-33046; **EG 31-16**: between Dębno and Harkłowa, ca 13 km E of Nowy Targ, ca 540 m, *Alin* on bank of Dunajec river, on living trunk of *Salix* sp., 22 Apr. 1971, leg. Z. Heinrich, KRAM F-27085.

*Trametes versicolor* (L.) Lloyd – mixed, deciduous and riparian forest; on wood of deciduous trees; saprobic; from spring to autumn (Apr.–July, Sept., Oct.); frequent (**13**).

DISTRIBUTION. **DG 37-26**: W of Jabłonka, near Murowanica, 49°27'59.81"N, 19°38'27.96"E, 603.5 m, thick brushwood on bank of Lipnica river (*Salix*, *Arctium*), grass and in some places moss, on fallen twigs, 14 July 2012, leg. M. Pilch, KRAM F-49588; **DG 39-20**: Puścizna Rękówiańska (19) peatbog, NW of Czarny Dunajec, 49°28'10"N, 19°49'37.6"E, 650.4 m, in undergrowth *Potentilla erecta*, 3 Sept. 2012, leg. Z. Heinrich, KRAM F-56845; **DG 39-48**: near Rogoźnik village, in riparian forest (*Alpa*) on bank of stream, on dead trunk of *Alnus* sp., 3 Oct. 1970, leg. I. Jalocho, KRAM F-11077; near Rogoźnik village, *Alin* on bank of Wielki Rogoźnik stream, ca 10 km SW of Nowy Targ, ca 640 m, on deciduous tree, 7 June 1972, leg. Z. Heinrich, KRAM F-27082; **DG 39-51**: Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 675 m, near the church, on *Fraxinus excelsior*, 14 Apr. 1972, leg. Z. Heinrich, KRAM F-27084; Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 670 m, on dead trunk of deciduous tree (*F. excelsior*?), near road, 3 July 1970, leg. Z. Heinrich, KRAM F-27083; **EG 20-81**: Bór na Grełu (VIII) forest, N part, near Lasek railway station, on fallen twig, 29 Apr. 2011, leg. D. Karasiński, KRAM F-58070; **EG 30-25**: Bór na Czerwonem (X) forest, coniferous (*Picea abies*, *Pinus sylvestris*) forest, ca 3 km S of Nowy Targ, ca 620 m, *VuP*, on wood of *Betula pendula*, 22 Apr. 1971, leg. W. Wojewoda, KRAM F-27087; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on stumps of deciduous trees (Wojewoda et al. 2004); **EG 30-31**: Bór Nowotarski (IX, Do Boru) forest, W part, 49°27'34.68"N, 19°59'23.49"E, 597.7 m, coniferous forest, place with *Picea*, on old trunk, 2 May 2011, leg. A. Sadowska, KRAM F-58067; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), forest near railway, on trunk, 20 July 2010, leg. M. Pilch, KRAM F-58145; **EG 30-44**: Bór na Czerwonem (X, Czerwony Bór) forest, SW part, near Szaflary, 49°26'41.81"N, 20°01'47.16"E, 622.4 m, 17 Sept. 2011, leg. Mi. Lysek, KRAM F-49443; Bór na Czerwonem (X, Czerwony Bór) peatbog, SW part (near Szaflary), 49°26'41.81"N, 20°01'47.16"E, 622.4 m, edge of forest, 3 May 2011, leg. M. Lysek, KRAM F-58053; **EG 30-56**: NW of Bór village, S edge of Bory forest, 49°26'26.08"N, 20°03'02.77"E, 630.6 m, mossy wayside. 28 June 2011, leg. M. Lysek, KRAM F-56846; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, 2 May 2011, leg. M. Lysek, KRAM F-58088; **EG 31-27**: Dębno, ca 14 km E of Nowy Targ, ca 540 m, *Alin* on bank of Dunajec river, on living trunk of coniferous tree, 27 June 1972, leg. W. Wojewoda, KRAM F-27086; **EG 31-61**: Przełom Białki pod Krem-pachami Nature Reserve, 49°25'41.2"N, 20°07'42.4"E, willow thickets on bank of Białka river, on fallen *Salix eleagnos* branch, 24 May 2012, leg. D. Karasiński 7072 (KRAM F-58269).

\**Trechispora* cf. *confinis* (Bourdot & Galzin) Liberta – willow thickets on bank of river, on rotten wood; saprobic; spring (May); rare (**1**).

DISTRIBUTION. **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.2"N, 20°07'41.1"E, willow thickets on bank of Białka river, on fallen *Salix eleagnos* trunk, 24 May 2012, leg. D. Karasiński 7077a (KRAM F-58555).

REMARKS. The specimen differs from those described in the literature by its distinctly fimbriate margin. In Poland the species was recorded only from Kampinos National Park and Poznań (Lasek Marcelesiński forest) (Karasiński et al. 2015; Gierczyk and Ślusarczyk 2020).

***Trechispora farinacea*** (Pers.) Liberta – in coniferous forest and peatbogs, on wood, also on cones and dead basidiome; saprobic; summer and autumn (Aug.–Oct.); rare (**5**).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Pinus sylvestris* trunk, 9 Oct. 2012, leg. D. Karasiński 8967 (KRAM F-58446); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°25'54.0"N, 19°42'53.3"E, on dead basidiome of *Trichaptum* growing on fallen *Pinus x rhaetica* branch, 27 Aug. 2010, leg. D. Karasiński 5875; Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°25'54.2"N, 19°42'53.8"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. D. Karasiński 5878c; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, coniferous forest, decayed stump of *Picea*, 20 Sept. 1973, leg. W. Wojewoda, KRAM F-19485; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stump (Wojewoda et al. 2004); **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, 49°27'28.4"N, 20°02'03.8"E, on very rotten *Pinus sylvestris* stump, 17 Oct. 2011, leg. D. Karasiński 6610 (KRAM F-58422); **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, coniferous forest (*Picea abies*, *Pinus sylvestris*), on fallen cone of *P. abies*, 12 Oct. 1988, leg. W. Wojewoda, KRAM F-29122.

!\****Trechispora invisitata*** (H.J. Jacks.) Liberta – coniferous forest, on rotten wood; saprobic; autumn (Oct.); rare (**1**).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekielnik, 49°28'37.9"N, 19°43'53.2"E, on rotted wood of fallen *Picea abies* trunk, 8 Oct. 2012, leg. D. Karasiński 8891.

REMARKS. Species close to *T. invisitata* (as *T. aff. invisitata*) was reported by Szczepkowski et al. (2022)

***Tremella encephala*** Pers. – coniferous, mixed, alder forest and peatbog; on wood, bark, and mycelium of *Stereum sanguinolentum*; parasitic; summer to autumn (June–Oct.); frequent (**8**).

DISTRIBUTION. **DG 37-87**: Las Brzegi (I) forest, ca 1.2 km SW of Chyżne, spruce forest with *Pinus* admixture, 18 June 2010, leg. H. Komorowska, KRAM F-59118; **DG 38-33**: Bór koło Chyżnego (II, Szałas), ca 3 km SE of Jabłonka, 49°27'21.0"N, 19°44'13.4"E, mixed forest with pine, on *Stereum sanguinolentum* growing on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7134a (KRAM F-58630); **DG 39-51**: Czarny Dunajec, near Nowy Targ, in cemetery, on dead trunk of *Picea abies* lying on the ground, 31 July 1970, leg. Z. Heinrich, KRAM F-10916 (Wojewoda 1979); Czarny Dunajec, on lying trunk of *Picea abies*, 14 May 1971, leg. Z. Heinrich, KRAM F-11214 (Wojewoda 1979); **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, pine forest (SP) near peat dome, on fallen *Pinus* stump, 16 Sept. 2011, leg. H. Komorowska, KRAM F-58135 (with *Stereum sanguinolentum*); Bór na Czerwonem (24) Nature Reserve, 49°27'46.7"N, 20°02'25.9"E, on bark of fallen *Pinus sylvestris* trunk and *Stereum sanguinolentum*, 17 Oct. 2011, leg. D. Karasiński 6638a (KRAM F-58462); **EG 30-34**: Bór na Czerwonem (24) Nature Reserve, near Szaflary in vicinity of Nowy Targ, edge of forest and peatbog, on *Picea abies* stump, 30 July 1976, leg. Z. Heinrich, KRAM F-15586 (Wojewoda 1979); CvP, VuP, on mycelium of *Stereum sanguinolentum*, growing on stumps of conifers (Wojewoda et al. 2004); **EG 31-20**: Bór Ostrowski (XI) forest, between Ostrowsko and Łopuszna, pine-spruce forest, on lying twig of *Picea*, 25 Aug. 1981, leg. Z. Heinrich, KRAM F-25463; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.3"N, 20°08'45.2"E, pine-spruce forest, on *Stereum sanguinolentum* and fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7187d (KRAM F-58596); **EG 31-27**: Dębno, ca 540 m, ca 13 km E of Nowy Targ, alder forest, bank of Dunajec river, on fence post (*Picea abies*), 27 June 1972, leg. Z. Heinrich, KRAM F-18348 (Wojewoda 1979).

**Tremella foliacea** Pers. – **I**; forest and forest edge; on trunks of *Picea abies* and *Betula* sp.; saprobic; summer and autumn (Aug., Sept.); rare (**2**).

DISTRIBUTION. **DG 49-11**: between Ciche and Koniówka villages, 788 m, edge of small spruce forest, on lying trunk of dead *Picea abies*, 28 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25606; **EG 30-25**: Near Bór na Czerwonem (24) Nature Reserve, in vicinity of Nowy Targ, ca 630 m, *CvP*, on dead lying trunk of *Betula* sp., 20 Sept. 1973, leg. *W. Wojewoda*, KRAM F-14368 (Wojewoda 1979); *CvP*, on rotten stump (Wojewoda et al. 2004).

\***Tremella mesenterica** (Schaeff.) Retz. – mixed and riparian forest, fallen branch and twig, on basidiome and mycelium; parasitic; summer and autumn (June, Sept.); rare (**2**).

DISTRIBUTION. **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.8"N, 19°44'19.9"E, mixed forest with pine, on *Peniophora violaceolivida* growing on fallen *Salix aurita* branch, 12 June 2012, leg. *D. Karasiński* 7162; Bór koło Chyżnego (II, Szałas) forest, N part, pine forest with single *Picea* and *Populus tremula*, on fallen twig of *P. tremula*, 17 Sept. 2011, leg. *H. Komorowska*, KRAM F-58115; **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, riverside thickets and forest (*Salix* and young *Alnus*), 29 June 2011, leg. *H. Komorowska*, KRAM F-58128; leg. *H. Komorowska* KRAM F-58141.

**Tremella obscura** (L.S. Olive) M.P. Christ. – riverside mountain alder and park; on basidiome of *Dacrymyces stillatus* occurring on wood; parasitic; spring (Apr.); rare (**2**).

DISTRIBUTION. **DG 38-12**: Bór koło Chyżnego (II) forest, between Jabłonka and Piekienik, near Pirogówka, on bank of Piekienik stream, fragments of *Alin*, on decayed branch of *Alnus incana*, 14 Apr. 1972, leg. *W. Wojewoda*, KRAM F-12681 (Wojewoda 1979); **EG 30-04**: Nowy Targ, park, ca 600 m, on basidiome of *Dacrymyces stillatus* Nees, on decaying stump, 15 Apr. 1986, leg. *W. Wojewoda*, KRAM F-26392.

REMARKS. Wojewoda (1977) published the species for the first time from Poland from many regions including the KON but without giving any specific locations.

**Trichaptum abietinum** (Dicks.: Fr.) Ryvarden – coniferous forest; on dead wood of coniferous trees; saprobic; spring (Apr., May); rare (**3**).

DISTRIBUTION. **DG 39-28**: Pušćizna Franków (21, Pušćizna Franków Brzeżek) peatbog, ca 6 km SW of Nowy Targ, ca 620 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on stump of coniferous tree, 18 Apr. 1986, leg. *W. Wojewoda*, KRAM F-26394; **DG 39-61**: Czarny Dunajec village, on lying trunks of coniferous tree, 14 May 1971, leg. *Z. Heinrich*, KRAM F-11218; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on stumps, rotten trunk and fallen branches of deciduous trees (Wojewoda et al. 2004).

\***Trichaptum bifforme** (Fr.) Ryvarden – **R**; riverside mountain alder, on bark of *Alnus incana*; saprobic; spring (May); rare (**1**).

DISTRIBUTION. **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'01.3"N, 19°41'54.4"E, *Alin*, on bark of fallen *Alnus incana* trunk, 23 May 2012, leg. *D. Karasiński* 7045c (KRAM F-58566) coexists with *Stereum hirsutum* and *Plicatura crispa*.

**Trichaptum fuscoviolaceum** (Ehrenb.) Ryvarden – in mixed and coniferous forest, riverside thickets; on coniferous wood; saprobic; spring to autumn (Apr.–Oct.); common (**40**).

DISTRIBUTION. **DG 29-90**: between Odrowąż and Żary, N of Czarny Dunajec, on right side of Odrowąż–Żary road, 49°29'26.82"N, 19°50'37.42"E, 657.9 m, edge of spruce forest with single *Betula*, and *Sorbus*, in undergrowth *Vaccinium*, moss (partial clearing), on trunk of young *Picea*, 30 Aug. 2011, leg. *H. Komorowska*, KRAM F-49772; **DG 37-36**: Lipnica Wielka near Zalew Orawski flooding, ca 5 km SW of Jabłonka, ca 30 km SW of Nowy Targ, ca 600 m, near old brick-field, on lying trunk of coniferous

trees, 31 July 1984, leg. W. Wojewoda, KRAM F-27096; **DG 37-87**: Las Brzegi (I) forest, ca 1.2 km SW of Chyżne, spruce forest with *Pinus* admixture, on *Pinus* twigs, 18 June 2010, leg. Z. Heinrich, KRAM F-59126; on standing broken trunk of *Picea abies*, 18 June 2010, leg. H. Komorowska, KRAM F-59122; **DG 37-89**: SE of Chyżne, Las Brzegi (I, Graniowa Droga) forest, 49°24'42.87"N, 19°41'00.46"E, 664.3 m, spruce forest, *Sorbus*, ferns, *Rubus*, *Vaccinium*, in dry undergrowth (litter) – conifer needles, on twigs of dead lying *Picea*, 2 Sept. 2011, leg. M. Pilch, KRAM F-49762; on standing dead *Picea*, leg. H. Komorowska, KRAM F-49763; **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'21.2"N, 19°44'12.6"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June 2012, leg. D. Karasiński 7131b; **DG 38-38**: Las Baligówka (IV) forest, 49°27'23.7"N, 19°48'24.2"E, spruce forest, on bark of fallen *Picea abies* trunk, 22 May 2012, leg. D. Karasiński 6976a (KRAM F-58565); **DG 38-48**: Las Baligówka (IV) forest, N part, 49°26'54.21"N, 19°48'18.31"E, 658.9 m, spruce forest, sparse *Larix*, *Pinus*, young *Betula*, on old *Picea* trunk, 29 Oct. 2011, leg. M. Sadowski, KRAM F-56890; **DG 38-73**: Bór koło Chyżnego (II) forest, 4 km E of Chyżne, ca 22 km SW of Nowy Targ, ca 700 m, spruce forest (CvP) with *Pinus sylvestris*, on dead lying twigs of *P. sylvestris*, 31 July 1984, leg. W. Wojewoda, KRAM F-27095; **DG 38-90**: SE of Chyżne, Las Brzegi (I, Graniowa Droga) forest, 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in brushwood – young spruce below mosses and *Vaccinium*, on fallen *Picea* twig, 2 Sept. 2011, leg. M. Pilch, KRAM F-49740; Las Brzegi (I, near Wyżni Młyn) forest, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657.7 m, in clearing in spruce forest, on *Picea* stump, 14 Oct. 2010, leg. H. Komorowska, KRAM F-58131; **DG 39-17**: Długopole, ca 8 km W of Nowy Targ, ca 600 m, on pole (*Picea abies* wood) of fence enclosing meadow, 11 July 1984, leg. W. Wojewoda, KRAM F-27093; **DG 39-27**: Las Cyrła forest, near Długopole, SE part, spruce forest, 49°28'01.98"N, 19°55'36.3"E, 637.6 m, on *Picea* trunk, 27 June 2012, leg. B. Pleban, KRAM F-49575; **DG 39-35**: Puścizna Długopole (20) peatbog, SW part, SW of Długopole, on *Pinus* trunk, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49212; Puścizna Długopole peatbog, SW part, SW of Długopole, 49°27'36.36"N, 19°54'15.51"E, 637.9 m, on young *Pinus* stump, 29 June 2011, leg. H. Komorowska, KRAM F-56898; **DG 39-51**: Czarny Dunajec, Mościckiego street, near cemetery, 49°26'44.92"N, 19°50'42.72"E, 671.3 m, brushwood by roadside (*Betula*, *Sorbus*), on bark of wood, 31 Aug. 2011, leg. M. Pilch, KRAM F-49761; on cut piece of wood in pile of stored decorticated wood, leg. B. Pleban, KRAM F-49773; leg. H. Komorowska, KRAM F-58123; Czarny Dunajec, ca 14 km SW of Nowy Targ, ca 675 m, near cemetery, on dead spruce trunks lying near road, 14 May 1971, leg. Z. Heinrich, KRAM F-27088; leg. Z. Heinrich & I. Jalocho, KRAM F-27092; 22 Apr. 1971, leg. Z. Heinrich, KRAM F-27089; leg. Z. Heinrich, KRAM F-27167; **DG 39-56**: Soślina (VI) forest, NE part, E of Czarny Dunajec, on *Picea* stump, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49202; Soślina (VI) forest, between Czarny Dunajec and Rogoźnik, 15 Sept. 2011, leg. Mi. Łysek, KRAM F-49449; **DG 48-01**: Bór koło Chyżnego (II, Bucznik) forest, ca 4 km SE of Chyżne, 49°23'58.8"N, 19°42'06.1"E, coniferous forest, on *Picea abies* stump, 23 May 2012, leg. D. Karasiński 7054c (KRAM F-58363); **EG 20-81**: Bór na Grelu (VIII) forest, N part, near Lasek railway station, on standing dead young *Picea*, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49200; **EG 20-91**: Bór na Grelu (VIII) forest, E part, near Trute–Nowy Targ road, on trunk, 29 Apr. 2011, leg. H. Komorowska, KRAM F-49213; leg. H. Komorowska, KRAM F-49872; Bór na Grelu (VIII) forest, N of Ludźmierz, E part, edge of forest, cleared pine-spruce forest with *Vaccinium* and *Sphagnum*, in clearing, *Picea* trunk, 20 July 2010, leg. H. Komorowska, KRAM F-56723; **EG 30-00**: Bór na Grelu (VIII) forest, N of Ludźmierz, on right side of Ludźmierz–Trute road, young forest (*Populus tremula* and *Picea* sp.), on trunk, 20 July 2010, leg. M. Pilch, KRAM F-58112; **EG 30-01**: Bór na Grelu (VIII) forest, SW part (Grel), 49°28'55.9"N, 19°58'49.7"E, 627.2 m, spruce forest (with partial clearing), in brushwood with young *Picea* and *Vaccinium*, 16 July 2011, leg. H. Komorowska, KRAM F-49795; **EG 30-23**: Bór Nowotarski (IX) forest, N part (Do Boru), 49°28'00.93"N, 20°00'38.82"E, 602.0 m, on trunk of felled tree, 3 May 2011, leg. M. Łysek, KRAM F-58048; on trunk, 3 May 2011, leg. M. Sadowski, KRAM F-58068; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'34.2"N, 20°02'28.8"E, on fallen *Pinus sylvestris* trunk, 17 Oct. 2011, leg. D. Karasiński 6596a; **EG 30-31**: Bór Nowotarski (IX) forest, W part (Do Boru), 49°27'34.68"N, 19°59'23.49"E, 597.7 m, 2 May 2011, leg. M. Łysek, KRAM F-58033; **EG 30-32**: Bór Nowotarski (IX) forest, W part (Do Boru), marshy (with *Sphagnum*) old pine forest with single *Picea*, on living *Picea*, 20 July 2010, leg. M. Pilch, KRAM F-56718; **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 610 m, pine

forest (with *Calamagrostis*, *Deschampsia*, *Vaccinium myrtillus*, *Holcus mollis*), on dead lying trunk of *Pinus sylvestris*, 23 Aug. 2000, leg. W. Wojewoda, KRAM F-50582; Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, pine forest (?CvP), on fallen dead trunk of *P. sylvestris*, 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50620 (Wojewoda et al. 2004); Bór na Czerwonem (24) Nature Reserve, pine forest (SP) near peat dome, fallen young *Pinus*, 16 Sept. 2011, leg. H. Komorowska, KRAM F-49448; leg. H. Komorowska, KRAM F-49456; Bór na Czerwonem (24) Nature Reserve, 49°27'48.14"N, 20°02'20.94"E, 625.1 m, 15 July 2011, leg. H. Komorowska, KRAM F-49794; Bór na Czerwonem (24) Nature Reserve, N part, 49°27'54.87"N, 20°02'23.06"E, 600.0 m, 2 May 2011, leg. M. Lysek, KRAM F-58085; Bór na Czerwonem (24) Nature Reserve, edge of forest, on roots of fallen *Pinus*, 49°27'55.27"N, 20°02'22.73"E, 604.9 m, 13 Aug. 2011, leg. H. Komorowska, KRAM F-58122; near Bór na Czerwonem (24) Nature Reserve, ca 3 km S of Nowy Targ, ca 620 m, young pine forest with *Ledum palustre*, on trunk of coniferous tree, 22 Apr. 1971, leg. Z. Heinrich, KRAM F-27090; Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, ca 620 m, on lying trunk of *P. sylvestris*, 11 June 1974, leg. Z. Heinrich & I. Jalocho, KRAM F-27091; **EG 30-43**: Bór Nowotarski (IX) forest, S part (near Szaflary), forest near railway, 20 July 2010, leg. H. Komorowska, KRAM F-56731; Bór Nowotarski (IX) forest, S part (Do Boru), 49°26'45.14"N, 20°00'33.23"E, 616.8 m, on trunk, 3 May 2011, leg. M. Lysek, KRAM F-58054; on roots, leg. A. Sadowska, KRAM F-58059; leg. A. Sadowska, KRAM F-58069; **EG 30-44**: Bór na Czerwonem (X) forest, SW part (Czerwony Bór), near Szaflary, 49°26'41.81"N, 20°01'47.16"E, 622.4 m, 17 Sept. 2011, leg. Mi. Lysek, KRAM F-49455; **EG 30-45**: Bór na Czerwonem (X, Czerwony Bór) forest, SW part, peatbog, 49°26'32.36"N, 20°02'04.4"E, 580.3 m, 15 July 2011, leg. H. Komorowska, KRAM F-49793; **EG 30-46**: Bór na Czerwonem (X) forest, SE part (Czerwony Bór), peatbog (near Bór), 49°26'32.97"N, 20°03'04.49"E, 642.4 m, on *Picea* trunk, 3 May 2011, leg. M. Lysek, KRAM F-58089; on twig, KRAM F-58090; **EG 31-14**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowy Targ, in coniferous forest, on dead trunk of *Picea*, 21 Aug. 1970, leg. Z. Heinrich, KRAM F-10926; Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in underwood, young *Picea abies*, below *Carex* sp., on *Pinus* stump, 20 July 2010, leg. M. Pilch, KRAM F-58140; **EG 31-15**: Bór Harkłowski (XIII) forest, NE part near Harkłowa, 49°28'12.27"N, 20°10'33.91"E, 546.9 m, 2 May 2011, leg. M. Lysek, KRAM F-58087; **EG 31-20**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'50.46"N, 20°06'19.38"E, 597.2 m, clearing in spruce-pine forest, on young *Picea* trunk, 28 June 2012, leg. H. Komorowska, KRAM F-49574; Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'46.2"N, 20°06'23.1"E, 607.1 m, spruce-pine forest, in underwood *Sorbus*, *Rubus* below *Vaccinium*, on trunk of young ?*Picea*, 28 June 2012, leg. B. Pleban, KRAM F-49564; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, 49°27'54.11"N, 20°07'10"E, 583.6 m, on *Picea* twigs, 30 Apr. 2011, leg. H. Komorowska, KRAM F-49190; Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, leg. M. Lysek, KRAM F-49447; **EG 31-22**: Bór Bielski (XII, Brzezcie) forest, NE part, near Łopuszna–Nowa Biała road, on trunk or fallen twig? of *Picea*, 16 Sept. 2011, leg. Mi. Lysek, KRAM F-49457; **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.3"N, 20°08'45.2"E, pine-spruce forest, on fallen *Picea abies* trunk, 13 June 2012, leg. D. Karasiński 7187b (KRAM F-58594); **EG 31-27**: Dębno, ca 14 km E of Nowy Targ, ca 540 m, near road, on dead, not fallen trunk of *Pinus sylvestris*, 6 Aug. 1985, leg. W. Wojewoda, KRAM F-27094; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, NE part, 49°27'32.69"N, 20°08'06.74"E, 575.7 m, on living *Picea*, 30 Apr. 2011, leg. M. Lysek, KRAM F-49197; **EG 31-33**: Bór Harkłowski (XIII) forest, S part, near Nowa Biała, 49°27'03.82"N, 20°08'47.7"E, 591.4 m, on *Picea* trunk, 2 May 2011, leg. A. Sadowska, KRAM F-58082; Bór Harkłowski (XIII) forest, W part, 49°27'20.22"N, 20°08'49.2"E, 590.2 m, pine-spruce forest (on edge old *Pinus*, farther off young and old *Picea*), on stump, 28 June 2012, leg. H. Komorowska, KRAM F-58121; **EG 31-38**: riverine scrub forest on bank of Białka river, edge of forest (*Alin*), right side of Frydman–Dębno road, on *Pinus* trunk, 16 July 2010, leg. M. Pilch, KRAM F-56728; **EG 31-54**: Krempachy, Dolina Białki p.a., on right side of Krempachy–Nowa Biała road, thickets on bank of Białka river (*Alin*), wet place, on bark of lying twig, 19 July 2010, leg. H. Komorowska, KRAM F-58102; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'42.8"N, 20°07'39.8"E, mixed forest, on *Picea abies* stump, 24 May 2012, leg. D. Karasiński 7067 (KRAM F-58378).



\**Tricholoma albobrunneum* (Pers.: Fr.) P. Kumm. – pine-spruce forest; on the ground under *Pinus*; mycorrhizal; summer and autumn (Aug., Sept.); rare (2).

DISTRIBUTION. **DG 37-56**: pine-spruce forest near Zbiornik Orawski reservoir, ca 5 km SW of Jabłonka village, 29 Sept. 1974, leg. *M. Mitka*, KRAM F-25869; **EG 31-42**: Bór Bielski (XII) forest, ca 1 km NW of Nowa Biała, spruce-pine forest, 30 Aug. 1977, leg. *H. Komorowska*, KRAM F-25870.

\**Tricholoma batschii* Mort. Chr. & Noordel. – coniferous forest; on the ground under *Pinus*; mycorrhizal; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 8 Sept. 1972, leg. *Z. Heinrich*, KRAM F-25855.

REMARKS. In Poland the species was known only from Pieniny National Park (Gumińska 1976, as *Tricholoma fracticum* (Britzelm.) Kreisel s. auct.; Gumińska 2006) and from Ustronie (Chachula et al. 2021).

\**Tricholoma fulvum* (DC.: Fr.) Bigeard & H. Guill. – coniferous forest; on the ground under *Picea*; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-40**: Pasieczny Las (VII) forest, coniferous forest ca 2 km E of Rogoźnik village, 3 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25857.

\**Tricholoma imbricatum* (Fr.: Fr.) P. Kumm. – riverside mountain alder, coniferous forest; on the ground under *Pinus*; mycorrhizal; summer to autumn (Aug.–Oct.); rare (5).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, near Czarny Dunajec, in mixed forest, on the ground, 13 Oct. 1971, leg. *I. Jalocho*, KRAM F-12052; **DG 39-71**: between Czarny Dunajec and Podczerwone, small spruce forest on left bank of Czarny Dunajec river, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25587; **DG 39-90**: between Koniówka and Podczerwone, ca 3.5 km SW of Czarny Dunajec village, Alin with *Picea*, *Larix*, *Pinus*, 31 Aug. 1984, leg. *W. Wojewoda*, KRAM F-25588; **EG 30-40**: Pasieczny Las (VII) forest, pine-spruce forest, ca 2 km E of Rogoźnik village, 3 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25864; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25858.

\**Tricholoma portentosum* (Fr.: Fr.) Quél. – pine-spruce forest; on the ground under *Pinus* and *Picea*; mycorrhizal; autumn (Oct.); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekienik village, 2 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25860; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, 16 Oct. 1970, leg. *I. Jalocho*, KRAM F-25859.

\**Tricholoma saponaceum* (Fr.) P. Kumm. – spruce and pine-spruce forest; on the ground under *Picea*; mycorrhizal; autumn (Sept., Oct.); rare (3).

DISTRIBUTION. **EG 30-40**: Pasieczny Las (VII) forest, ca 2 km E of Rogoźnik village, pine-spruce forest, 3 Oct. 1970, leg. *I. Jalocho*, KRAM F-25294; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25293; **EG 31-32**: Bór Bielski (XII) forest, left side of Łopuszna–Nowa Biała road, ca 1 km NW of Nowa Biała, spruce forest, on decayed trunk, 7 Sept. 1982, leg. *W. Wojewoda*, KRAM F-25861.

\**Tricholoma sejunctum* (Sowerby: Fr.) Quél. – **R**; coniferous forest; on the ground; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, edge of forest, 49°27'55.27"N, 20°02'22.73"E, 604.9 m, 13 Aug. 2011, leg. *H. Komorowska*, KRAM F-56676.

\**Tricholoma terreum* (Schaeff.) P. Kumm. – riverside mountain alder; on the ground, under conifers; mycorrhizal; summer (Aug.); rare (1).

DISTRIBUTION. **DG 39-71**: between Czarny Dunajec and Podczerwone, on left bank of Czarny Dunajec river, in *Alin*, on the ground, 30 Aug. 1980, leg. *W. Wojewoda*, KRAM F-25862.

\**Tricholoma vaccinum* (Schaeff.: Fr.) P. Kumm. – coniferous forest; on the ground under *Picea*; mycorrhizal; autumn (Sept., Oct.); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest under *Picea*, 4 km SE of Piekienik village, 2 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25871; **EG 31-24**: Bór Harklowski (XIII) forest, between Harkłowa and Nowa Biała, coniferous forest, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-25865.

\**Tricholoma virgatum* (Fr.: Fr.) P. Kumm. – pine-spruce forest; on spruce needles under *Picea*; mycorrhizal; autumn (Sept., Oct.). rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekienik village, 2 Oct. 1970, leg. *Z. Heinrich*, in litter of conifer needles, under *Picea*, KRAM F-25863; **DG 38-43**: Bór koło Chyżnego (II) forest, N part (near Borowy Potok), spruce forest with sparse *Pinus*, in underwood ?*Salix* and young *Picea*, 17 Sept. 2011, leg. *M. Łysek*, KRAM F-49634.

*Tricholomopsis decora* (Fr.: Fr.) Singer – **R**; coniferous forest, peatbog; on rotten stump or woody debris in litter; saprobic; summer to autumn (Aug.–Oct.); frequent (8).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I) forest, near Niżni Młyn, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, on remnants of *Picea abies* wood, 14 Oct. 2010, leg. *M. Łysek*, KRAM F-58099; **DG 38-43**: Bór koło Chyżnego (II) forest, N part (near Borowy Potok), spruce forest with single *Pinus*, in underwood ?*Salix* and young *Picea*, 17 Sept. 2011, leg. *M. Łysek*, KRAM F-49667; **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°26'12.9"N, 19°42'15.7"E, on decayed wood of *Pinus x rhaetica* stump, 27 Aug. 2010, leg. *D. Karasiński* 5849; **DG 38-73**: Bór koło Chyżnego (II) forest, pine-spruce forest, 4 km E of Chyżne village, S of Pirogówka mount, 30 Sept. 1984, leg. *W. Wojewoda*, KRAM F-25874; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump (Wojewoda et al. 2004); **EG 31-14**: Bór Harklowski (XIII) forest, near Harkłowa, ca 550 m, in coniferous forest (*VuP* × *Sphagnetum medio-rubelli*), on stump of deciduous tree, 22 Sept. 1966, leg. *W. Wojewoda*, KRAM F-12451; **EG 31-20**: Bór Ostrowski (IX) forest, pine-spruce forest, ca 1 km SE of Ostrowsko village, 25 Aug. 1981, leg. *Z. Heinrich*, KRAM F-25872; **EG 31-24**: Bór Harklowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, on decayed wood, 16 Oct. 1970, leg. *I. Jalocho*, KRAM F-25873.

*Tricholomopsis rutilans* (Schaeff.: Fr.) Singer – coniferous forest, peat dome; on rotten conifer stump; saprobic; summer to autumn (July–Oct.); frequent (10).

DISTRIBUTION. **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, 2 Sept. 2011, leg. *H. Komorowska*, KRAM F-56640; **DG 38-38**: Las Baligówka (IV) forest, ca 4 km SE of Piekienik village, pine-spruce forest, 6 July 1970, leg. *I. Jalocho*, KRAM F-25882; 2 Oct. 1970, leg. *Z. Heinrich*, KRAM F-25875; 1 Aug. 1970, leg. *Z. Heinrich*, KRAM F-25876; **DG 38-41**: Bór koło Chyżnego (II) forest, W part, edge of forest by way-side, spruce-pine forest with *Vaccinium*, *Calluna vulgaris*, moss, patches of *Sphagnetum*, 49°26'50.89"N, 19°42'39.84"E, 640.2 m, near living young *Picea*, 4 Sept. 2011, leg. *H. Komorowska*, KRAM F-56677; **DG 38-90**: Las Brzegi (I) forest, near Wyżni Młyn, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, in clearing in spruce forest, 14 Oct. 2010, leg. *Z. Heinrich*, KRAM F-58101; **EG 30-23**: Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, pine-spruce forest, 1 Sept. 1970, leg. *H. Komorowska*, KRAM F-25881; 7 Oct. 1970, leg. *I. Jalocho*, KRAM F-25877; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, edge of forest, 49°27'55.27"N, 20°02'22.73"E, 604.9 m, 13 Aug. 2011, leg. *M. Sadowski*, KRAM F-56678;

Bór na Czerwonem (24) Nature Reserve, pine forest (*SP*) near peat dome, 16 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49665; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, *VuP*, on the rotten stumps (Wojewoda et al. 2004); **EG 30-40**: Pasieczny Las (VII) forest, ca 2 km E of Rogoźnik village, pine-spruce forest, 2 Oct. 1984, *leg. Z. Heinrich*, KRAM F-25878; **EG 31-20**: Bór Ostrowski (XI) forest, pine-spruce forest, ca 1 km SE of Ostrowsko village, pine-spruce forest, 14 Aug. 1970, *leg. Z. Heinrich*, KRAM F-25880; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, E part, spruce forest with single *Pinus*, some *Sorbus* and *Betula*, 16 Sept. 2011, *leg. P. Roux*, KRAM F-49666; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, 18 Aug. 1970, *leg. I. Jalocho*, KRAM F-25879.

***Tubaria confragosa*** (Fr.) Harmaja – **E**; coniferous forest; on mossy trunk; saprobic; summer (June); rare (**2**).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground in litter (Wojewoda et al. 2004); **EG 30-45**: Bór na Czerwonem (X) forest, on mossy rotten stump of *Betula*, 11 June 1971, *leg. Z. Heinrich*, KRAM F-25301.

\****Tubaria furfuracea*** (Pers.: Fr.) Gillet s.l. – spruce and deciduous forest, riverine scrub; on twigs and organic debris; on the ground in moss; saprobic; spring and autumn (Apr., May, Oct., Nov.); rare (**5**).

DISTRIBUTION. **DG 38-42**: between Piekienik and Jablonka, on bank of Piekienik stream, ca 630 m, in riverine scrub, 14 Apr. 1972, *leg. W. Wojewoda*, KRAM F-12670; between Piekienik and Jablonka, near Pirogówka, ca 630 m, on field, near road, 14 Apr. 1972, *leg. I. Jalocho*, KRAM F-12684; **DG 38-90**: Las Brzegi (I) forest, near Wyżni Młyn, S of Chyżne, 49°24'17.7"N, 19°41'20.4"E, 657,7 m, spruce forest with young *Picea*, on remnants of wood and on conifer needles, 14 Oct. 2010, *leg. Z. Heinrich*, KRAM F-49984; **DG 48-29**: forest on bank of Czarny Dunajec river, NW of Chochołów, 49°22'27.79"N, 19°48'47.69"E, 731.8 m, sparse deciduous forest (*Alnus*, *Salix*, *Corylus*, *Betula*) with frequent shrubs, on twig lying on the ground, 13 Nov. 2011, *leg. M. Sadowski*, KRAM F-58005; on twig lying on the ground, *leg. A. Sadowska*, KRAM F-58007; **EG 31-21**: Bór Ostrowski (XI, Księży Bór) forest, SW of Łopuszna, NE part, edge of forest, young pine-spruce forest, 17 Oct. 2010, *leg. Z. Heinrich*, KRAM F-49932; **EG 31-27**: left bank of Białka river, in vicinity of Dębno, edge of forest with *Pinus sylvestris*, dry stony grass with *Juniperus communis*, in moss, 24 May 1984, *leg. W. Wojewoda*, KRAM F-25531.

***Tubulicrinis angustus*** (D.P. Rogers & Weresub) Donk – peat bog; on rotten stump; saprobic; rare (**1**).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on rotten stump (Wojewoda et al. 2004).

REMARKS. In Poland the species is known only from KON (Wojewoda 2003; Wojewoda et al. 2004).

***Tubulicrinis medius*** (Bourdot & Galzin) Oberwinkler – peat bog; on rotten stump; saprobic; rare (**1**).

DISTRIBUTION. ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve (Grodzińska et al. 1973); *CvP*, on rotten stump (Wojewoda et al. 2004).

REMARKS. In Poland known only from the KON (Grodzińska et al. 1973; Wojewoda et al. 2004).

\****Tubulicrinis subulatus*** (Bourdot & Galzin) Donk – peat bogs and coniferous forest, on fallen trunks and branches; saprobic; summer to autumn (June, Aug., Oct.); rare (**5**).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekienik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Pinus sylvestris* trunk, 9 Oct. 2012, *leg. D. Karasiński* 8964 (KRAM F-58416); *leg. D. Karasiński* 8966 (KRAM F-58431); **DG 38-33**: Bór koło Chyżnego (II, Szalas) forest, ca 3 km SE of Jablonka, 49°27'23.4"N, 19°44'18.7"E, mixed forest with pine, on fallen *Pinus sylvestris* branch, 12 June

2012, *leg. D. Karasiński* 7154 (KRAM F-58586); *leg. D. Karasiński* 7155 (KRAM F-58633); **DG 38-51**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°26'13.4"N, 19°42'08.3"E, on decayed wood of fallen *Pinus xraetica* trunk, 27 Aug. 2010, *leg. D. Karasiński* 5839; **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, 49°27'35.5"N, 20°02'10.6"E, on rotten wood of fallen *Pinus sylvestris* branch, 17 Oct. 2011, *leg. D. Karasiński* 6598 (KRAM F-58376); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'52.7"N, 20°08'45.2"E, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7185 (KRAM F-58337); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.1"N, 20°08'58.1"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7209a (KRAM F-58568); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'43.1"N, 20°08'43.8"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7195 (KRAM F-58590); Bór Harkłowski (XIII) forest, Harkłowa, 49°27'43.2"N, 20°08'43.6"E, pine-spruce forest, on strongly rotted wood of fallen *Pinus sylvestris* branch, 13 June 2012, *leg. D. Karasiński* 7199.

\**Tulasnella deliquescens* (Juel) Juel – coniferous forest, on very rotten coniferous wood; saprobic; autumn (Oct.). rare (1).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekelnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on very rotten stump of coniferous tree (coexists with *Botryobasidium* sp. and *Trechispora* sp.), 9 Oct. 2012, *leg. D. Karasiński* 8937 (KRAM F-58549).

REMARKS. In Poland the species was known only from Młynne village (Beskid Wyspowy) and Tatra National Park (Wojewoda 2003; Ronikier 2002).

\**Tulasnella eichleriana* Bres. – peatbog dome and in mixed forest; on unknown substrate and fallen branches; saprobic; summer and autumn (Aug., Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, mixed forest, on fallen *Picea abies* branch, 8 Oct. 2012, *leg. D. Karasiński* 8921b (KRAM F-58474); on bark of fallen *Pinus sylvestris* branch, 8 Oct. 2012, *leg. D. Karasiński* 8920 (KRAM F-58364); **DG 39-28**: Puścizna Franków (21) peatbog, on peat dome, 49°28'01"N, 19°56'15"E, *Pinus* and sparse *Betula* with *Calluna vulgaris*, *Ledum palustre*, 30 Aug. 2012, *leg. M. Piątek*, KRAM F-56844.

*Tulasnella rubropallens* Bourdot & Galzin – peatbog; on unidentified timber; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (24) Nature Reserve, ca 3 km S of Nowy Targ, ca 620 m, on fence post, 20 Sept. 1973, *leg. W. Wojewoda*, KRAM F-14371 (Wojewoda et al. 2004).

REMARKS. In Poland the species was known only from Tatra National Park (Ronikier 2002).

*Tulasnella violea* (Quél.) Bourdot & Galzin – coniferous forest; on fallen twigs and branches; saprobic; spring (May); rare (2).

DISTRIBUTION. **DG 38-38**: Las Baligówka (IV) forest, between Piekelnik and Czarny Dunajec, on dead fallen twig of *Picea*, 18 May 1973, *leg. J. Kurzawiński*, KRAM F-14267 (Wojewoda 2003); **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, in vicinity of Chyżne, 49°24'03.4"N, 19°41'51.1"E, spruce forest, on wood of fallen *Picea abies* branch, 23 May 2012, *leg. D. Karasiński* 7019 (KRAM F-58420).

*Tylophilus felleus* (Bull.: Fr.) P. Karst. – coniferous forest, riverine scrub; on the ground; mycorrhizal; summer to autumn (June–Oct.); frequent (10).

DISTRIBUTION. **DG 38-06**: forest near Piekelnik village, ca 6 km S of Jabłonka, 620–680 m, ca 20 km W of Nowy Targ, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32430; *leg. Z. Heinrich*, KRAM F-32428; **EG 30-25**: Bór na Czerwonem (X) forest, near Nowy Targ, ca 610 m, pine forest, on the ground, 6 Sept. 1973, *leg. W. Wojewoda*, KRAM F-17140; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 30-43**: Bór Nowotarski (IX) forest, edge of forest, 49°27'01.8"N,

20°00'45.78"E, 629.8 m, 12 Aug. 2012, *leg. G. Końska*, KRAM F-49974; Bór Nowotarski (IX) forest, S part (near Szaflary), forest near railway, 20 July 2010, *leg. M. Pilch*, KRAM F-59117; **EG 31-14**: Bór Harkłowski (XIII) forest, S of Harkłowa (Naborze Bór), marshy old pine-spruce forest, in underwood young *Picea abies* below *Carex* sp., 20 July 2010, *leg. H. Komorowska*, KRAM F-59012; **EG 31-22**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, 580–600 m, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32432; **EG 31-24**: Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 1 Oct. 1967, *leg. K. Szczepanek*, KRAM F-32433; **EG 31-25**: Bór Harkłowski (XIII) forest, NE part, W of Dębno, 49°28'02.7"N, 20°10'42.72"E, 553.4 m, pine-spruce forest and sparse *Betula*, 14 Aug. 2012, *leg. G. Końska*, KRAM F-49510; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, 580–600 m, 14 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32431; *leg. Z. Heinrich*, KRAM F-32429; Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, pine-spruce forest, on the ground, in moss, 31 Aug. 1985, *leg. W. Wojewoda*, KRAM F-32426; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, right side of Łopuszna–Nowa Biała road, central part, spruce forest, in underwood: *Frangula alnus*, *Sorbus*, 17 July 2010, *leg. H. Komorowska*, KRAM F-56861; **EG 31-54**: Krempachy, Dolina Białki p.a., 49°26'15.9"N, 20°09'20.3"E, 597.0 m, riverside thickets (single *Pinus* and frequent *Salix* and *Alnus*) on bank of river, 28 June 2011, *leg. H. Komorowska*, KRAM F-49803.

\****Tylospora asterophora*** (Bonord.) Donk – coniferous forest, on fallen twig; mycorrhizal; autumn (Oct.); rare (1).

DISTRIBUTION. **EG 30-01**: Bór na Grełu (VIII) forest, ca 2 km N of Ludźmierz, 600–620 m, ca 3 km W of Nowy Targ, dead lying twig of *Picea*, 11 Oct. 1984, *leg. Z. Heinrich*, KRAM F-25662.

***Tylospora fibrillosa*** (Burt) Donk – E; coniferous forest, on wood; mycorrhizal; spring and autumn (Apr., May, Sept.); frequent (6).

DISTRIBUTION. **DG 38-73**: Bór koło Chyżnego (II) forest, ca 4 km of Chyżne village, between Chyżne, Jabłonka and Piekielnik, 640–710 m, ca 22 km SW of Nowy Targ, on *Picea abies* trunk, 14 Apr. 1972, *leg. Z. Mirek*, KRAM F-25571; **EG 30-23**: Bór Nowotarski (IX) forest, near Nowy Targ, pine-spruce forest, on fallen twig of coniferous tree, 13 May 1981, *leg. W. Wojewoda*, KRAM F-25391; ?**EG 30-25**: Bór na Czerwonym (24) Nature Reserve, CvP, on rotten stump (Wojewoda et al. 2004); **EG 30-45**: Bór na Czerwonym (X) forest (spruce forest), near Szaflary, ca 630 m, on dead lying trunk of *Picea*, 20 Sept. 1973, *leg. W. Wojewoda*, KRAM F-14379; **EG 31-22**: Bór Bielski (XII) forest, near Łopuszna, ca 600 m, coniferous forest, on *Picea abies* stump, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-13434; Bór Bielski (XII) forest, near Łopuszna, ca 600 m, coniferous forest, on soil with remnants of wood, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-13433; **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, 580–600 m, dead twig of *Picea abies* lying on the ground, 18 May 1973, *leg. W. Wojewoda*, KRAM F-25570.

REMARKS. In Poland the species was known only from Tatra National Park, the Kashubian Landscape Park and Gorce National Park (Wojewoda et al. 1986, 2016; Karasiński 2016).

\****Typhula uncialis*** (Grev.) Berthier – riverside mountain alder; on dead petioles of fallen leaves; saprobic; summer (July); rare (1).

DISTRIBUTION. **DG 39-57**: near mouth of Wielki Rogoźnik stream to Czarny Dunajec river, ca 4 km SW of Nowy Targ, ca 600 m, *Alin*, on dead petioles of fallen leaves of ?*Petasites paradoxus*, 11 July 1984, *leg. W. Wojewoda*, KRAM F-25939.

\****Vascellum pratense*** (Pers.) Kreisel – pastures, on the ground among grasses; saprobic; spring and summer (May, July); rare (3).

DISTRIBUTION. **DG 39-18**: between Krauszów and Długopole, pasture on bank of Czarny Dunajec river, ca 6 km W of Nowy Targ, 600–640 m, 11 July 1984, *leg. W. Wojewoda*, KRAM F-32672; Krauszów, pasture

on bank of Czarny Dunajec river, ca 5 km W of Nowy Targ, 620–640 m, 11 July 1984, *leg. W. Wojewoda*, KRAM F-32652; **EG 30-10**: Ludźmierz, near church, pasture on bank of Czarny Dunajec river, ca 4 km SW of Nowy Targ, 600–610 m, 11 July 1984, *leg. W. Wojewoda*, KRAM F-32653; **EG 31-39**: Frydman, ca 16 km SE of Nowy Targ, 525 m, pasture, 24 May 1984, *leg. W. Wojewoda*, KRAM F-32651.

\**Veluticeps abietina* (Pers.) Hjortst. & Tellería – **R**; coniferous forest; on stumps; saprobic; spring (Apr., May); rare (**2**).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, ca 4 km W of Czarny Dunajec, ca 18 km W of Nowy Targ, ca 670 m, coniferous forest, on *Picea abies* stump, 18 May 1973, *leg. Z. Heinrich*, KRAM F-25246; **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, ca 10 km SE of Nowy Targ, ca 580 m, pine-spruce forest, on *Picea abies* stump, 7 Apr. 1981, *leg. H. Komorowska*, KRAM F-25265.

*Vesiculomyces citrinus* (Pers.) E. Hagstr. – mixed, coniferous and riverside mountain alder; on dead wood of coniferous trees, once observed on bark of living tree; saprobic; from spring to autumn (May, Aug.–Oct.); frequent (**7**).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekienik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on fallen *Picea abies* trunk, 8 Oct. 2012, *leg. D. Karasiński* 8917 (KRAM F-58335); **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'02.6"N, 19°41'50.4"E, spruce forest, on bark of *Picea abies* base of living tree, 23 May 2012, *leg. D. Karasiński* 7027 (KRAM F-58572); **DG 39-90**: on right bank of Czarny Dunajec river, between Podczerwone and Czarny Dunajec village, ca 16 km SW of Nowy Targ, ca 675–720 m, *Alin* with single *Pinus*, on trunk of ?*Pinus*, 31 Aug. 1984, *leg. W. Wojewoda*, KRAM F-25661; **EG 30-23**: Bór Nowotarski (IX) forest, ca 3 km SW of Nowy Targ, spruce forest, on trunk of *Picea abies*, 20 Sept. 1973, *leg. W. Wojewoda*, KRAM F-19484; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on coniferous stumps and logs (Wojewoda et al. 2004, as *Gloiothele citrina* (Pers.) Ginns & Freeman); **EG 31-14**: Bór Harkłowski (XIII) forest, near Harkłowa, in coniferous forest, on burnt wood of *Picea abies*, 8 Sept. 1972, *leg. Z. Heinrich*, KRAM F-13801; **EG 31-24**: Bór Harkłowski (XIII) forest, in coniferous forest (*Picea*, *Pinus*), on dead trunk of *Picea abies*, 16 Oct. 1970, *leg. Z. Heinrich*, KRAM F-11100.

*Xerocomus badius* (Fr.: Fr.) E.-J. Gilbert – coniferous forest; on the ground; mycorrhizal; summer to autumn (Aug.–Oct.); frequent (**7**).

DISTRIBUTION. **DG 37-89**: Las Brzegi (I, near Niżni Młyn) forest, S of Chyżne, 49°24'42.2"N, 19°40'55.2"E, 667,6 m, spruce forest, in undergrowth: *Vaccinium vitis-idaea* and mosses, 14 Oct. 2010, *leg. M. Lysek*, KRAM F-56854; **DG 38-06**: small forest near Piekienik village, ca 6 km S of Jabłonka, 620–680 m, ca 20 km W of Nowy Targ, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32434; *leg. Z. Heinrich*, KRAM F-32435; near Piekienik village, in coniferous forest, on the ground, 13 Oct. 1971, *leg. Z. Heinrich*, KRAM F-32427; **DG 38-28**: Las Baligówka (IV) forest, E part, coniferous forest, 49°27'37.92"N, 19°48'17.16"E, 664.4 m, 11 Aug. 2012, *leg. G. Końska & P. Roux*, KRAM F-49512; **DG 38-43**: Bór koło Chyżnego (II) forest, N part (near Borowy Potok), spruce forest with sparse *Pinus*, in underwood ?*Salix* and young *Picea*, 17 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49633; **DG 38-48**: Las Baligówka (IV) forest, ca 3.5 km NW of Czarny Dunajec, 23 Sept. 1981, *leg. M. Czerwieniec*, KRAM F-18570; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004); **EG 31-31**: Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, 580–600 m, 14 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32436.

*Xerocomus chrysenteron* (Bull.) Quél. – coniferous forest; on the ground; mycorrhizal; summer to autumn (July–Oct.); frequent (**6**).

DISTRIBUTION. **DG 38-48**: Las Baligówka (IV) forest, 4 km SE of Piekienik village, 650–670 m, ca 17 km SW of Nowy Targ, 1 Aug. 1970, *leg. Z. Heinrich*, KRAM F-32446; ?**EG 30-25**: Bór na Czerwonem (24) Nature Reserve, *CvP*, on the ground (Wojewoda et al. 2004, as *X. pascuus* (Pers.) Gill.);

**EG 31-20:** Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, 580–595 m, ca 6 km SE of Nowy Targ, 1 Oct. 1967, *leg. K. Szczepanek*, KRAM F-3244; **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 18 July 1970, *leg. Z. Heinrich*, KRAM F-32437; *leg. Z. Heinrich*, KRAM F-32439; *leg. Z. Heinrich*, KRAM F-32442; **EG 31-31:** Bór Bielski (XII) forest, between Nowa Biała and Łopuszna, ca 7 km SE of Nowy Targ, ca 580–600 m, 30 Aug. 1977, *leg. Z. Heinrich*, KRAM F-32438; **EG 31-32:** Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, spruce forest, 7 Sept. 1982, *leg. W. Wojewoda*, KRAM F-32440; *leg. W. Wojewoda*, KRAM F-32443; *leg. I. Jalocha*, KRAM F-32441.

**Xerocomus subtomentosus** (L.: Fr.) Quél. – coniferous forest; on the ground; mycorrhizal; autumn (Oct.); rare (2).

DISTRIBUTION. ?**EG 30-25:** Bór na Czerwonem (24) Nature Reserve, CvP, on the ground (Wojewoda et al. 2004); **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, ca 10 km SE of Nowy Targ, 570–580 m, 1 Oct. 1967, *leg. K. Szczepanek*, KRAM F-32445.

\***Xeromphalina brunneola** O.K. Mill. – coniferous forest; on wood; saprobic; summer and autumn (June, Aug., Sept.); rare (5).

DISTRIBUTION. **DG 37-18:** Forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, 2 Sept. 2011, *leg. H. Komorowska*, KRAM F-49973; **DG 38-26:** Las Sosnówka forest, pine forest, *Picea* admixture, ca 1 km S of Piekienik village, 3 Aug. 1970, *leg. Z. Heinrich*, KRAM F-25884; **DG 38-38:** Las Baligówka (IV) forest, N part, near Czarny Dunajec–Jabłonka road, on stump, 15 Sept. 2011, *leg. Mi. Lysek*, KRAM F-49631; **EG 30-45:** Bór na Czerwonem (X) forest, in coniferous forest, on living trunk of *Picea abies*, 11 June 1971, *leg. I. Jalocha*, KRAM F-11354; **EG 31-31:** Bór Bielski (XII) forest, ca 1 km N of Nowa Biała, ca 7 km SE of Nowy Targ, 30 Aug. 1977, *leg. H. Komorowska*, KRAM F-30251.

REMARKS. In Poland the species was known only from the Białowieża Primeval Forest and the Góry Izerskie Mts (Antonín 2000; Gierczyk et al. 2018).

**Xeromphalina campanella** (Batsch: Fr.) Kühner & Maire – coniferous forest; on rotten stumps of conifers; saprobic; spring, summer and autumn (Apr., May, July, Aug., Oct.); frequent (10).

DISTRIBUTION. **DG 38-06:** pine-spruce forest near Piekienik village, W of Czarny Dunajec, on stump, 3 July 1970, *leg. Z. Heinrich*, KRAM F-25242; **DG 38-26:** Las Sosnówka forest, ca 1 km of Piekienik village, on roots and rotten stump, 3 July 1970, *leg. I. Jalocha*, KRAM F-25888; **DG 38-38:** Las Baligówka (IV) forest, W of Czarny Dunajec, on rotten *Picea* stump, 6 July 1970, *leg. I. Jalocha*, KRAM F-25243; Las Baligówka (IV) forest, pine-spruce forest, 4 km SE of Piekienik village, 2 Oct. 1970, *leg. Z. Heinrich*, KRAM F-25886; Las Baligówka (IV) forest, pine-spruce forest, ca 4 km SE of Piekienik village, on rotten stump, 14 May 1971, *leg. Z. Heinrich*, KRAM F-25887; **EG 20-81:** Bór na Grełu (VIII) forest, N part, near Lasek railway station, 29 Apr. 2011, *leg. M. Lysek*, KRAM F-49874; **EG 20-91:** Bór na Grełu (VIII) forest, E part, near Trute–Nowy Targ road, 29 Apr. 2011, *leg. M. Lysek*, KRAM F-49873; **EG 30-23:** Bór Nowotarski (IX) forest, ca 2 km SW of Nowy Targ, coniferous forest, rotten stump, 17 Oct. 1970, *leg. I. Jalocha*, KRAM F-25889; ?**EG 30-25:** Bór na Czerwonem (24) Nature Reserve, CvP, on rotten stumps of conifers (Wojewoda et al. 2004); **EG 31-20:** Bór Ostrowski (XI) forest, ca 1 km SE of Ostrowsko village, on rotten *Pinus* stump, 14 Aug. 1970, *leg. I. Jalocha*, KRAM F-25885; **EG 31-24:** Bór Harkłowski (XIII) forest, between Harkłowa and Nowa Biała, pine-spruce forest, on stump, 2 Aug. 1970, *leg. Z. Heinrich*, KRAM F-25883; **EG 31-32:** Bór Bielski (XII, Brzezcie) forest, NE part, 49°27'32.69"N, 20°08'06.74"E, 575.7 m, on stump, 30 Apr. 2011, *leg. M. Lysek*, KRAM F-49871; on very rotten stump, *leg. H. Komorowska*, KRAM F-49877.

\**Xeromphalina cauticinalis* (Fr.) Kühner & Maire – pine forest with *Picea*; in litter among mosses; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **EG 30-25**: Bór na Czerwonem (X) forest, ca 3 km S of Nowy Targ, pine forest, *Picea* admixture, 10 Aug. 1983, leg. H. Komorowska, KRAM F-25890.

*Xeromphalina cornui* (Qué.) J. Favre – pine forest; on the ground among *Sphagnum*; saprobic; autumn (Sept.); rare (1).

DISTRIBUTION. **EG 30-35**: Bór na Czerwonem (24) Nature Reserve, ca 2.5 km S of Nowy Targ centre, ca 600 m, in pine forest with *Ledum palustre*, *Vaccinium uliginosum* (*VuP*) among *Sphagnum*, on the ground (on fallen leaves and needles), 19 Sept. 2000, leg. W. Wojewoda, KRAM F-50617 (Wojewoda et al. 2004, as *Xeromphalia cornui*).

\**Xylodon asperus* (Fr.) Hjortstam & Ryvarden – coniferous forest; on stumps, fallen trunks and branches of conifers; saprobic; from spring to autumn (May, Aug., Oct.); rare (4).

DISTRIBUTION. **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Pinus sylvestris* branch, 9 Oct. 2012, leg. D. Karasiński 8948 (KRAM F-58268); on rotten *Picea abies* stump, 9 Oct. 2012, leg. D. Karasiński 8950 (KRAM F-58336); leg. D. Karasiński 8951b (KRAM F-58472); leg. D. Karasiński 8952 (KRAM F-58439); leg. D. Karasiński 8954 (KRAM F-58261); **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'14.9"N, 19°42'24.5"E, on decayed wood of fallen *Pinus xrahetica* branch, 27 Aug. 2010, leg. D. Karasiński 5860; **EG 31-31**: Bór Bielski (XII) forest, between Łopuszna and Nowa Biała, ca 7 km SE of Nowy Targ, ca 580–600 m, coniferous forest (*Picea abies*, *Pinus sylvestris*), on decayed trunk of coniferous tree lying on the ground, 12 Oct. 1988, leg. W. Wojewoda, KRAM F-29120; **EG 31-32**: Bór Bielski (XII, Brzezcie) forest, Łopuszna, 49°27'23.5"N, 20°07'56.0"E, spruce forest with pine, on rotten *Picea abies* stump, 24 May 2012, leg. D. Karasiński 7106 (KRAM F-58311).

\**Xylodon borealis* (Kotir. & Saaren.) Hjortstam & Ryvarden – peatbog dome; on dead *Calluna vulgaris* twigs; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°25'53.3"N, 19°42'53.7"E, on dead *Calluna vulgaris* twigs, 27 Aug. 2010, leg. D. Karasiński 5888.

REMARKS. In Poland the species was known only from the Ochojec Nature Reserve (Katowice), Białowieża National Park and Kampinos National Park (Karasiński 2009; Karasiński et al. 2010, 2015).

\**Xylodon brevisetus* (P. Karst.) Hjortstam & Ryvarden – coniferous forest; on stumps, fallen trunks and branches of conifers; saprobic; from spring to autumn (May, June, Aug.–Oct.); frequent (10).

DISTRIBUTION. **DG 37-18**: forest W of Jabłonka, on bank of Syhleć river, 49°28'37.32"N, 19°39'42.26"E, 636.4 m, spruce forest with *Vaccinium*, *Oxalis* and *Rubus*, on *Picea abies* trunk, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49750; **DG 38-23**: Bór koło Chyżnego (II, Ucinki) forest, Piekielnik, 49°28'01.8"N, 19°44'48.3"E, coniferous forest, on fallen *Picea abies* branch, 9 Oct. 2012, leg. D. Karasiński 8963b (KRAM F-58467); **DG 38-47**: Las Gajka (III) forest, 49°27'04.2"N, 19°47'22.5"E, pine forest, on dead attached *Pinus sylvestris* branch, 22 May 2012, leg. D. Karasiński 6999 (KRAM F-58250); Las Gajka (III) forest, 49°27'04.0"N, 19°47'25.1"E, pine forest, on fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7002 (KRAM F-58656); Las Gajka (III) forest, 49°26'55.0"N, 19°47'28.7"E, pine forest, on bark of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7011 (KRAM F-58557); Las Gajka forest, 49°27'03.8"N, 19°47'25.4"E, pine forest, on wood of fallen *Pinus sylvestris* trunk, 22 May 2012, leg. D. Karasiński 7005 (KRAM F-58642); **DG 38-61**: Puścizna Jasiowska (4) peatbog, ca 3 km NE of Chyżne, 49°26'00.8"N, 19°42'34.3"E, on wood of fallen *Pinus xrahetica* trunk, 27 Aug. 2010, leg. D. Karasiński 5865; **DG 38-69**: Las Cikówka (V) forest, ca 2 km SW of Czarny Dunajec, ca 700 m, pine



forest, decayed trunk, 24 Aug. 1984, leg. W. Wojewoda, KRAM F-25627; **DG 38-73**: Bór koło Chyżnego (II), forest (between Chyżne and Podczerwone), ca 22 km SW of Nowy Targ, pine-spruce forest, conifer twigs lying on the ground, ca 670 m, 30 Aug. 1984, leg. W. Wojewoda, KRAM F-25628; **DG 38-90**: Bór koło Chyżnego (II) forest, SE of Chyżne (Graniowa Droga), 49°24'05.08"N, 19°41'53.56"E, 684.5 m, spruce forest, in underwood young spruce, below mosses and *Vaccinium*, on very decayed trunk without bark, 2 Sept. 2011, leg. H. Komorowska, KRAM F-49749; **DG 48-01**: Bór koło Chyżnego (II, Bucznik) forest, ca 4 km SE of Chyżne, 49°23'57.2"N, 19°42'27.3"E, pine forest, on fallen *Pinus sylvestris* trunk, 23 May 2012, leg. D. Karasiński 7057 (KRAM F-58372); **EG 31-23**: Bór Harkłowski (XIII) forest, Harkłowa, 49°27'37.9"N, 20°08'46.2"E, pine-spruce forest, on fallen *Pinus sylvestris* branch, 13 June 2012, leg. D. Karasiński 7203 (KRAM F-58591); **EG 31-32**: Bór Bielski (XII) forest, right side of Łopuszna–Nowa Biała road, ca 7 km SE of Nowy Targ, ca 580–600 m, pine-spruce forest, on rotten stump, 7 Sept. 1982, leg. W. Wojewoda, KRAM F-25626.

\**Xylodon crustosus* (Pers.) Chevall. – mixed, deciduous and coniferous forest, on fallen trunks, branches and twigs of conifers and deciduous trees; saprobic; spring and summer (May, Aug.); rare (3);

DISTRIBUTION. **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'03.2"N, 19°41'50.7"E, spruce forest, on bark of fallen *Picea abies* trunk, 23 May 2012, leg. D. Karasiński 7021 (KRAM F-58644); **EG 30-30**: Przymiarki (22) peatbog, in birch forest (with sparse *Pinus*, *Salix cinerea*), on dead twigs of *S. cinerea*, 30 Aug. 2012, leg. H. Komorowska, KRAM F-56834; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'39.3"N, 20°07'41.2"E, willow thickets on bank of Białka river, on wood of fallen *Salix eleagnos* branch, 24 May 2012, leg. D. Karasiński 7080 (KRAM F-58359).

\**Xylodon nespori* (Bres.) Hjortstam & Ryvarden – coniferous and mixed forest; on stumps; saprobic; spring and autumn (May, Oct.); rare (2).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, on bark and wood of *Picea abies* stump, 8 Oct. 2012, leg. D. Karasiński 8926 (KRAM F-58248); **DG 38-90**: Las Brzegi (I, Sławny Łęk) forest, ca 4 km SE of Chyżne, 49°24'02.1"N, 19°41'50.9"E, spruce forest, on decayed *Picea abies* stump, 23 May 2012, leg. D. Karasiński 7030 (KRAM F-58657).

\**Xylodon quercinus* (Pers.) Gray – mixed and deciduous forest, on fallen branches of deciduous trees; saprobic; from spring to autumn (May, June, Aug., Oct.); frequent (6).

DISTRIBUTION. **DG 38-13**: Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, 49°28'37.9"N, 19°43'53.2"E, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. D. Karasiński 8868 (KRAM F-58353); on fallen branch of deciduous tree, 8 Oct. 2012, leg. D. Karasiński 8859 (KRAM F-58281); leg. D. Karasiński 8860 (KRAM F-58362); Bór koło Chyżnego (II, Księża Soślina) forest, Piekelnik, mixed forest, on fallen *Salix* sp. branch, 8 Oct. 2012, leg. D. Karasiński 8875b; **DG 38-33**: Bór koło Chyżnego (II, Szałas) forest, ca 3 km SE of Jabłonka, 49°27'23.6"N, 19°44'20.2"E, mixed forest with pine, on fallen *Salix aurita* trunk, 12 June 2012, leg. D. Karasiński 7165 (KRAM F-58592); **DG 38-43**: Bór koło Chyżnego (II, Siedlcowa Soślina), ca 3 km SE of Jabłonka, 49°27'22.1"N, 19°44'14.5"E, mixed forest with pine, on bark of fallen *Salix aurita* branch, 12 June 2012, leg. D. Karasiński 7145 (KRAM F-58321); leg. D. Karasiński 7146a (KRAM F-58617); **DG 39-18**: W of Krauszów, on bank of Czarny Dunajec river, 49°28'29.39"N, 19°57'02.9"E, 607.7 m, brushwood and forest (*Salix* with young *Alnus*), on fallen twigs, 29 June 2011, leg. H. Komorowska, KRAM F-56896; **DG 48-29**: between Chochołów and Koniówka, ca 20 km SW of Nowy Targ, ca 740 m, *Alin* on bank of Czarny Dunajec river, fallen dead twig of deciduous tree, 31 Aug. 1984, leg. W. Wojewoda, KRAM F-26305; **EG 31-61**: Przełom Białki pod Krempachami Nature Reserve, 49°25'38.6"N, 20°07'40.7"E, willow thickets on bank of Białka river, on fallen *Salix eleagnos* branch, 24 May 2012, leg. D. Karasiński 7093 (KRAM F-58643); Przełom Białki pod Krempachami Nature Reserve, 49°25'39.5"N, 20°07'41.0"E, willow thickets on bank of Białka river, on bark of fallen *Salix eleagnos* trunk, 24 May 2012, leg. D. Karasiński 7082a (KRAM F-58618); Przełom

Białki pod Krempachami Nature Reserve, 49°25'41.3"N, 20°07'42.5"E, willow thickets on bank of Białka river, on *Salix eleagnos* fallen twig, 24 May 2012, leg. D. Karasiński 7070 (KRAM F-58658).

\**Xylodon spathulatus* (Schrad.) Kuntze – coniferous forest; on bark and wood; saprobic; summer (Aug.); rare (1).

DISTRIBUTION. **DG 38-51**: in vicinity of Puścizna Jasiowska (4) peatbog, ca 2.5 km NE of Chyżne, 49°26'13.5"N, 19°42'16.8"E, on bark and wood of fallen *Pinus x-rhaetica* trunk, 27 Aug. 2010, leg. D. Karasiński 5852.

## THE MYCOBIOTA OF THE KOTLINA ORAWSKO-NOWOTARSKA BASIN: AN ASSESSMENT

Our investigations contribute data on the fungi of the Polish Carpathian Mountains, yielding a list of 626 taxa, including 620 species, four varieties and two forms from the Kotlina Orawsko-Nowotarska basin (KON), given here. The majority are saprotrophs (67%), nearly a third are mycorrhizal (29%), and the smallest groups consist of facultative parasites (3%), obligate parasites and lichenized fungi (1%). As many as 409 taxa were not reported from the KON previously, 171 were found before 2010, and 157 species were newly found during intensive field studies in 2010–2012. Another 81 taxa were found both before 2010 and in 2010–2012. Most species (79%) were recorded as rare in the study area (1–5 localities) and 20% were noted as frequent (6–20 localities). Only five species (1%) were found to be common (more than 20 localities) in the KON: *Calocera viscosa*, *Gloeophyllum sepiarium*, *Hypholoma capnoides*, *Trametes hirsuta* and *Trichaptum fuscoviolaceum*; the latter is the most common species in the study area (40 localities).

Noteworthy is a group of 12 fungal species found for the first time in Poland: *Deconica subfusispora*, *Galerina minima*, *G. similis*, *G. subcerina*, *Hyphodontiella multiseptata*, *Porpoloma* cf. *metapodium*, *Russula longipes*, *Scopuloides leprosa*, *Sistotrema efibulatum*, *S. pinifoliae*, *S. pteriphilum* and *Trechispora invisitata*. Most of them have been recorded as rare in Europe.

Sixty-one species collected in the KON are rare in Poland, recorded from one to five localities nationwide so far. Three of them – *Conocybe pallidospora*, *Tubulicrinis angustus* and *T. medius* – are known in Poland only from the KON. As many as 115 species are in the ‘Red List of the macrofungi in Poland’ (Wojewoda and Ławrynowicz 2006) (Tab. 1). The most remarkable one is *Hyphodermella corrugata*, considered to be extinct (**Ex**) in Poland (Wojewoda and Ławrynowicz 2006). It was collected by Bresadola in the vicinity of Międzyrzec Podlaski (Bresadola 1903) and it was known in Poland only from the type locality (Bresadola 1903; Flisińska 2004); thus its second Polish locality in the KON is noteworthy, and the habitat where it was found should be placed under special care. *Hyphodermella corrugata* was collected during a field survey in 2012. Further species from the Polish Red List have the following threat categories assigned to them: **E** – 35 species, **V** – 13 species, **R** – 60 species, and **I** – 6 species (Tab. 1).

Four species found in the KON are legally protected in Poland. *Hydnellum concreescens* is a strictly protected (**SP**) species known from about 80 localities in the country, the largest concentrations of contemporary localities being in the Gorce Mts and around Radomsko (Pawłowska, Okraśńska 2020). Three other species are under partial protection (**PP**): *Entoloma cuspidiferum* known from two localities on the Babia Góra massif (Bujakiewicz 1979, 1981; Stasińska 2020a), *Entoloma sphagnum* known only from Babia Góra National

**Table 1.** List of species found in the area of the Kotlina Orawsko Nowotarska basin and included in the Polish Red List of species. Threat categories are according to Wojewoda and Ławrynowicz (2006); the name of a given species from the Polish Red List is given in parentheses

Ex – Extinct and probably extinct	<i>Hyphodermella corrugata</i>
E – Endangered	<i>Albatrellus confluens</i> <i>Albatrellus ovinus</i> <i>Arrhenia onisca</i> ( <i>Omphalina oniscus</i> ) <i>Arrhenia philonotis</i> ( <i>Omphalina philonotis</i> ) <i>Boletopsis leucomelaena</i> <i>Bovista graveolens</i> <i>Ceraceomyces serpens</i> <i>Cortinarius fulvescens</i> <i>Dacryobolus karstenii</i> <i>Dacryobolus sudans</i> <i>Entoloma cuspidiferum</i> <i>Galerina ampullaceocystis</i> <i>Gloeoporus dichrous</i> <i>Gloeocystidiellum furfuraceum</i> ( <i>Boidinia furfuracea</i> ) <i>Gymnopilus picreus</i> <i>Helicogloea pinicola</i> ( <i>H. farinacea</i> ) <i>Hydnellum conrescens</i> <i>Hygroaster asterosporus</i> ( <i>Omphaliaster asterosporus</i> ) <i>Hygrophorus hyacinthinus</i> <i>Hypholoma ericeoides</i> ( <i>Psilocybe ericaeoides</i> ) <i>Inocybe jacobi</i> <i>Lactarius lacunarum</i> <i>Lepiota tomentella</i> <i>Mucronella calva</i> <i>Mycena urania</i> <i>Peniophora pithya</i> <i>Phellinus tremulae</i> <i>Phlebia aurea</i> ( <i>Mycoacia aurea</i> ) <i>Pholiota henningsii</i> <i>Psilocybe turficola</i> <i>Rhodocybe fallax</i> <i>Skeletocutis alutacea</i> <i>Stypella vermiformis</i> <i>Tubaria confragosa</i> <i>Tylospora fibrillosa</i>
V – Vulnerable	<i>Amanita muscaria</i> var. <i>regalis</i> ( <i>Amanita regalis</i> ) <i>Arrhenia epichysium</i> ( <i>Omphalina epiphysium</i> ) <i>Arrhenia gerardiana</i> ( <i>Omphalina sphagnicola</i> ) <i>Conohypha albocrema</i>

Table 1. Continued

V – Vulnerable	<i>Cortinarius bivelus</i> <i>Dichomitus campestris</i> <i>Inocybe calospora</i> <i>Inonotus triqueter</i> <i>Ischnoderma benzoinum</i> <i>Lyophyllum palustre</i> <i>Mycena megaspora</i> <i>Phyllotopsis nidulans</i> <i>Porodaedalea chrysoloma (Phellinus chrysoloma)</i>
R – Rare	<i>Antrodia heteromorpha</i> <i>Antrodiella romellii</i> <i>Boletus calopus</i> <i>Botryobasidium candicans</i> <i>Botryobasidium obtusisporum</i> <i>Bulbillomyces farinosus</i> <i>Ceriporia reticulata</i> <i>Ceriporia viridans</i> <i>Ceriporiopsis mucida</i> <i>Clavaria argillacea</i> <i>Climacocystis borealis</i> <i>Clitocybe pruinosa</i> <i>Cortinarius uraceus</i> <i>Crepidotus appianatus</i> <i>Diplomitoporus flavescens</i> <i>Exidia glandulosa (E. truncata)</i> <i>Galerina paludosa</i> <i>Galerina sideroides (G. stylifera)</i> <i>Galerina sphagnorum</i> <i>Geastrum fimbriatum</i> <i>Geastrum quadrifidum</i> <i>Gloeocystidiellum ochraceum</i> <i>Gloeophyllum trabeum</i> <i>Gloeoporus taxicola</i> <i>Gomphidius glutinosus</i> <i>Gomphidius roseus</i> <i>Gyrodon lividus</i> <i>Hygrocybe pratensis (Camarophyllum pratensis)</i> <i>Hymenochaete tabacina</i> <i>Hypholoma elongatum (Psilocybe elongata)</i> <i>Hypholoma polytrichi (Psilocybe polytrichi)</i> <i>Hypholoma subericeum (Psilocybe subericaea)</i> <i>Hypholoma udum (Psilocybe uda)</i> <i>Lactarius lilacinus</i>

Table 1. Continued

R – Rare	<i>Lactarius picinus</i> <i>Lactarius trivialis</i> <i>Lentinus torulosus</i> <i>Lichenomphalia umbellifera</i> ( <i>Omphalina umbellifera</i> ) <i>Melanoleuca strictipes</i> <i>Mycena adonis</i> <i>Mycena plumipes</i> ( <i>M. strobilicola</i> ) <i>Panaeolus papilionaceus</i> <i>Phaeomarasmius erinaceus</i> <i>Phlebia rufa</i> <i>Pholiota adiposa</i> <i>Physisporinus vitreus</i> <i>Plicatura crispa</i> <i>Porodaedalea pini</i> ( <i>Phellinus pini</i> ) <i>Porphyrellus porphyrosporus</i> <i>Psathyrella microrhiza</i> <i>Pseudomerulius aureus</i> <i>Psilocybe coprophila</i> <i>Pycnoporus cinnabarinus</i> <i>Russula rhodopus</i> ( <i>R. rhodopoda</i> ) <i>Steccherinum fimbriatum</i> <i>Trametes pubescens</i> <i>Trichaptum bifforme</i> <i>Tricholoma sejunctum</i> <i>Tricholomopsis decora</i> <i>Veluticeps abietina</i>
I – Indeterminate	<i>Ceratobasidium cornigerum</i> <i>Cystodermella granulosa</i> ( <i>C. granulorum</i> ) <i>Hygrophorus hypothejus</i> <i>Leratiomyces squamosa</i> ( <i>Psilocybe squamosa</i> ) <i>Myxomphalia maura</i> ( <i>Fayodia maura</i> ) <i>Tremella foliacea</i>

Park (Bujakiewicz 2004, 2018; Stasińska 2020b), and *Geastrum quadrifidum* known from 90 localities scattered throughout the country in both lowlands and mountains (Kujawa 2020). Three protected species (*E. cuspidiferum*, *G. quadrifidum*, *H. conrescens*) were found before 2010 but their presence was not confirmed during the recent field studies (2010–2012). *E. sphagnorum* was collected from one locality in 2011.

The vegetation of the study area is diverse. The most valuable habitats are the peat bogs, waterlogged forests, and river valleys with riverine thickets and forest. An analysis of the distribution of fungi occurring in the KON indicated the areas and habitats hosting the most remarkable fungi. The bogs richest in rare fungal species are Puścizna Jasiowska (4),

Puścizna Wielka (10), Puścizna Rękowiańska (19), Puścizna Franków (21), Przymiarki (22) and Bór na Czerwonem (24). The waterlogged pine-spruce forests richest in rare fungal species are Las Brzegi (I), Bór koło Chyżnego (II), Las Baligówka (IV), Bór Ostrowski (XI), Bór Bielski (XII) and Bór Harkłowski (XIII). The Czarny Dunajec valley and Dolina Białki Natura 2000 protected area are the most valuable regions of river valleys with riverine thickets and forests in the KON. Natura 2000 protection of the Dolina Białki is of great importance for maintenance of the fungal diversity of this region of the Carpathians.

**Fungi occurring in peat bogs** (Plate I) (class: *Oxycocco-Sphagnetea* Br.-Bl. et R.Tx. 1943 and *Scheuchzerio-Caricetea* (Nordh. 1937) R.Tx 1937)

Fungi occurring in peat bogs form the most characteristic ecological group growing in the KON, distinguishing the study area from other regions of the Polish Carpathians. The richest genus of peat bog-inhabiting fungi in the KON is *Galerina*, represented by 24 species there, ten of them associated with peat bog mosses: *Galerina allospora*, *G. calyptrata*, *G. calyptrasporea*, *G. norvegica*, *G. paludosa*, *G. pumila*, *G. sphagnorum*, *G. stordalii*, *G. tibiicystis* and *G. vittiformis*. The most typical peat bog species from other genera are *Arrhenia gerardiana*, *A. onisca*, *A. philonotis*, *Hebeloma helodes*, *H. incarnatum*, *Hypholoma elongatum*, *H. ericaeoides*, *H. polytrichi*, *H. udum*, *Lichenomphalia umbellifera* and *Russula paludosa*. *Tomentella terresris*, *Tulasnella rubropallens* and *Lyophyllum palustre* occur quite frequently on *Sphagnum*, while *Laccaria proxima* grows on waterlogged and boggy sites. Apart from common species and those frequently occurring in boggy habitats, some rare species have also been recorded in peat bogs of the KON. Examples are *Acantobasidium norvegicum*, found for the second time in Poland, and the rare *Tulasnella eichleriana*. They were found growing on peat domes.

Fungi associated with coniferous trees enter waterlogged sites with *Sphagnum* at the margins of peat bogs and in peated forests. The following species belong to this group: *Athelia decipiens*, *Ceratobasidium cornigerum*, *Hypochnicium geogenium*, *Phanerochaete sanguinea*, *Phlebiella sulphurea*, *Skeletocutis carneogrisea*, *Trechispora farinacea* and *Tubulicrinis subulatus*.

**Fungi of coniferous forests** (Plate II) (class: *Vaccinio-Piceetea* Br.-Bl. 1939)

Since coniferous forests are an important component of the vegetation of the KON, fungi collected in boggy coniferous forests (dominated by pine and/or spruce) are the most numerous group of species. Many of them are common, such as *Lactarius helvus*, *L. rufus*, *Russula decolorans*, *R. emetica*, *R. ochroleuca* and *Tylophilus felleus*. Rare fungi collected from single localities or during a limited timespan include *Albatrellus confluens* (last observed in 1972), *A. ovinus* (in 1982), *Boletopsis leucomelaena* (in 1970), *Hydnellum conrescens* (in 1970), *Porphyrellus porphyrosporus* (in 1984), *Tylospora fibrillosa* (in 1981) and *Tulasnella violacea* (collected in 1973 and then in 2012 from a single locality).

The most interesting records include the species known from only one locality in Poland – *Skeletocutis alutacea*, *Tomentellopsis bresadolana* and *Tricholoma batschi* – and also those found for the first time in the country: *Sistotrema efibulatum*, *S. pinifolia* and *Trechispora invisitata*.

**Fungi of riparian montane alder forest** (Plate III) (class: *Quercus-Fagetum* Br.-Bl. et Vlieg. 1937, alliance *Alno-Ulmion* Br.-Bl. et R.Tx.1943)

More or less degraded riparian mountain alder forest, *Alnetum incanae*, occurs on alluvial floodplains of rivers (Białka Tatrzańska, Czarny Dunajec valley, Biały Dunajec valley) and streams in the KON. The community usually forms alder-willow thickets. Fungi in this plant association are very different from those of coniferous forests and peat bogs. Many fungi closely associated with *Alnus* grow here: *Ceriporia reticulata*, *Gyrodon lividus*, *Lactarius lilacinus*, *Naucoria subconspersa* and *Peniophora erikssonii*. Species of riparian and deciduous forests often associated with, for example, *Salix*, occur in this area: *Byssomerulius corium*, *Corticium roseum*, *Daedaleopsis confragosa*, *Peniophora violaceolivida*, *Phellinus igniarius* and *Trametes suaveolens*.

In the Białka valley (especially in the Dolina Białki Natura 2000 protected area) many very interesting and rare species have been collected, for example: *Scopuloides leprosa* and *Sistotrema pteriphylum*, new for Poland; and the red-listed *Hyphodermella corrugata* (Ex) and *Phlebia rufa* (R). Other species, collected in the KON only in the Białka valley in 2012, are *Fuscoporia ferruginosa* and *Hyphoderma mutatum*. Very rare and known only from two localities in Poland, *Steccherinum oreophilum* is also rare in the KON, found only in the Białka valley and by Borowy stream in 2012.

Interesting species rare in Poland and included in the Red List have also been recorded in the Czarny Dunajec valley: *Bulbillomyces farinosus* (R), *Gloephyllum trabeum* (R), *Gyrodon lividus* (R), *Lactarius lilacinus* (R) and *Lepiota tomentella* (E). Other species, collected in the KON only in the Czarny Dunajec valley, are *Entoloma sericeum* (in 1984), *Flammulaster muricatus* (in 1971) and *Melanoleuca amica* (in 1984, known only from one more locality in Poland).

In the KON, *Hypochnicium punctulatum* was collected only in the Białka (in 2010) and Czarny Dunajec valleys (in 1984). *Conocybe pallidospora* (in 1971), a species known in Poland only from the KON, was collected on the bank of the Biały Dunajec river.

Fungi known from many other deciduous forest communities are also found in *Alnetum incanae*, such as those known from *Tilio-Carpinetum*, *Dentario glandulosae-Fagetum*, and *Ficario-Ulmetum campestris*. They include *Cyathus striatus*, *Infundibulicybe gibba* and *Mycena galericulata*.

**Fungi of meadows, pastures and roadsides** (Plate IV) (class: *Molinio-Arrhenatheretea* R.Tx. 1937 and ruderal sites)

Many species have also been recorded in the drier and more fertile open areas. These are *Bovista graveolens*, *B. nigrescens*, *B. plumbea*, *Calocybe gambosa*, *Conocybe apala*, *C. subovalis*, *C. tenera*, *Coprinopsis atramentaria*, *Gloephyllum trabeum*, *Hygrocybe conica* var. *pseudoconica*, *H. miniata*, *H. pratensis*, *H. virginea*, *Lycoperdon utriforme*, *Marasmius oreades*, *Melanoleuca melaleuca*, *M. strictipes*, *Panaeolina foenisecii*, *Peniophora limitata*, *Phellinus tremulae*, *Stropharia coronilla*, *S. semiglobata* and *Vascellum pratense*.

The funga of the Polish Carpathian Mts is still insufficiently investigated. The results of our studies presented in this monograph add new data on fungal diversity and species



occurrences in a valuable part of the Carpathians, the Kotlina Orawsko-Nowotarska basin. These results make it clear that protection of the unique habitats of the KON is of great importance for maintenance of the biodiversity of fungi of this region, especially those associated with peat bogs and boggy forests. Further intensive field research on the fungi of various taxonomic groups in this unique region of Poland should yield a wealth of new and revealing data about this group of organisms.

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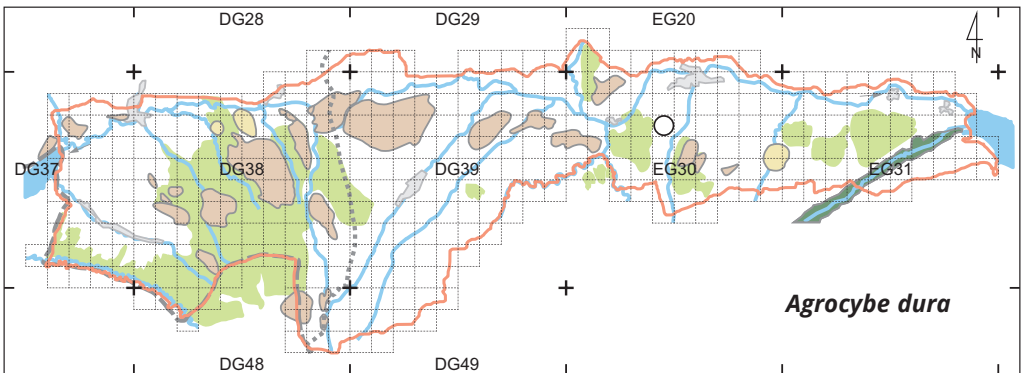
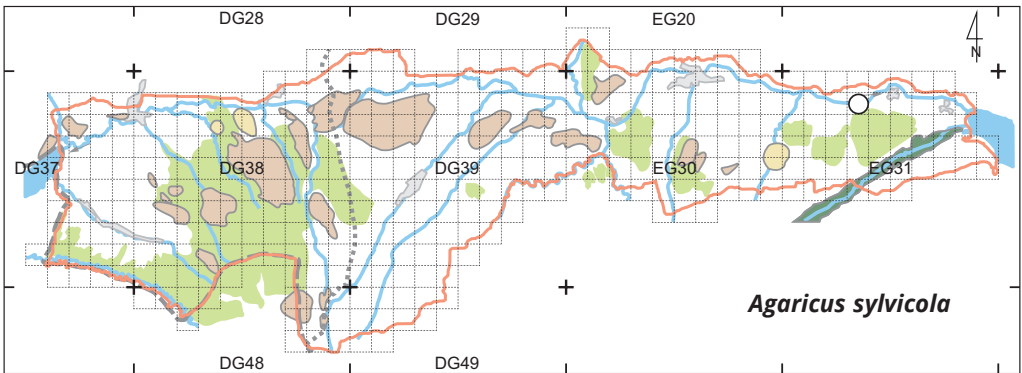
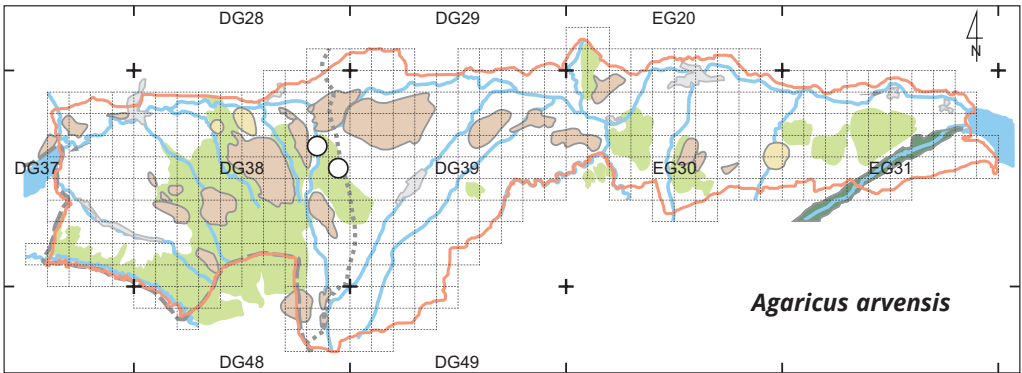
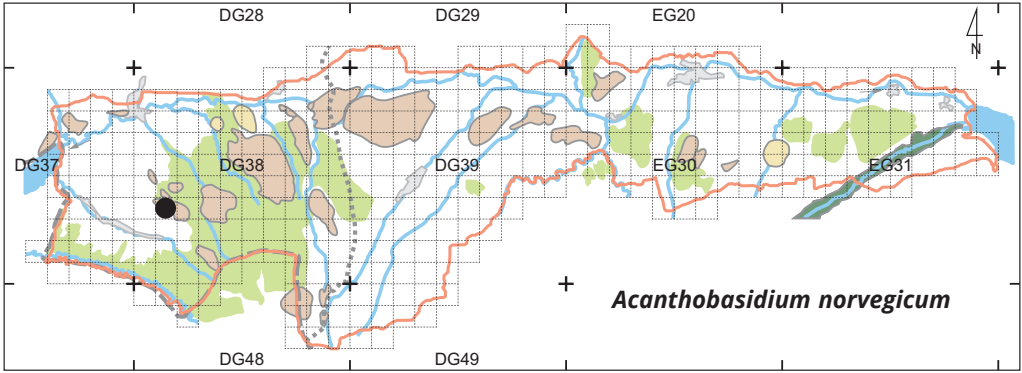


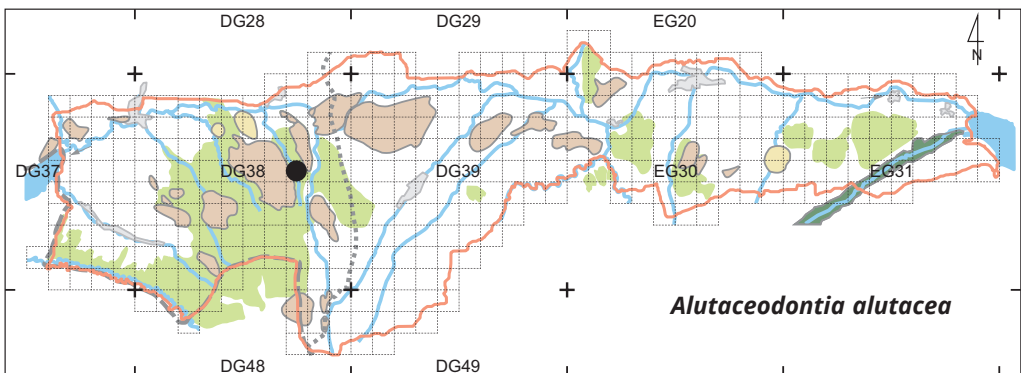
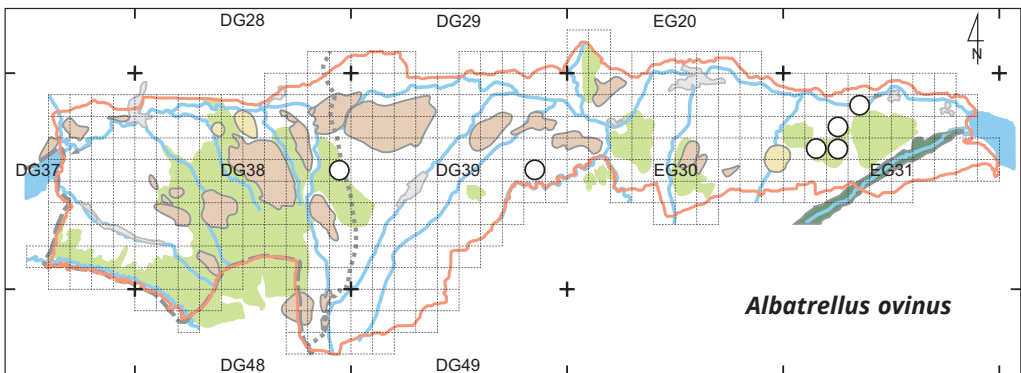
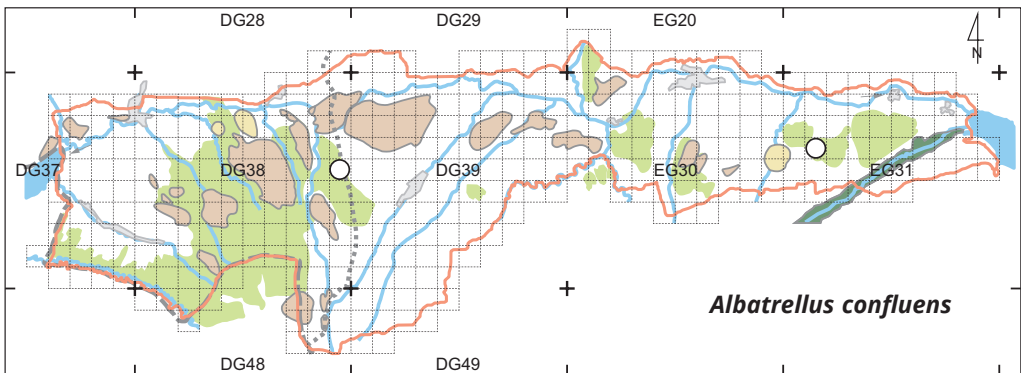
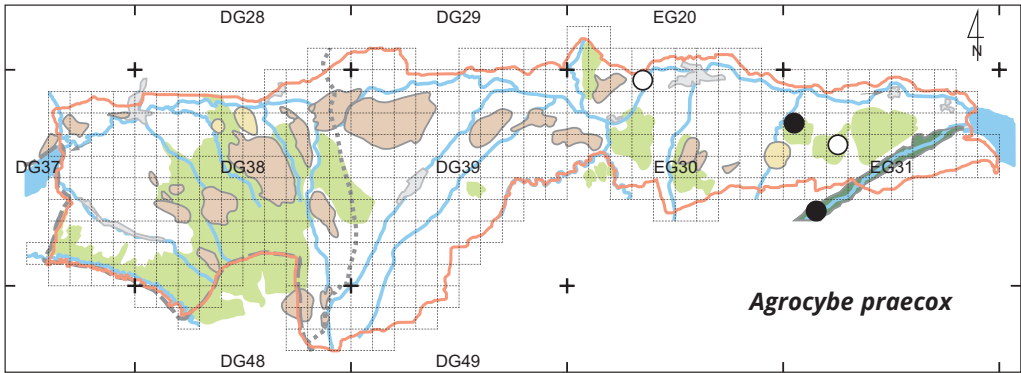


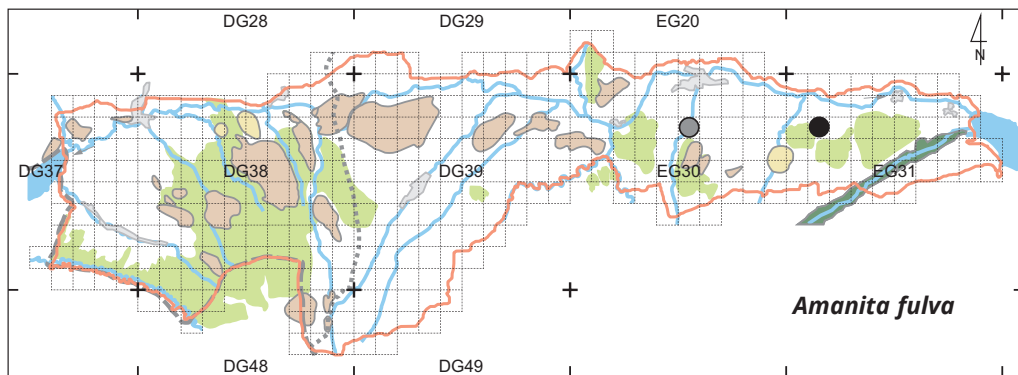
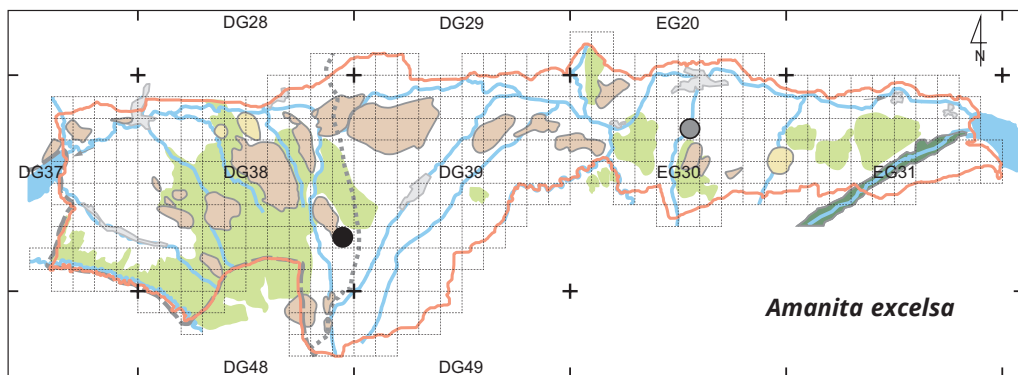
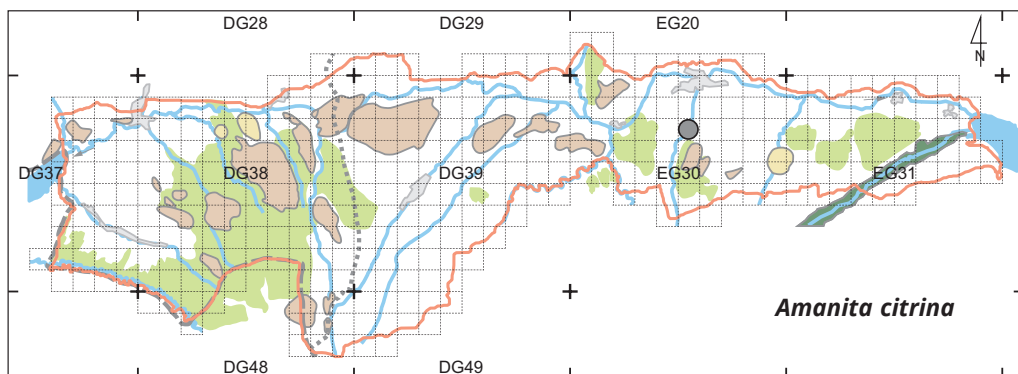
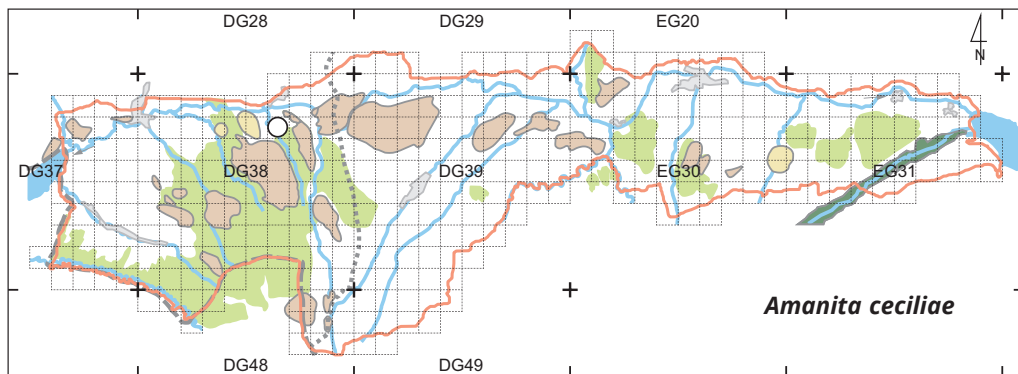
## MAPS OF SPECIES DISTRIBUTIONS IN THE KOTLINA ORAWSKO-NOWOTARSKA BASIN

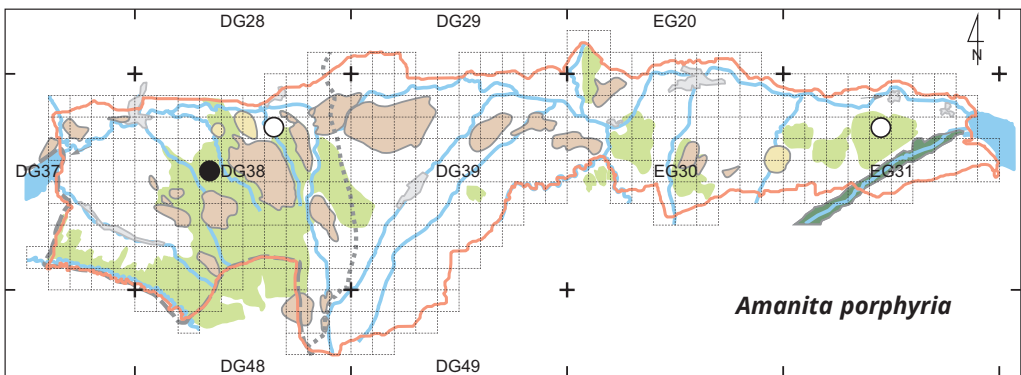
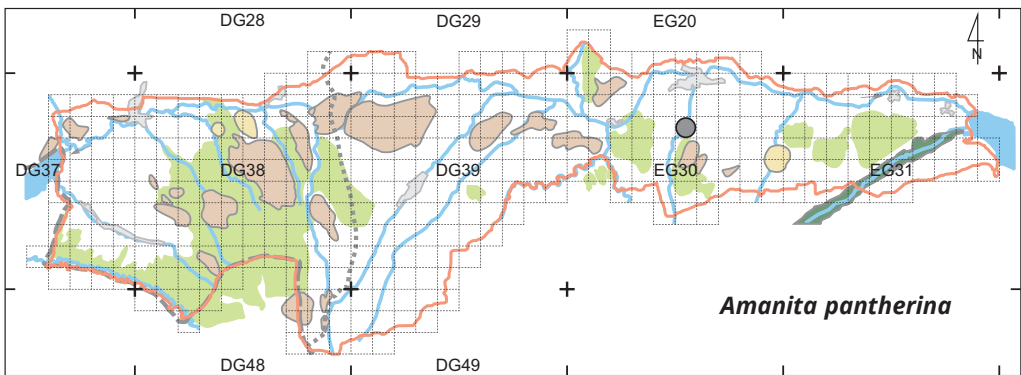
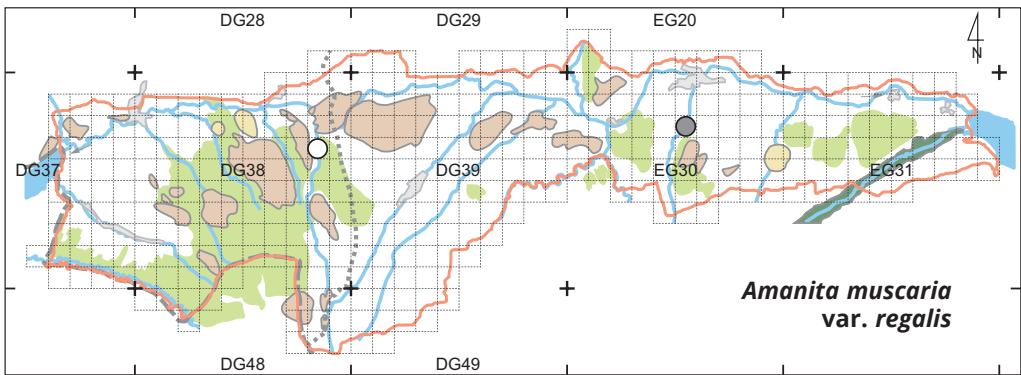
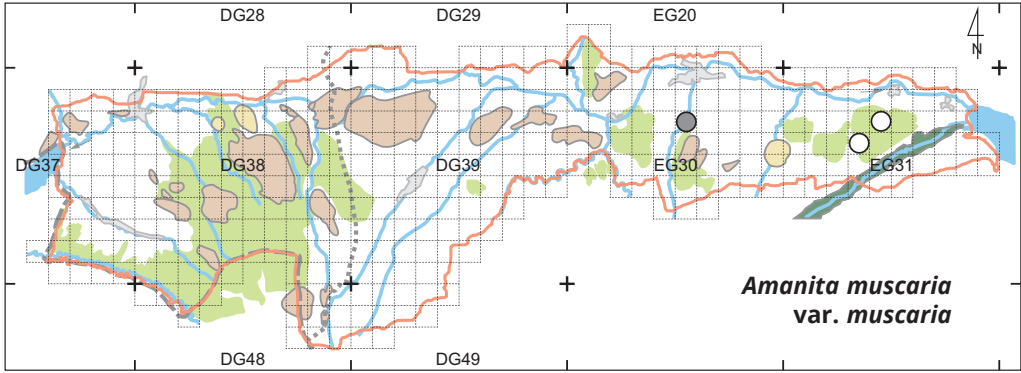
Explanation of symbols used in the distribution maps:

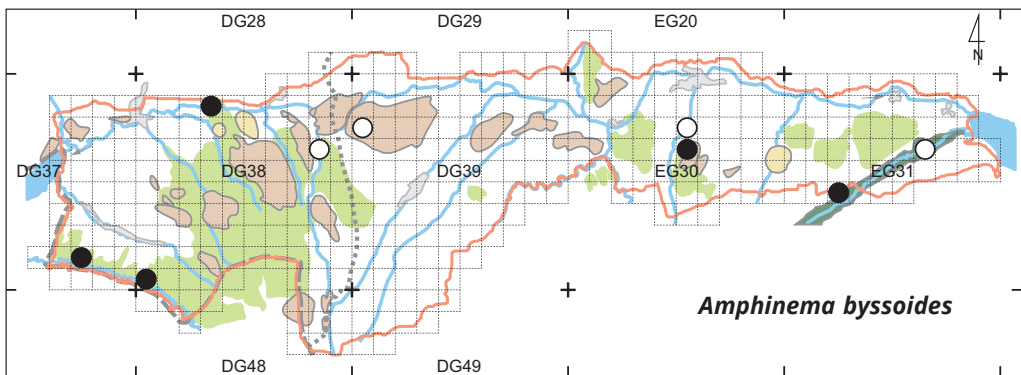
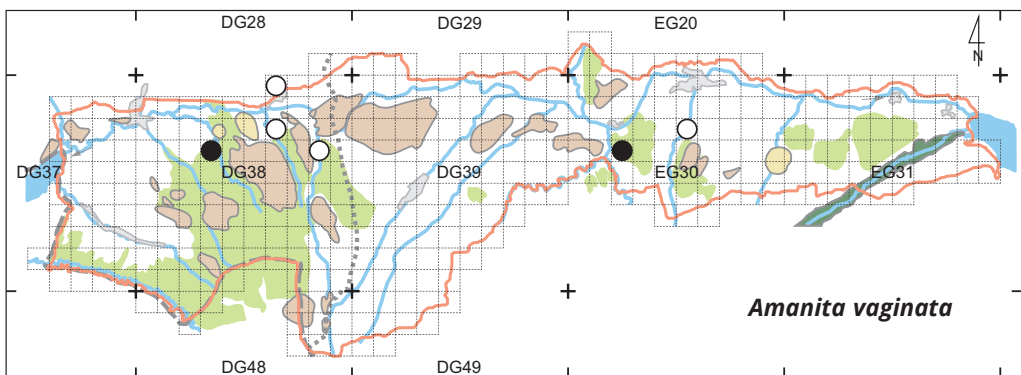
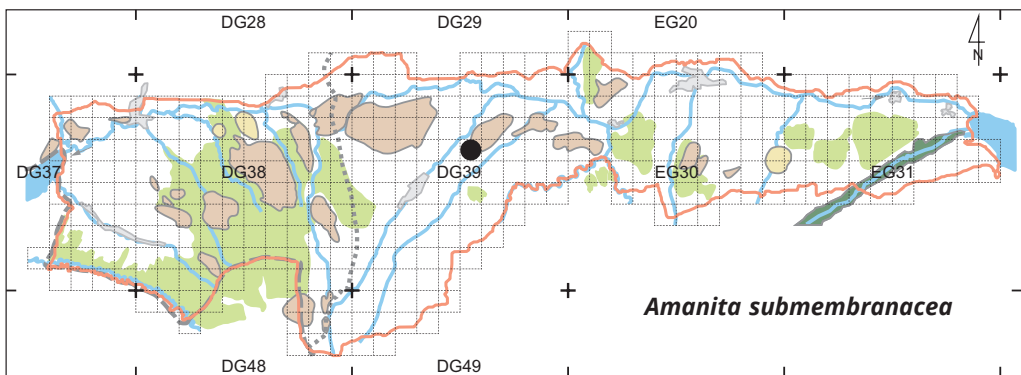
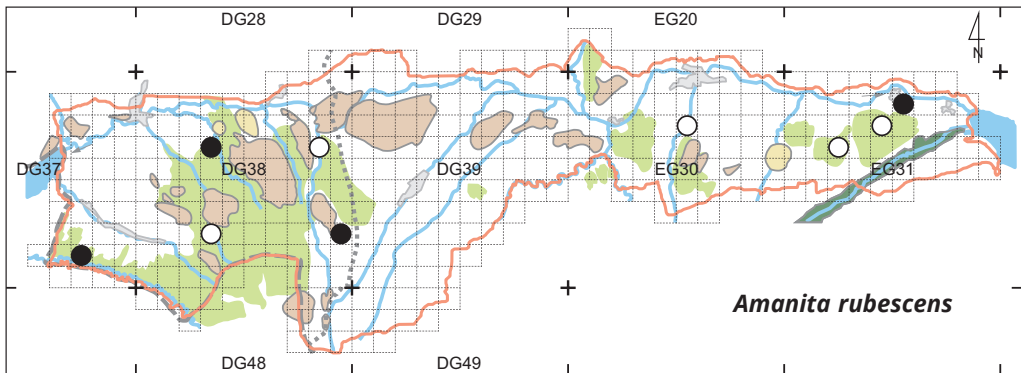
- – localities found during the first research period (up till 2000)
- – localities found during regular studies (2010–2012)
- ◐ – localities found during both the first research period and regular studies
- ◑ – imprecise locality

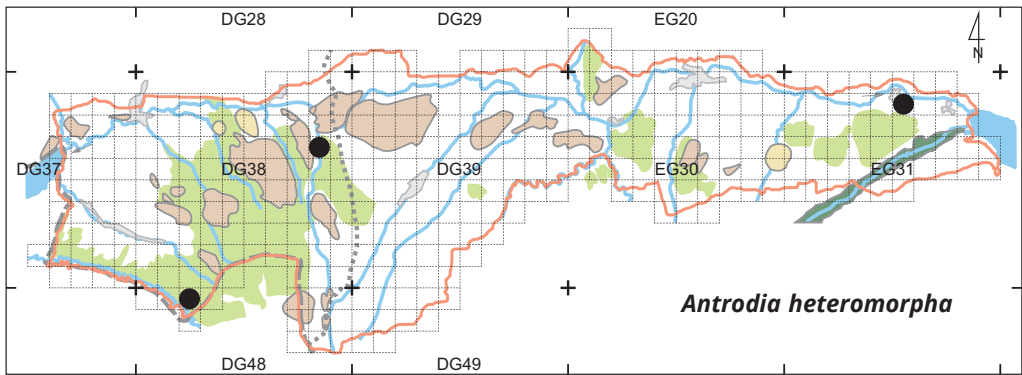
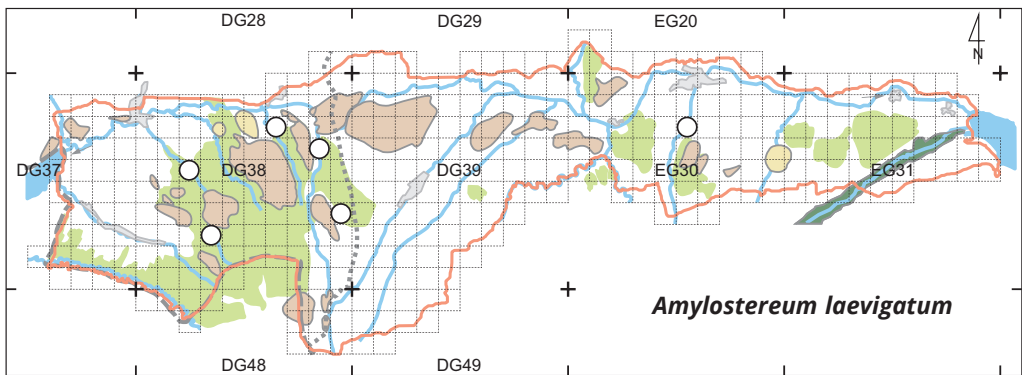
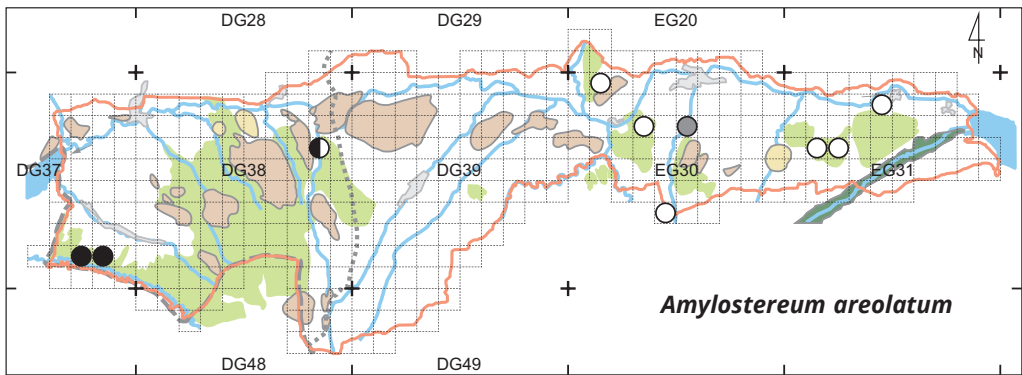
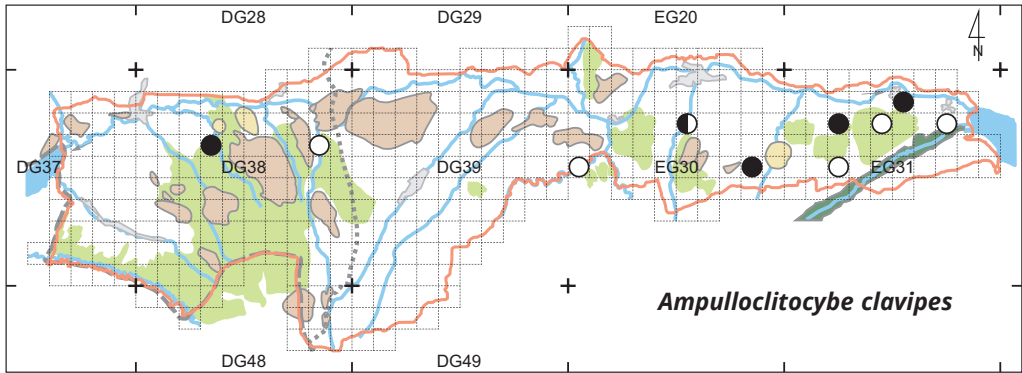


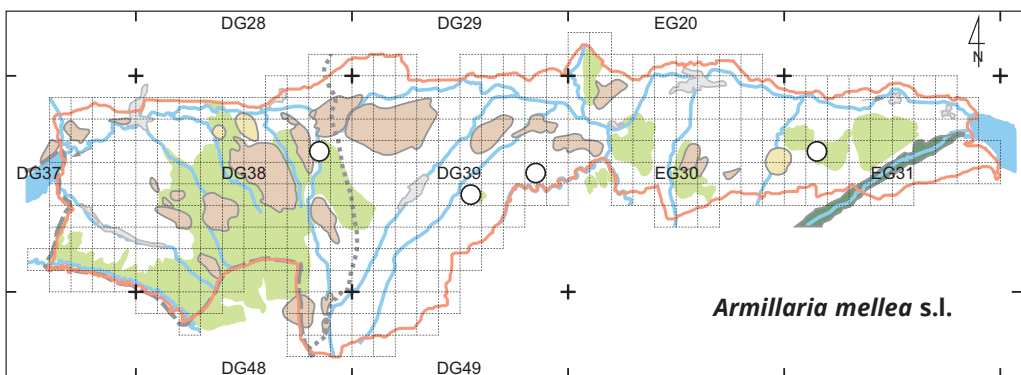
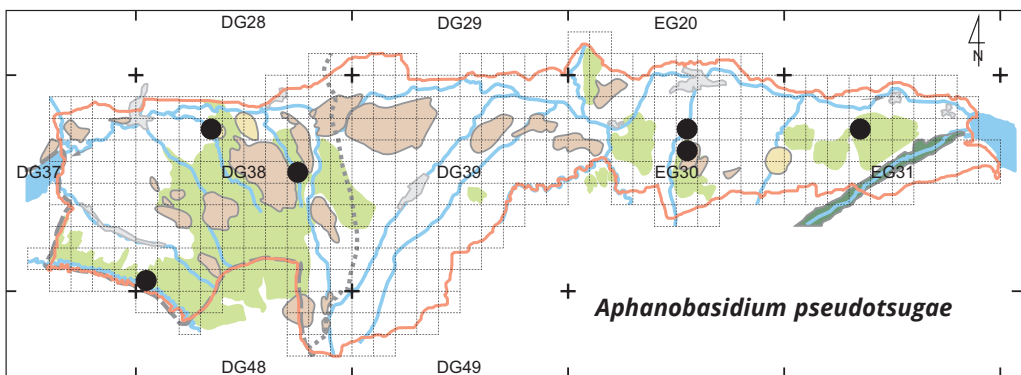
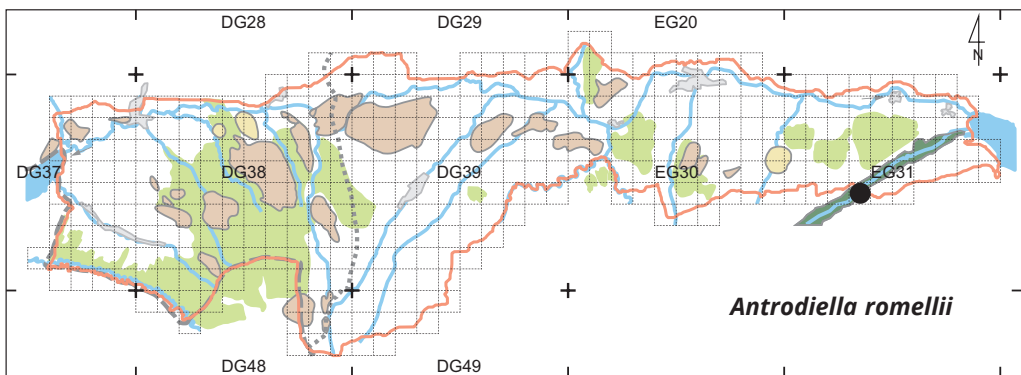
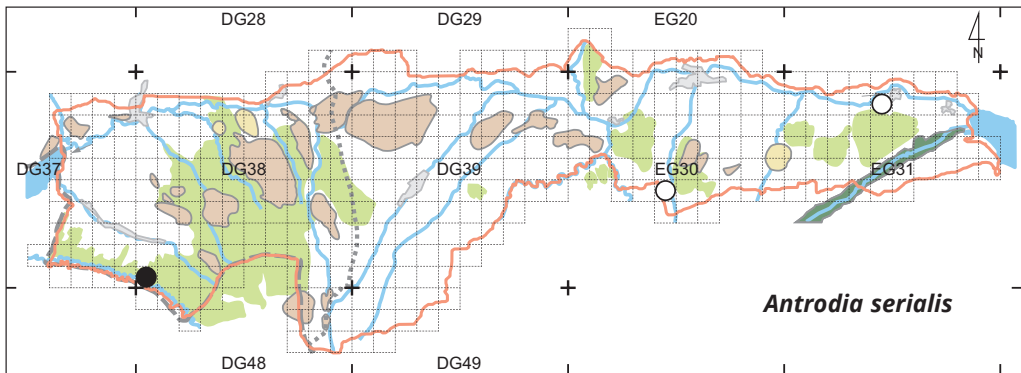




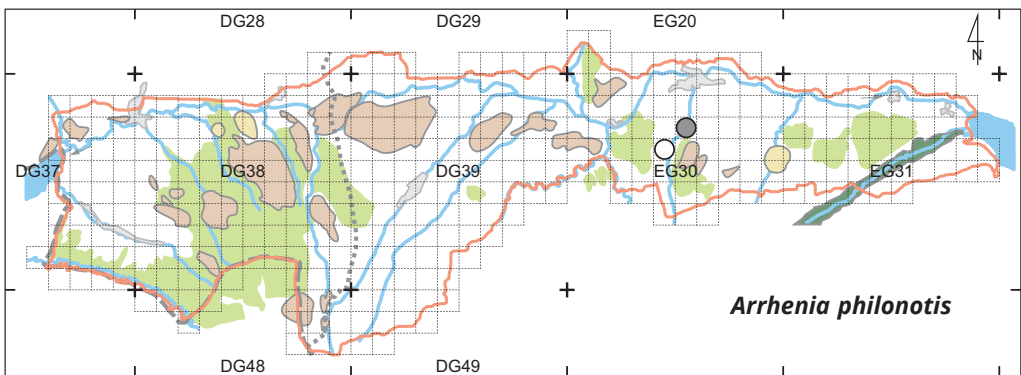
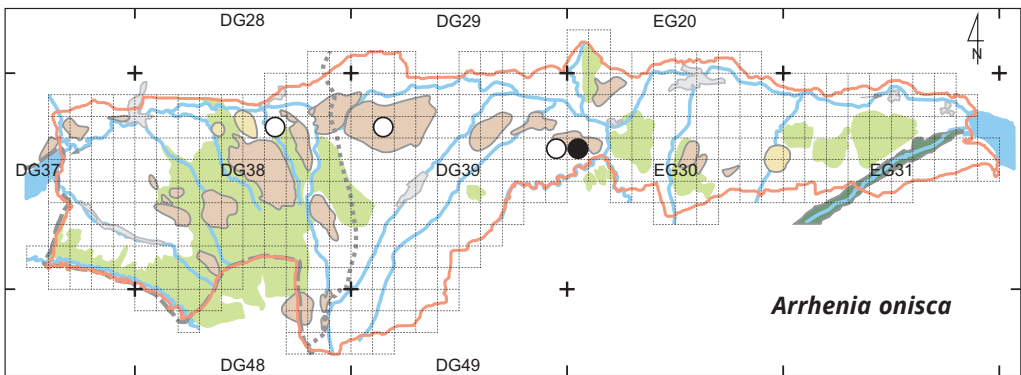
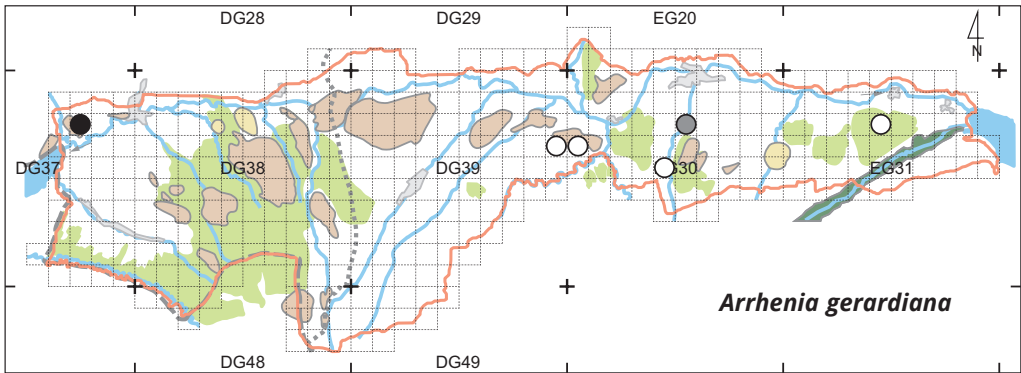
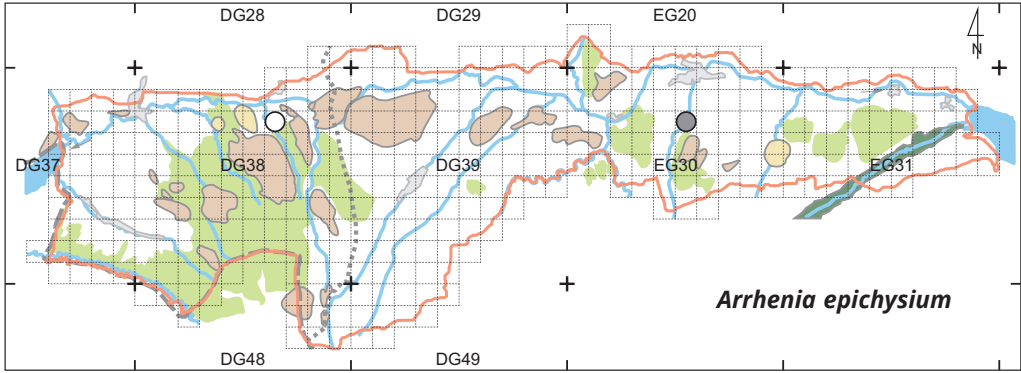


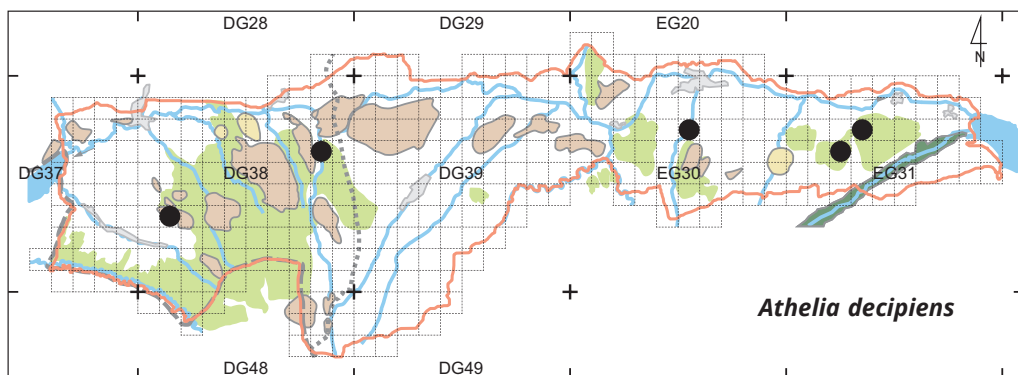
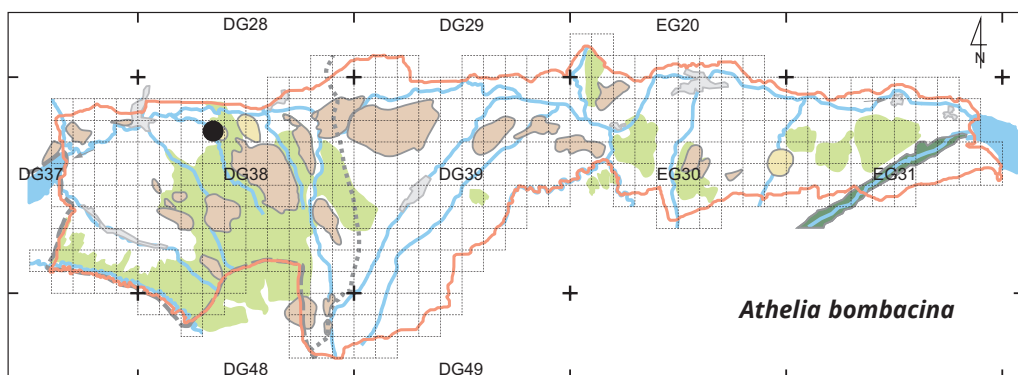
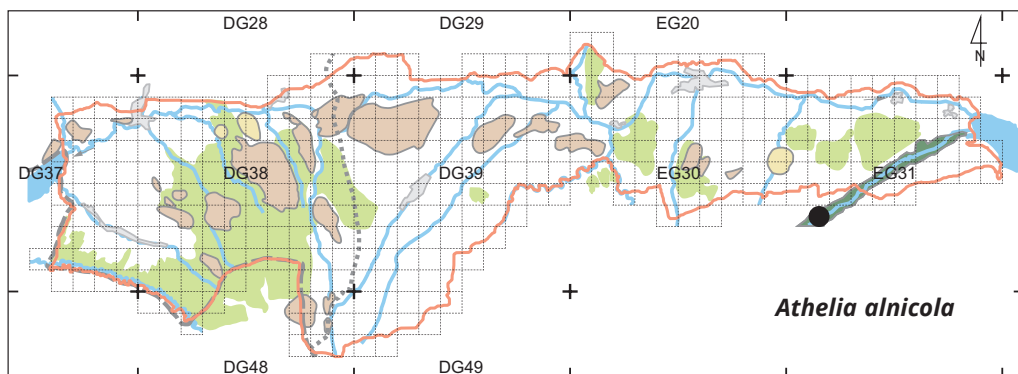
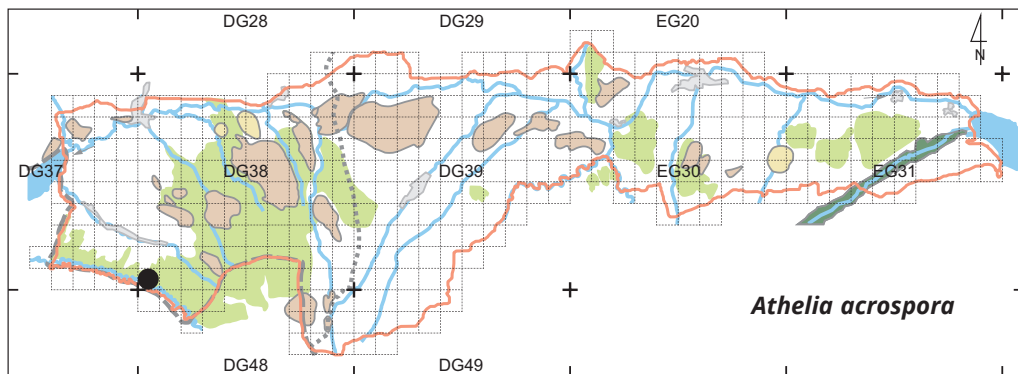


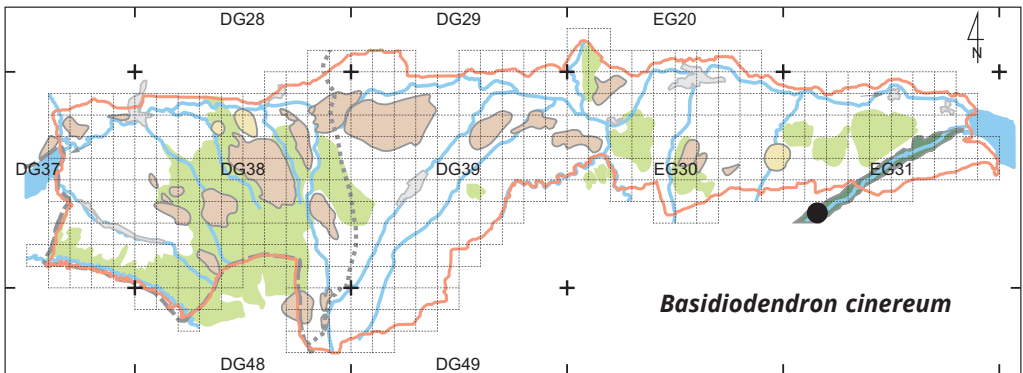
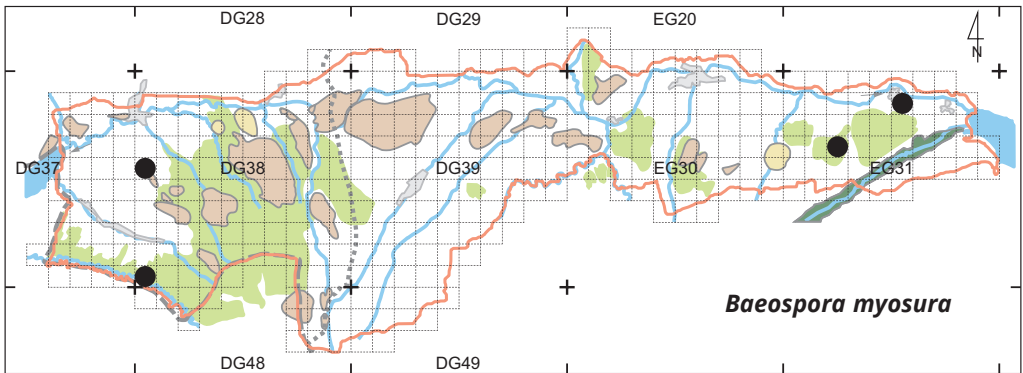
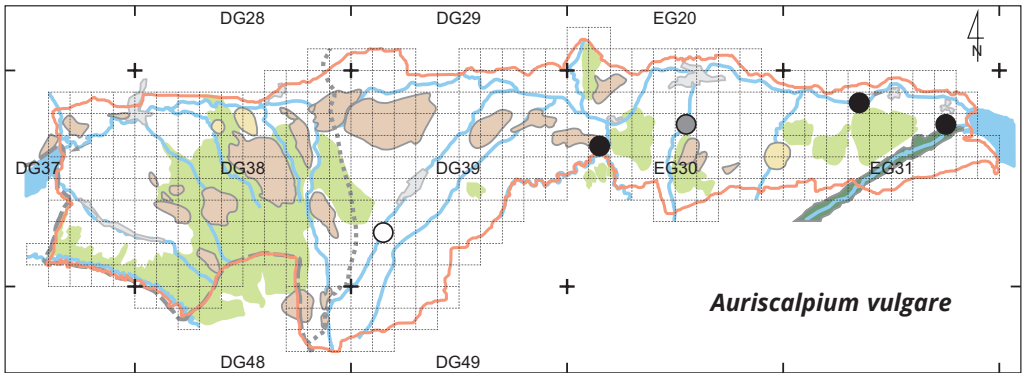
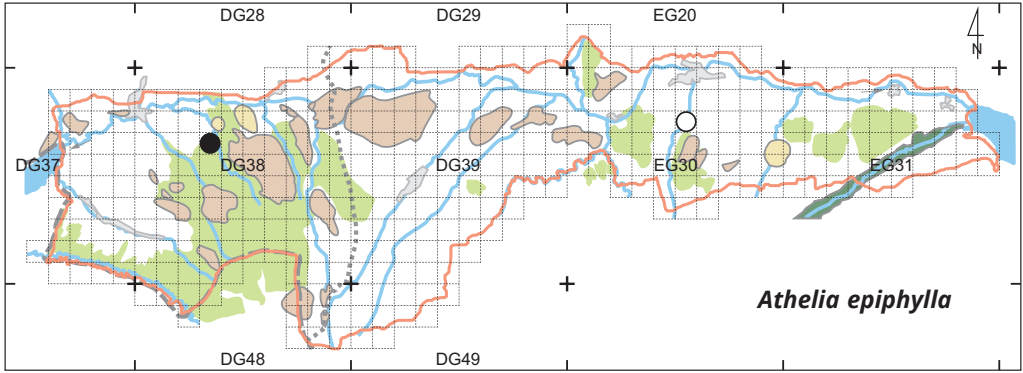


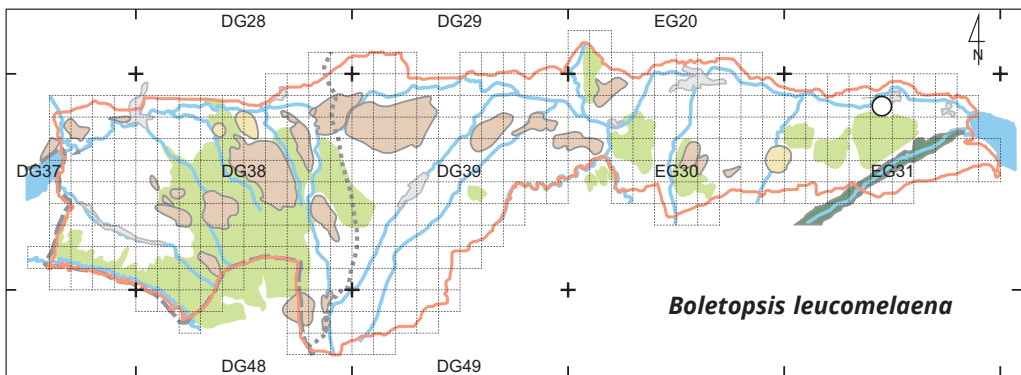
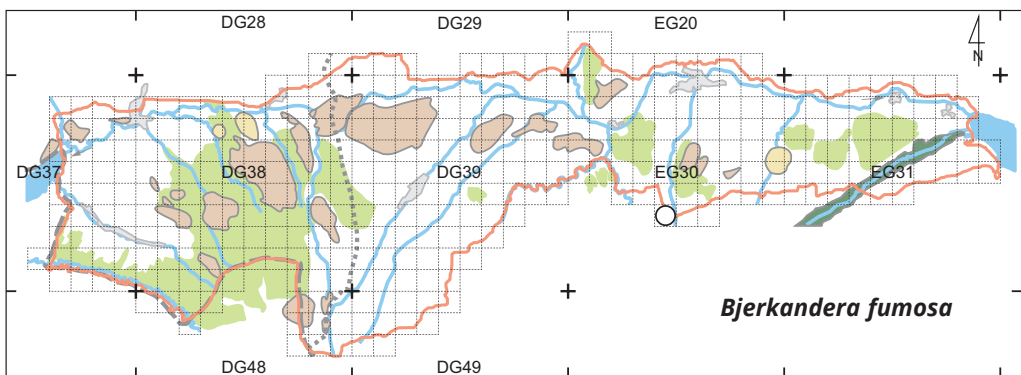
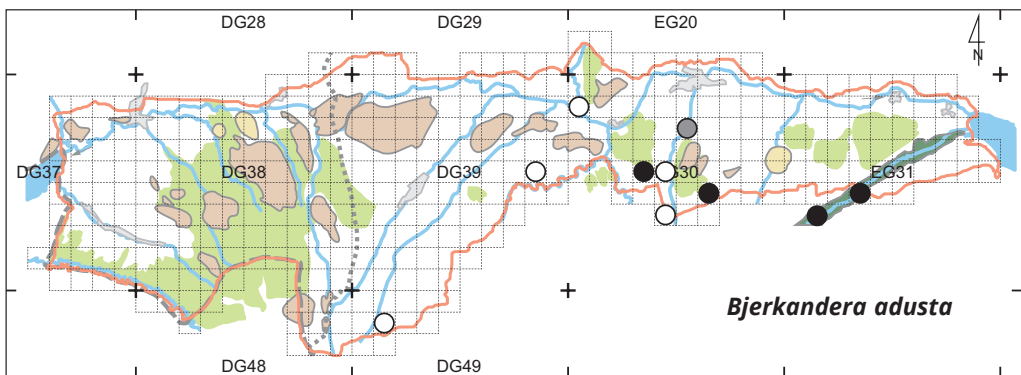
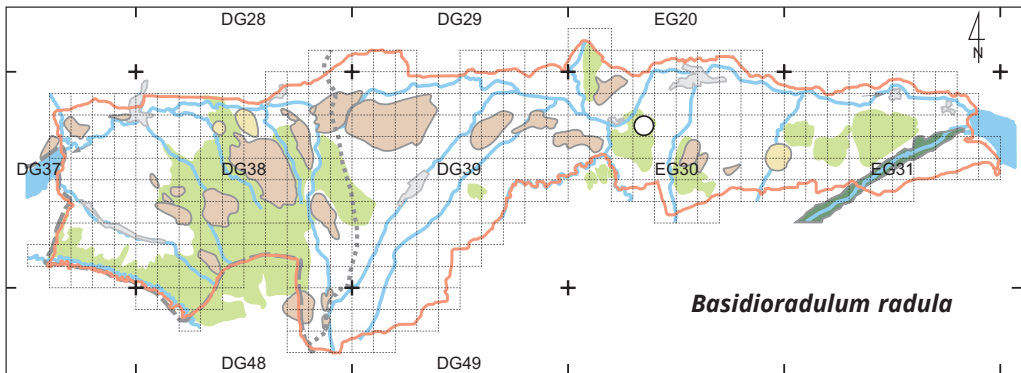


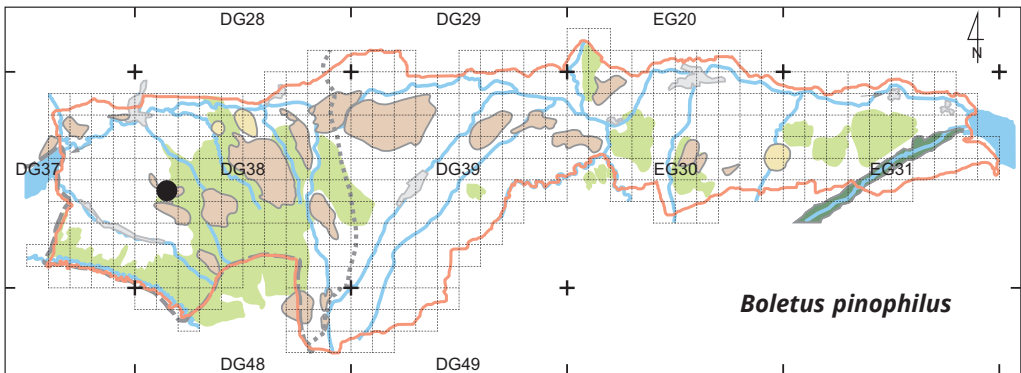
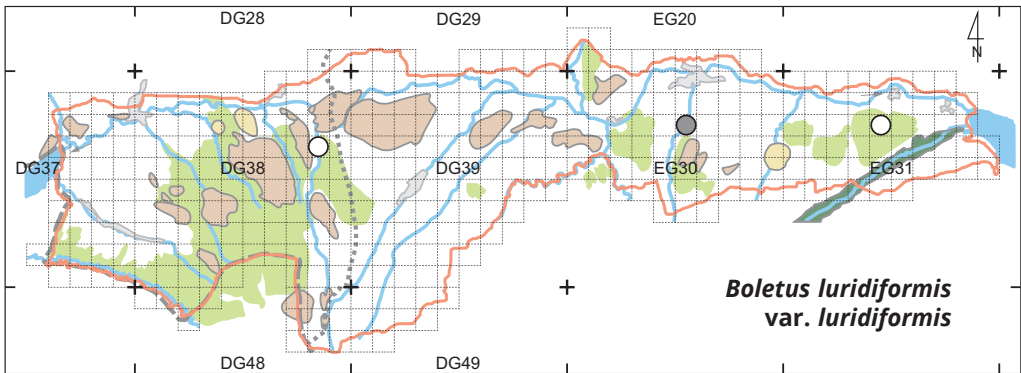
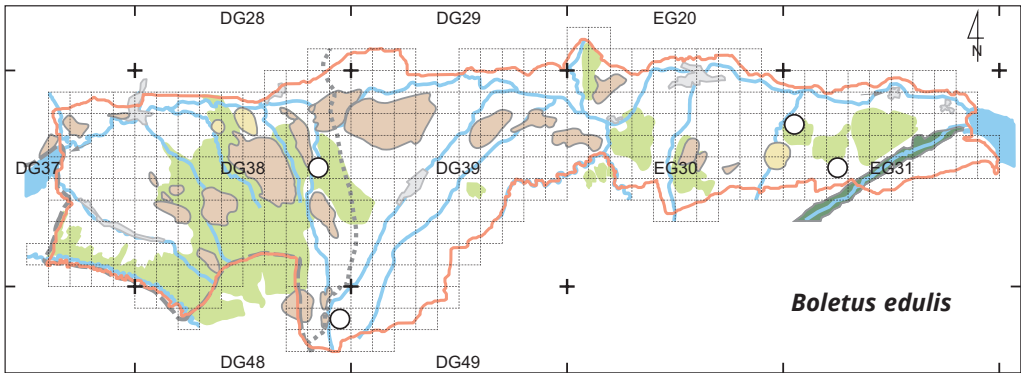
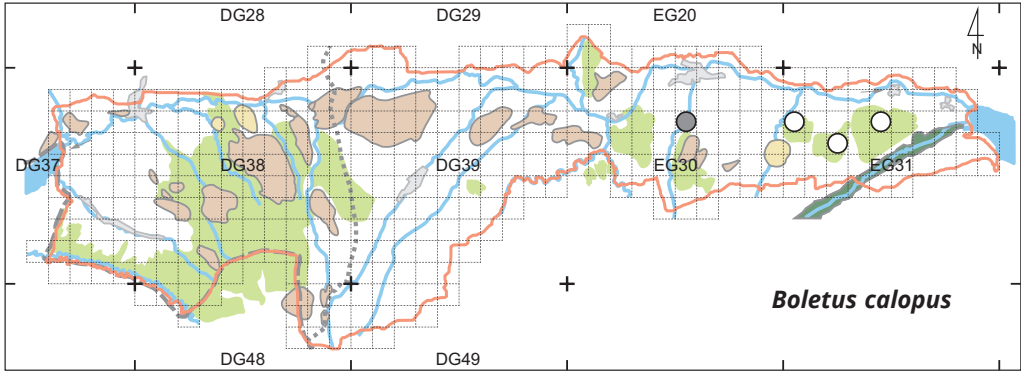


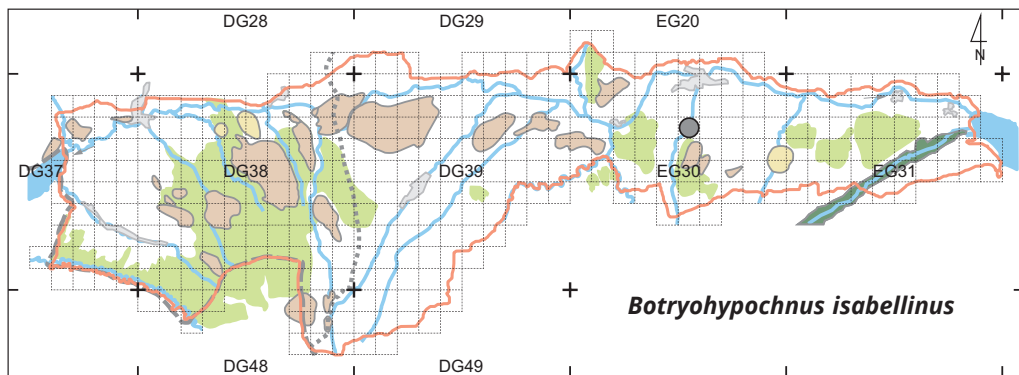
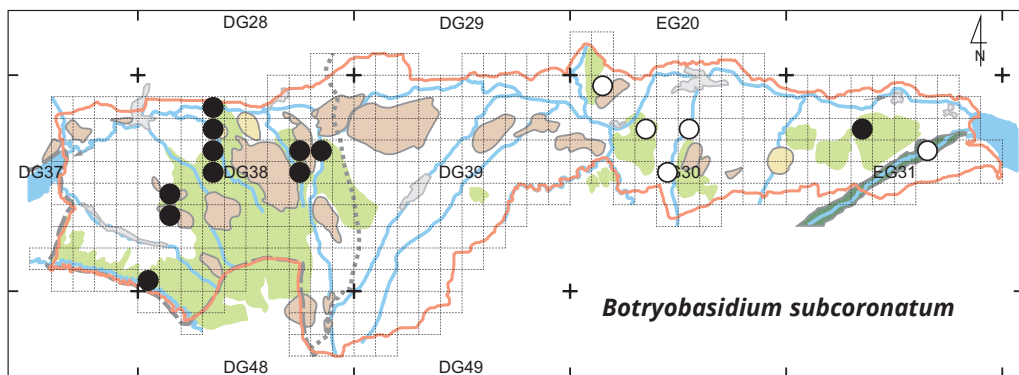
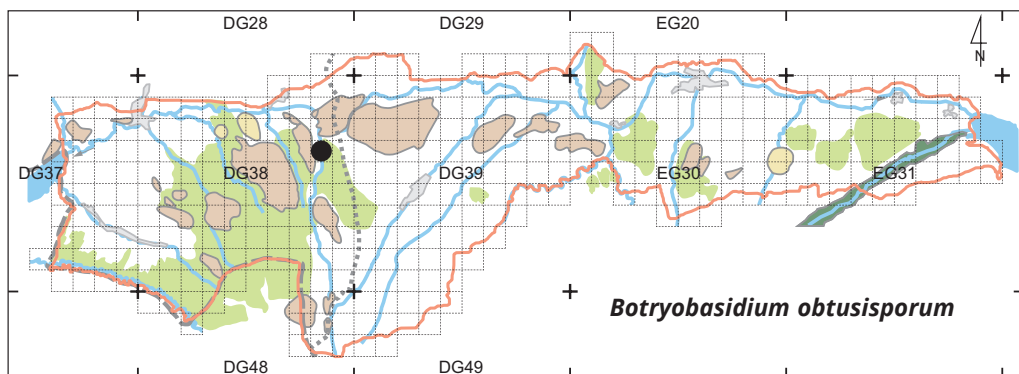
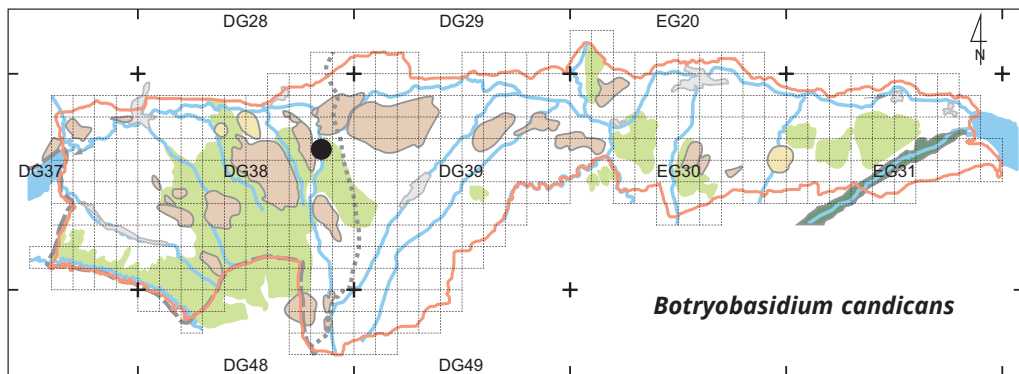


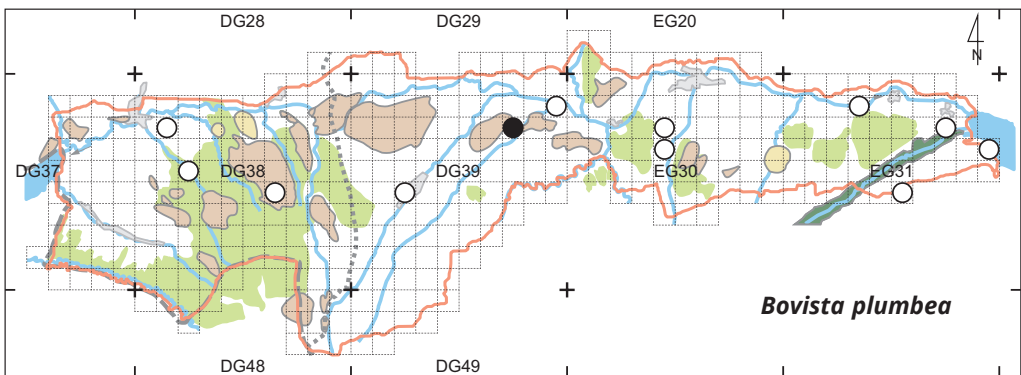
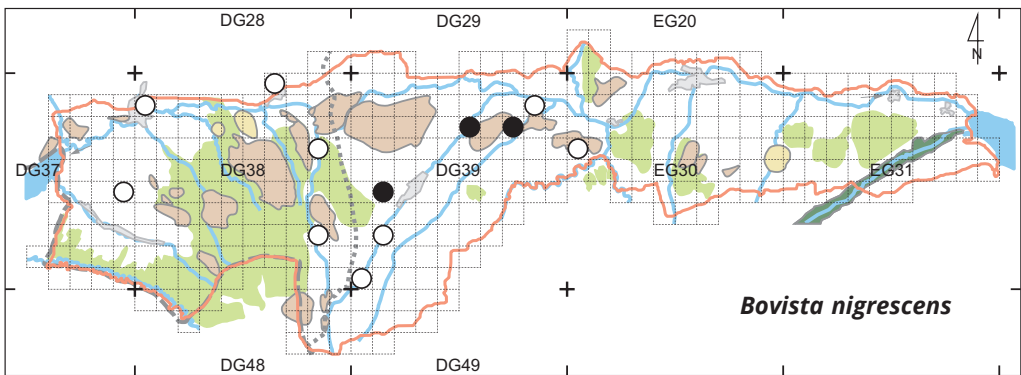
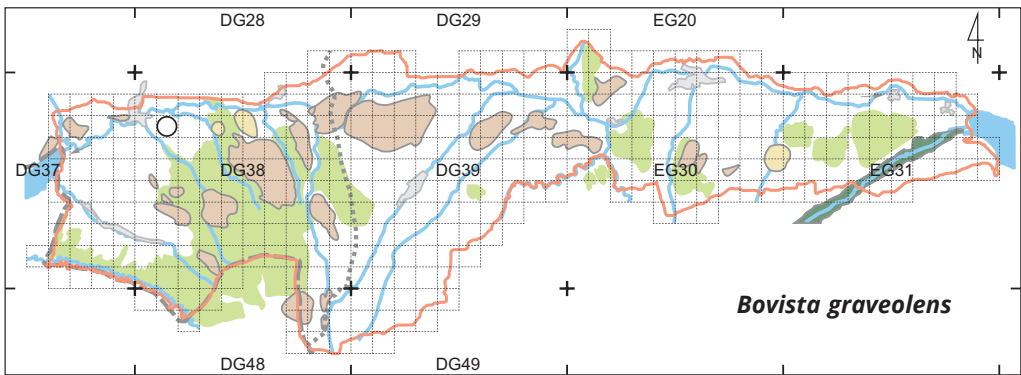
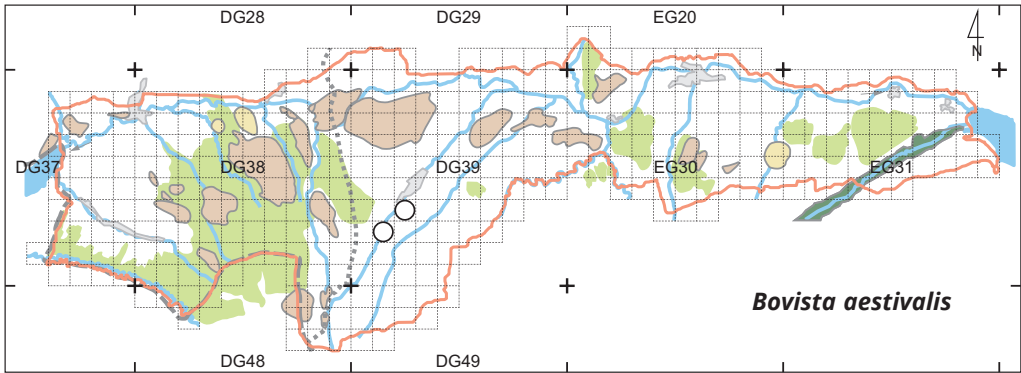


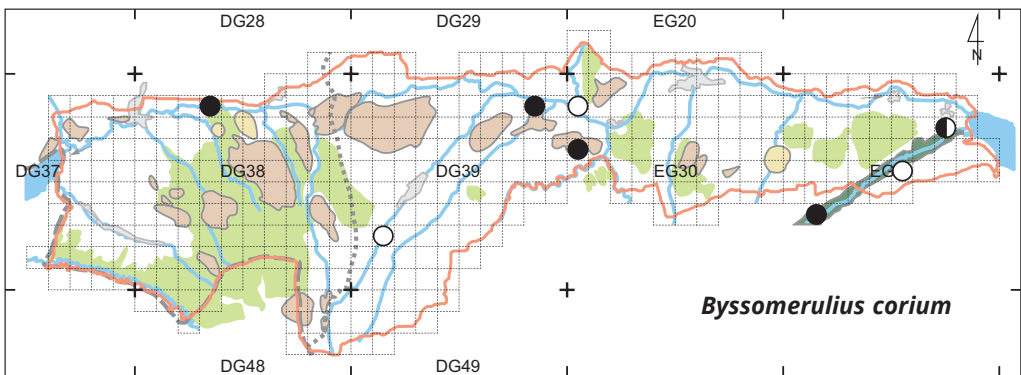
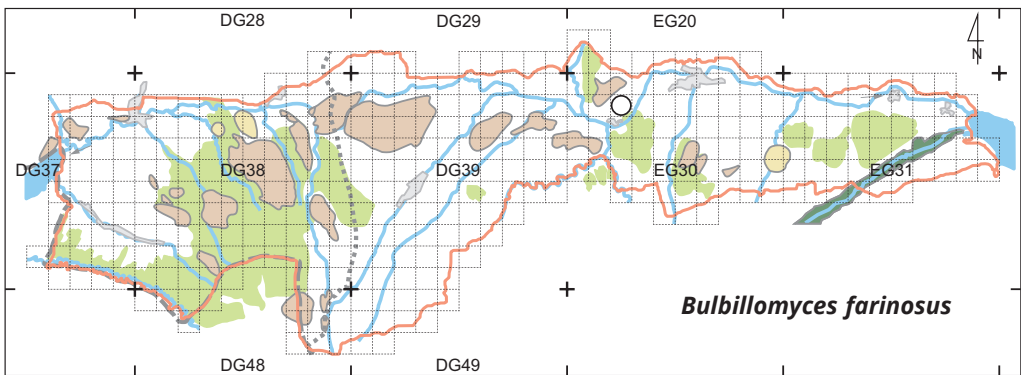
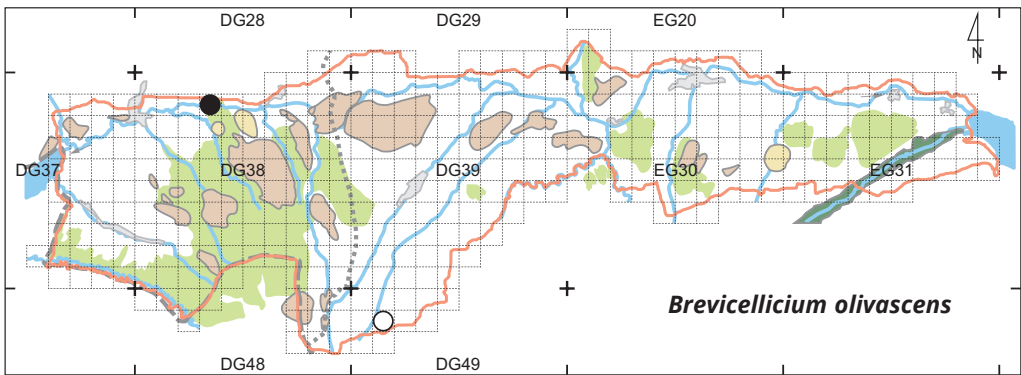
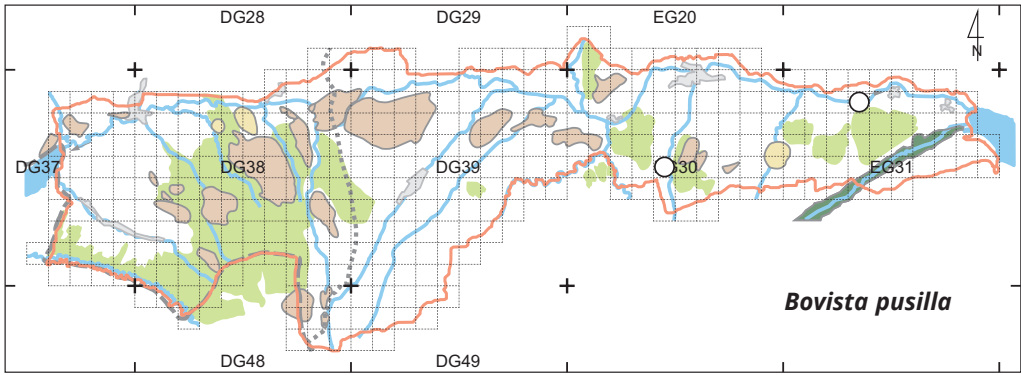




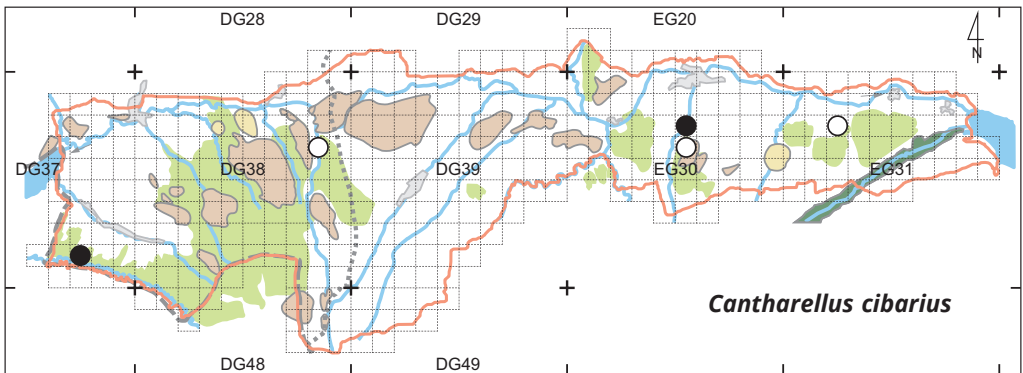
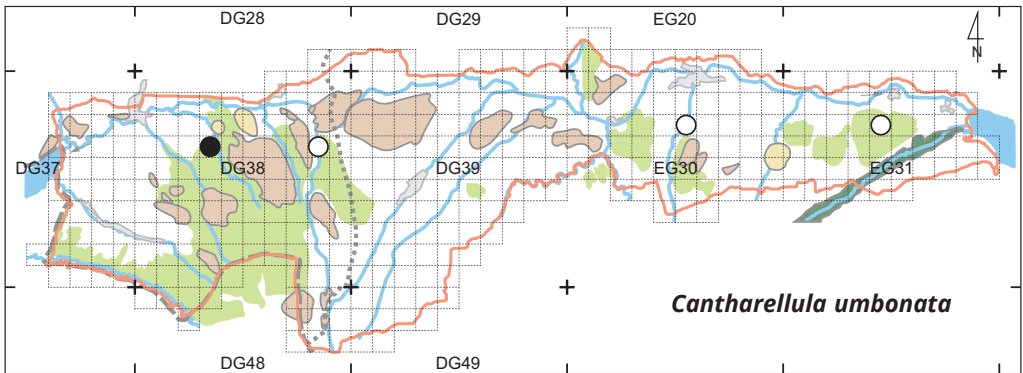
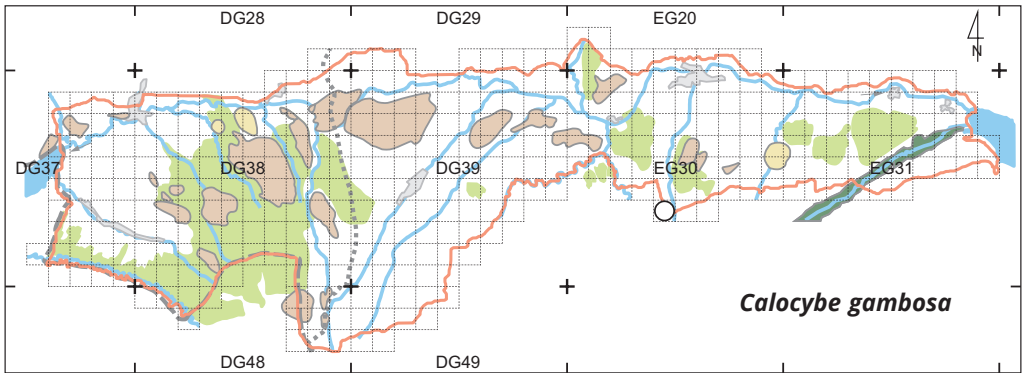
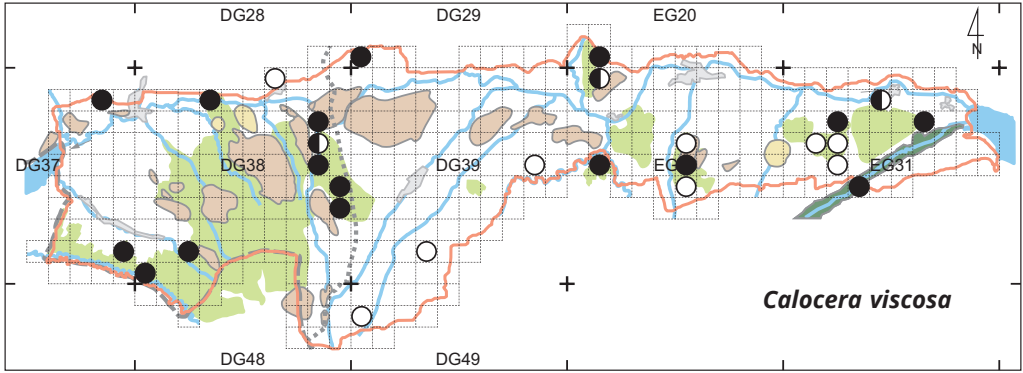


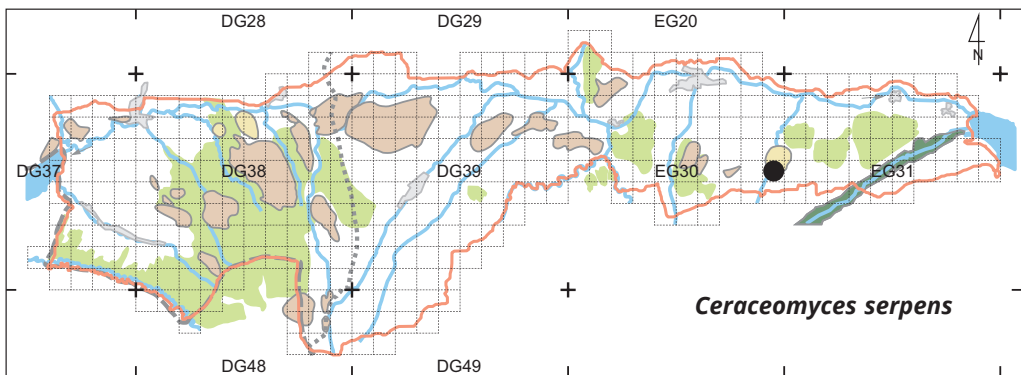
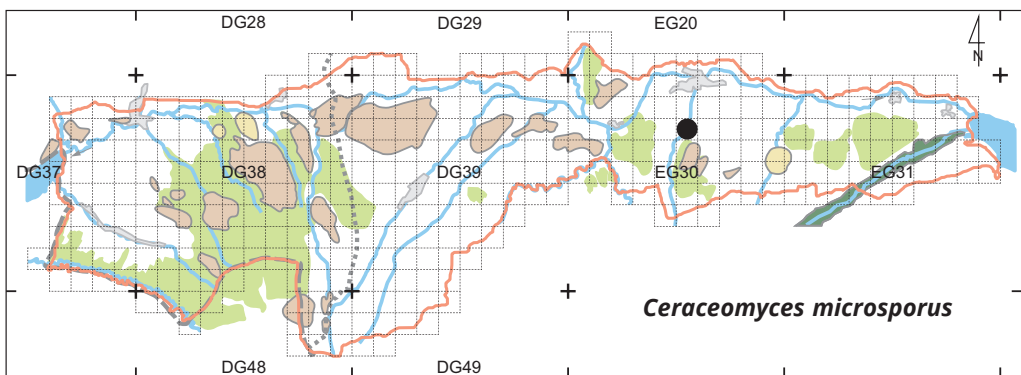
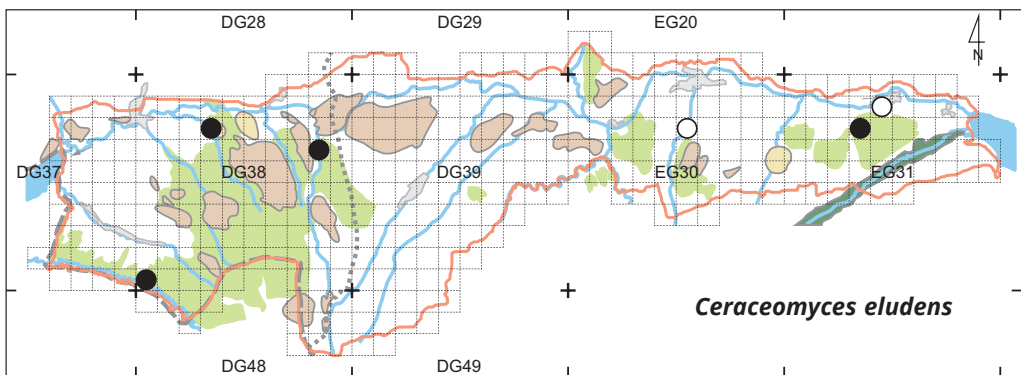
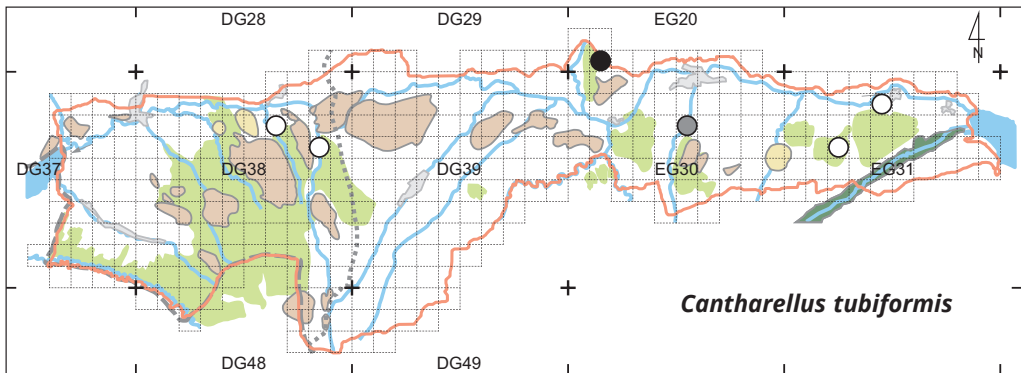


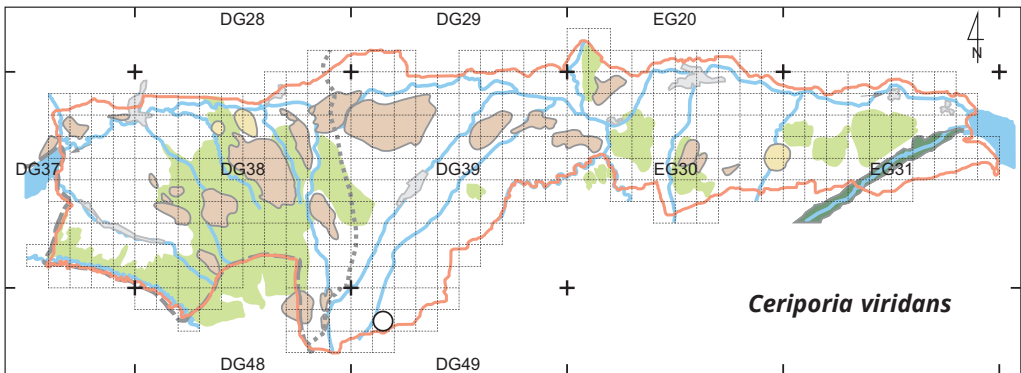
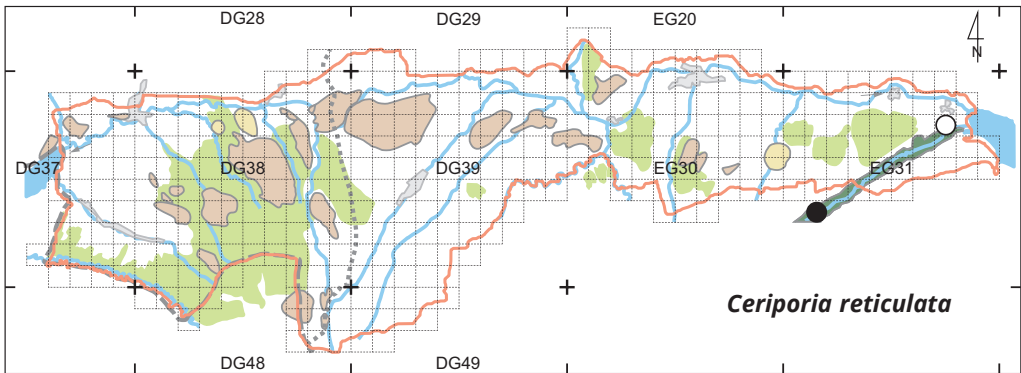
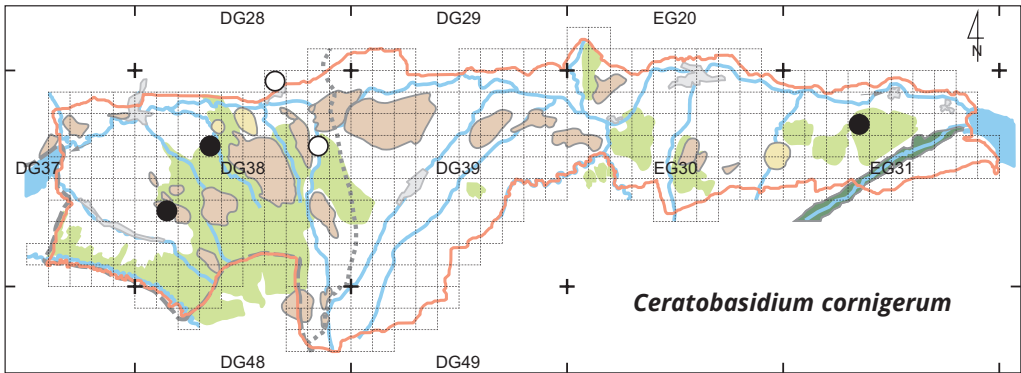
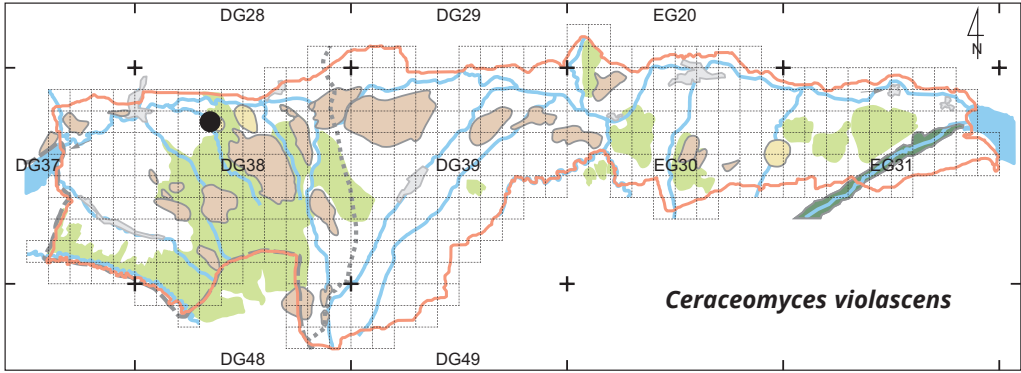


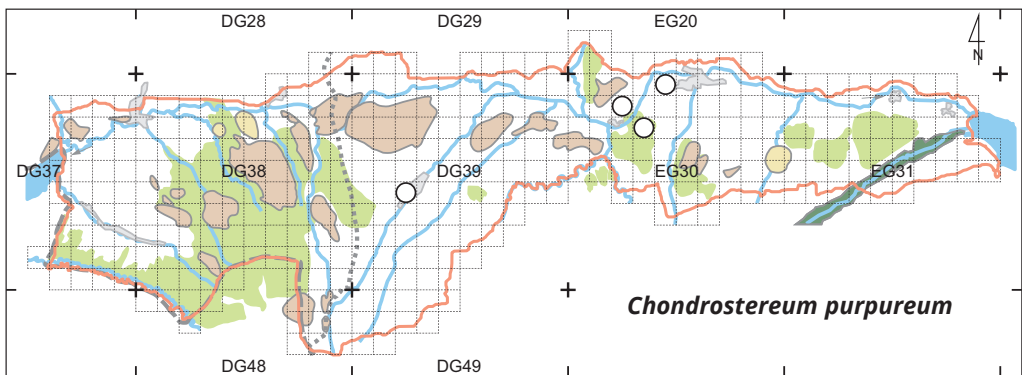
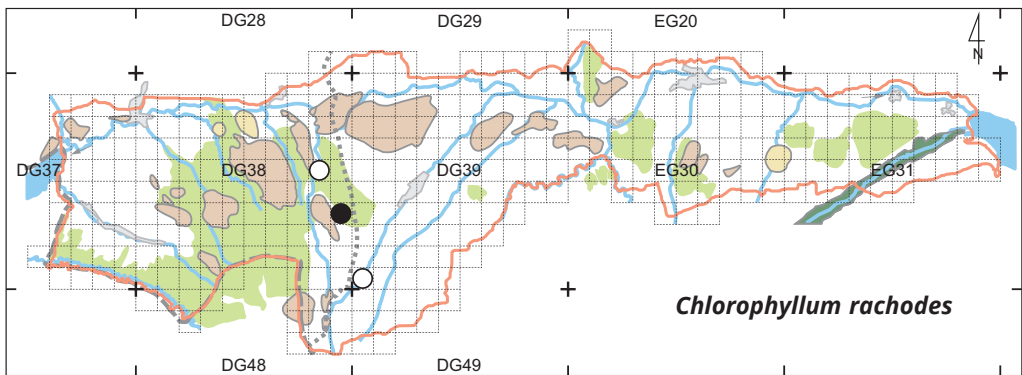
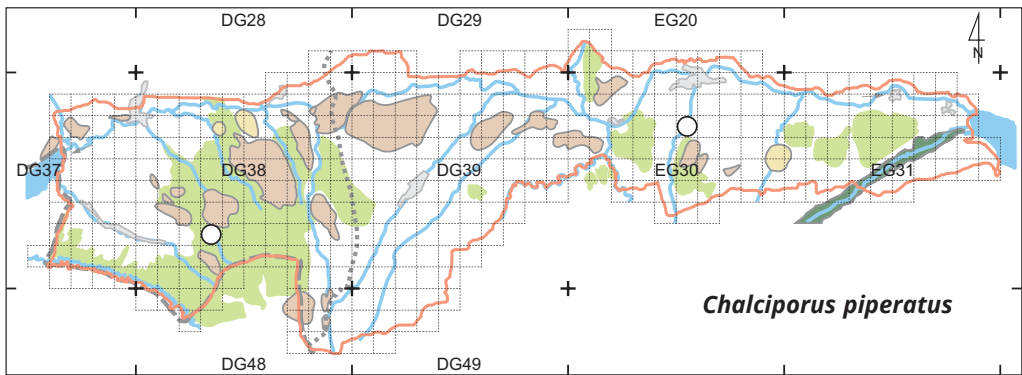
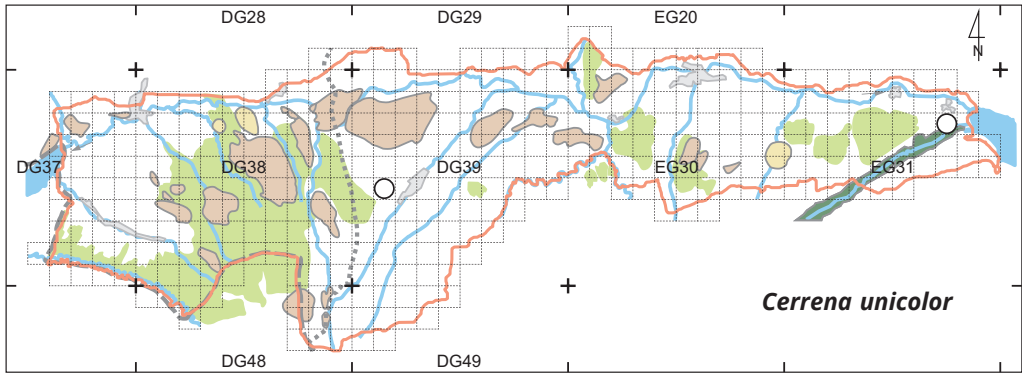


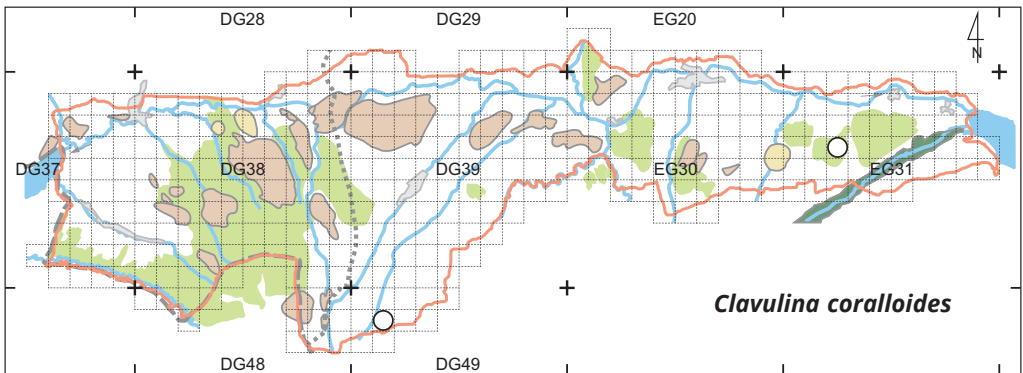
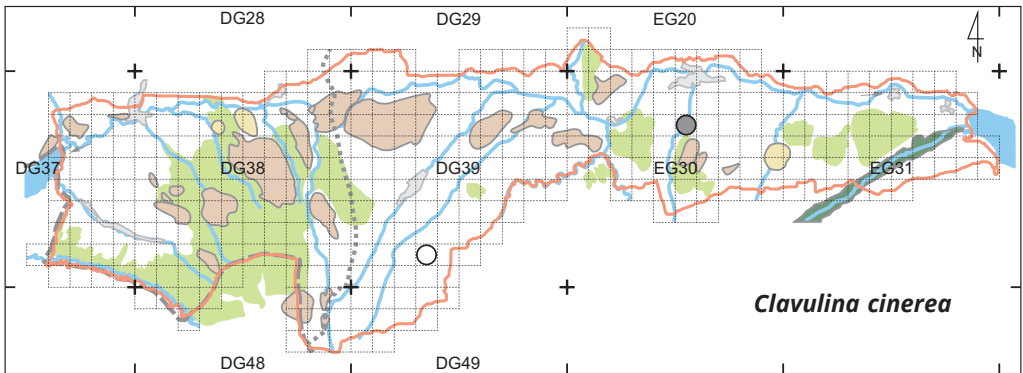
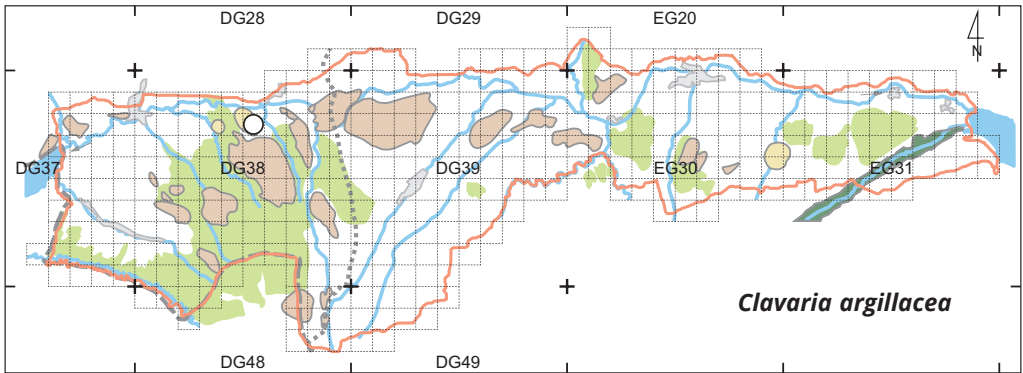
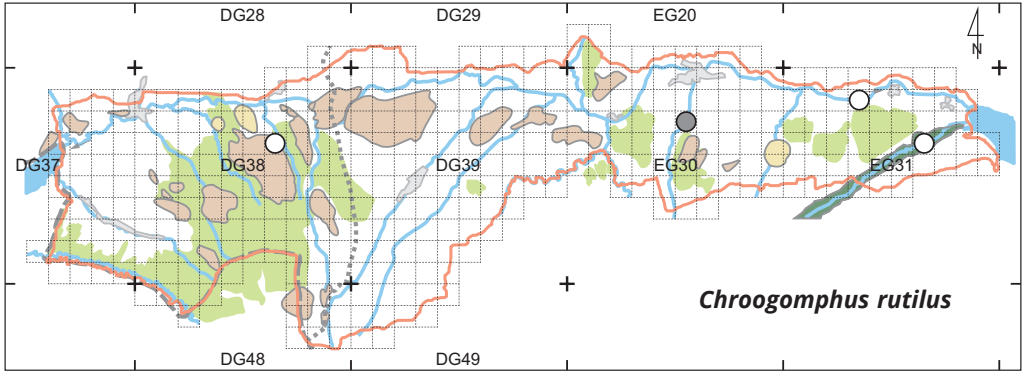


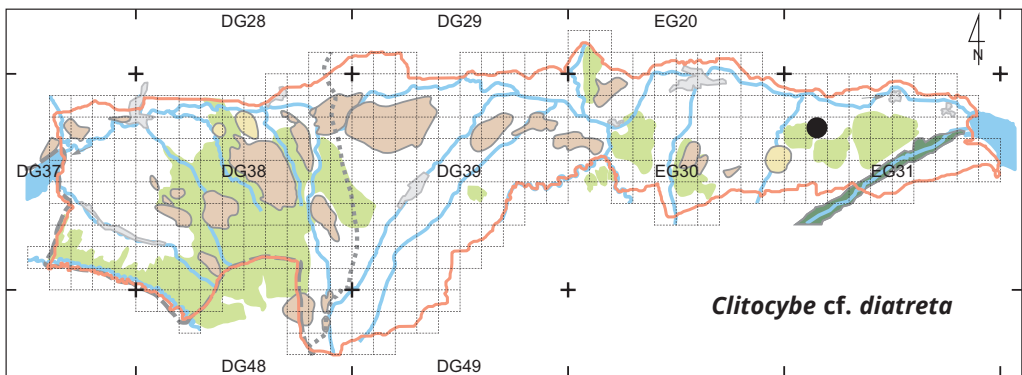
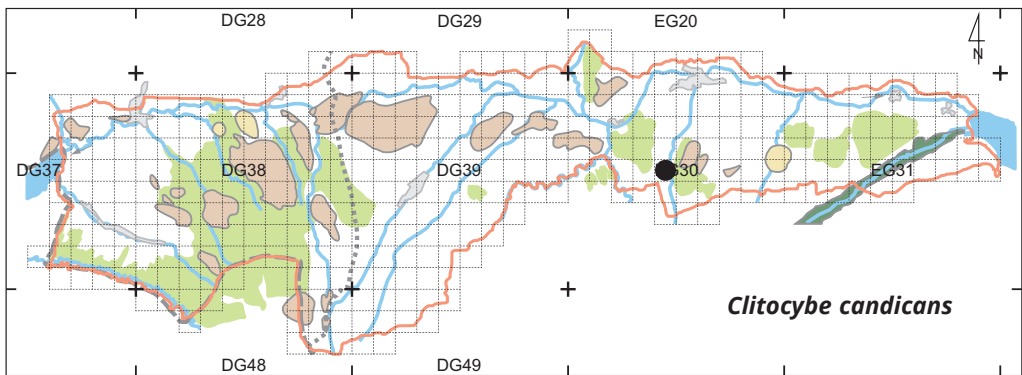
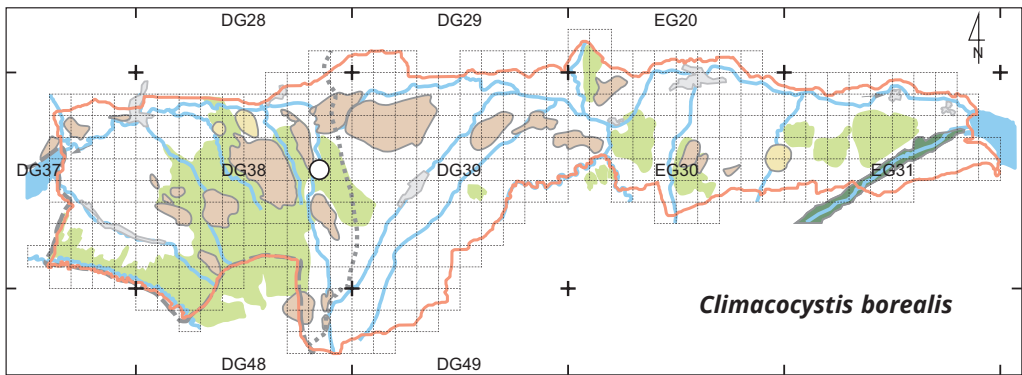
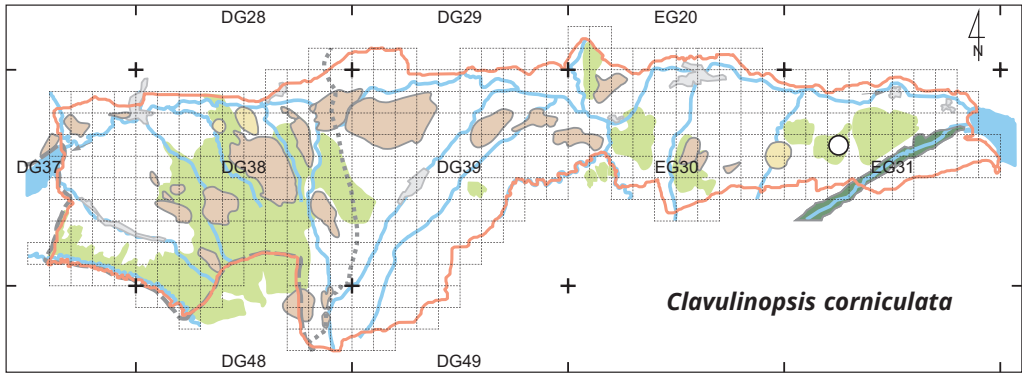


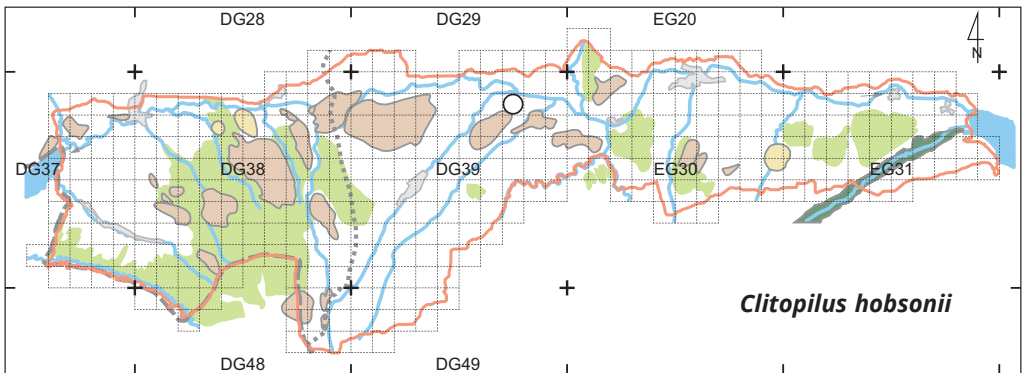
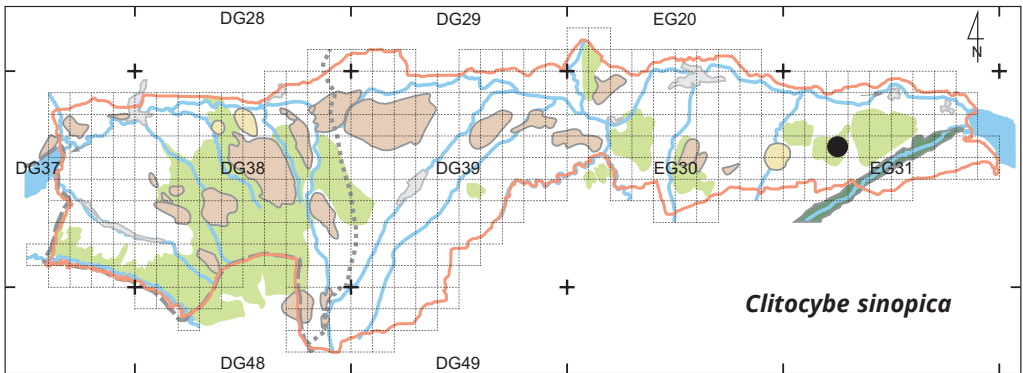
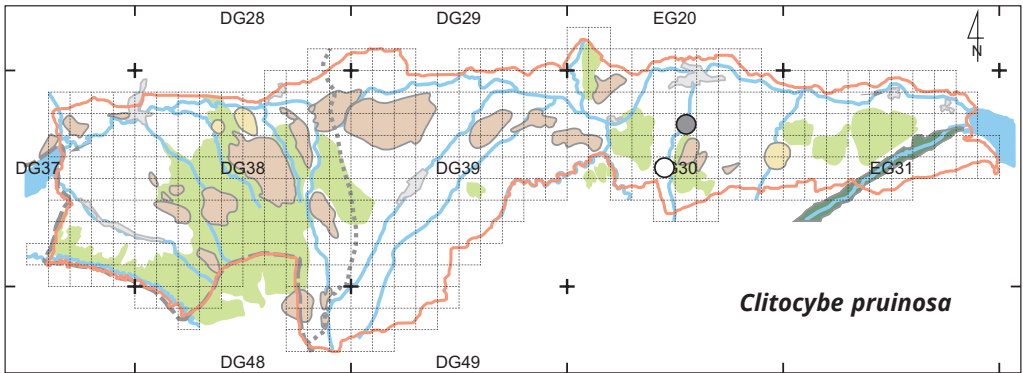
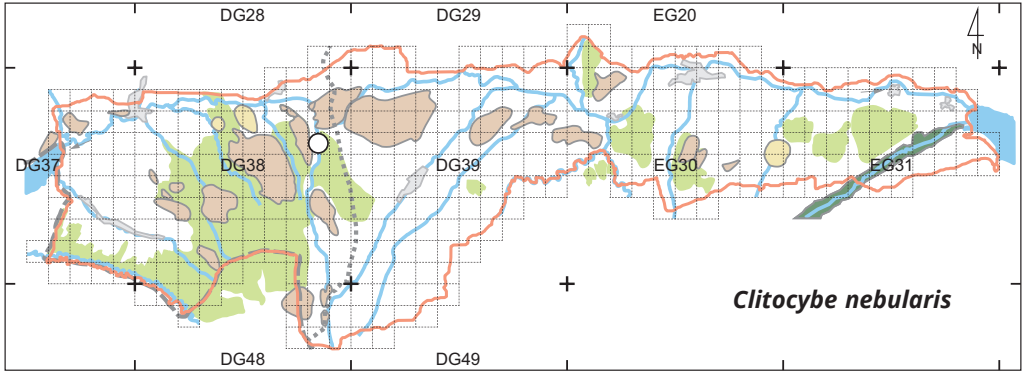


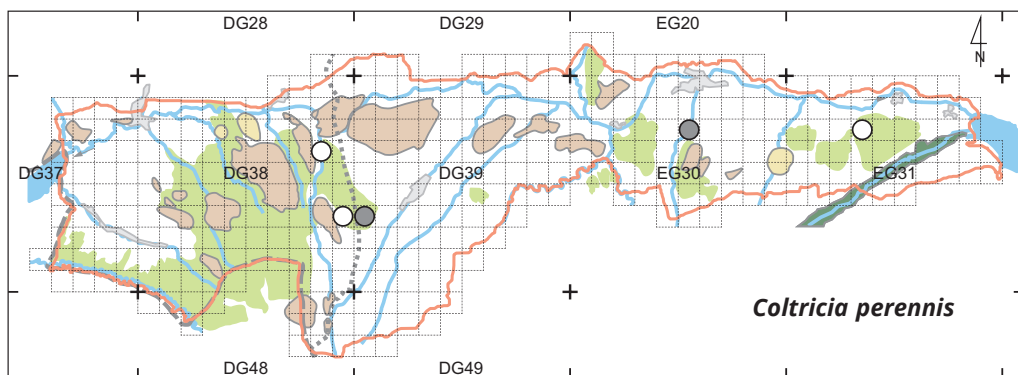
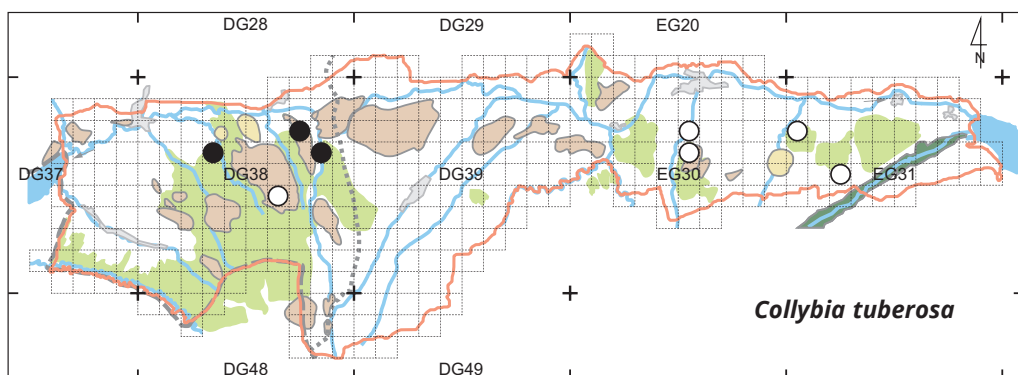
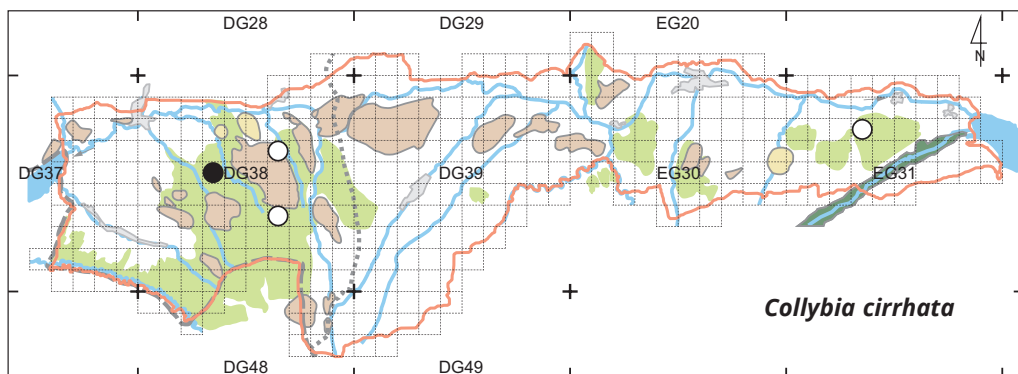
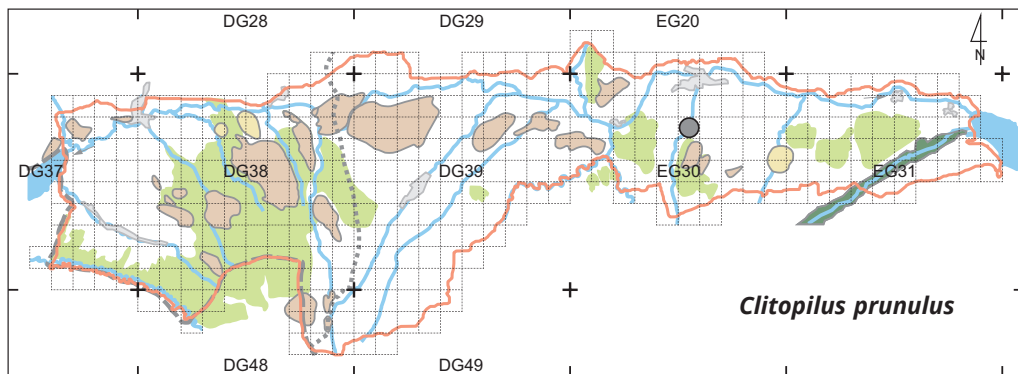




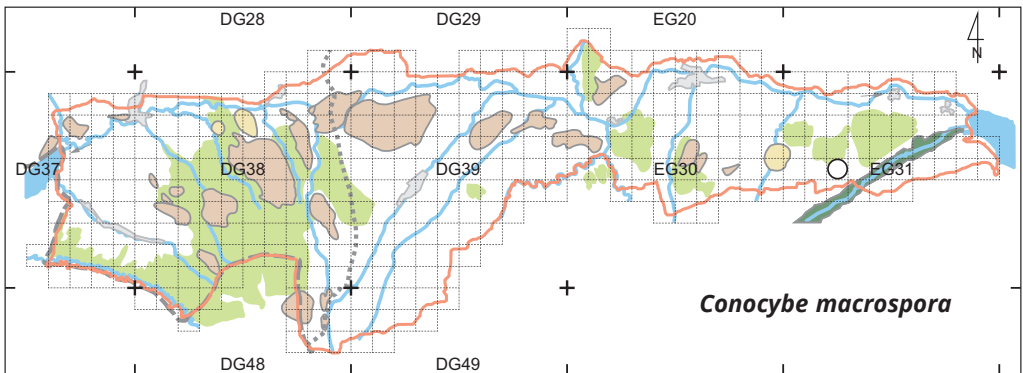
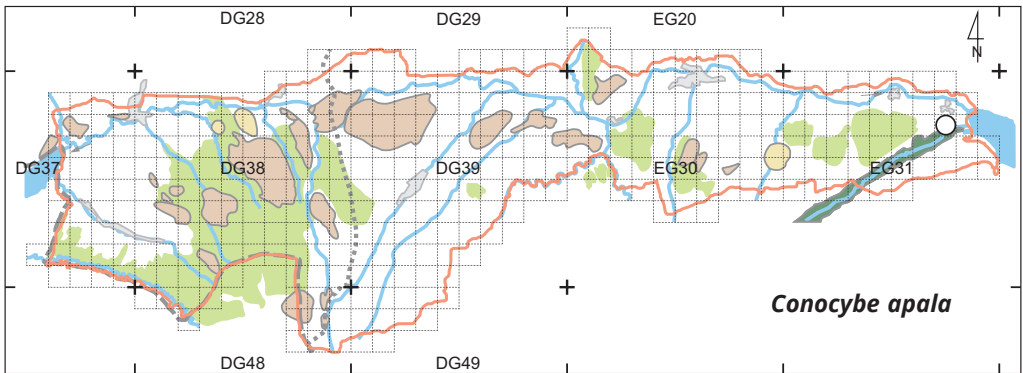
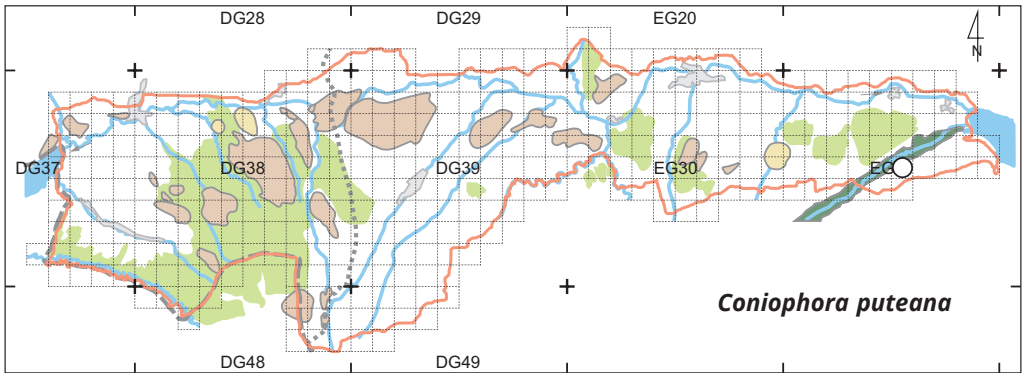
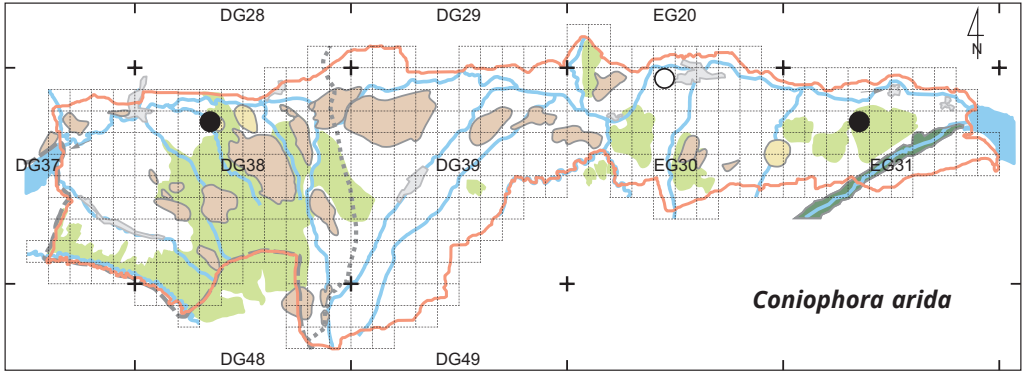


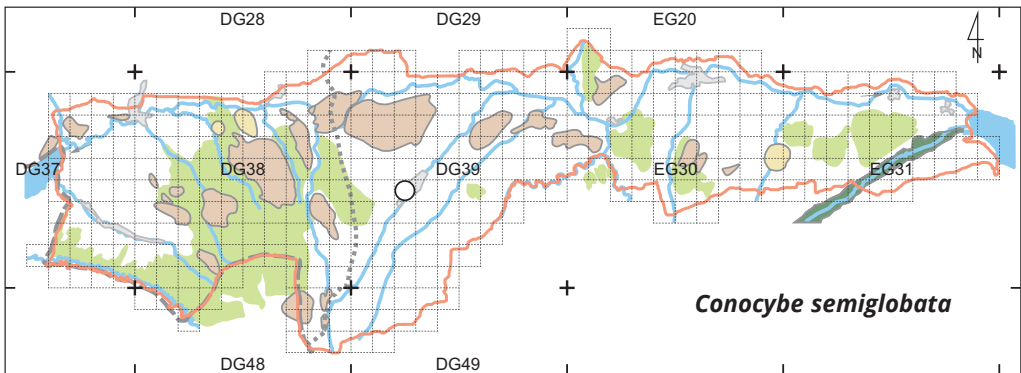
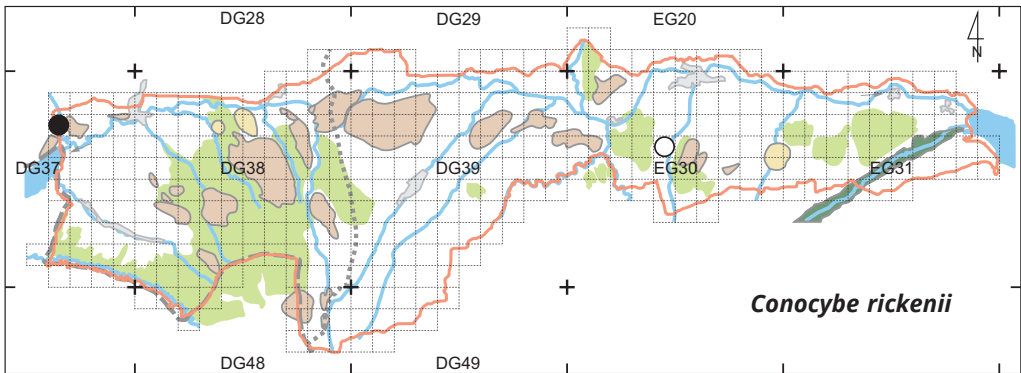
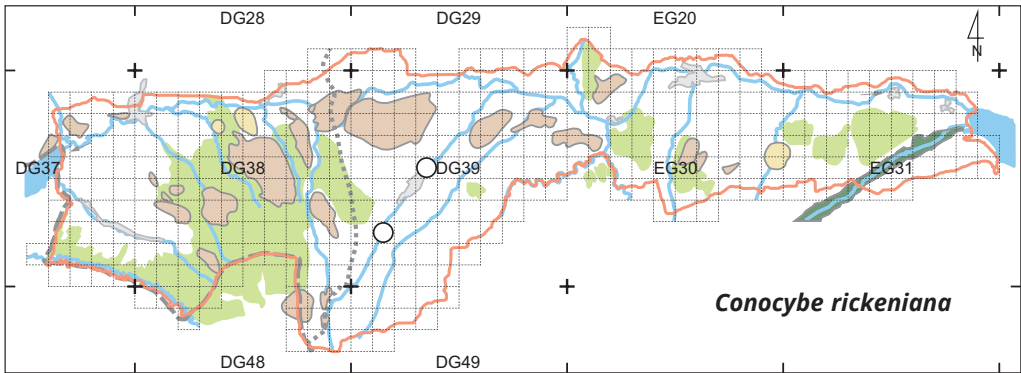
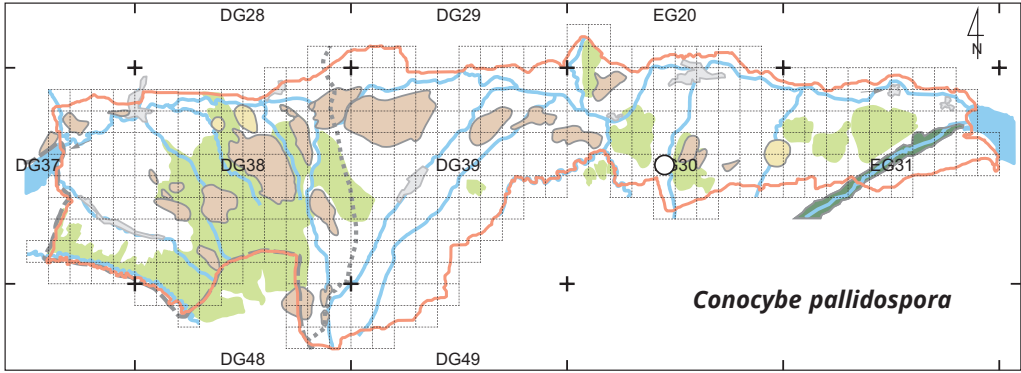


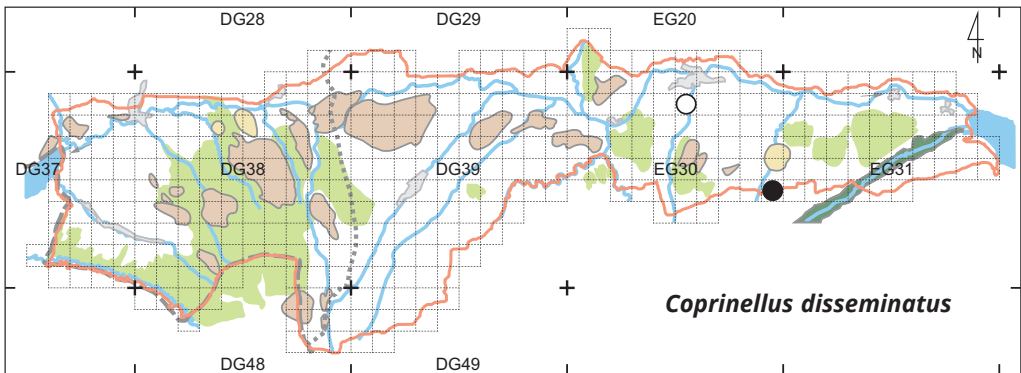
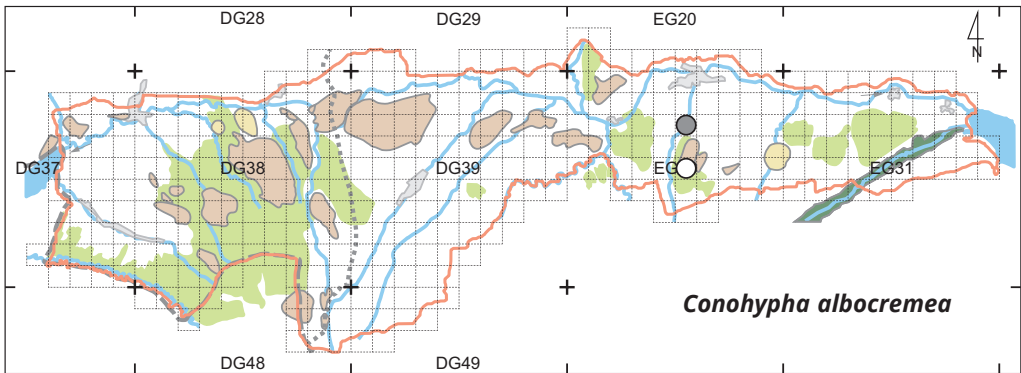
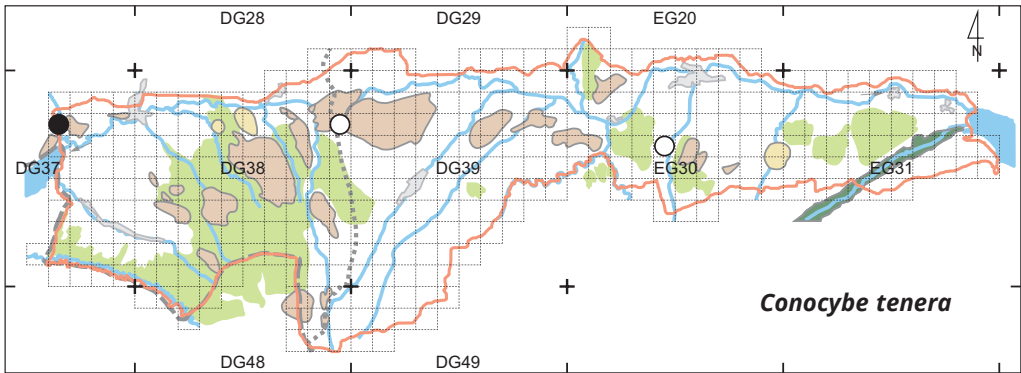
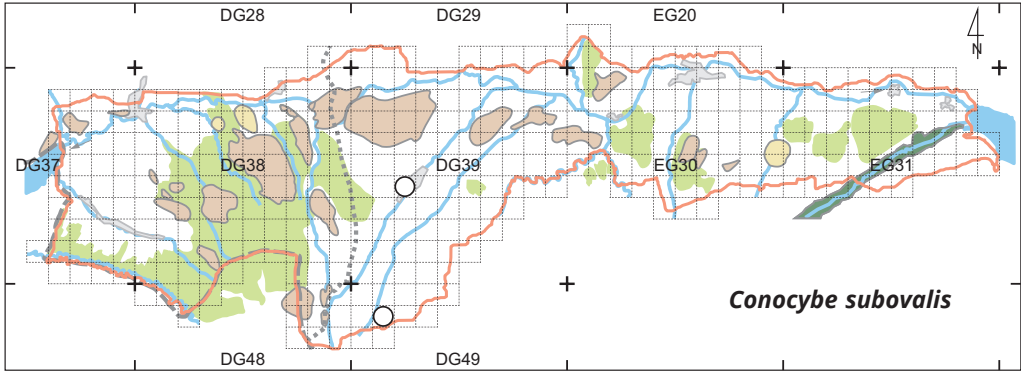


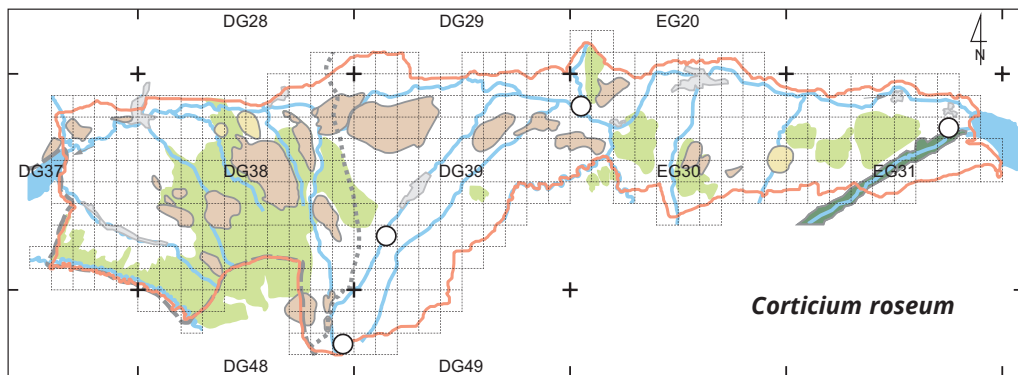
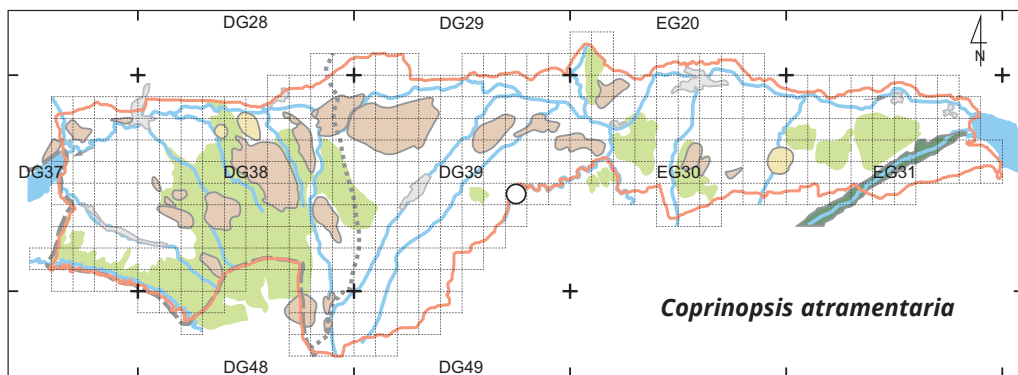
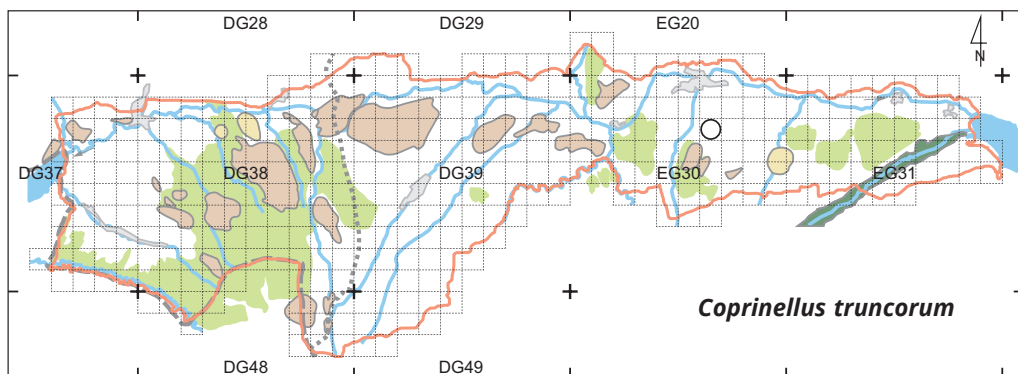
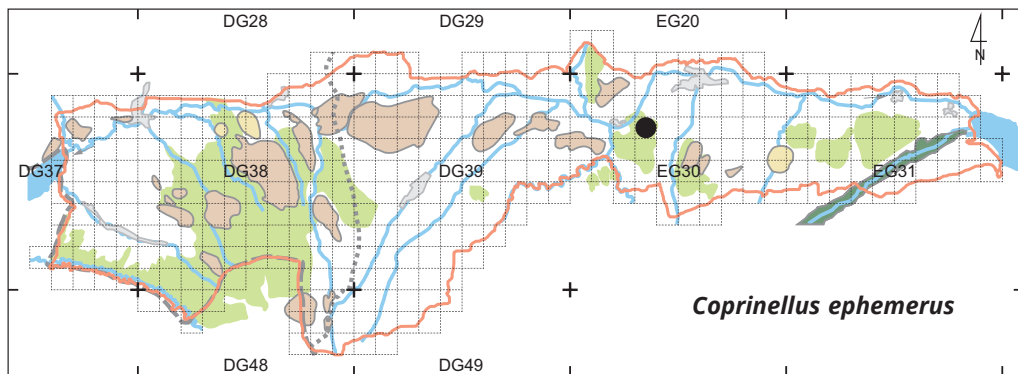


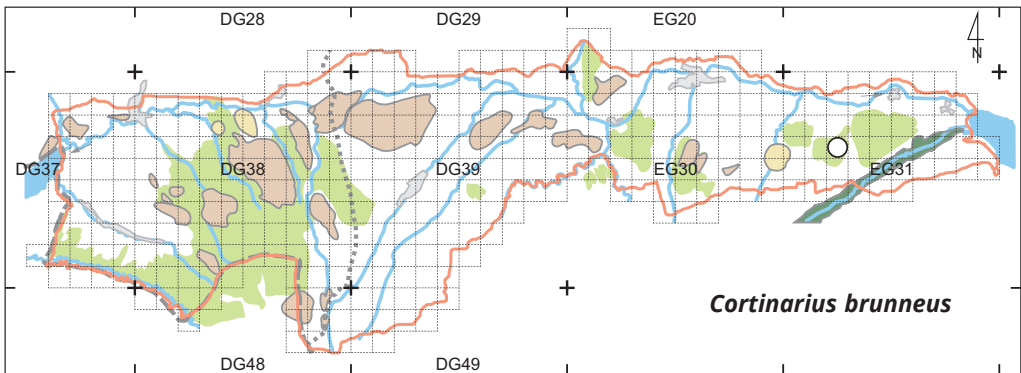
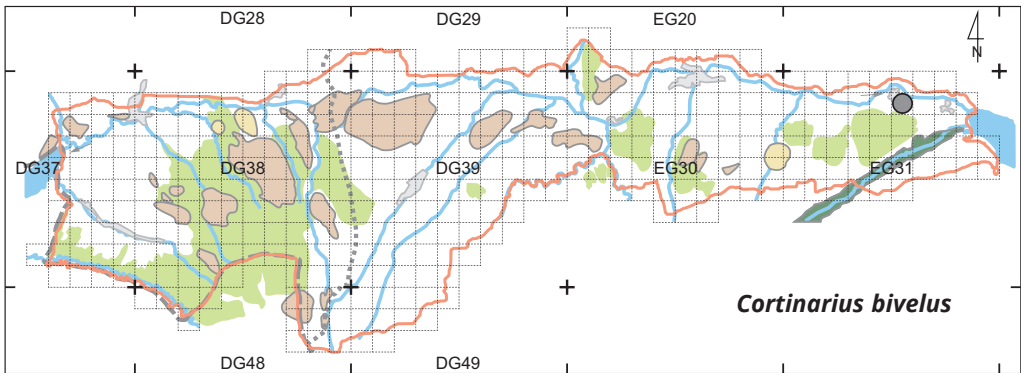
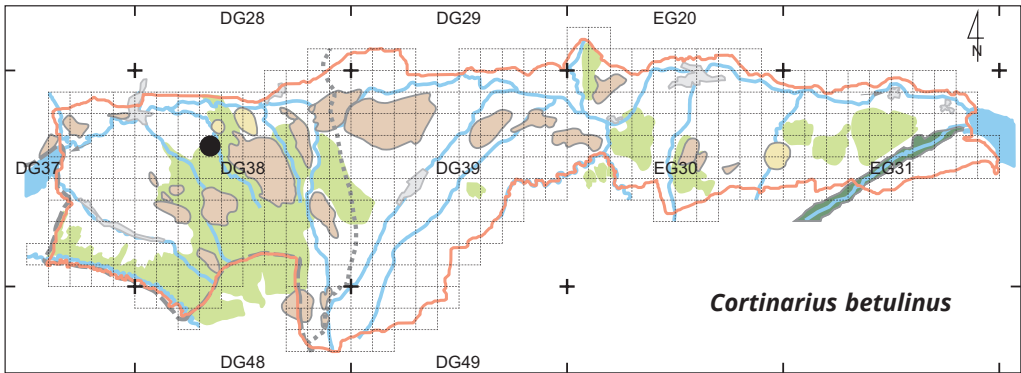
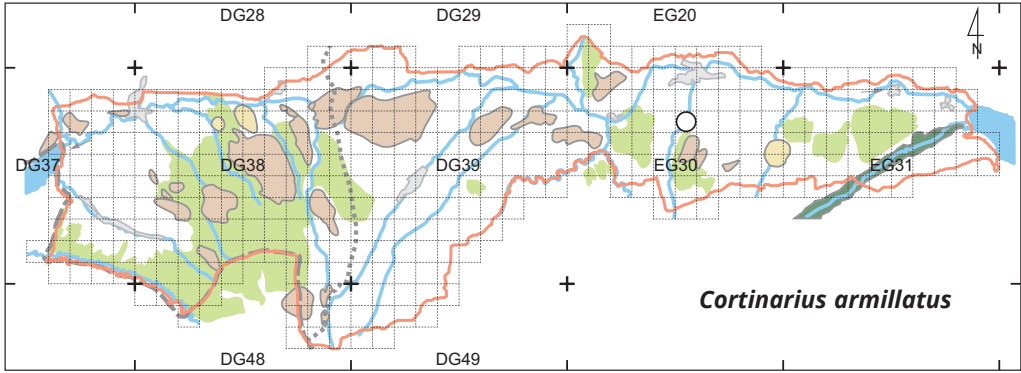


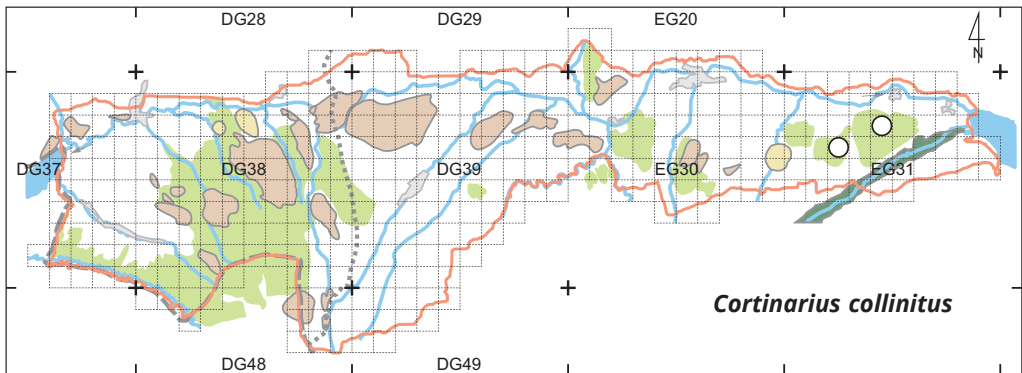
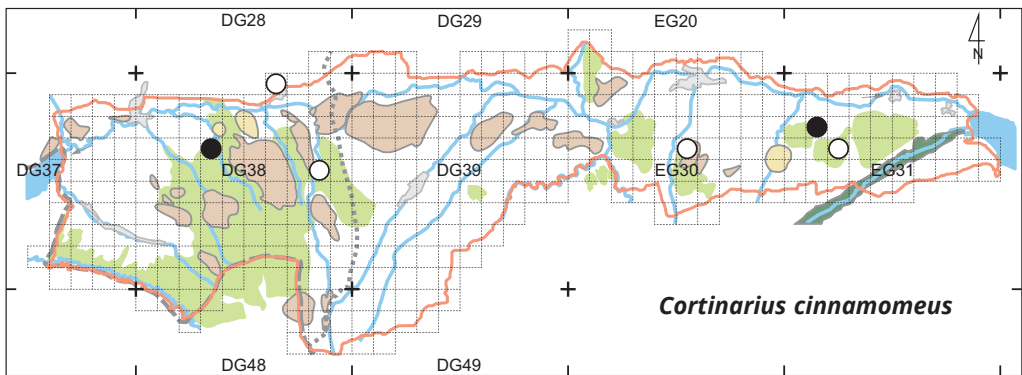
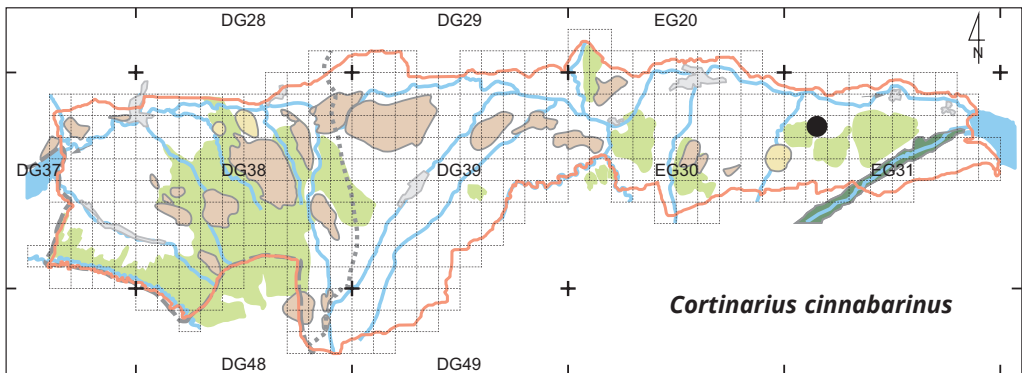
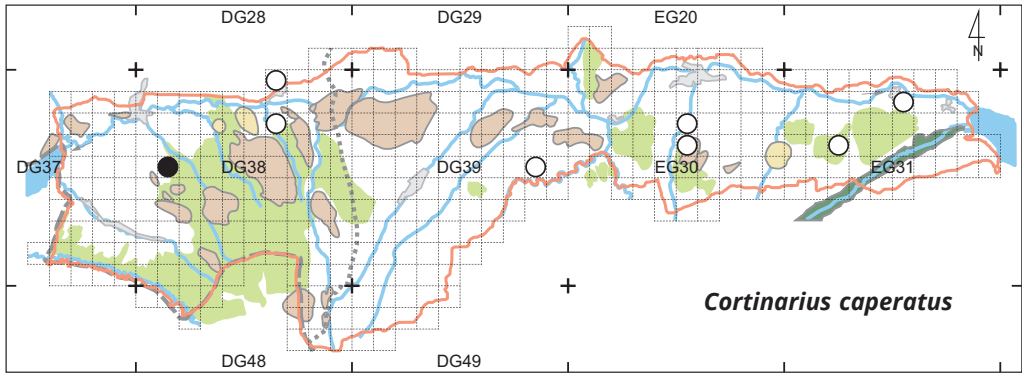


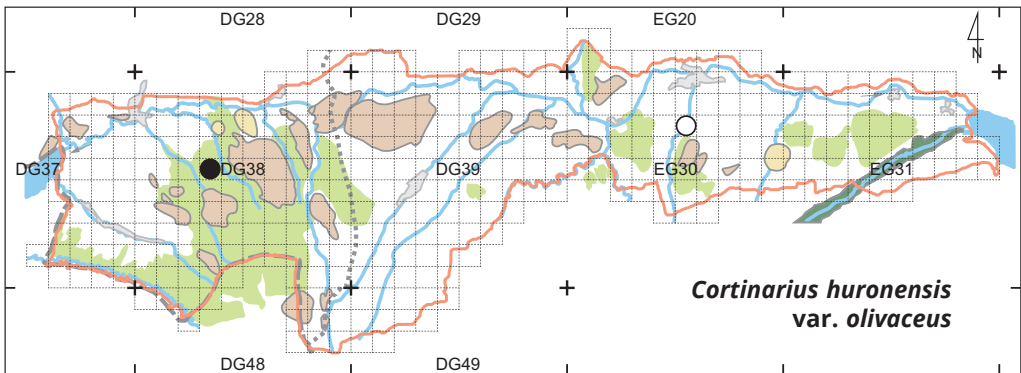
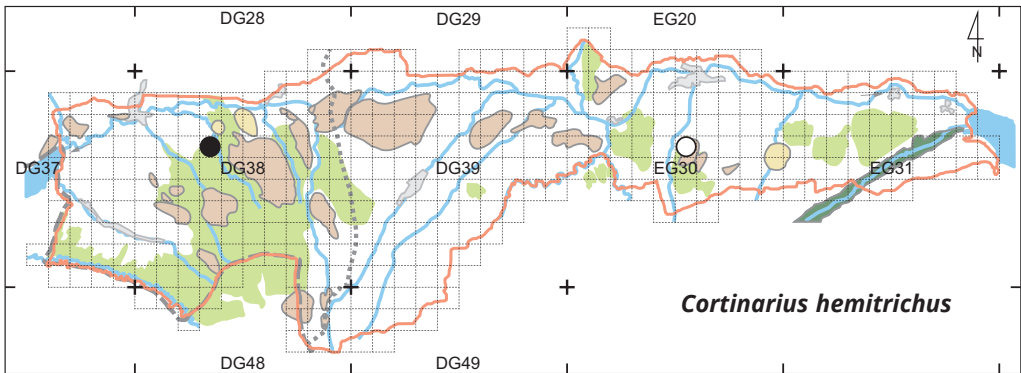
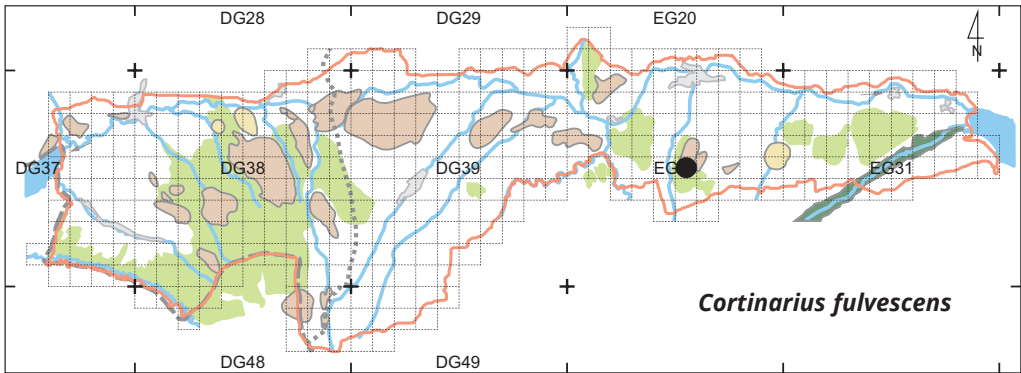
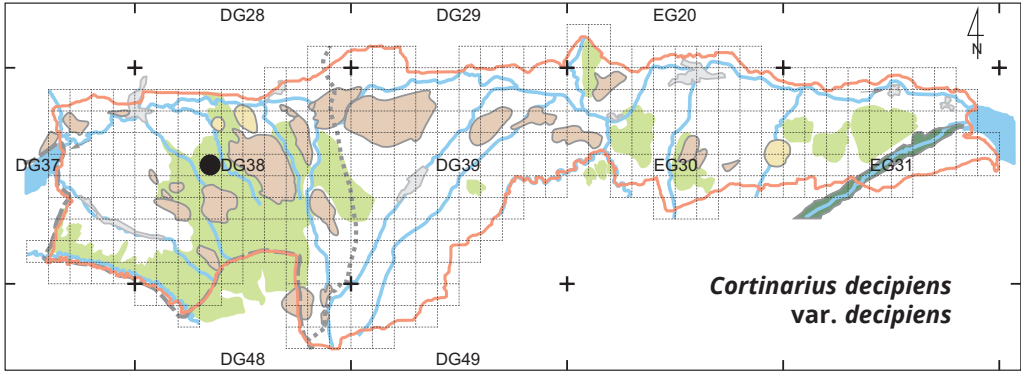


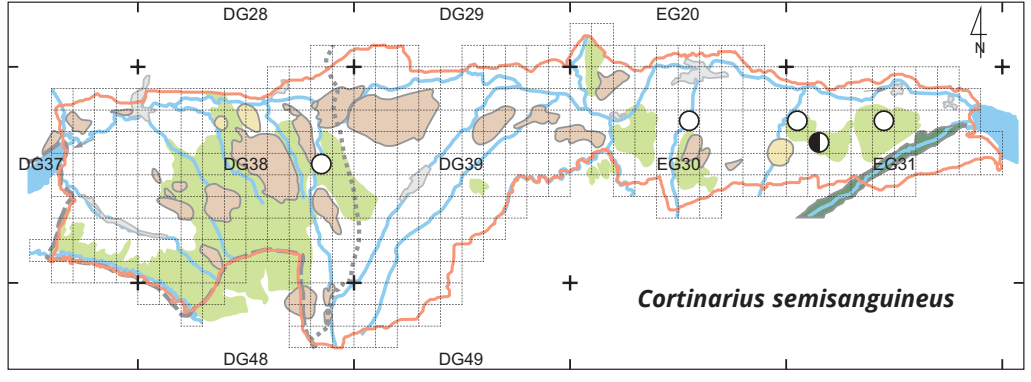
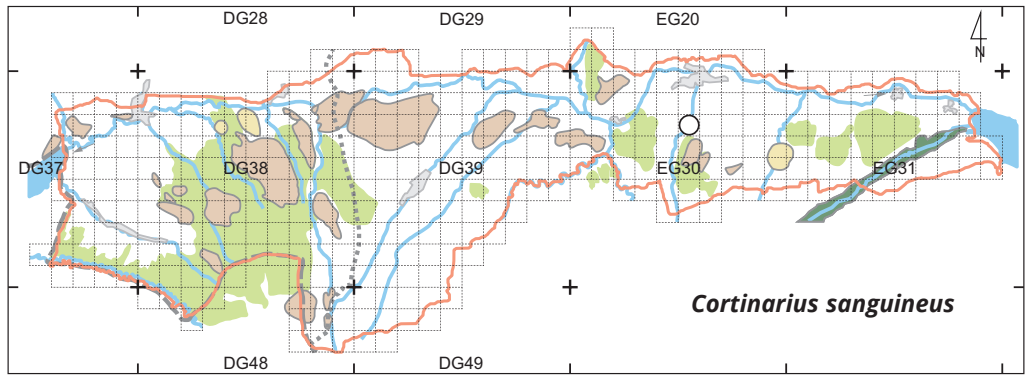
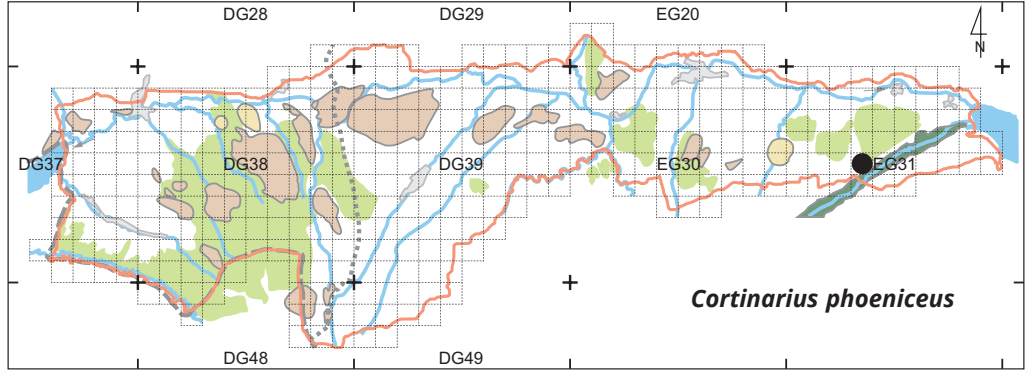
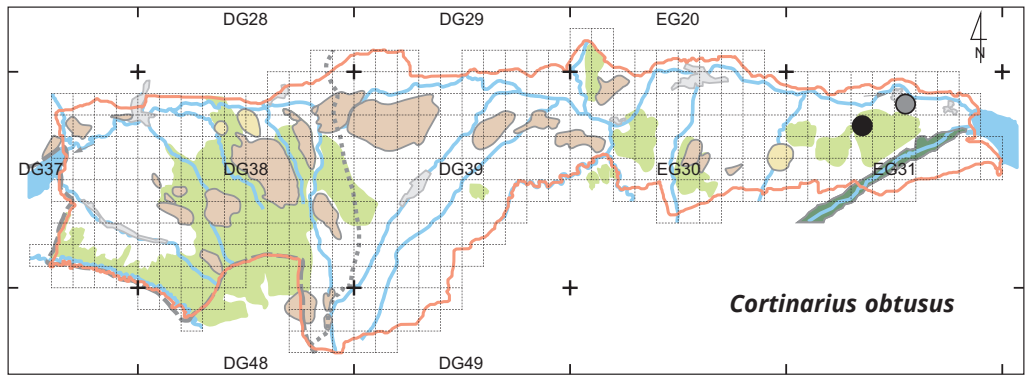




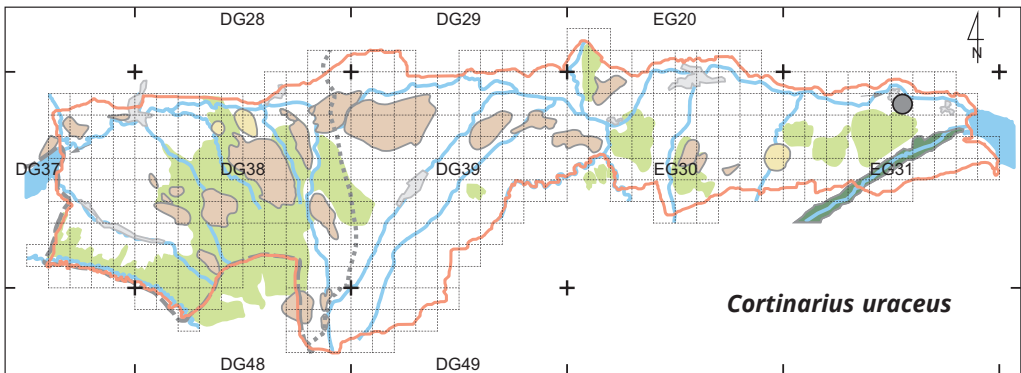
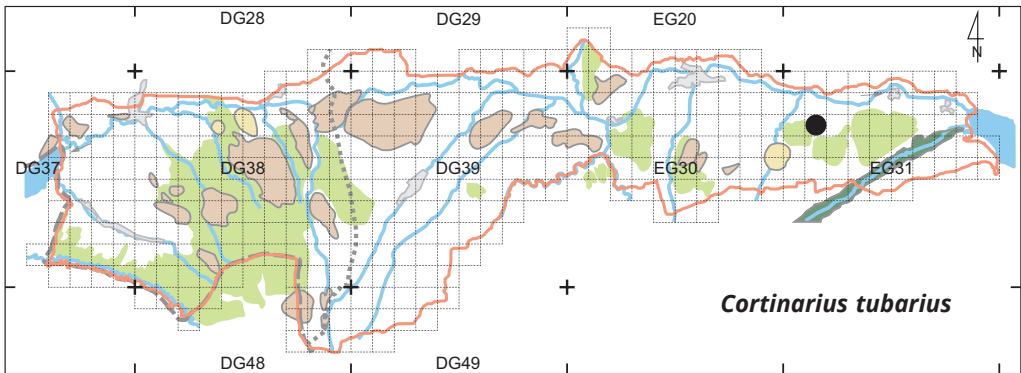
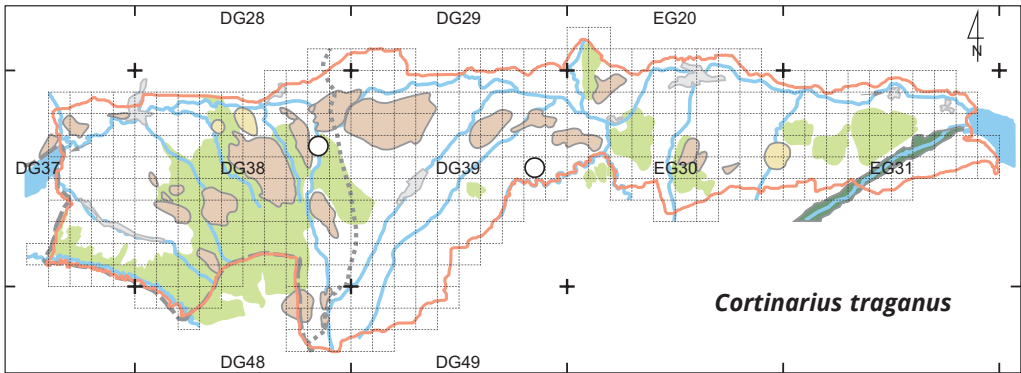
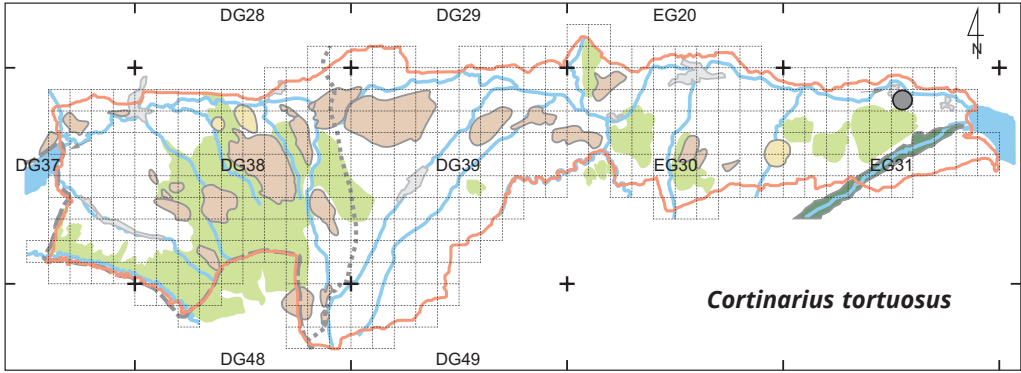


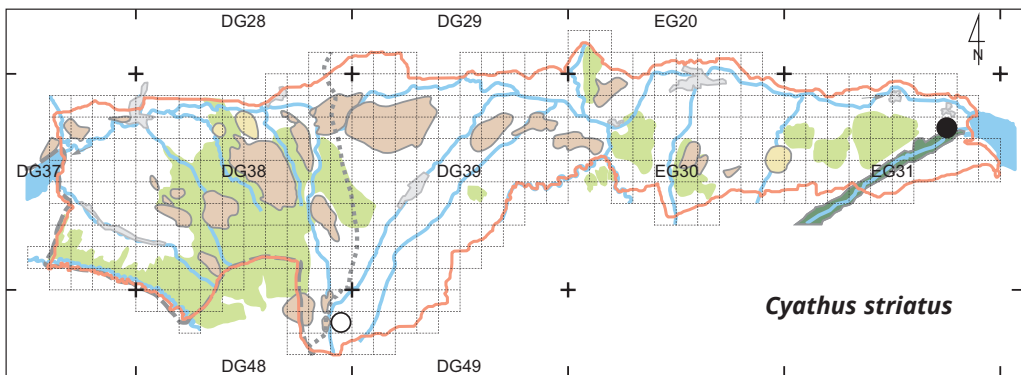
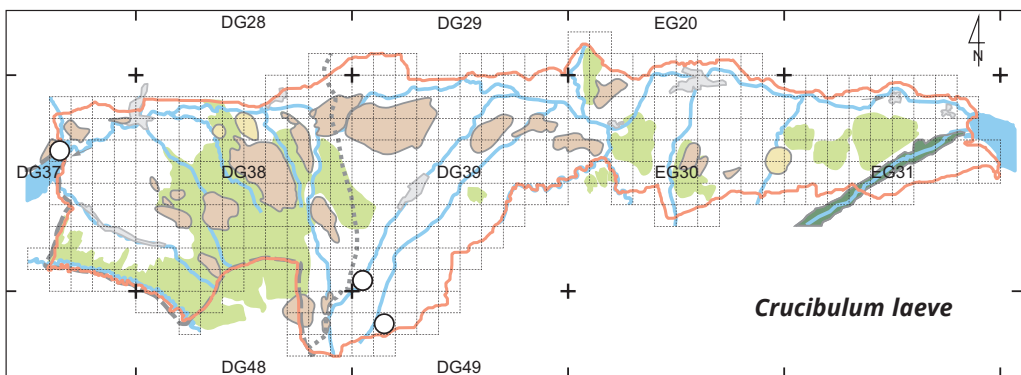
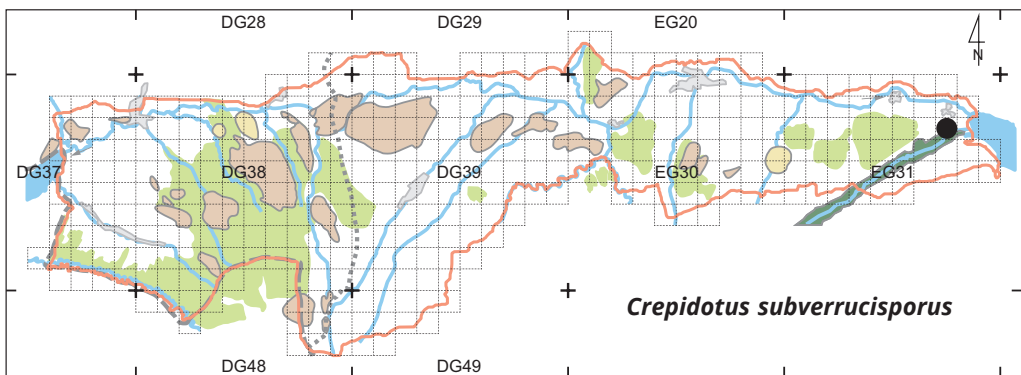
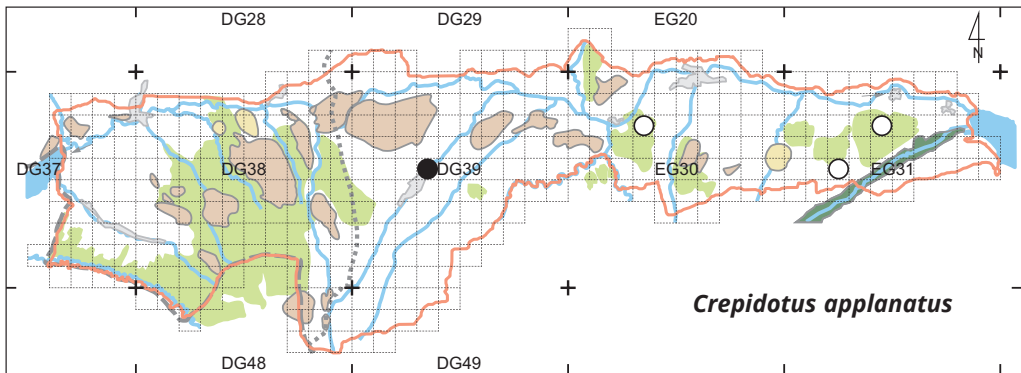


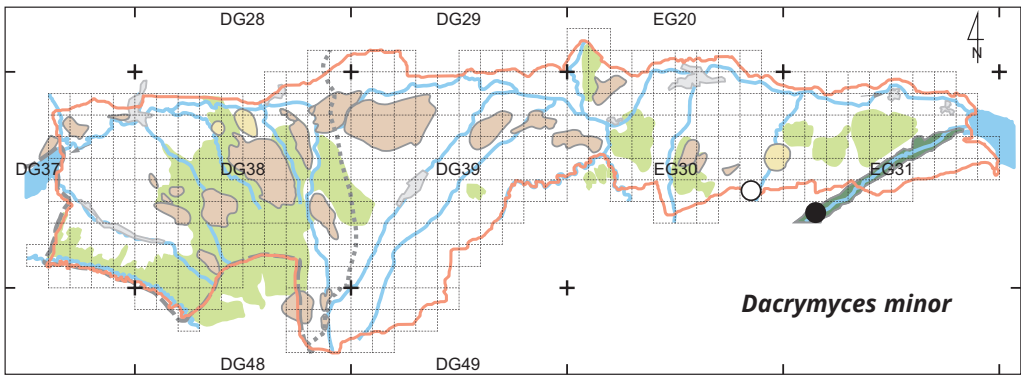
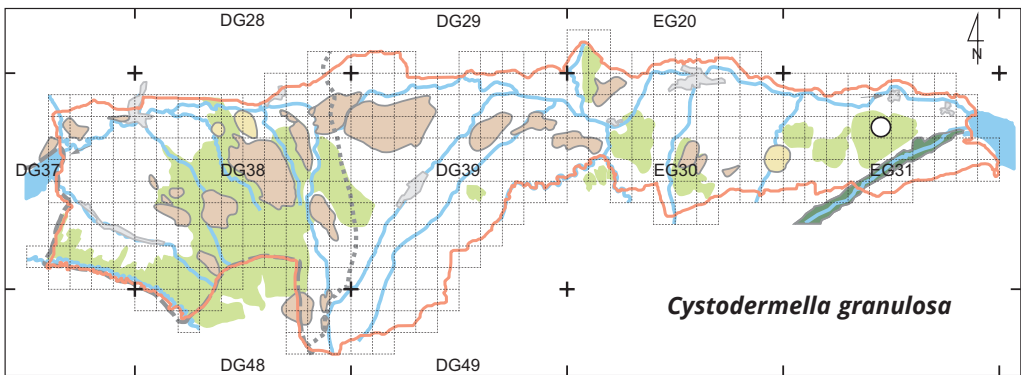
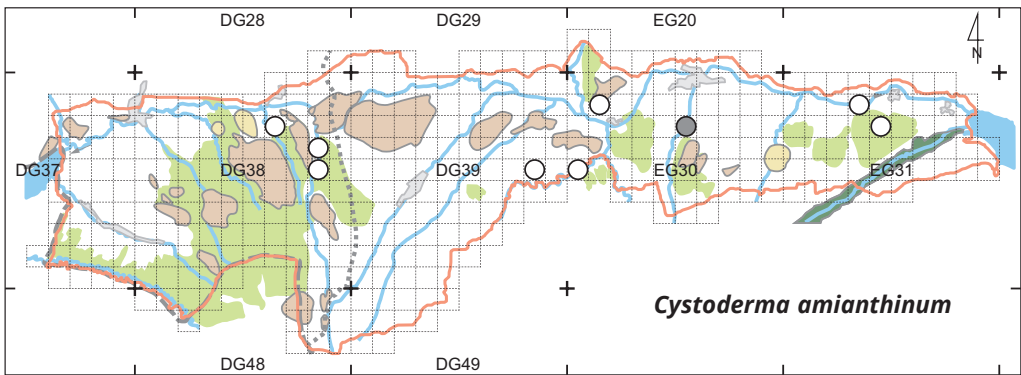
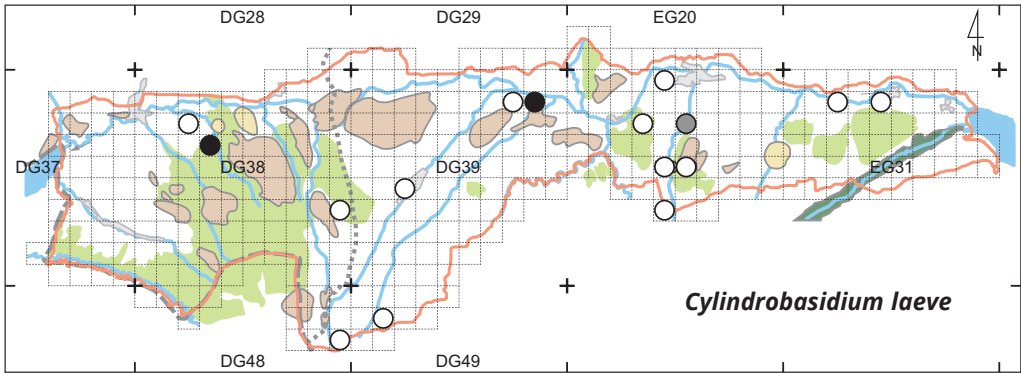


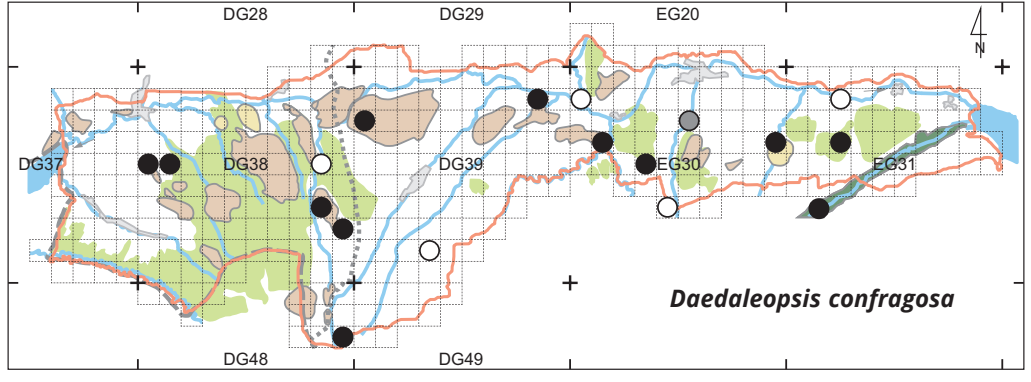
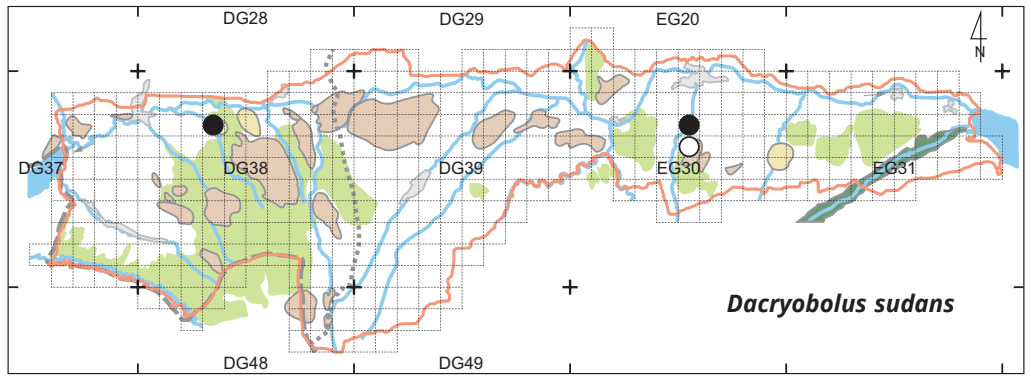
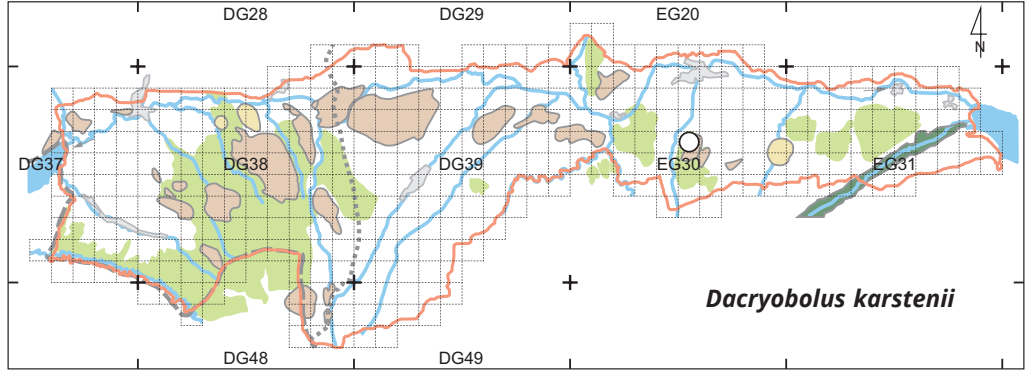
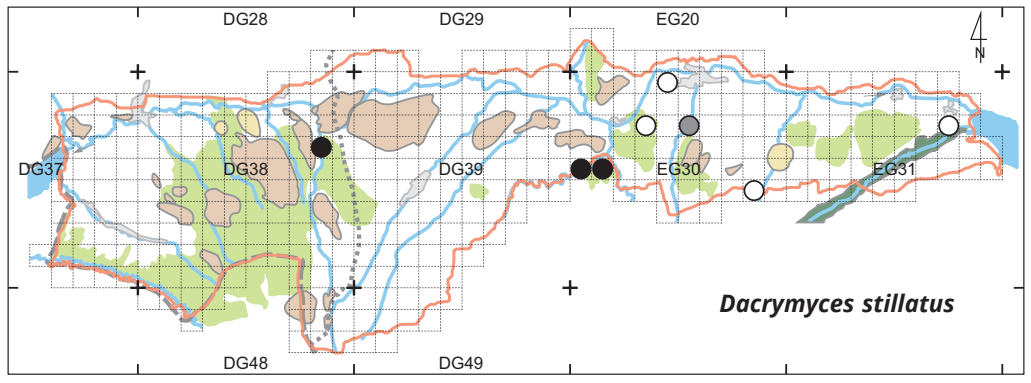


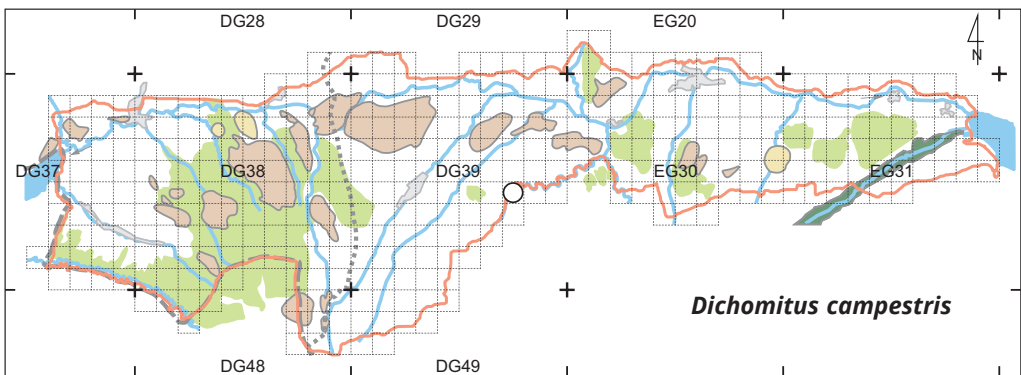
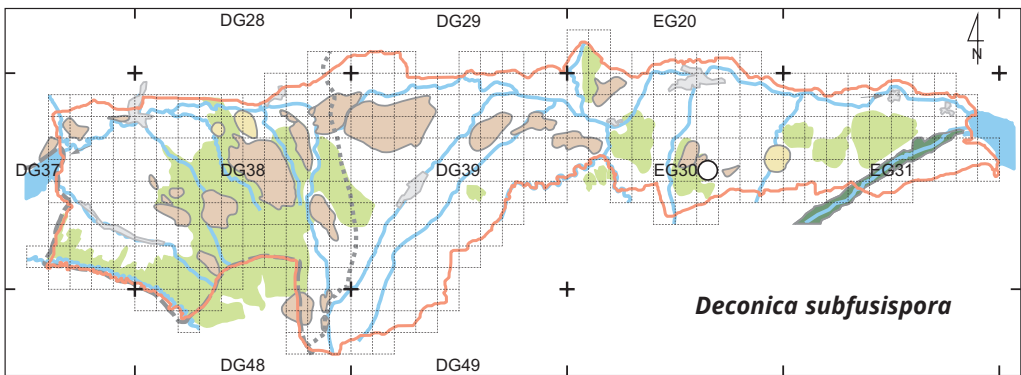
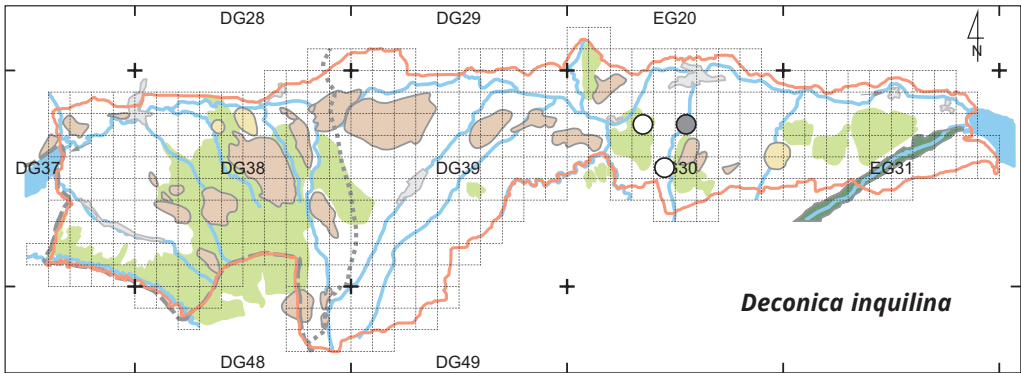
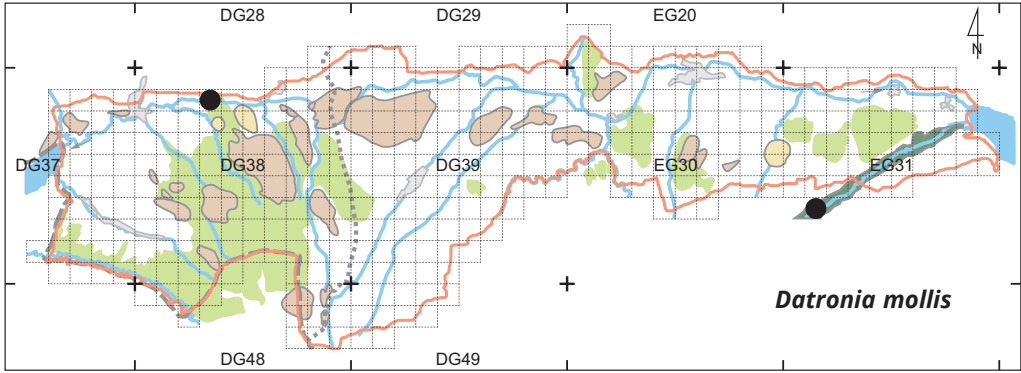


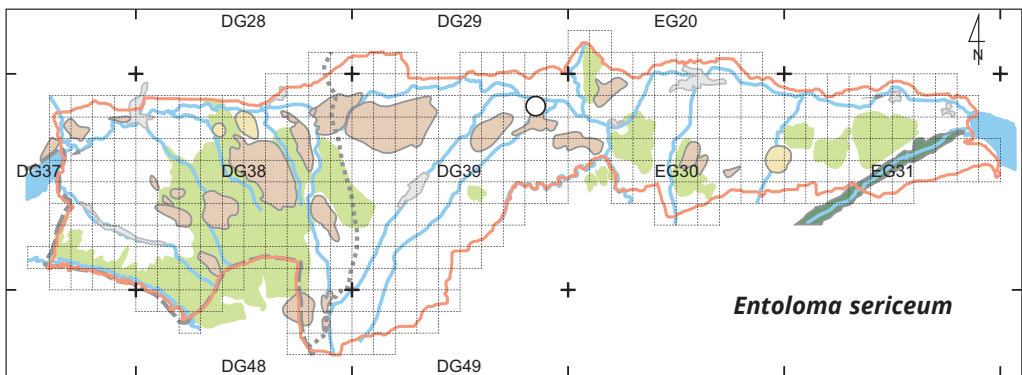
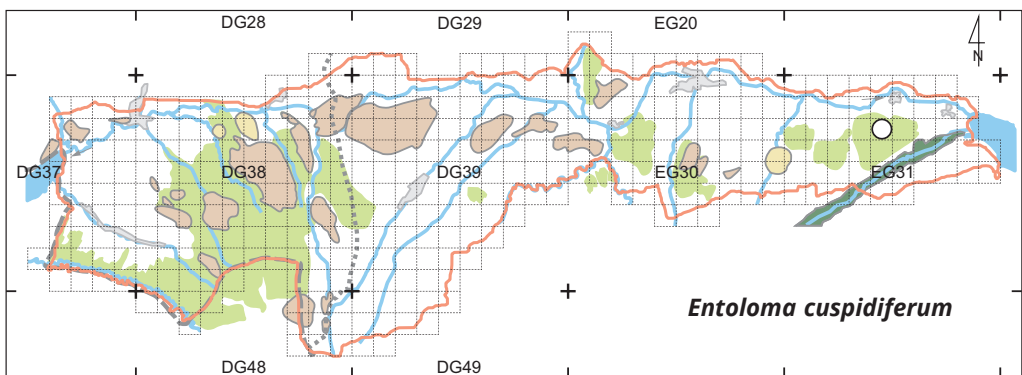
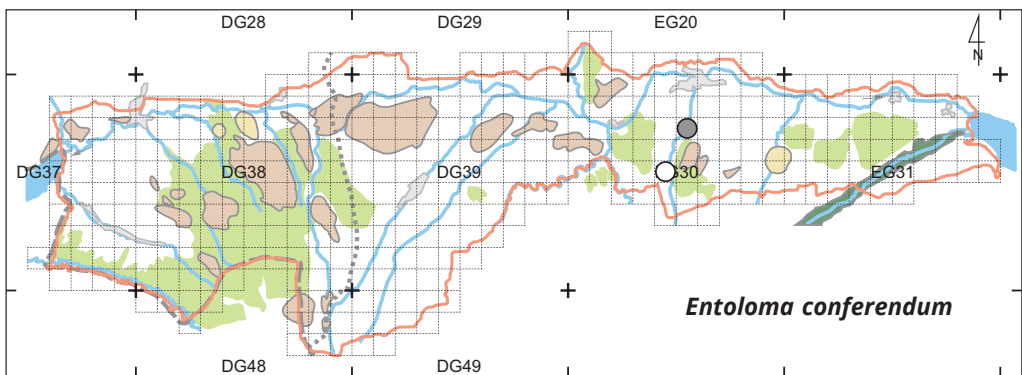
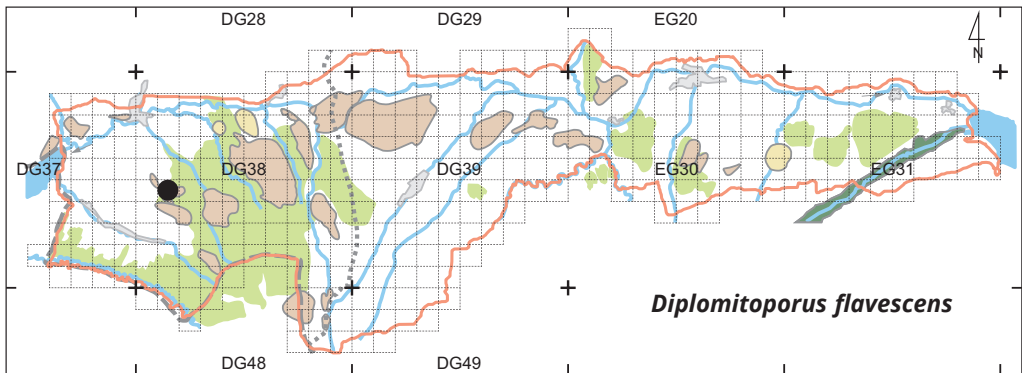


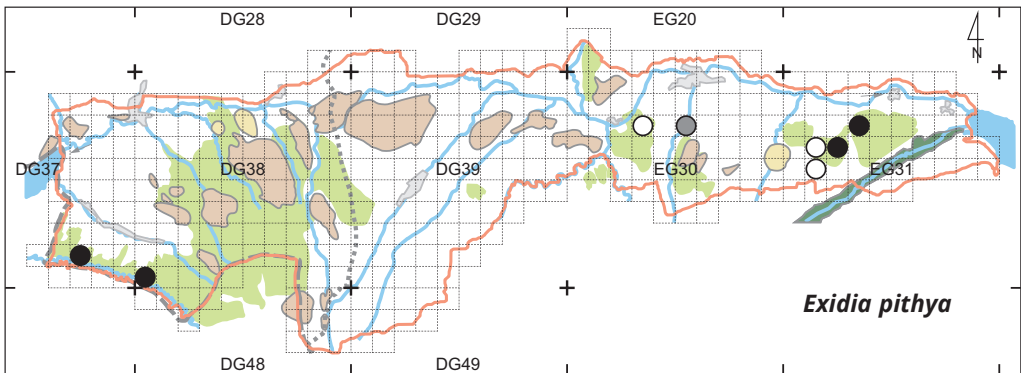
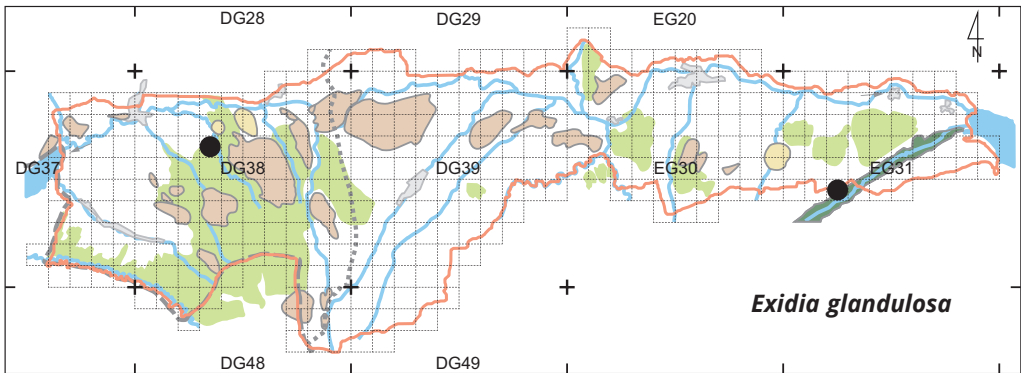
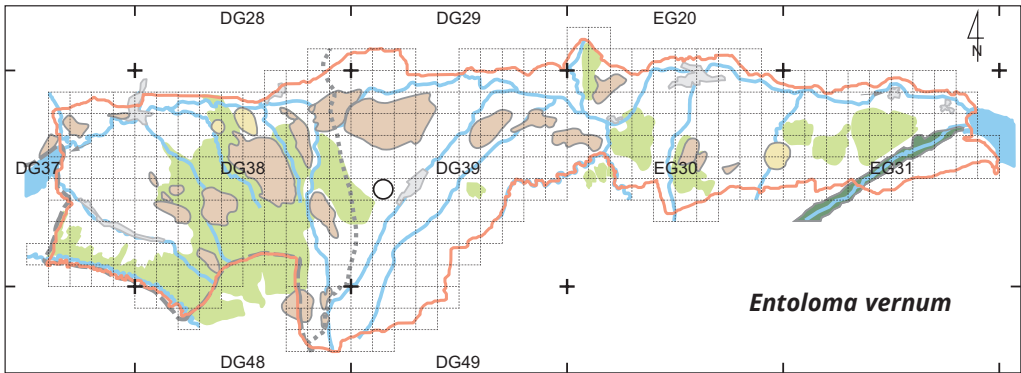
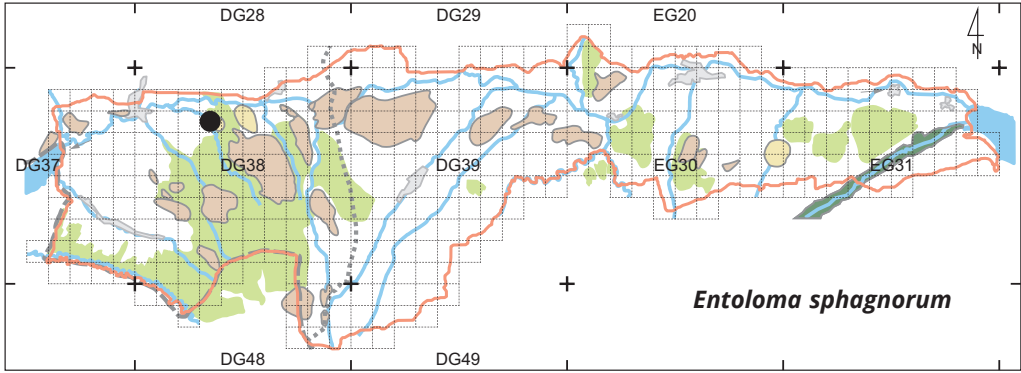


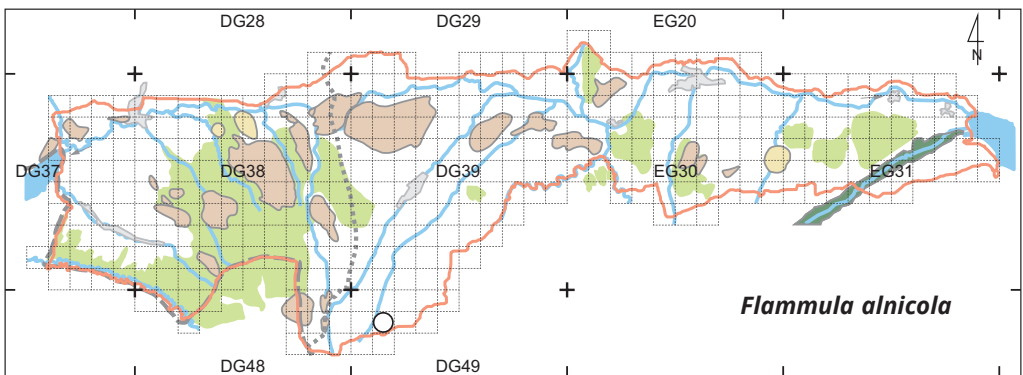
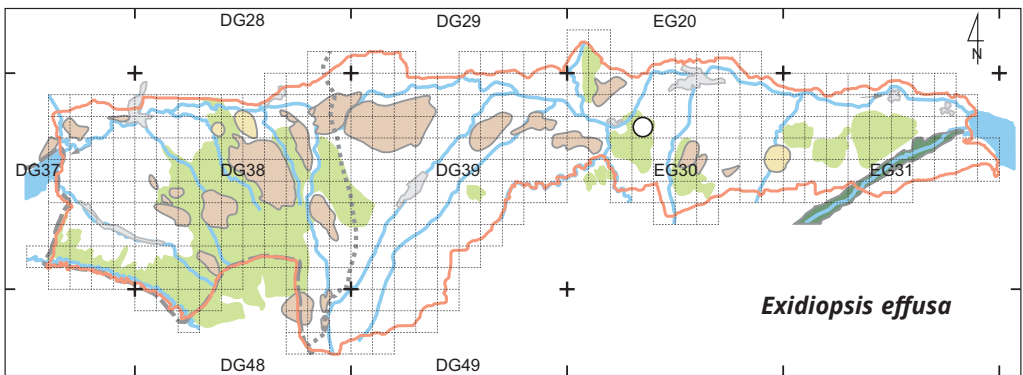
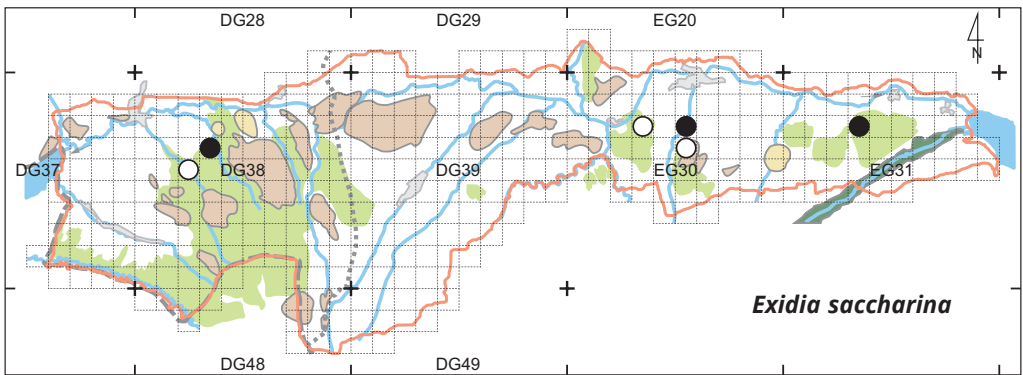
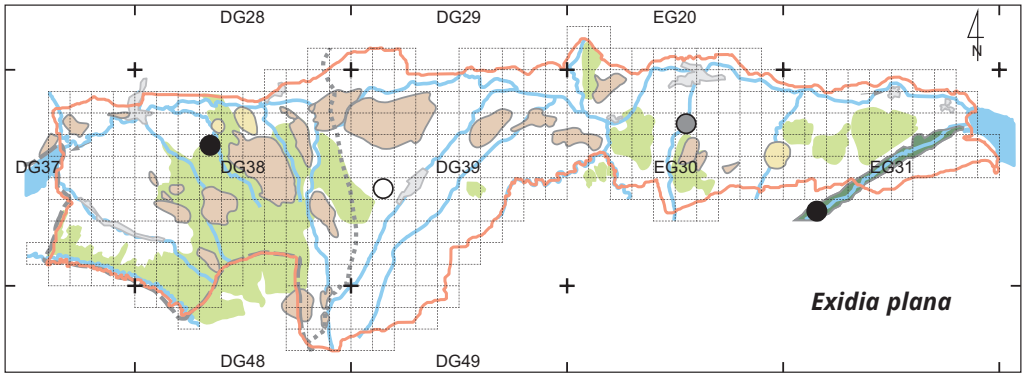




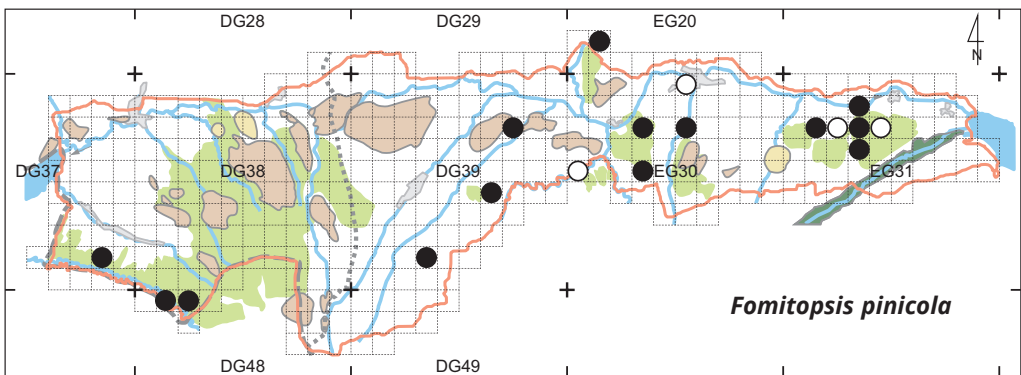
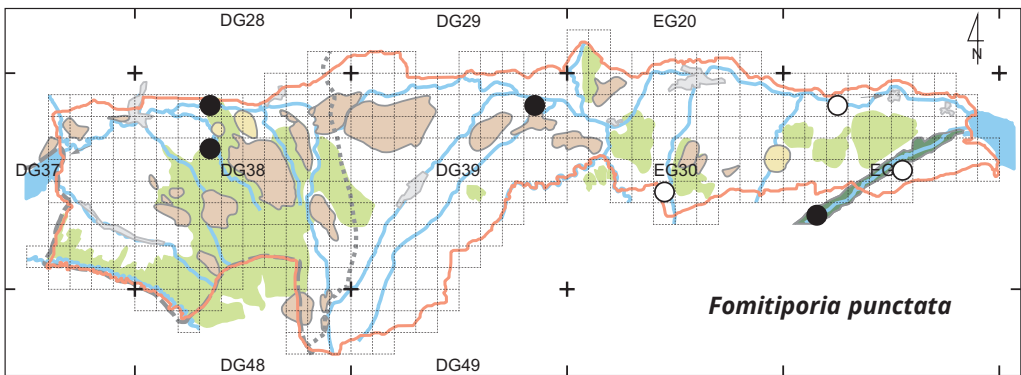
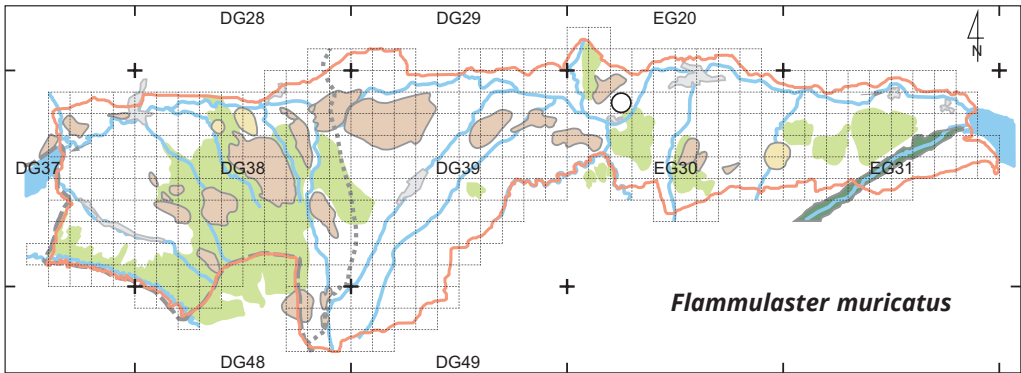
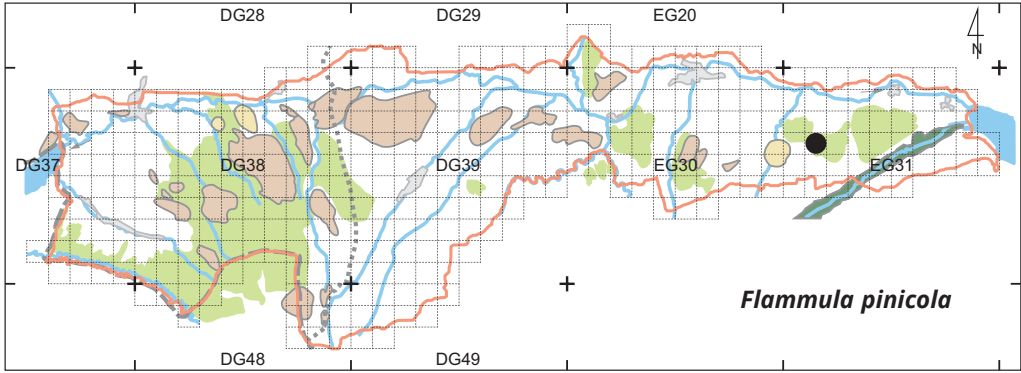


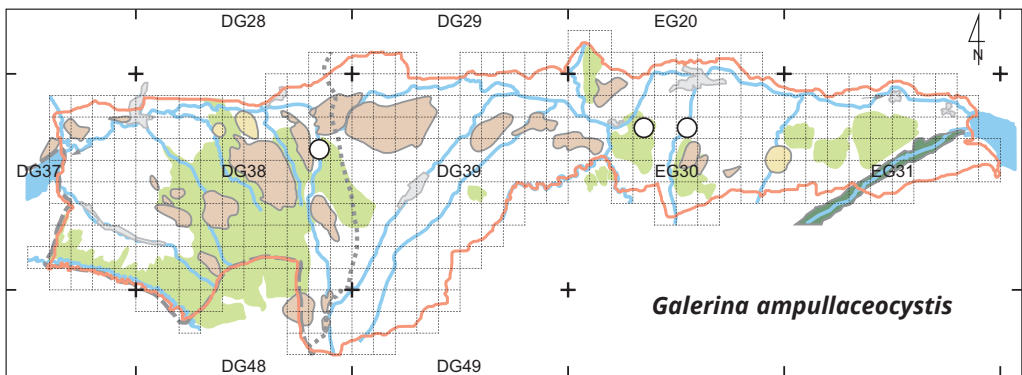
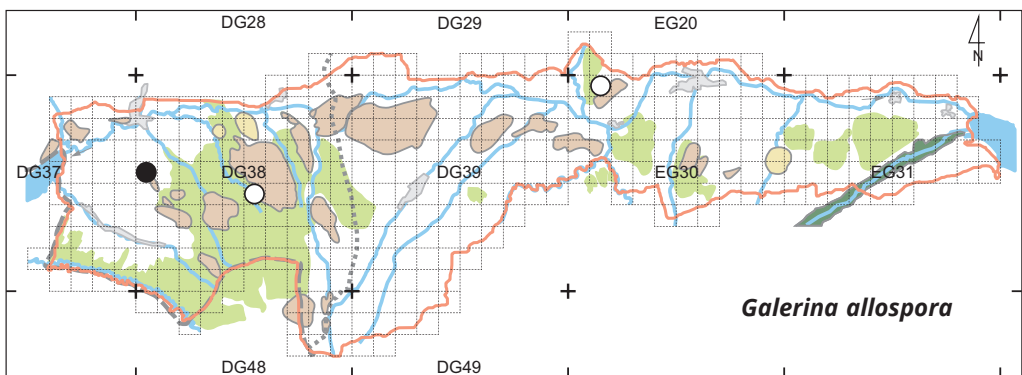
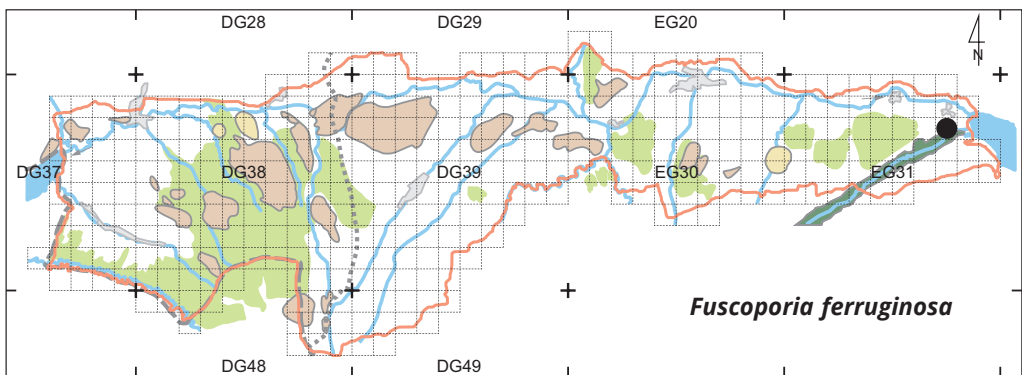
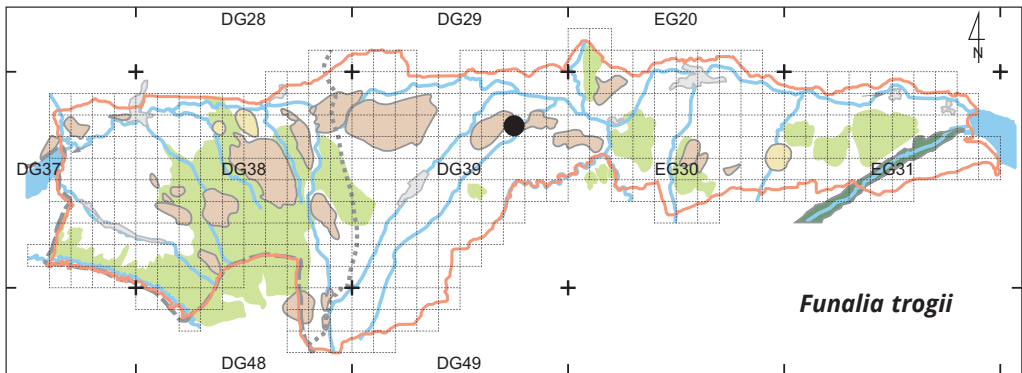


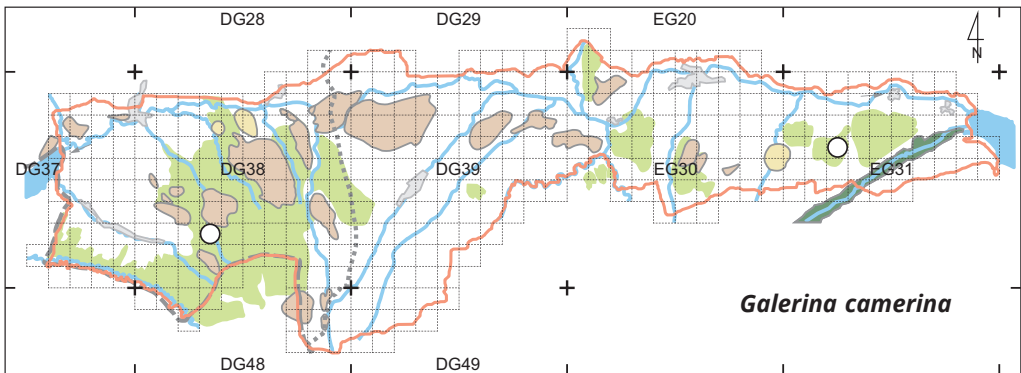
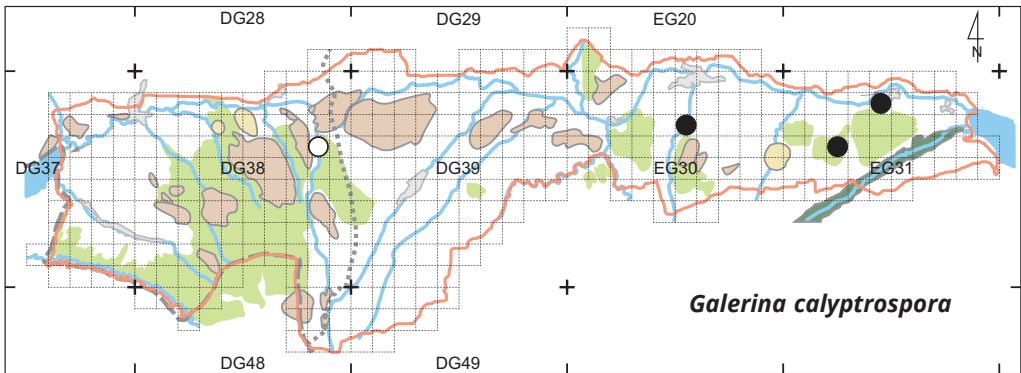
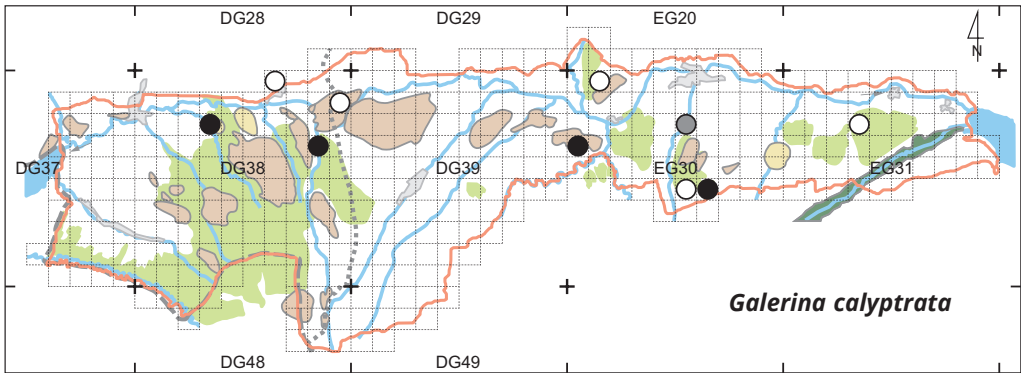
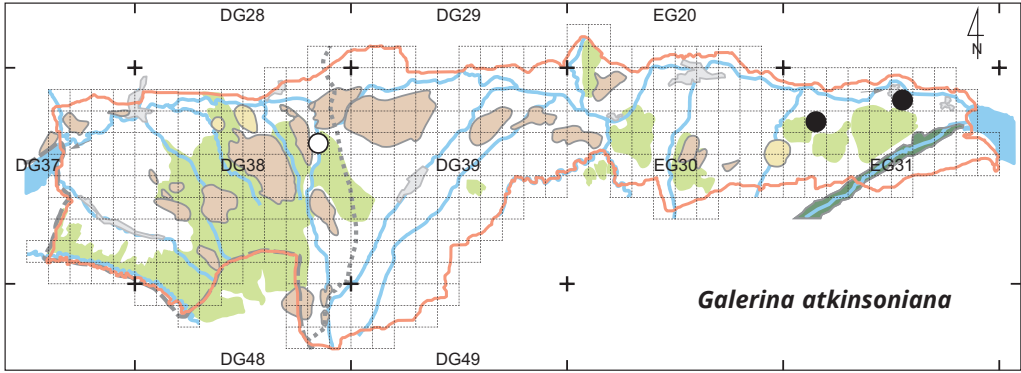


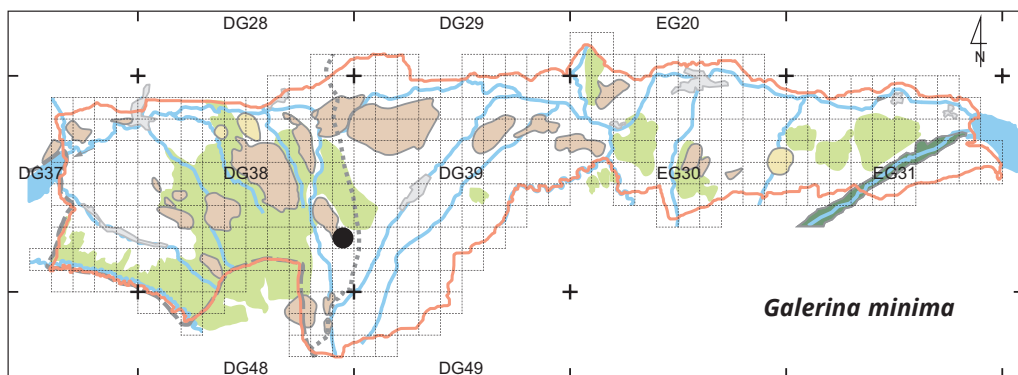
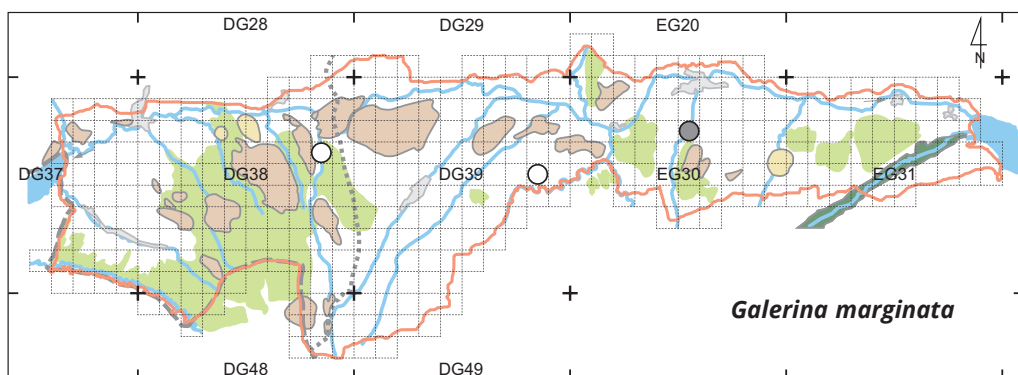
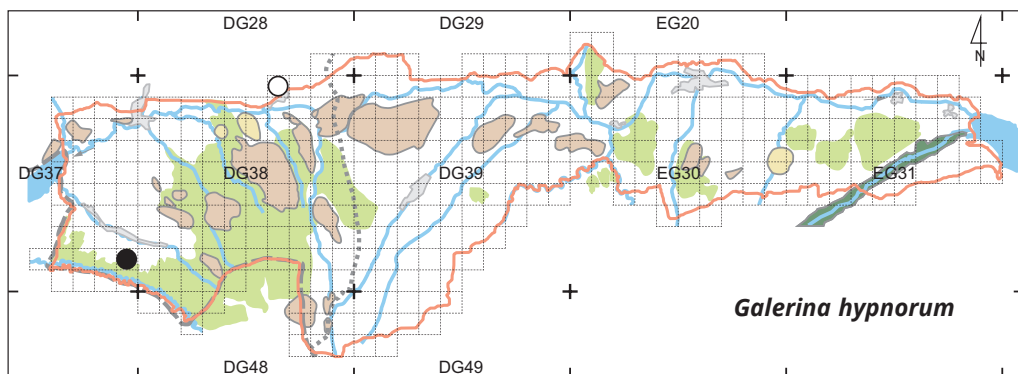
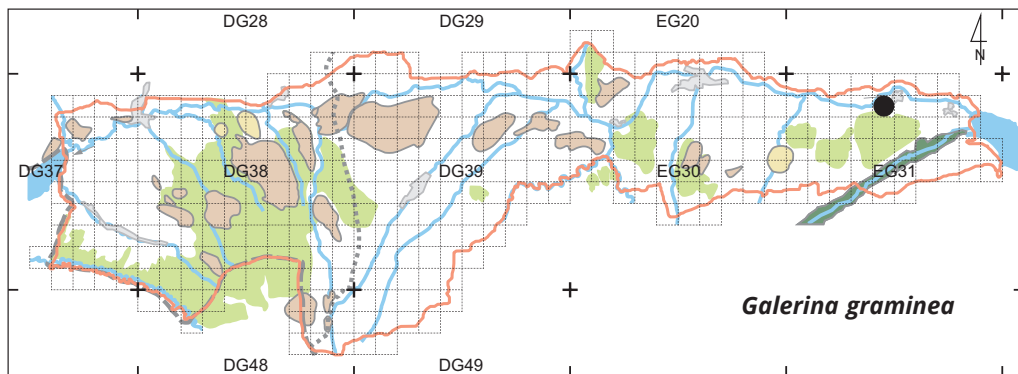


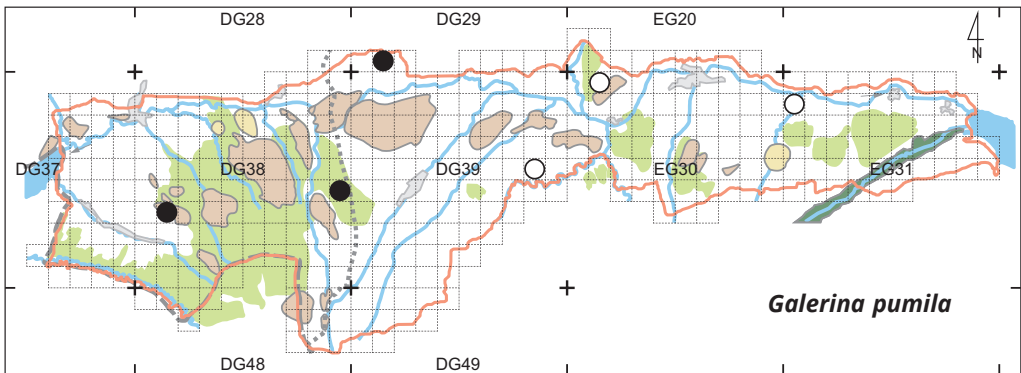
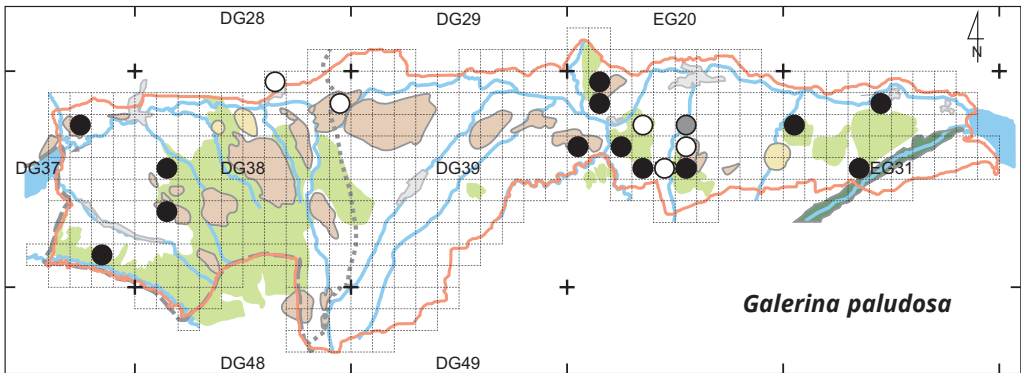
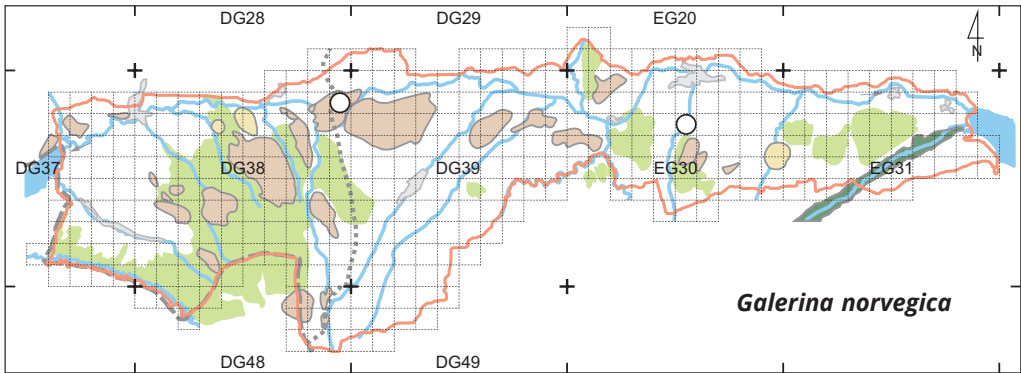
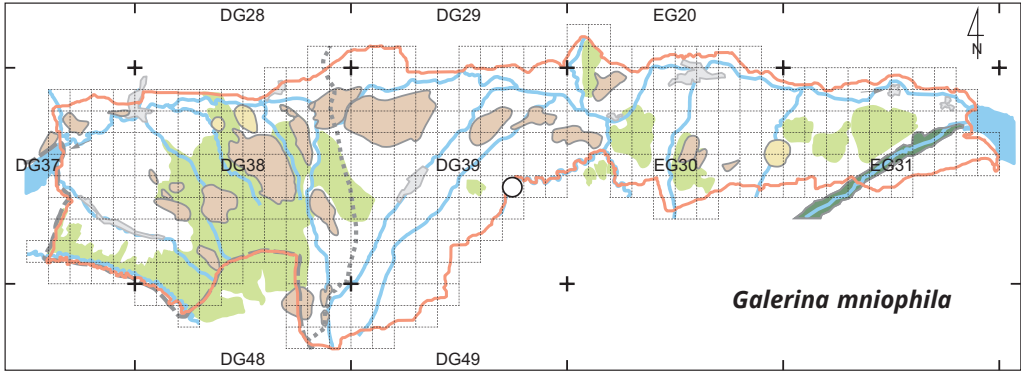


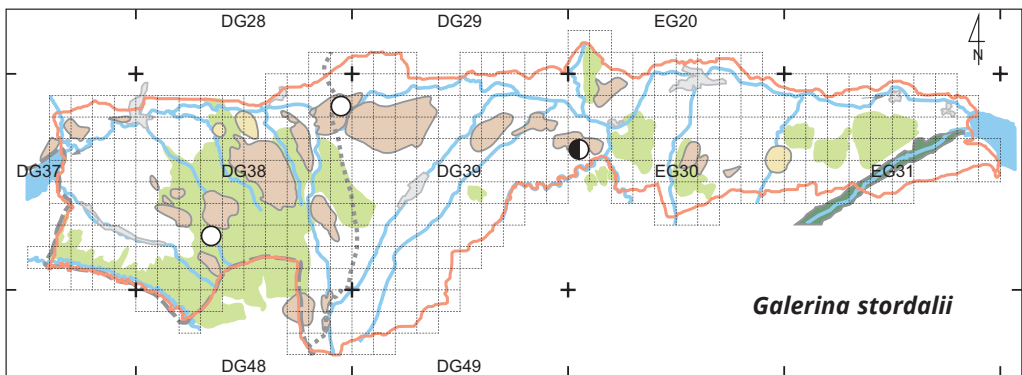
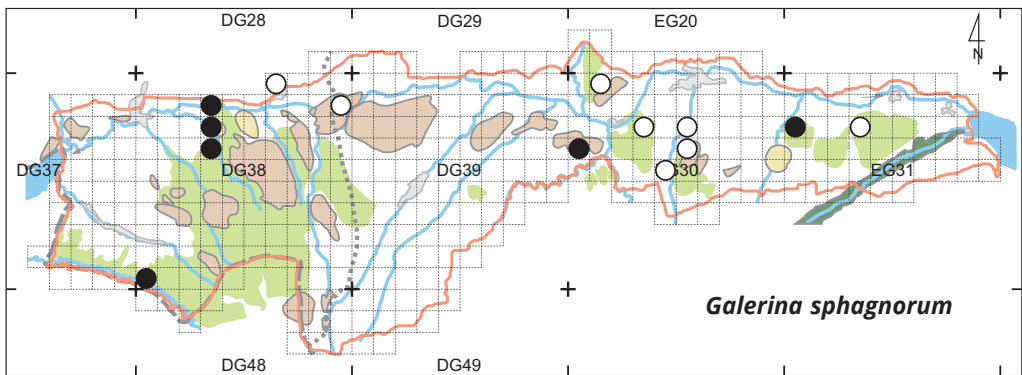
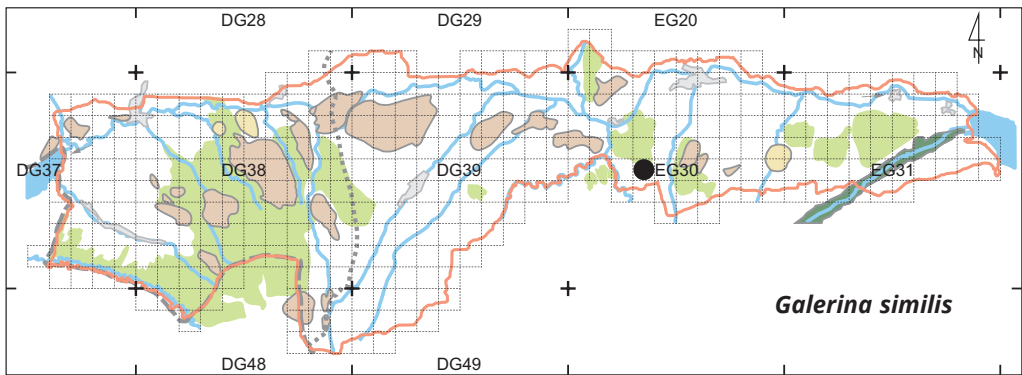
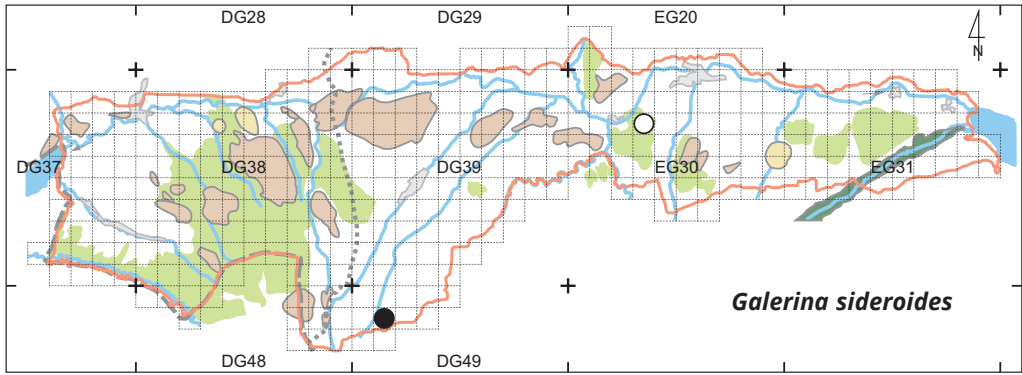


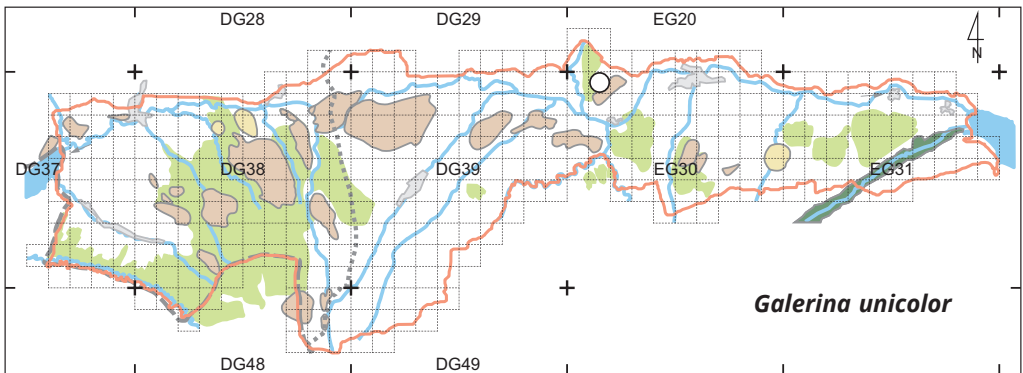
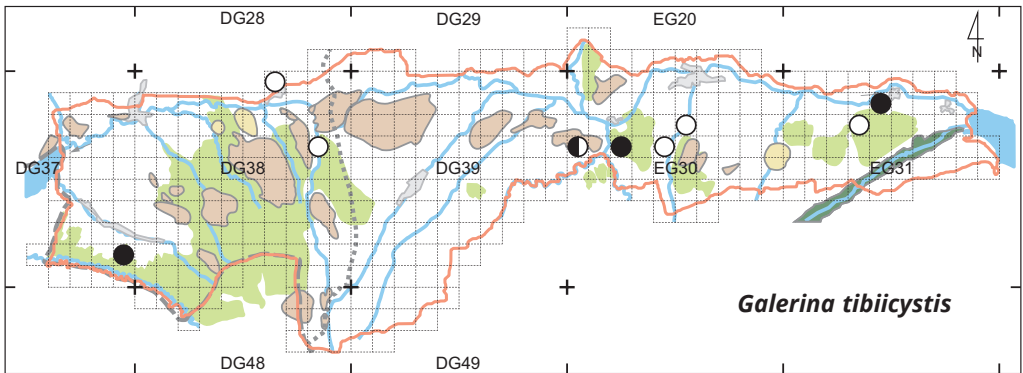
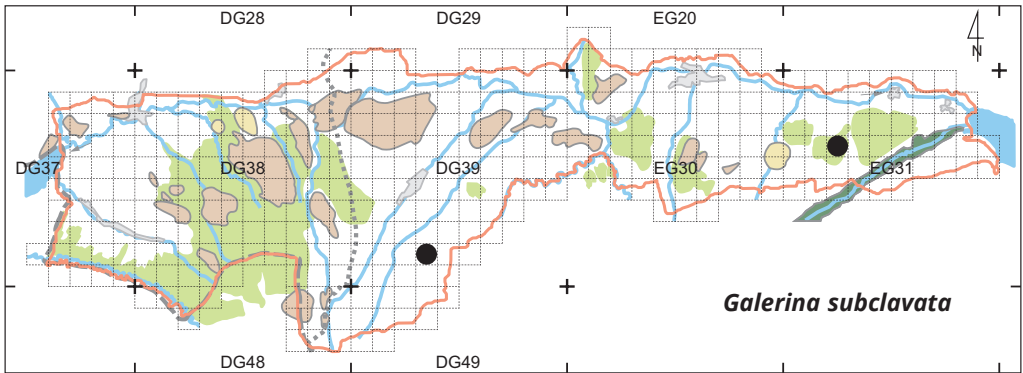
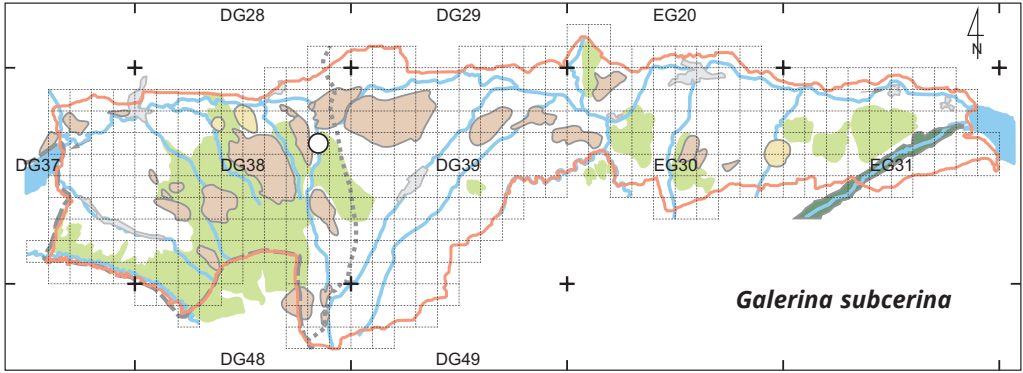


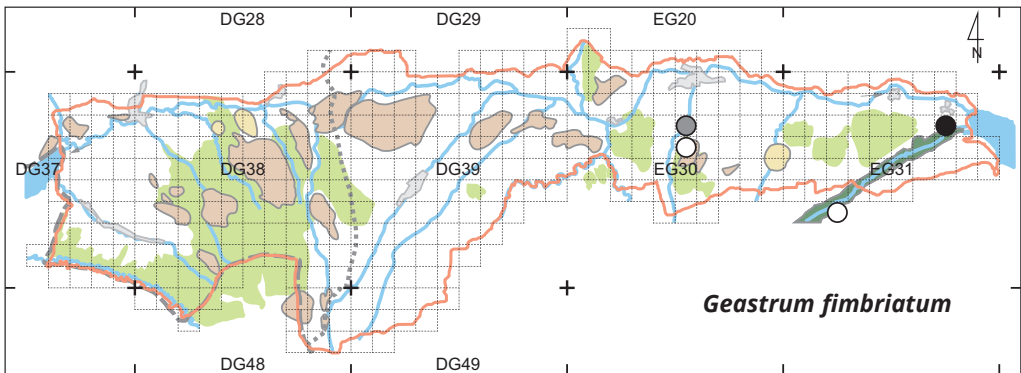
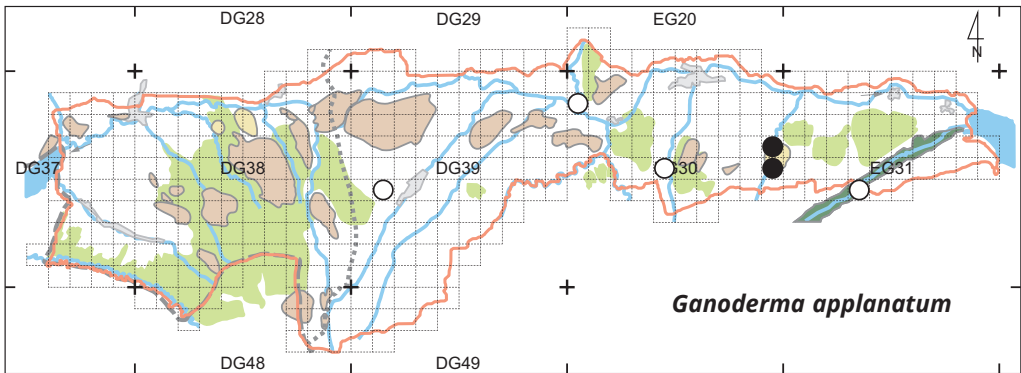
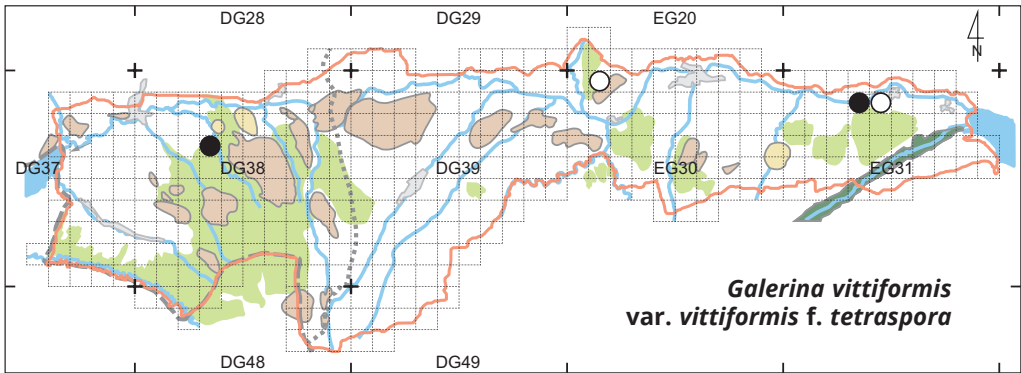
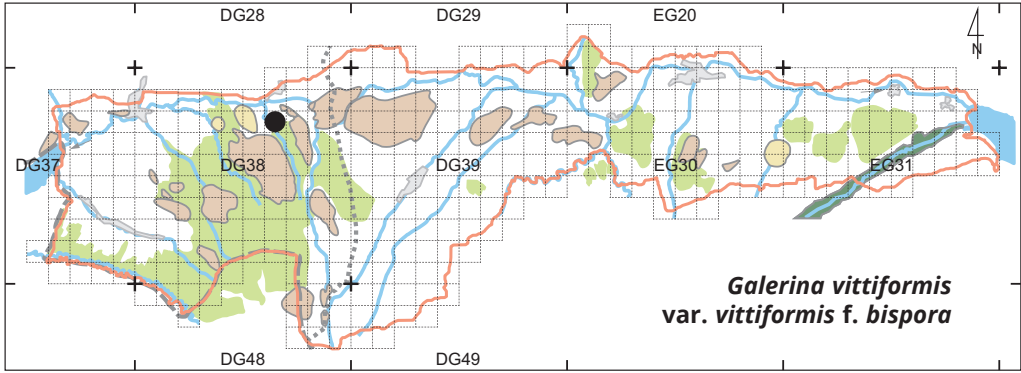




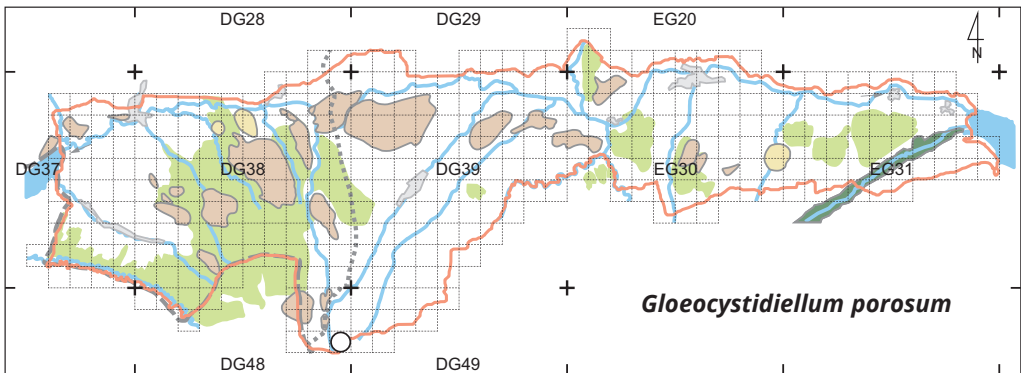
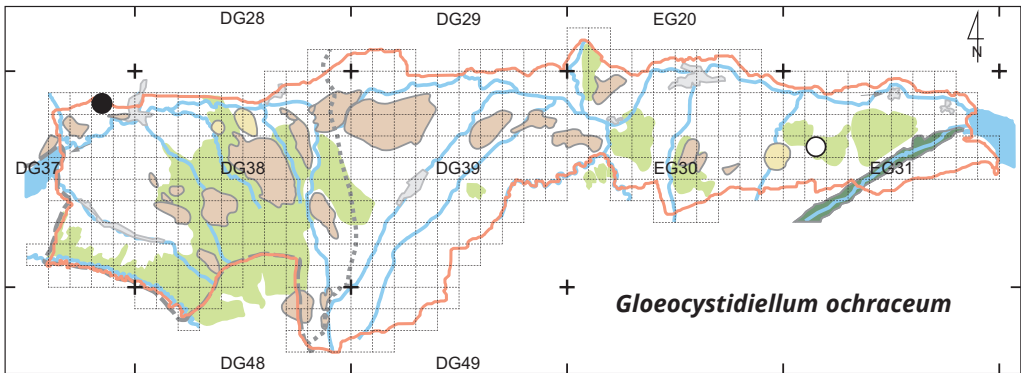
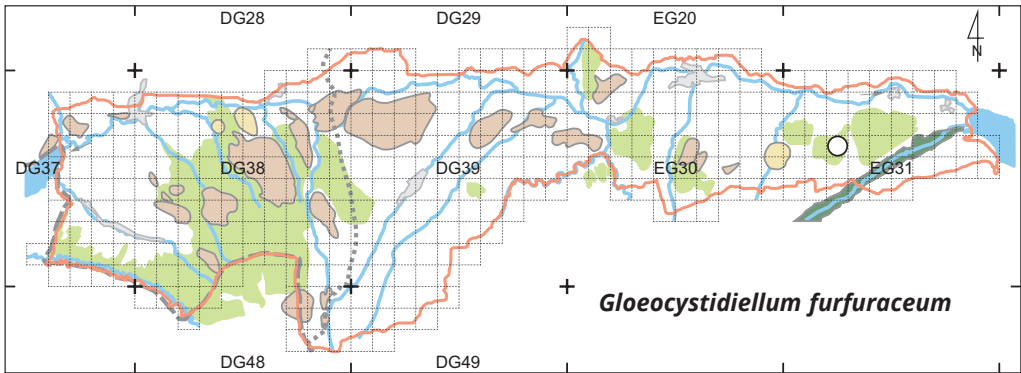
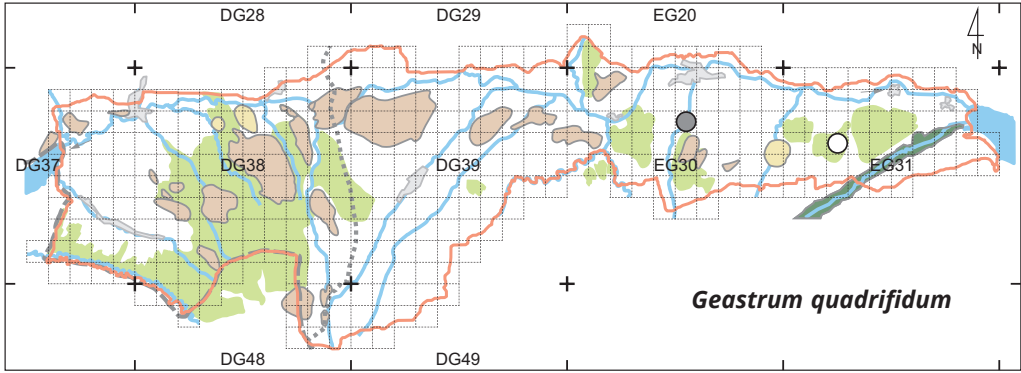


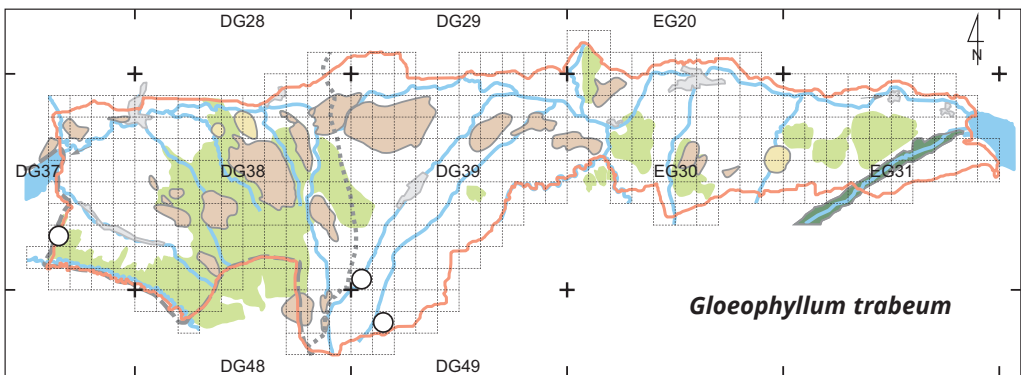
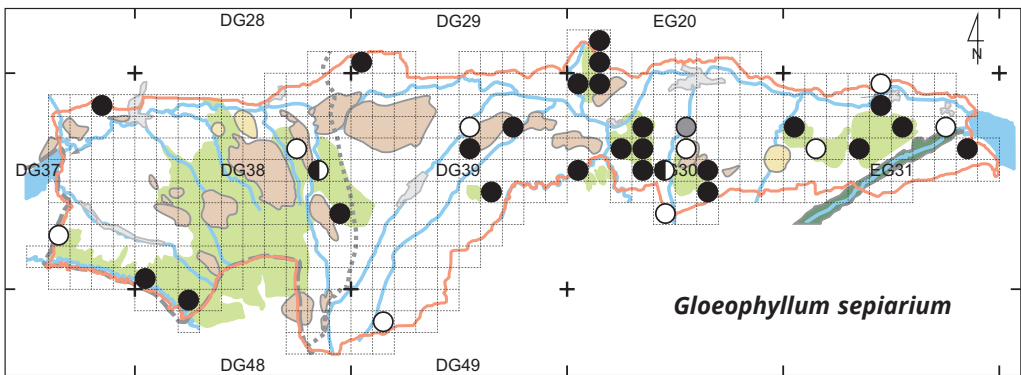
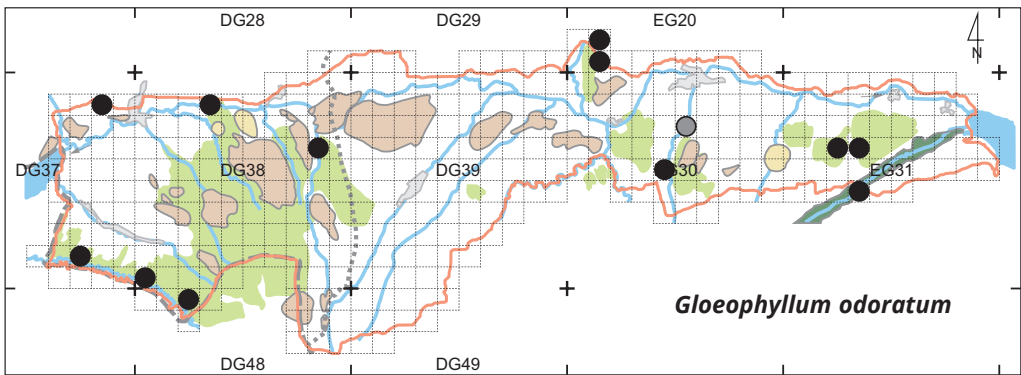
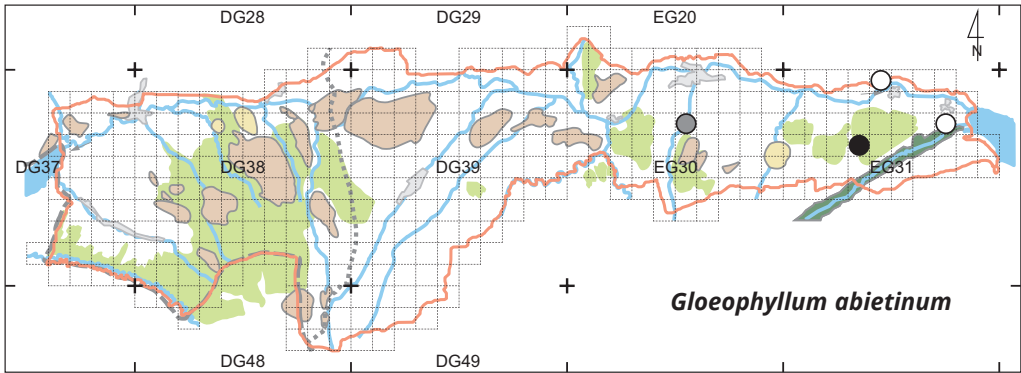


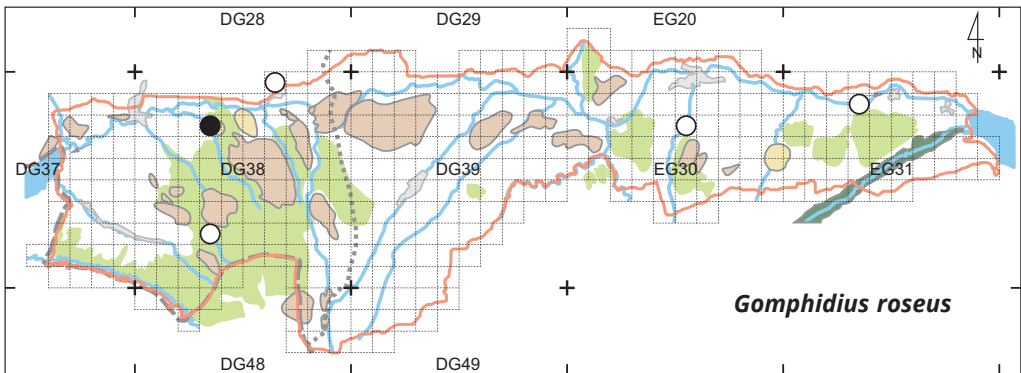
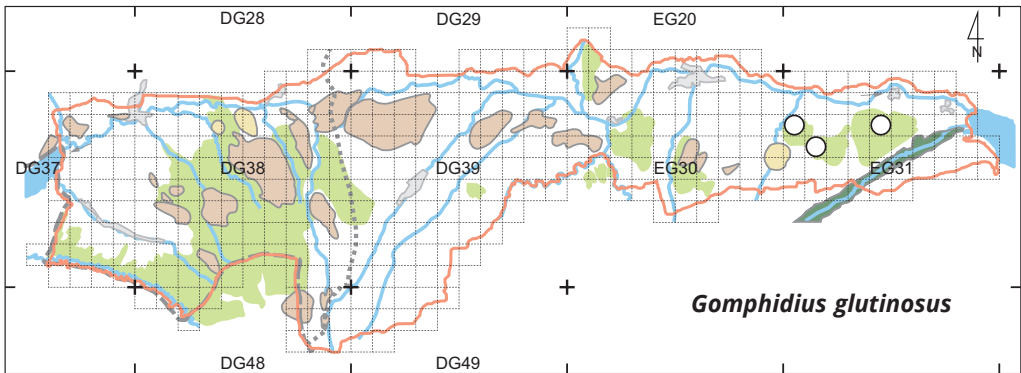
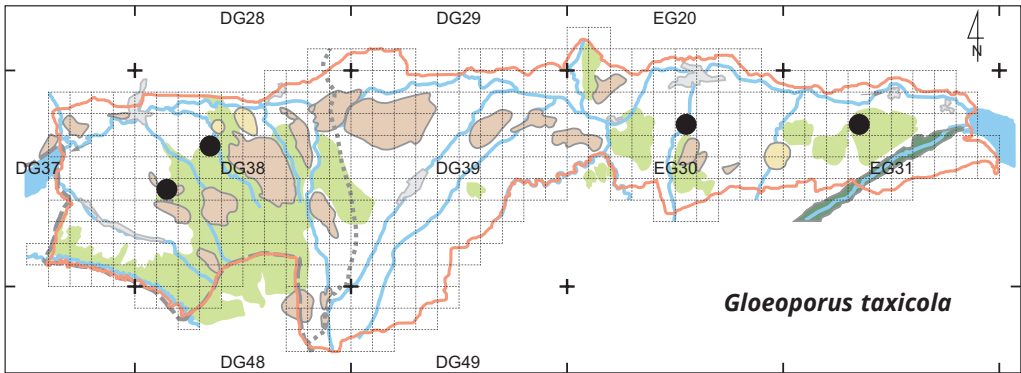
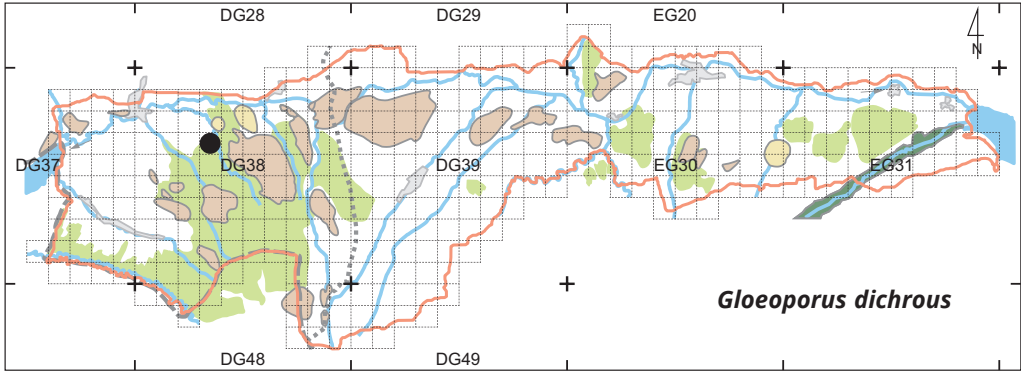


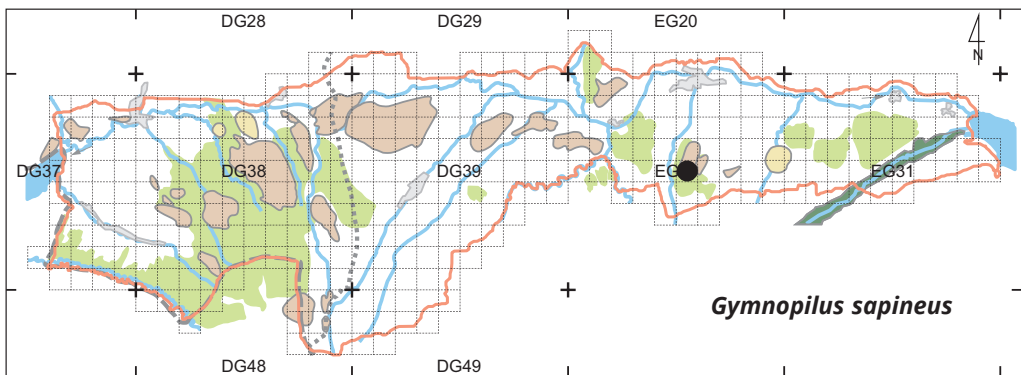
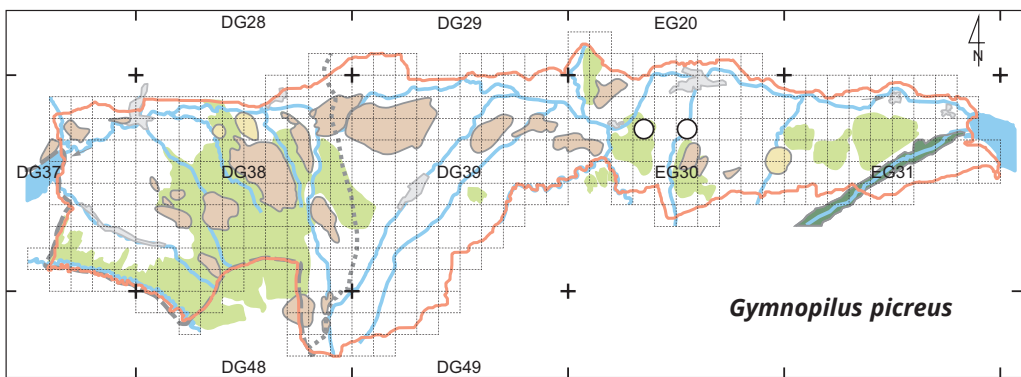
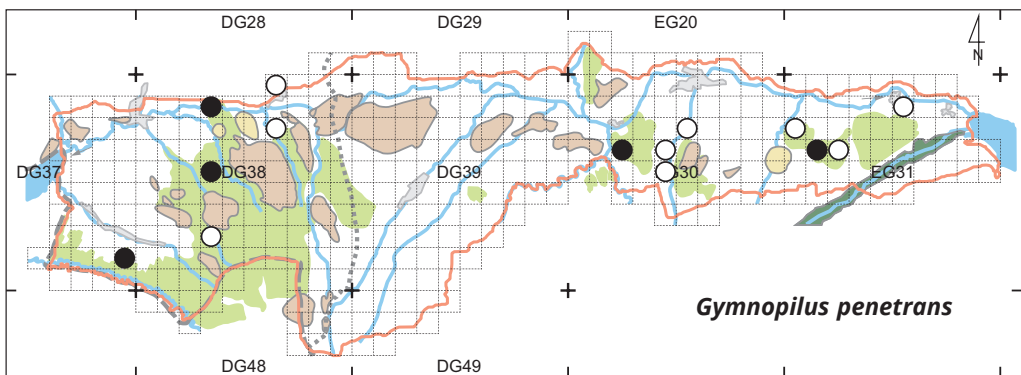
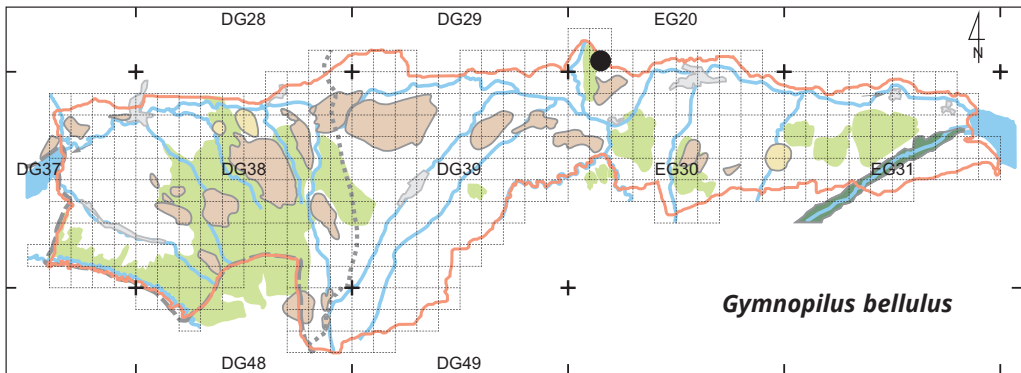


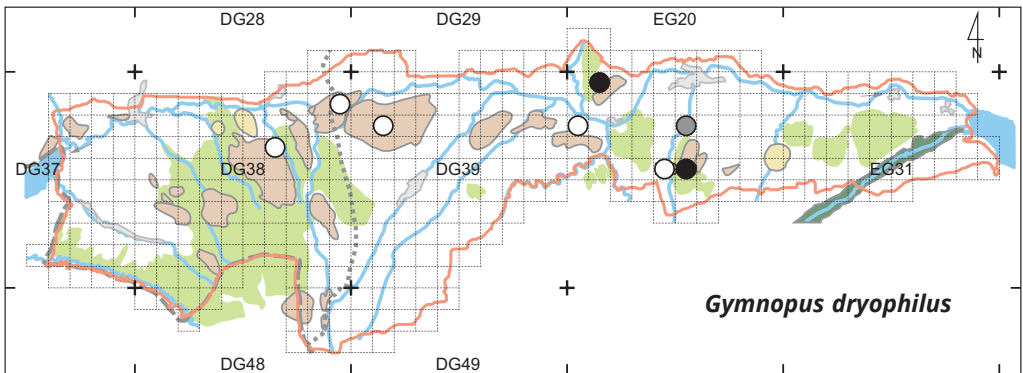
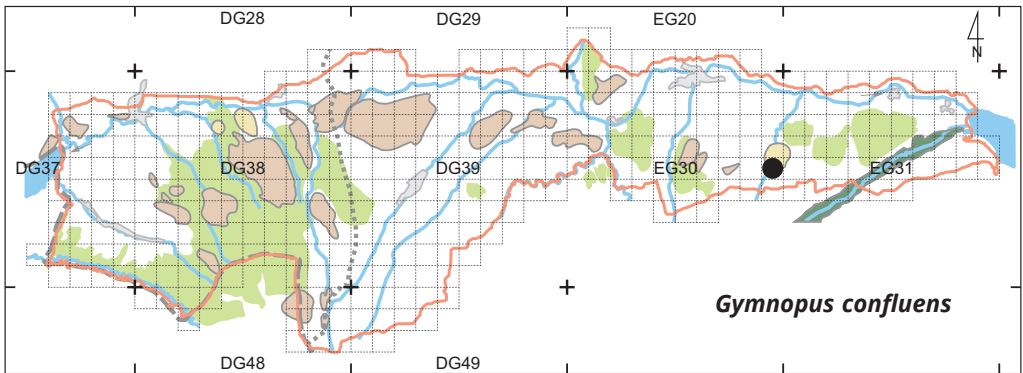
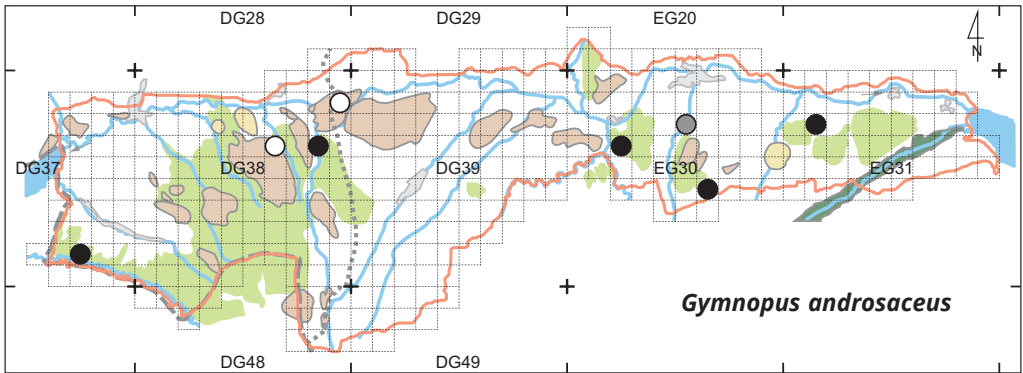
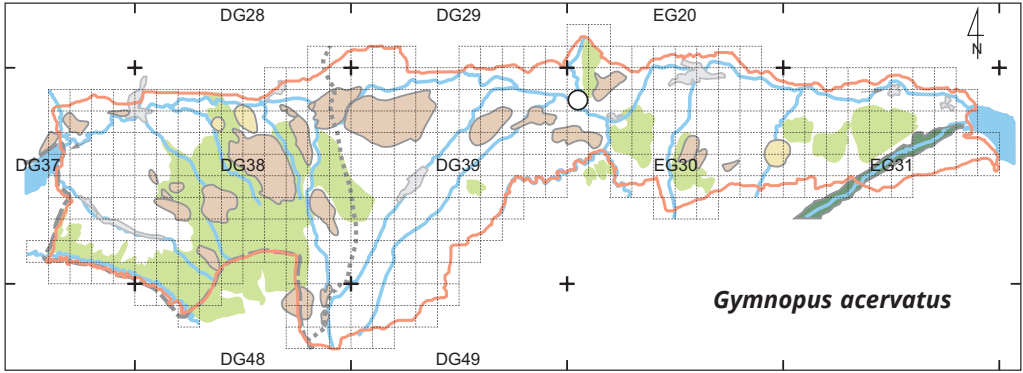


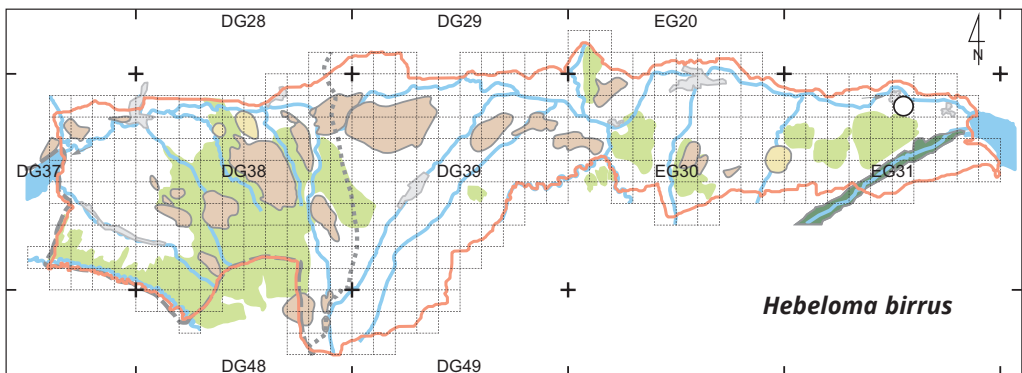
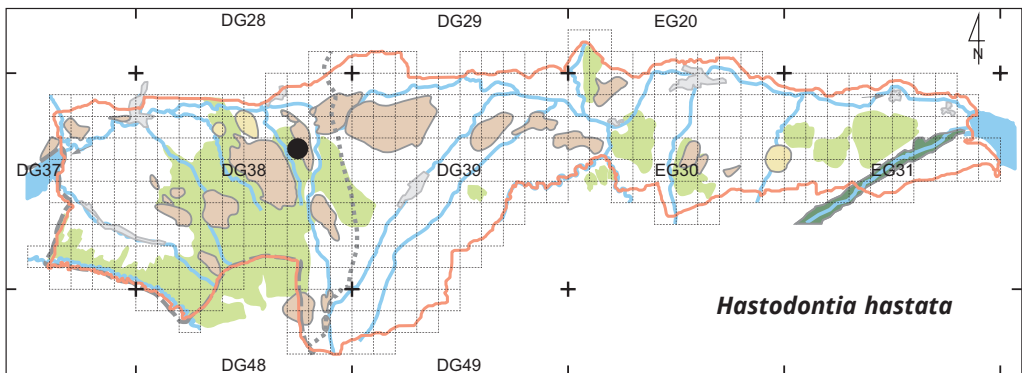
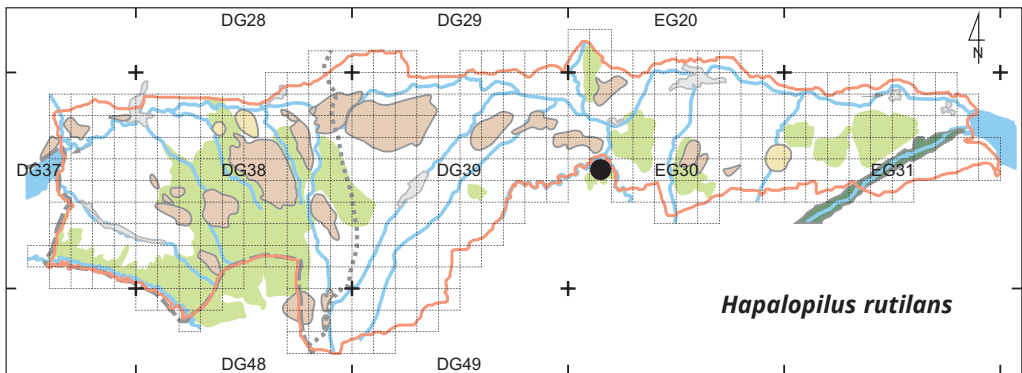
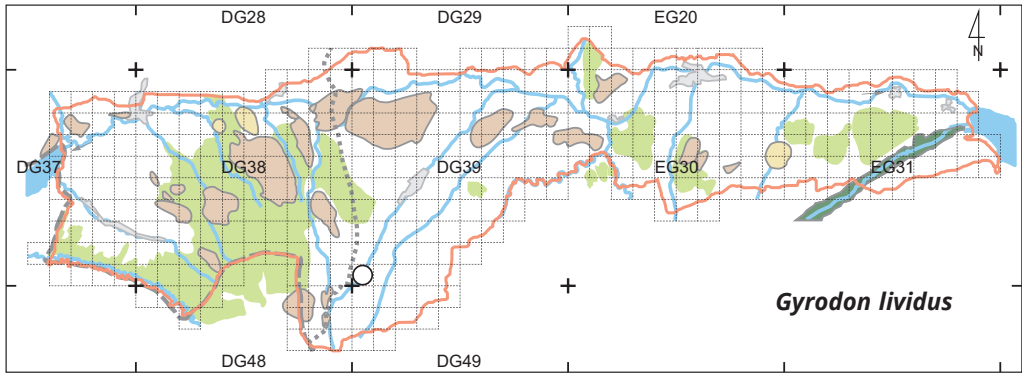


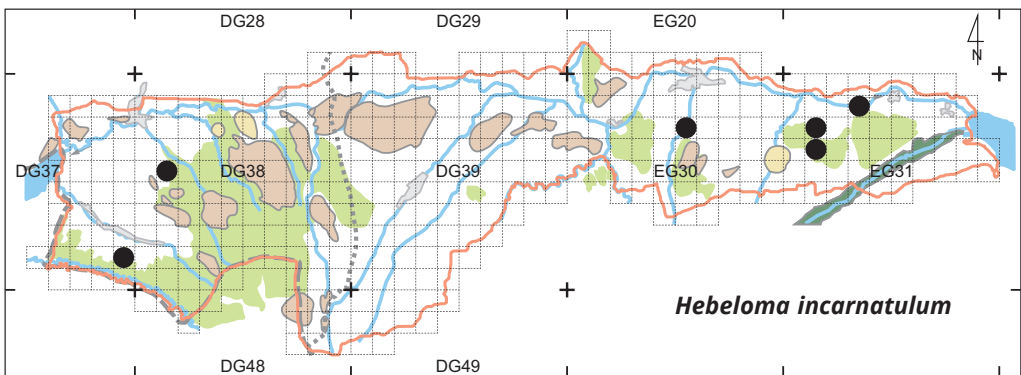
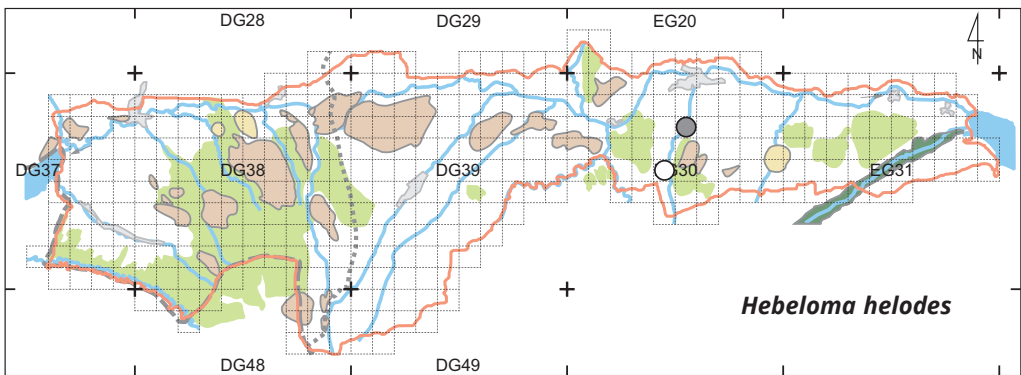
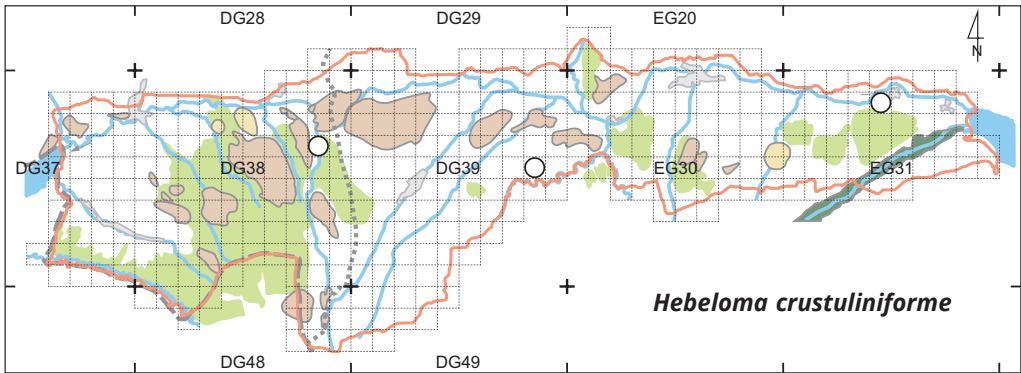
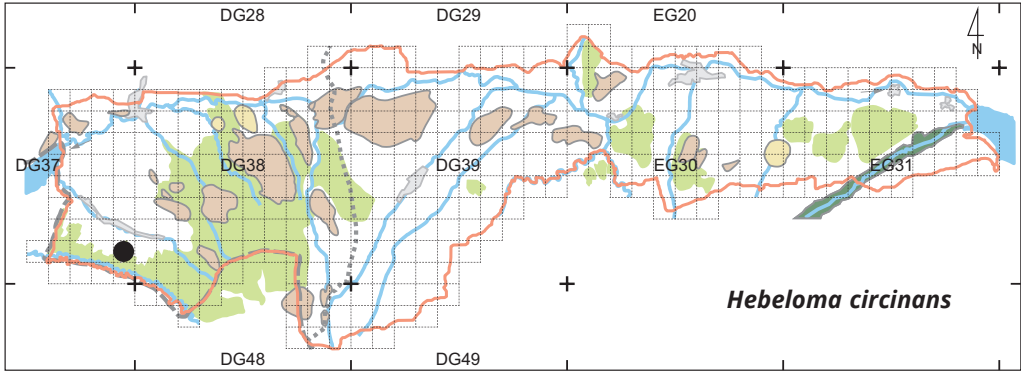


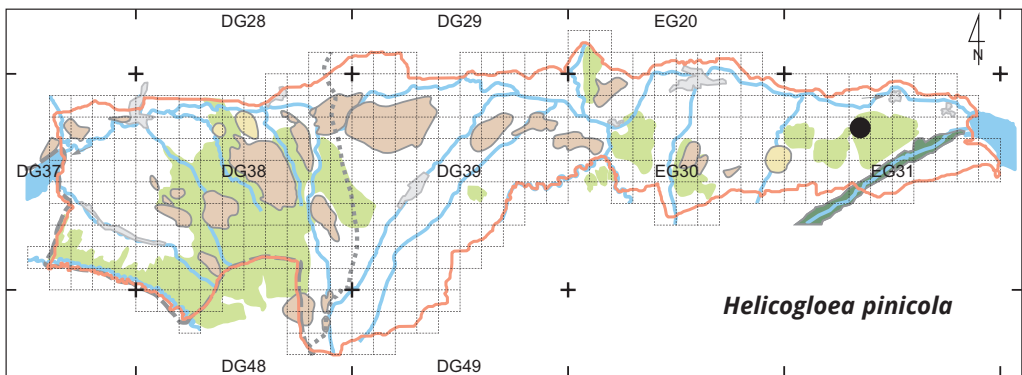
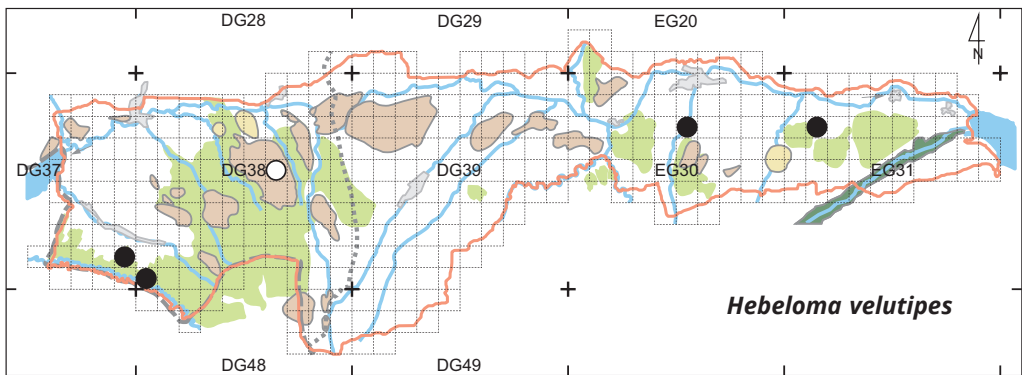
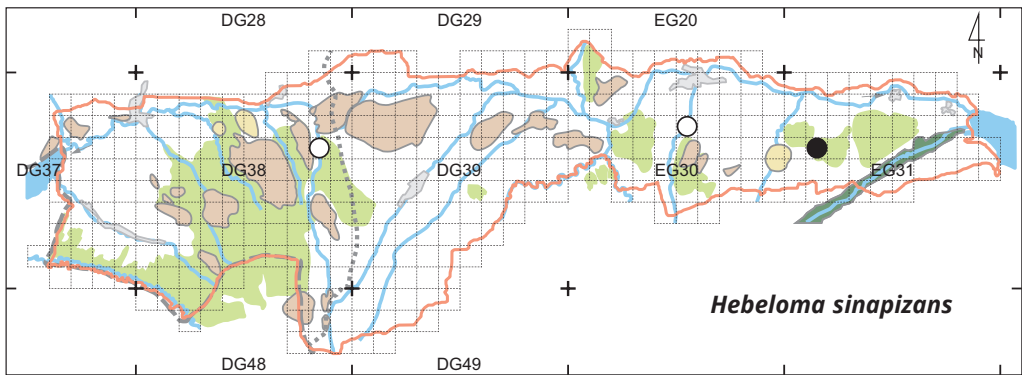
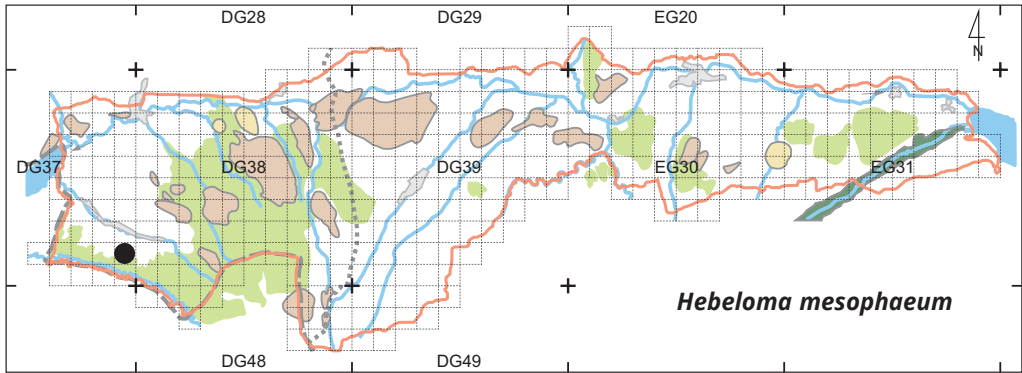




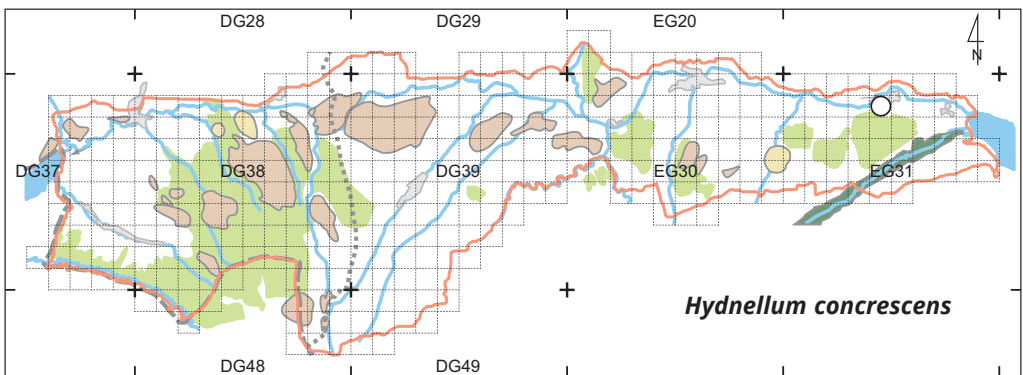
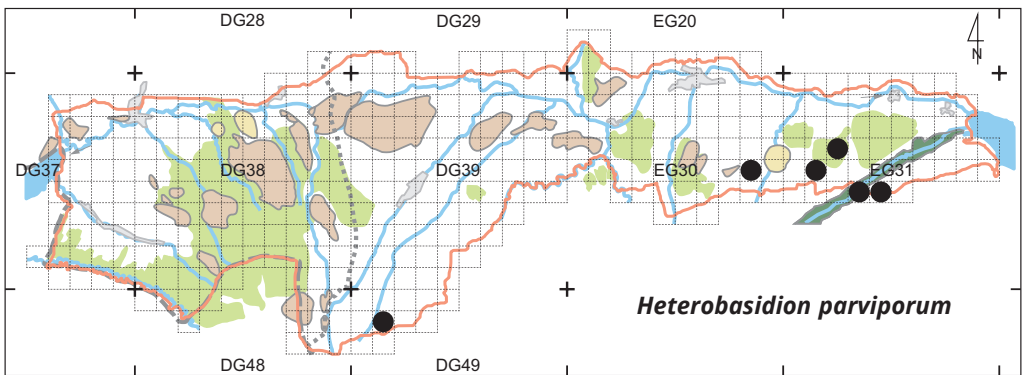
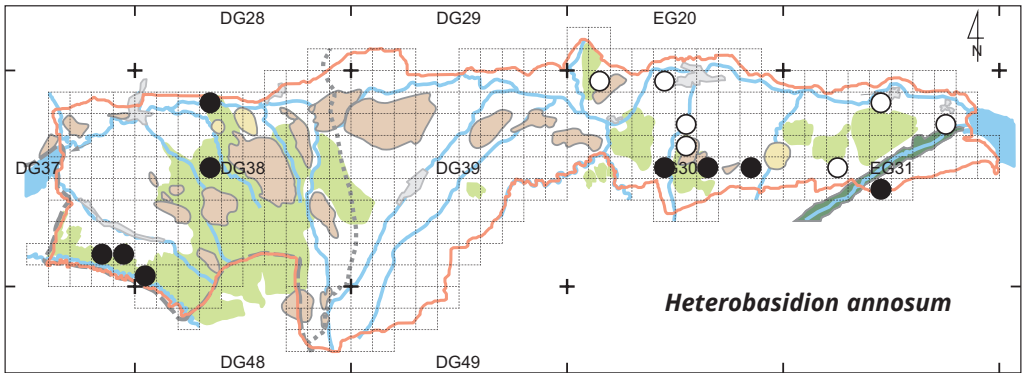
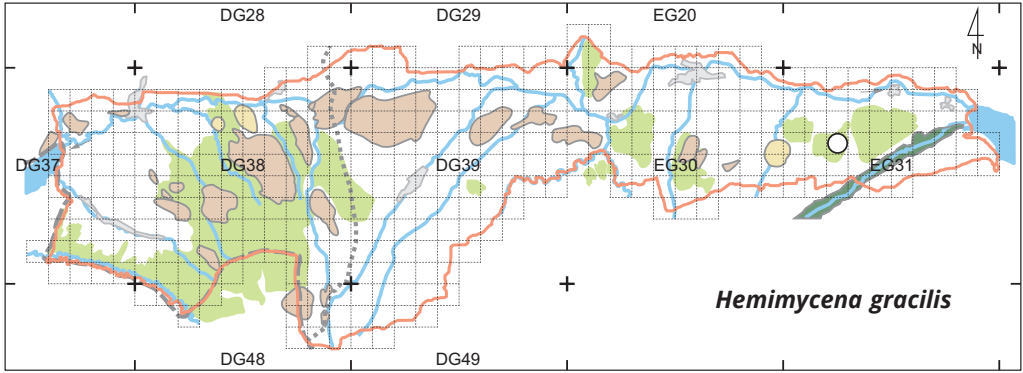


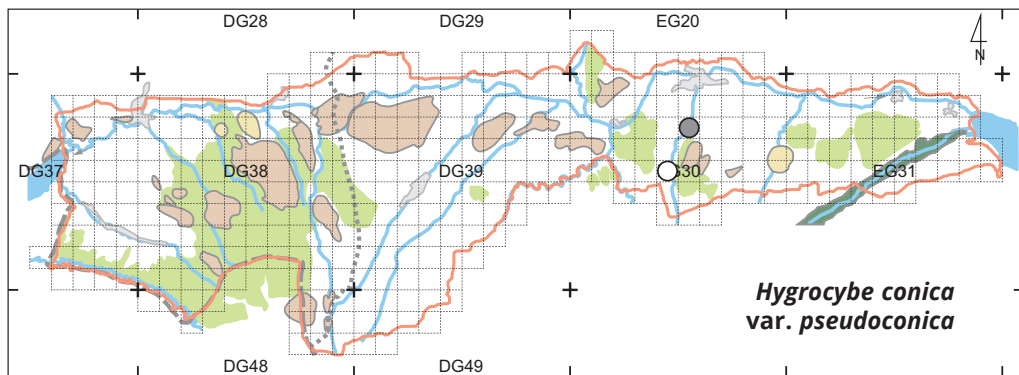
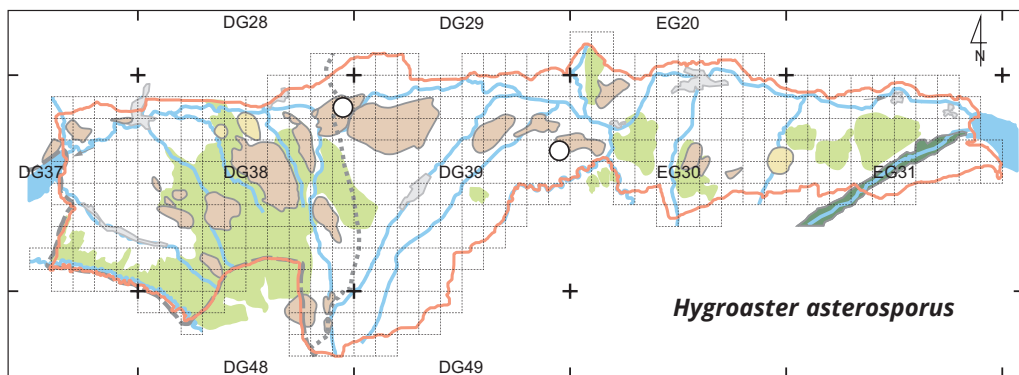
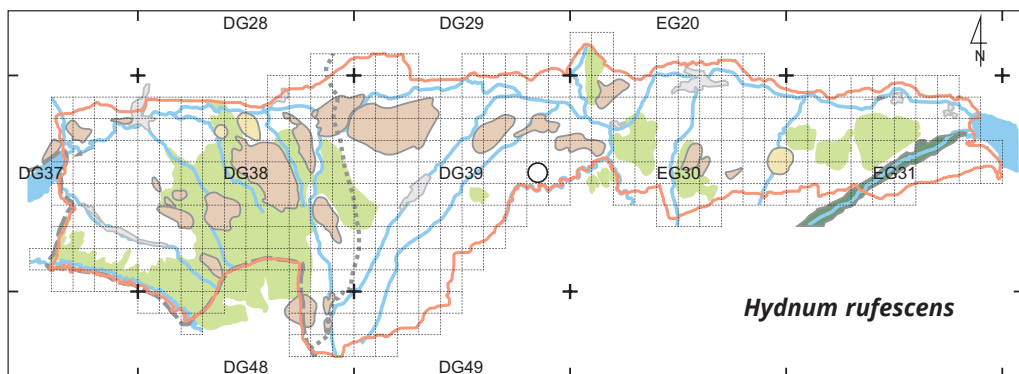
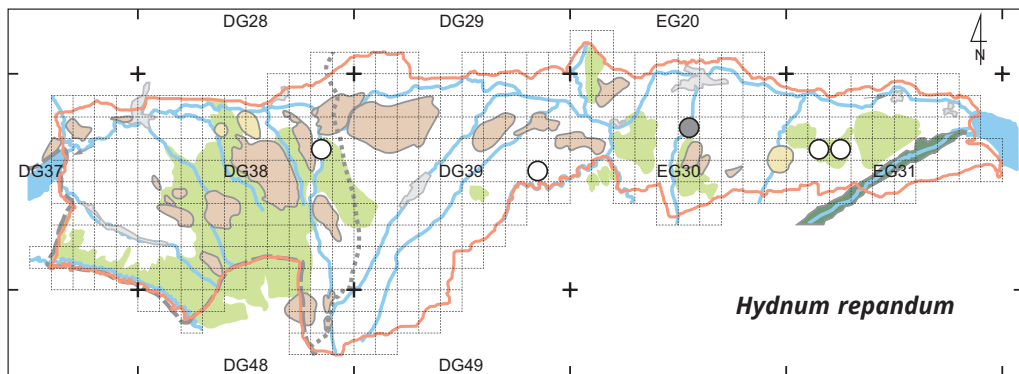


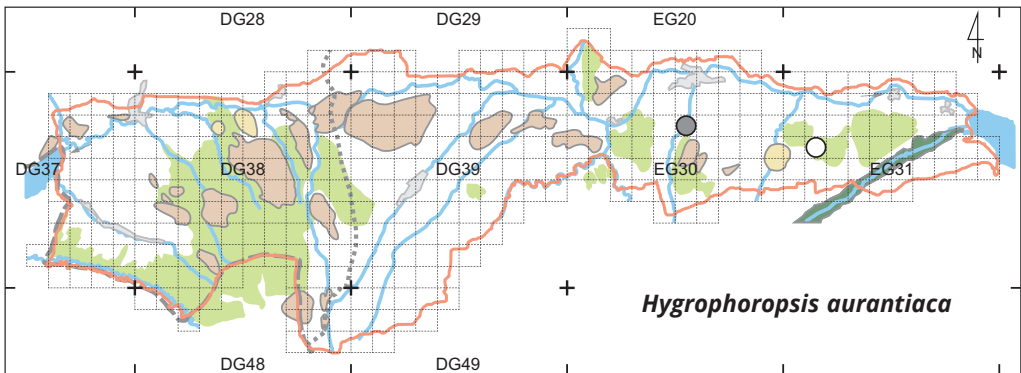
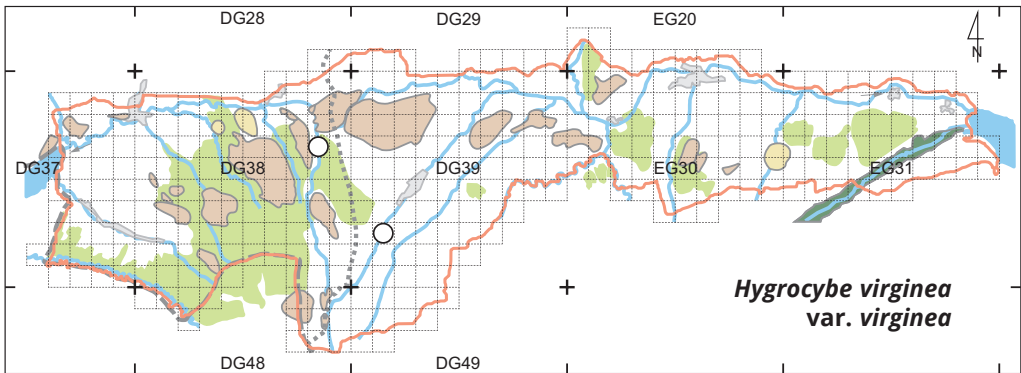
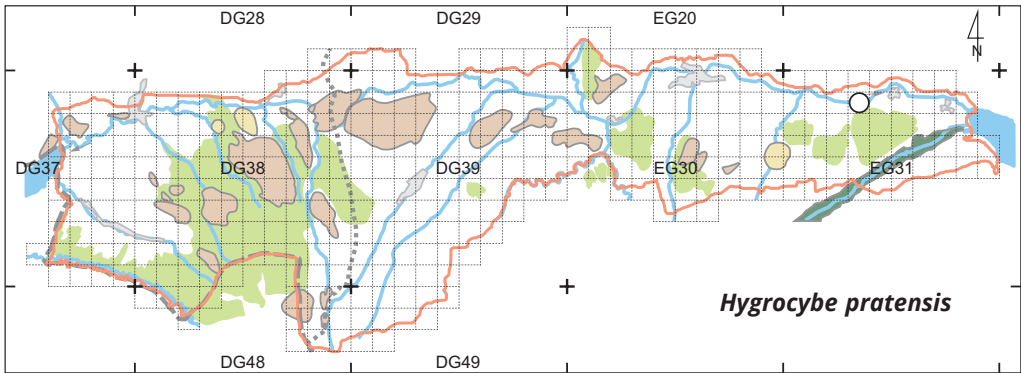
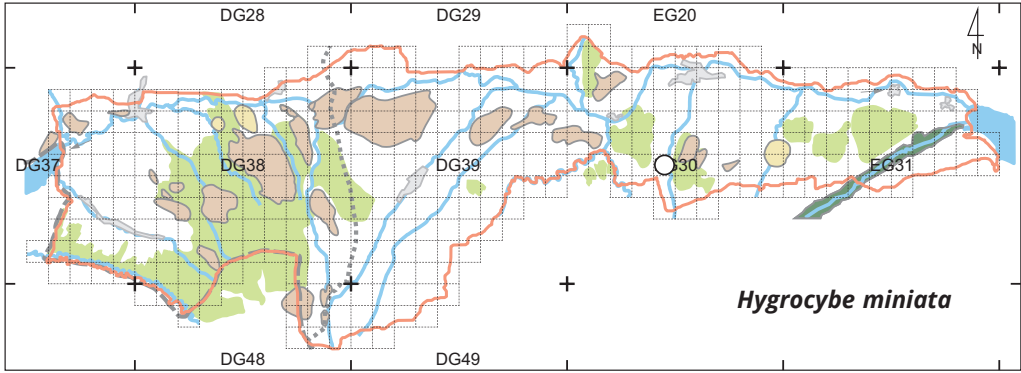


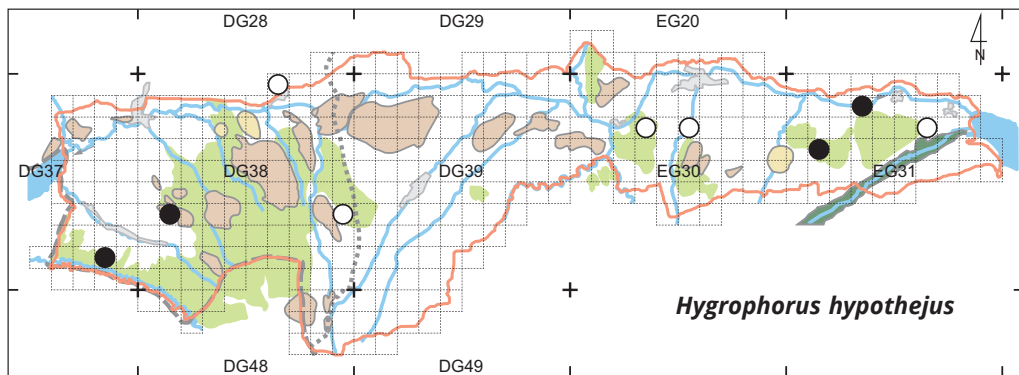
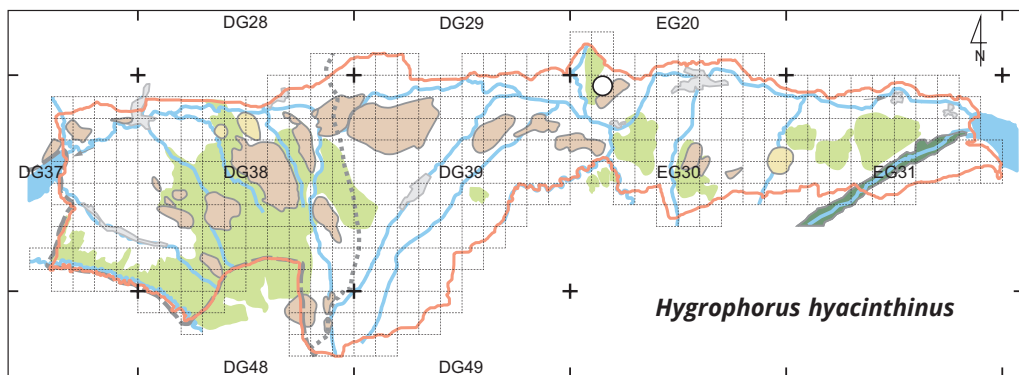
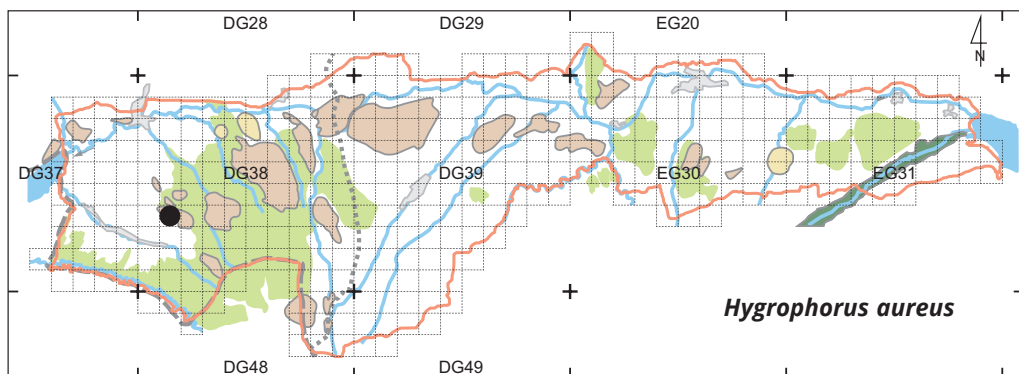
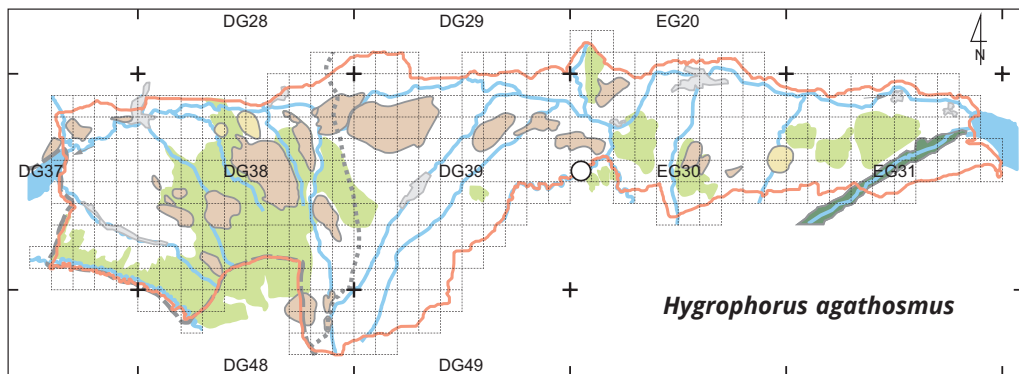


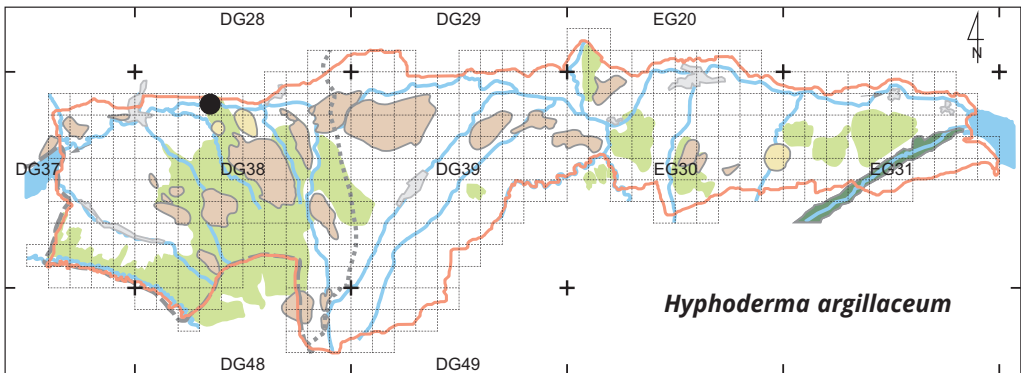
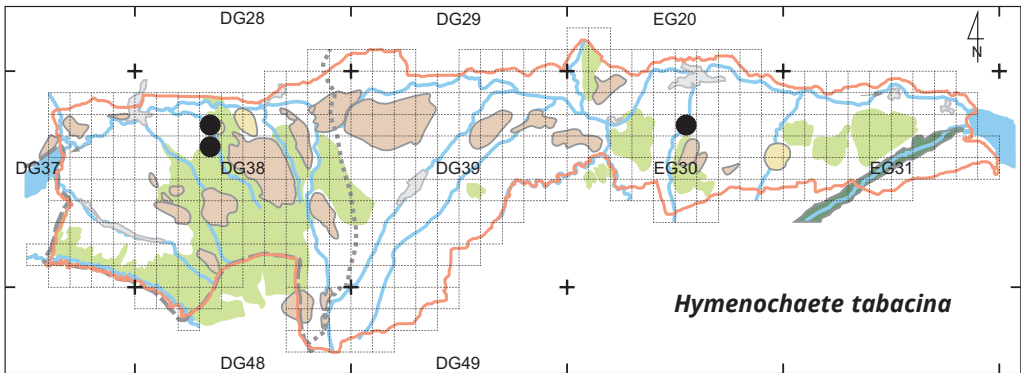
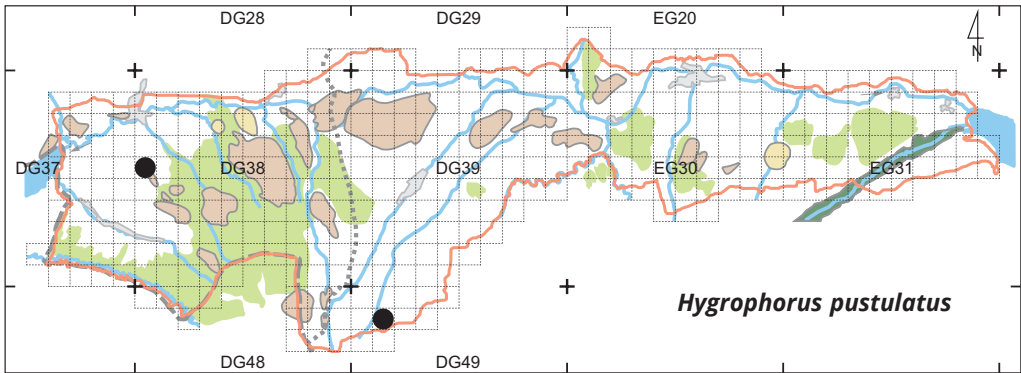
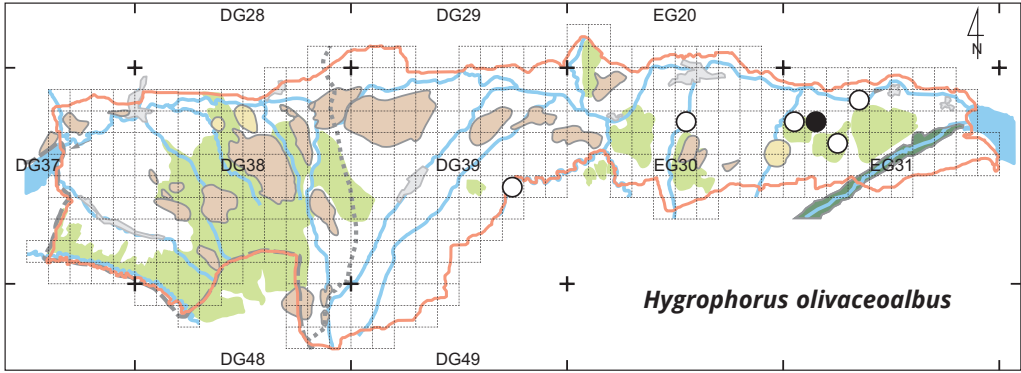


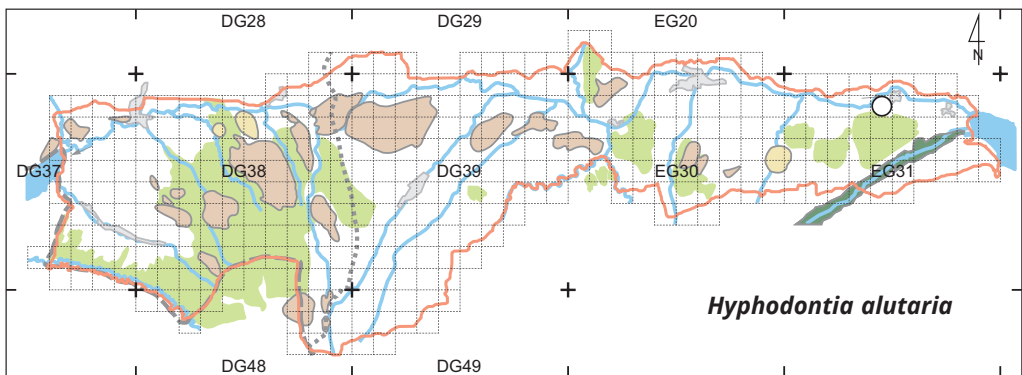
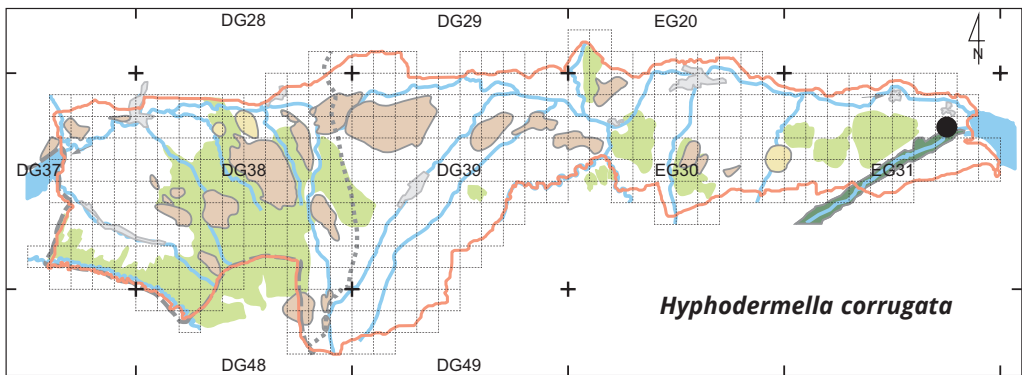
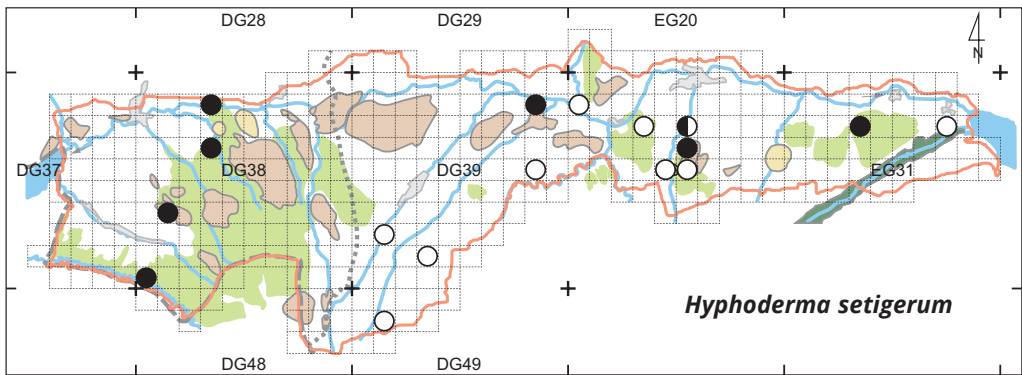
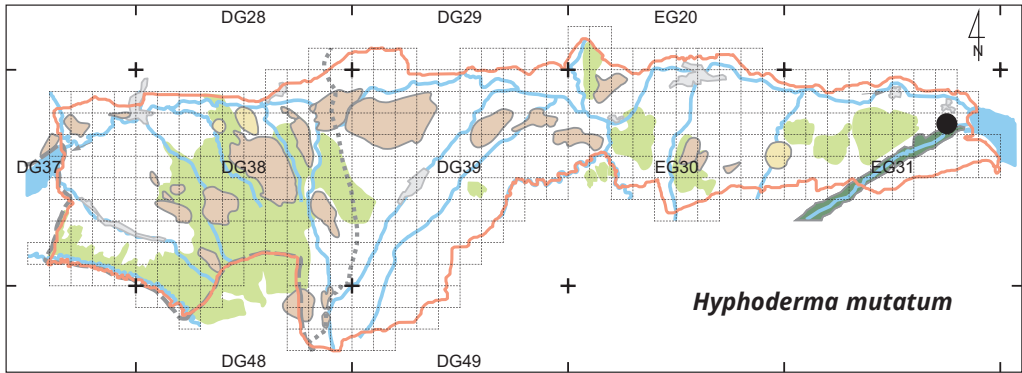


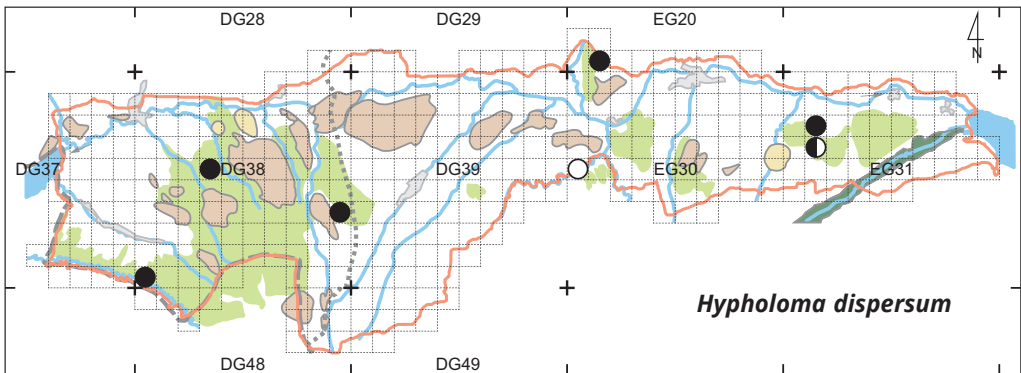
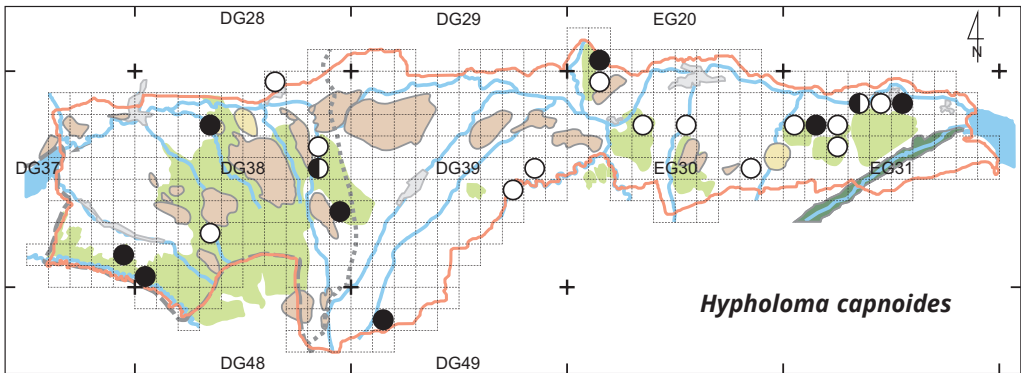
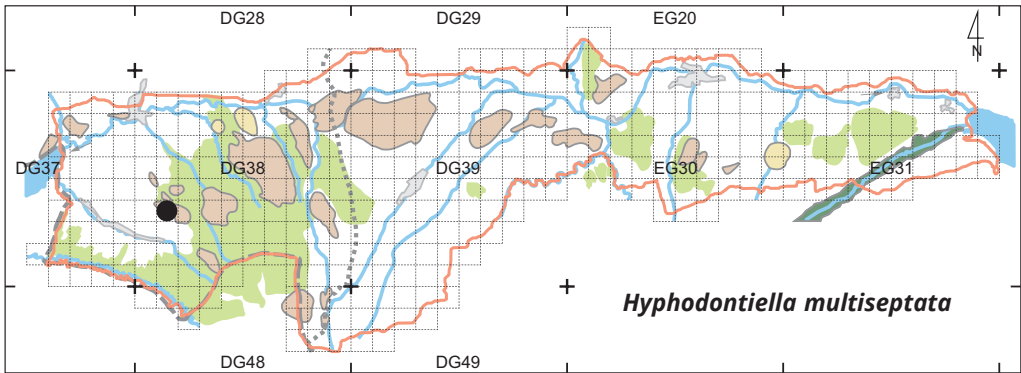
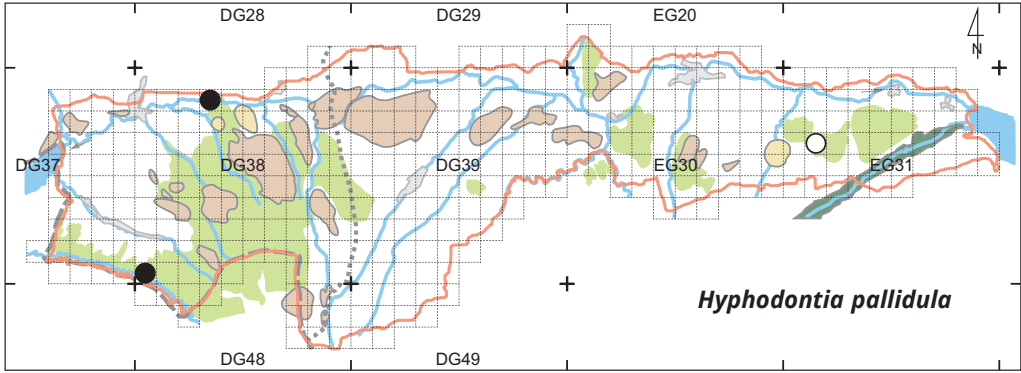


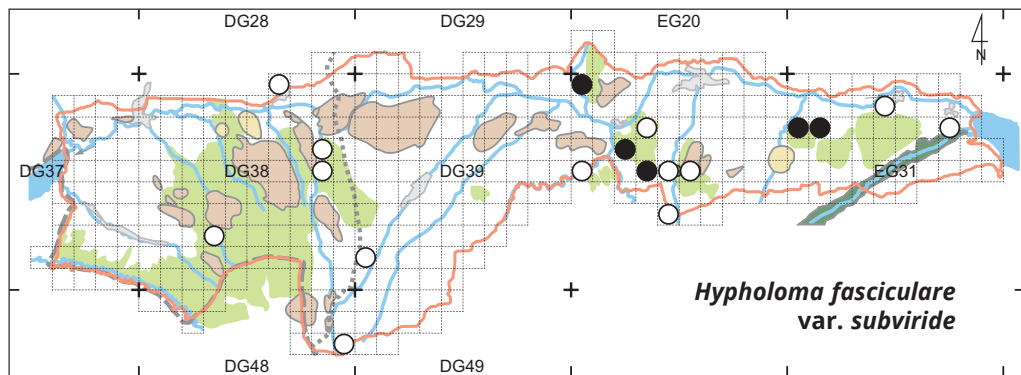
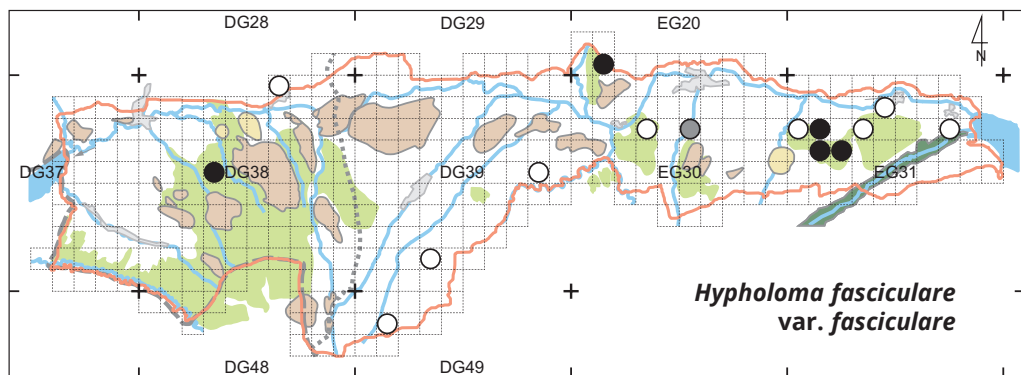
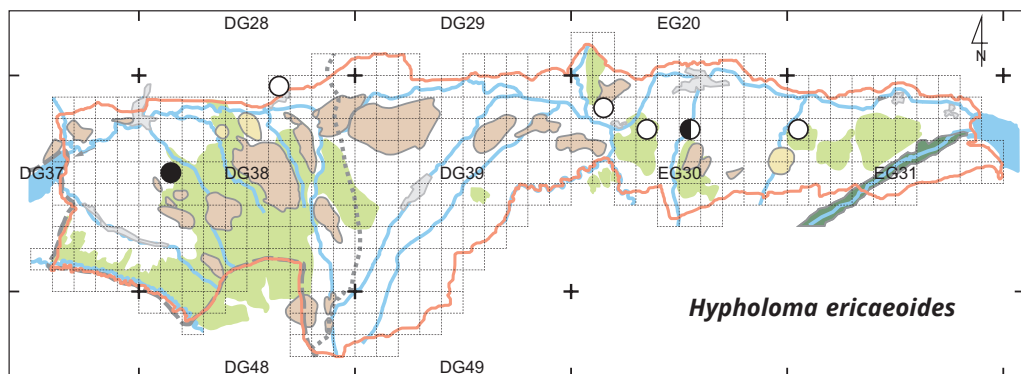
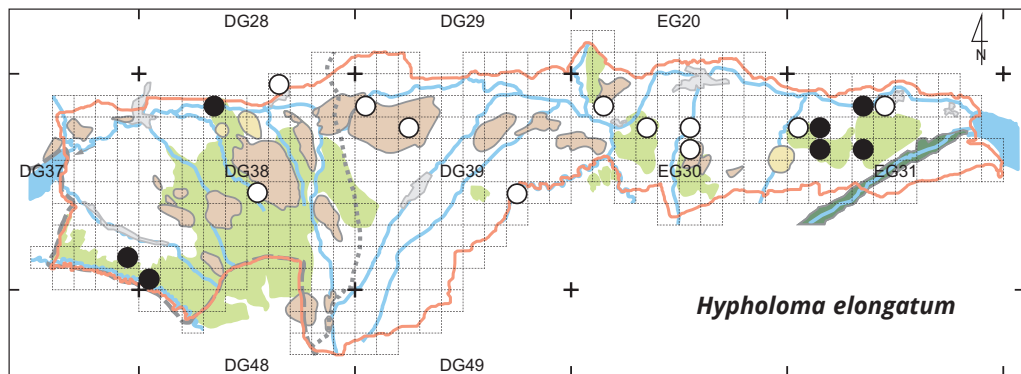




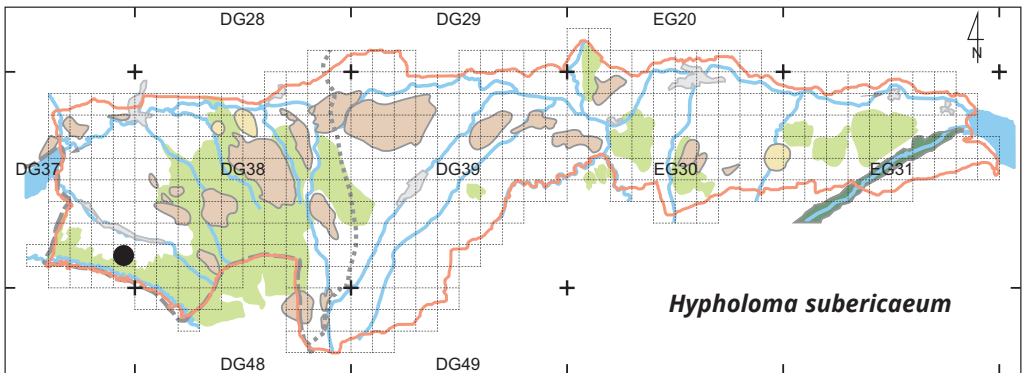
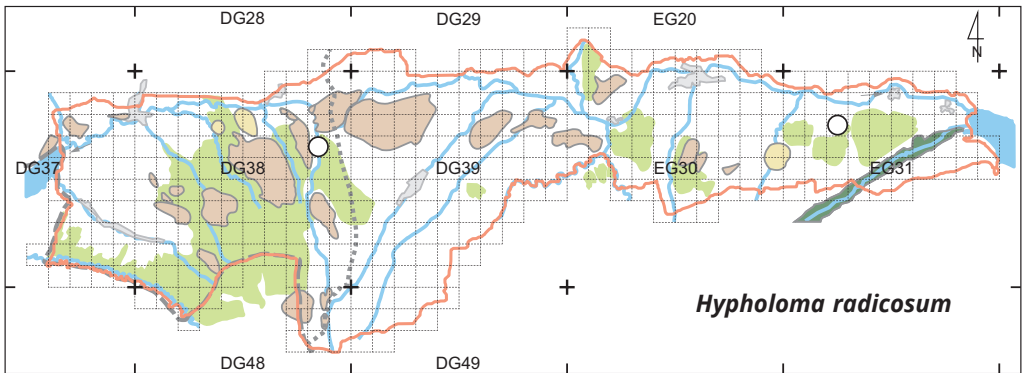
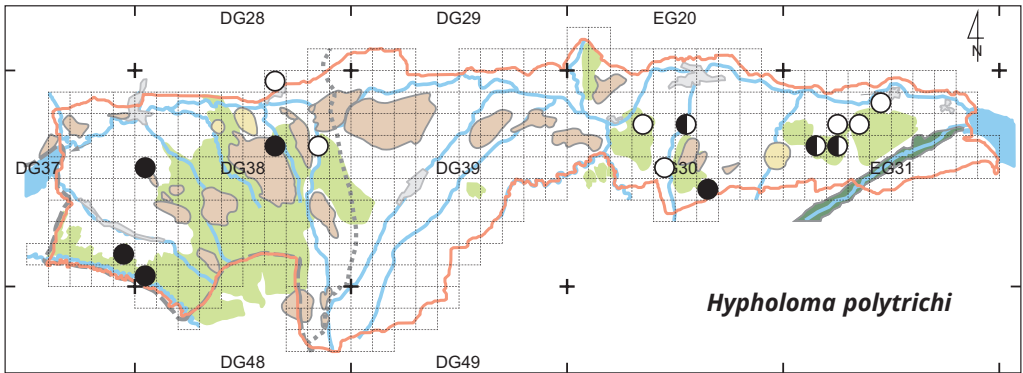
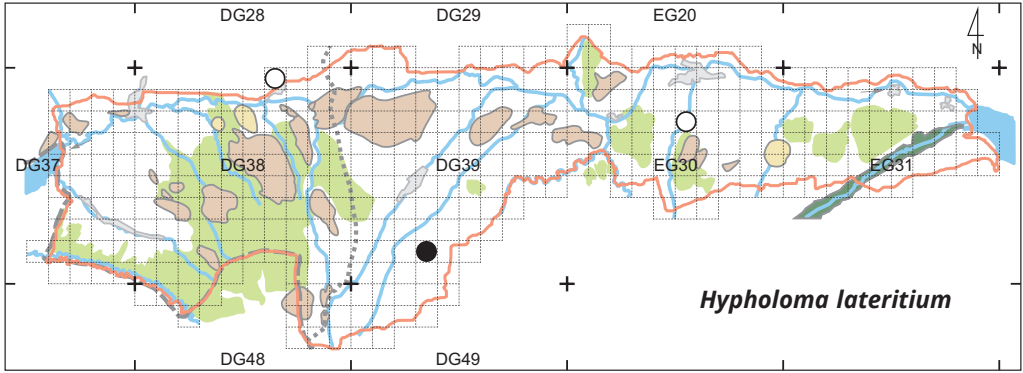


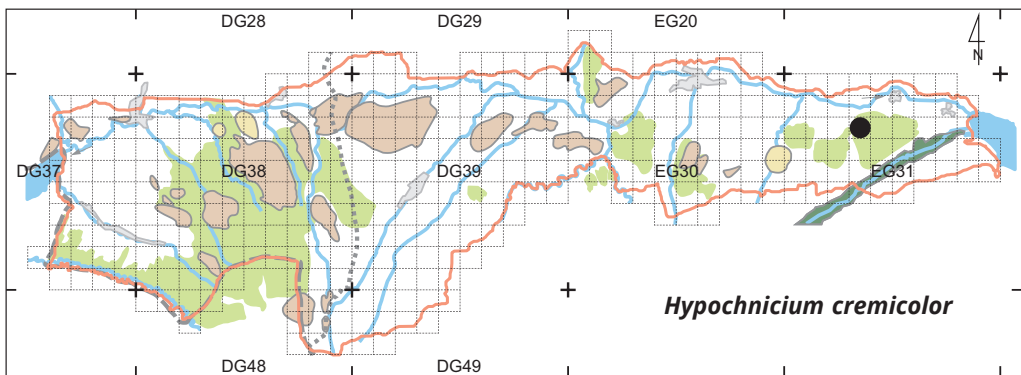
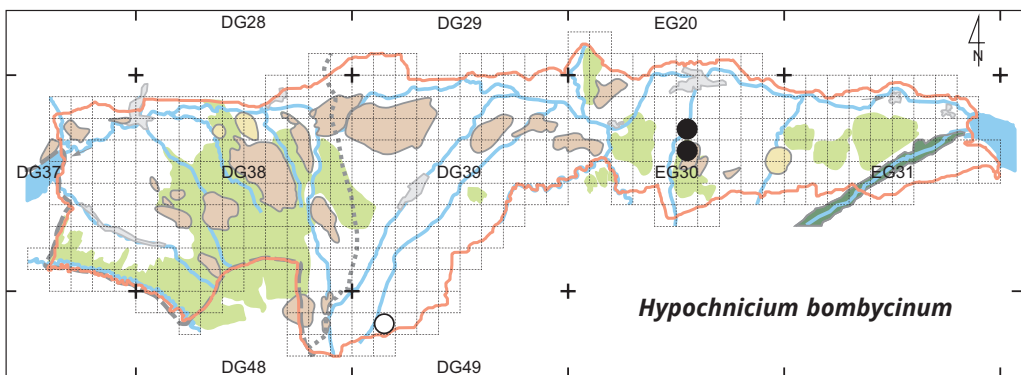
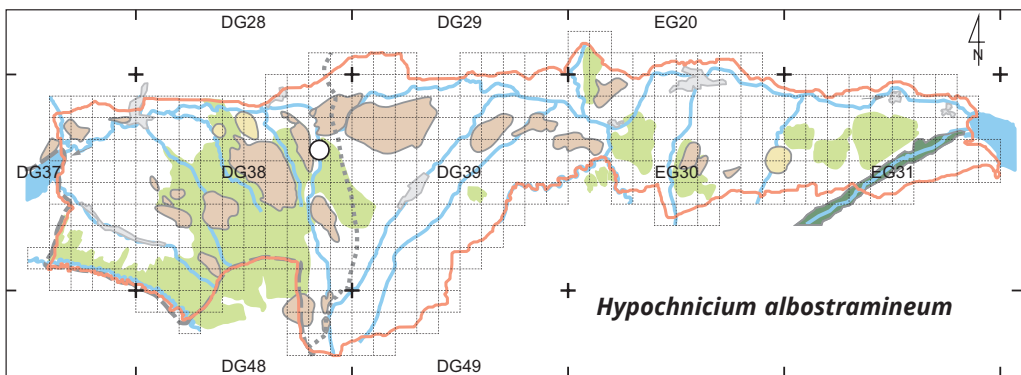
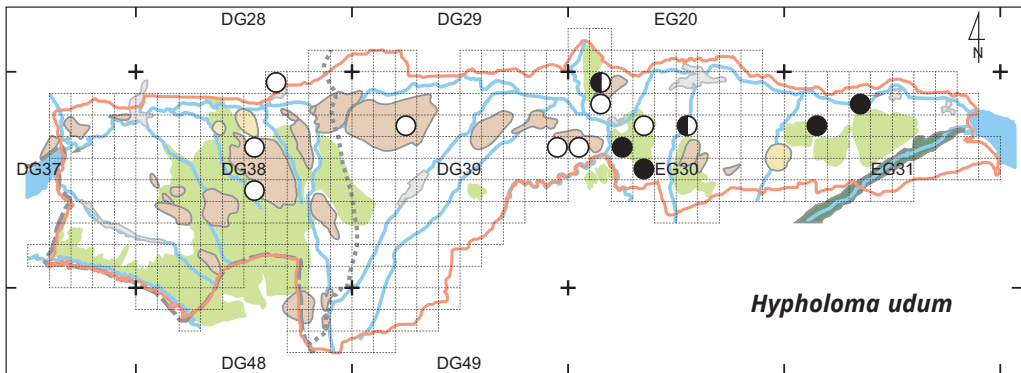


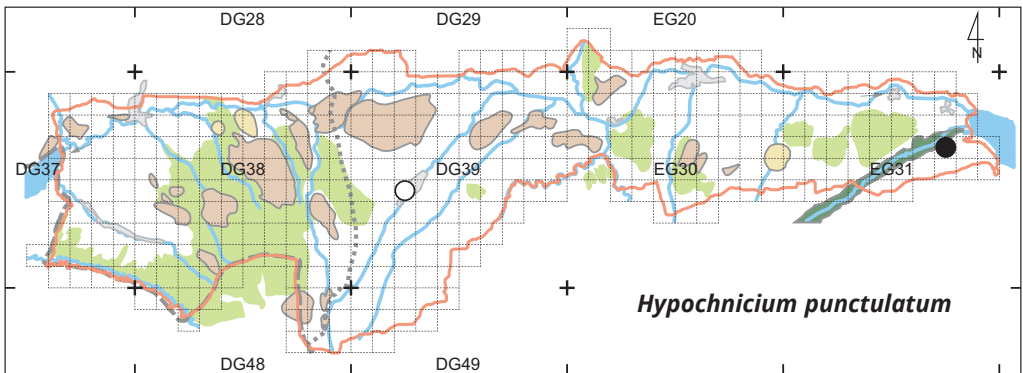
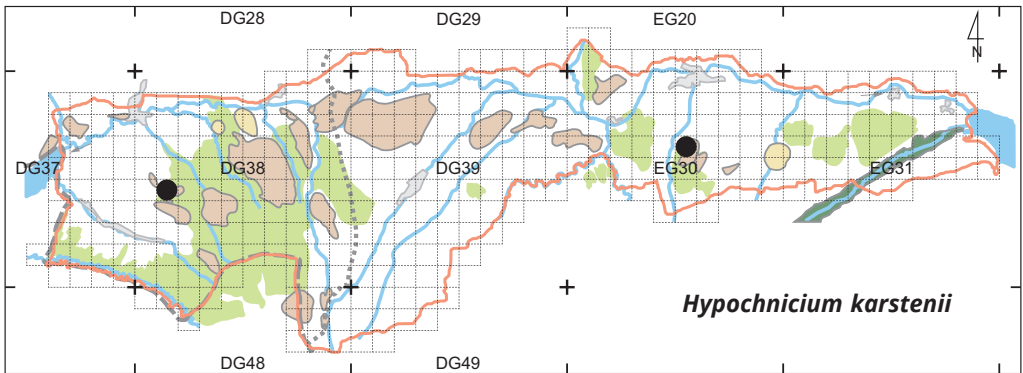
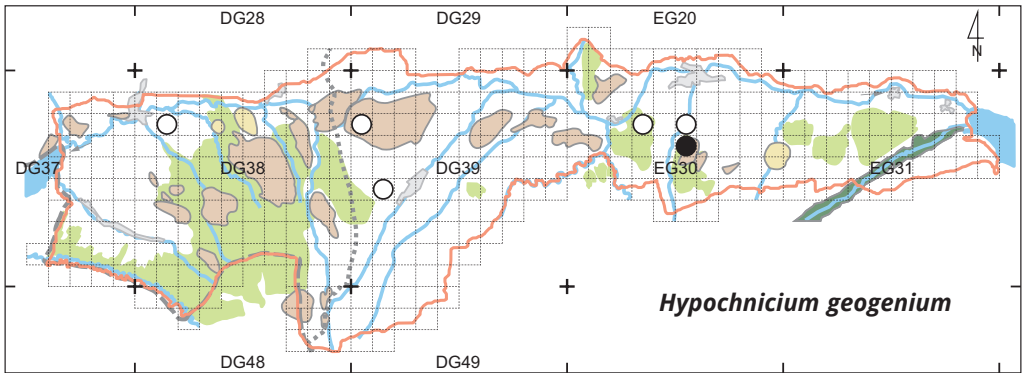
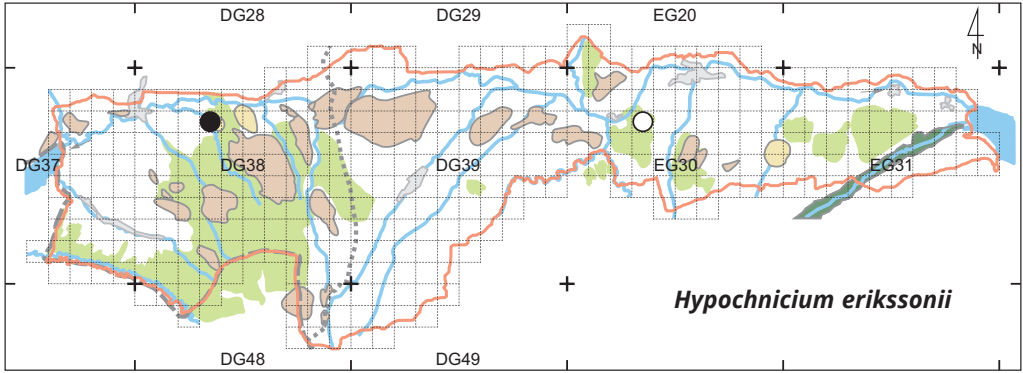


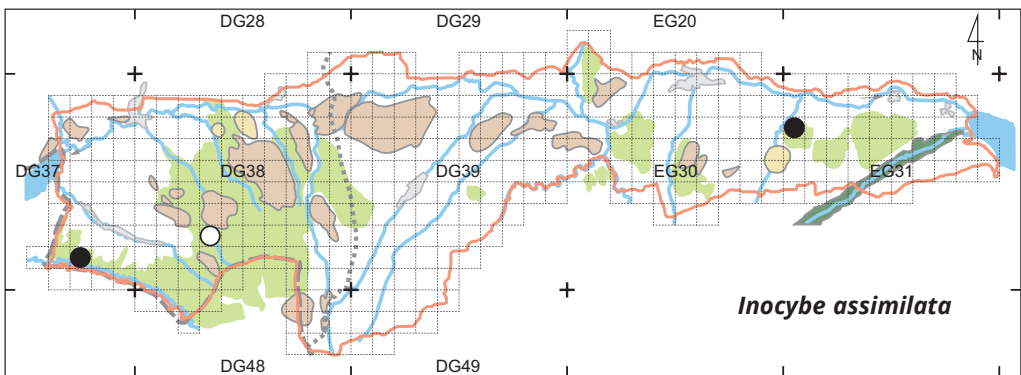
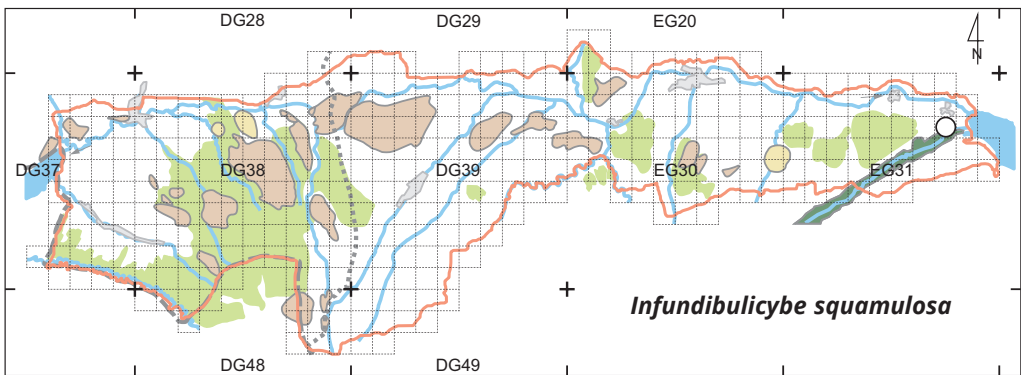
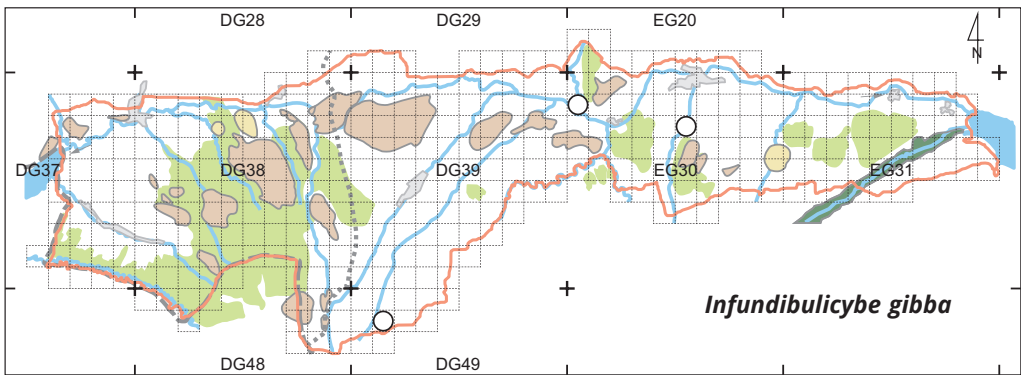
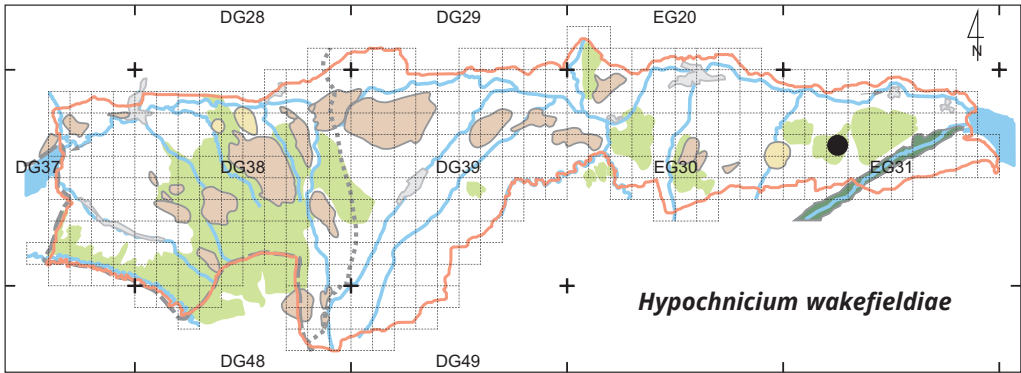


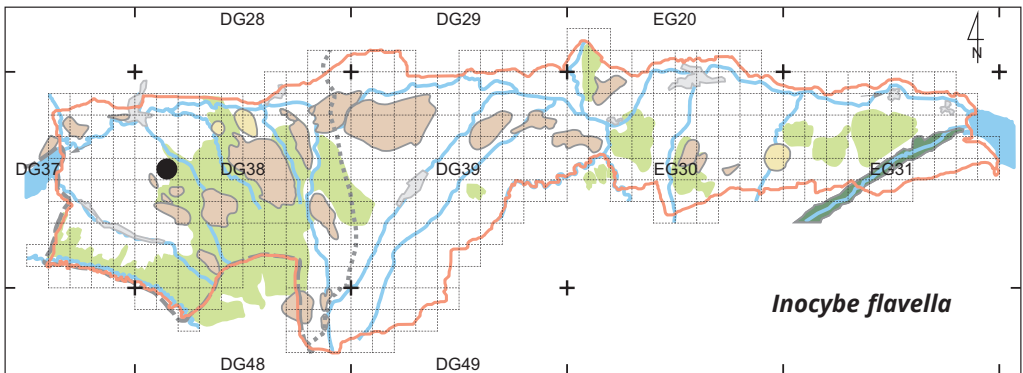
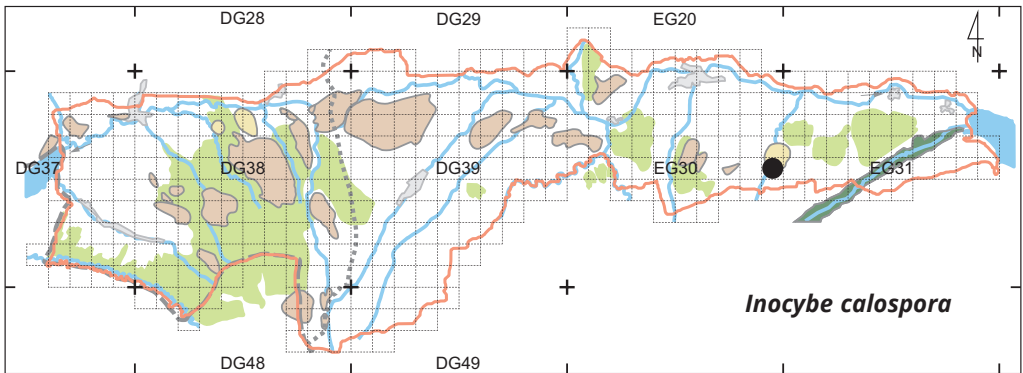
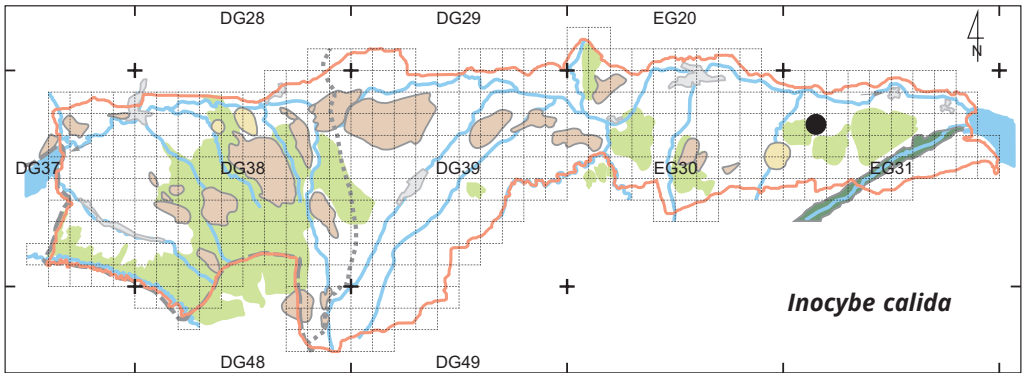
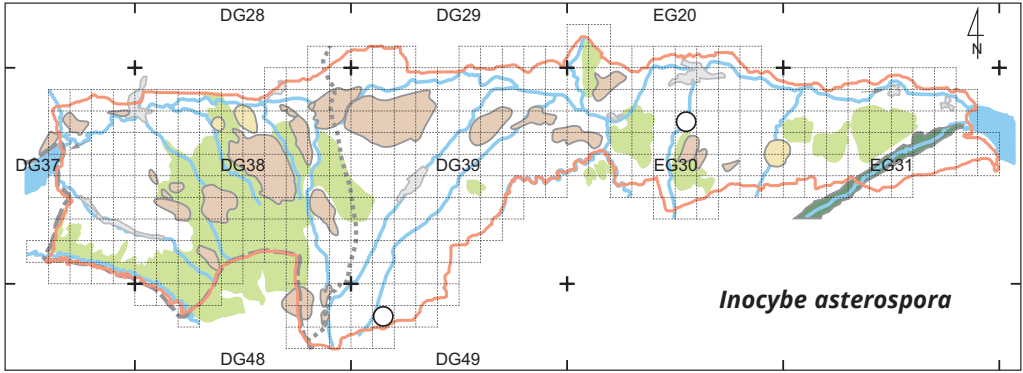


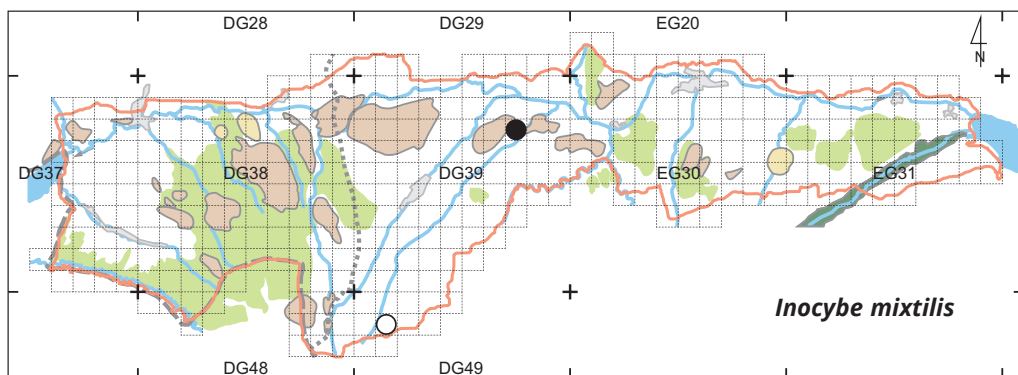
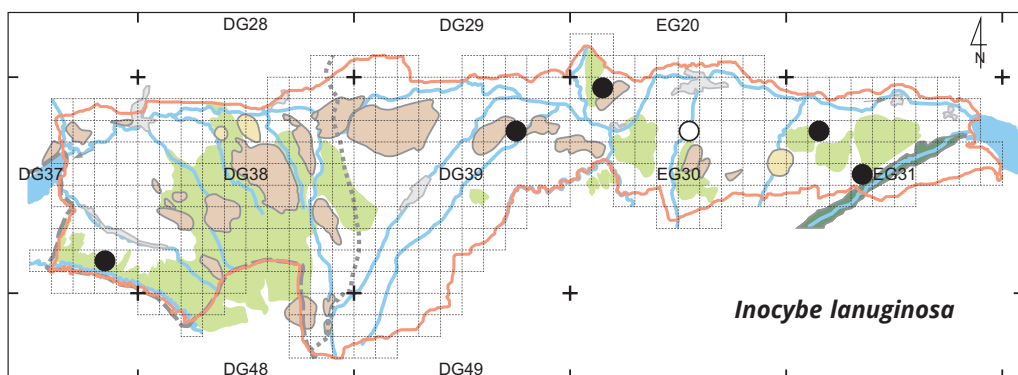
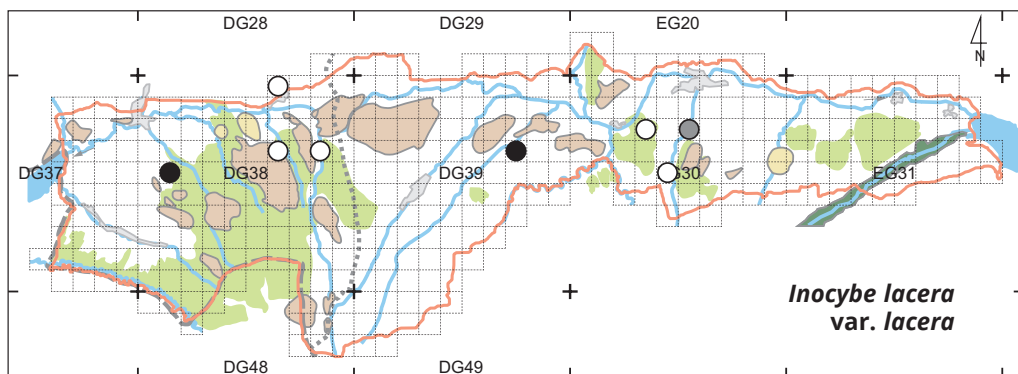
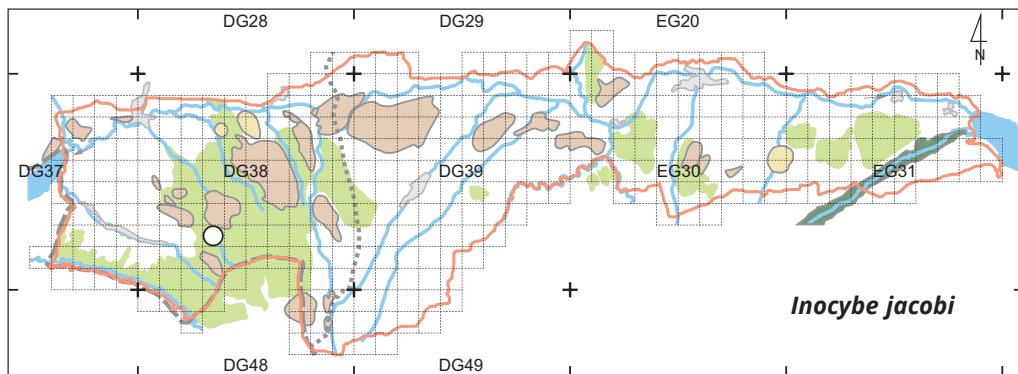


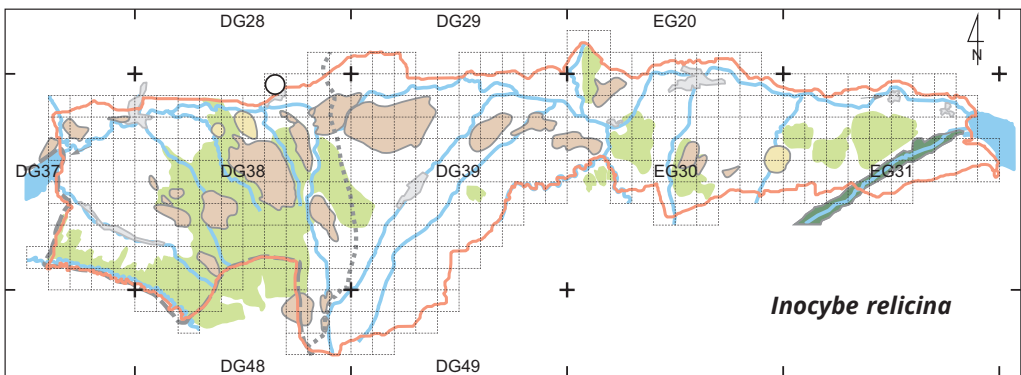
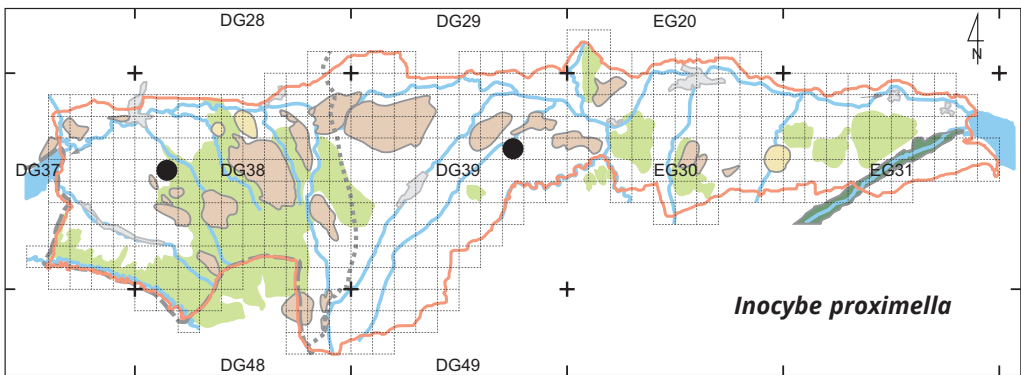
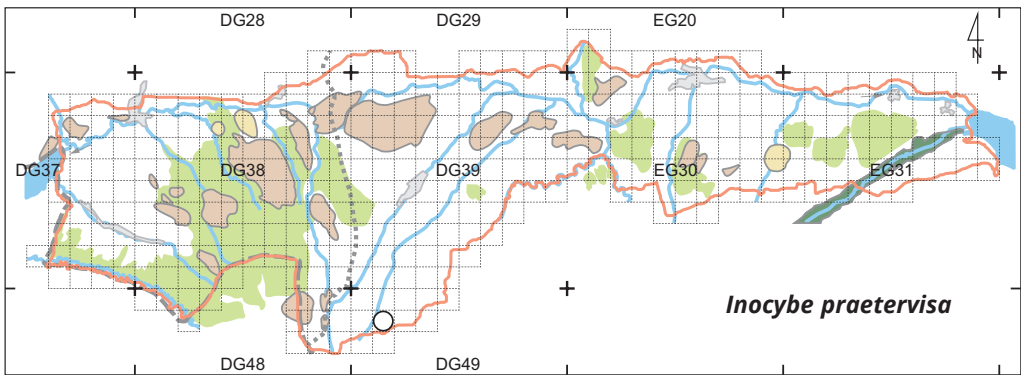
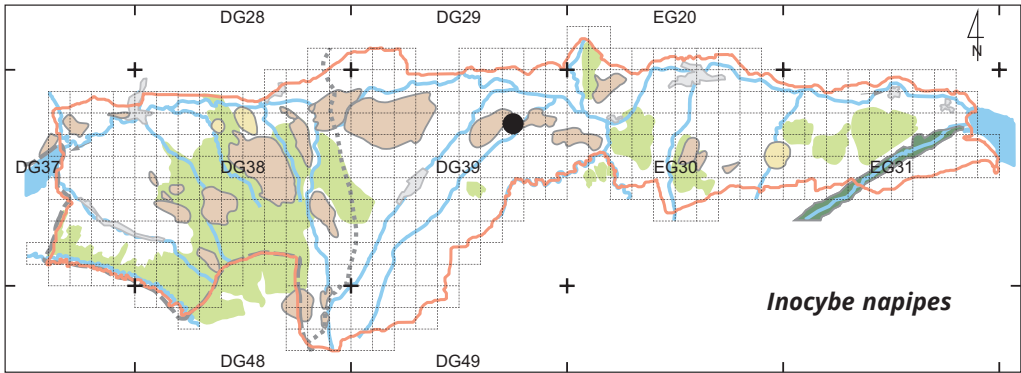


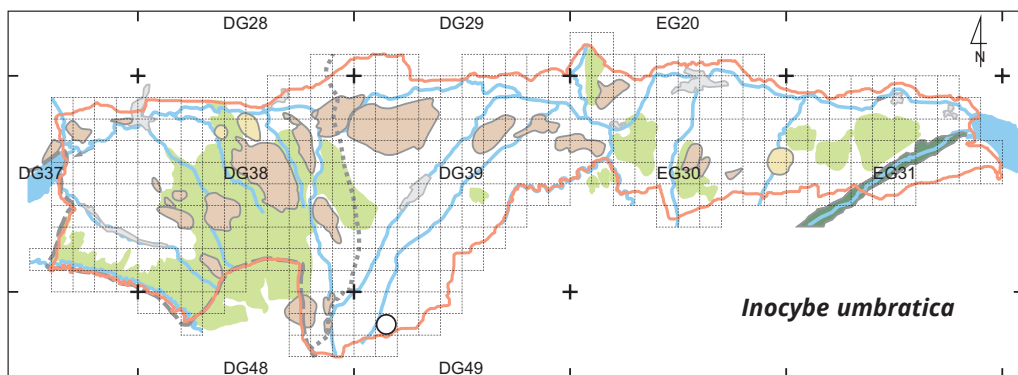
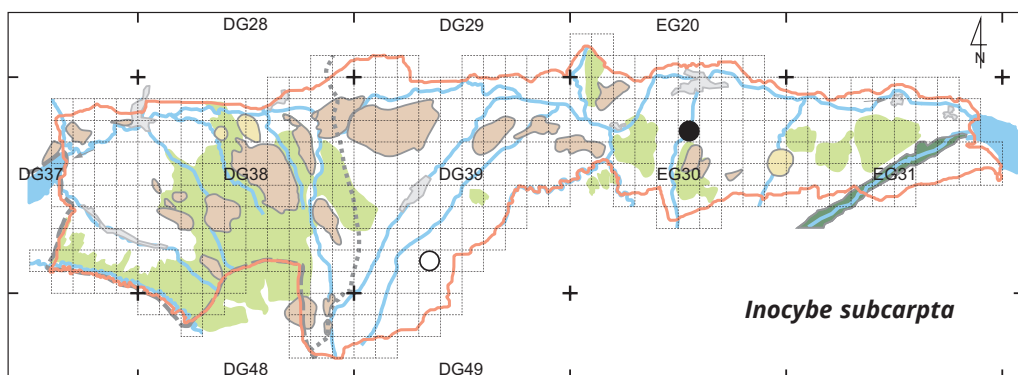
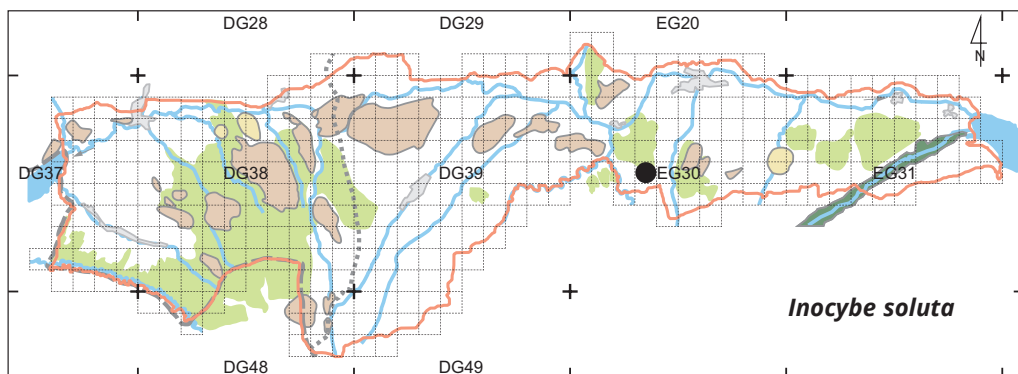
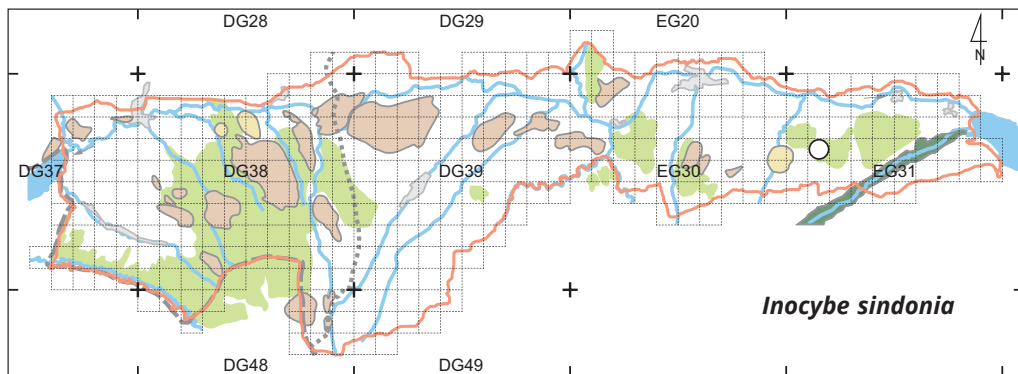




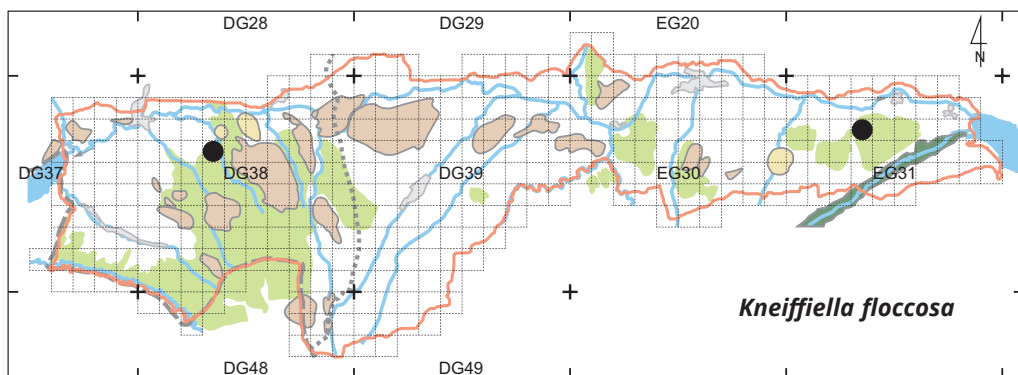
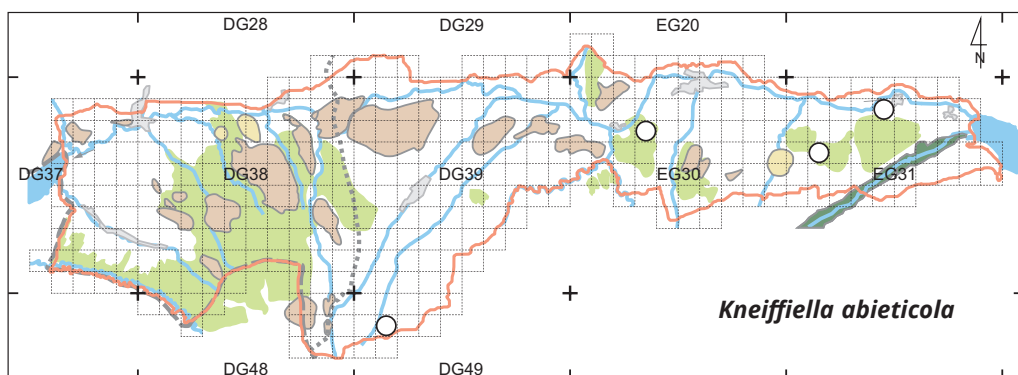
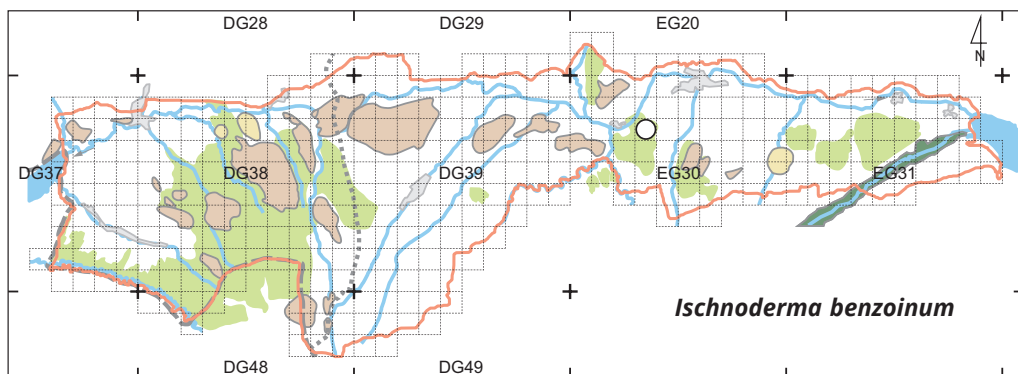
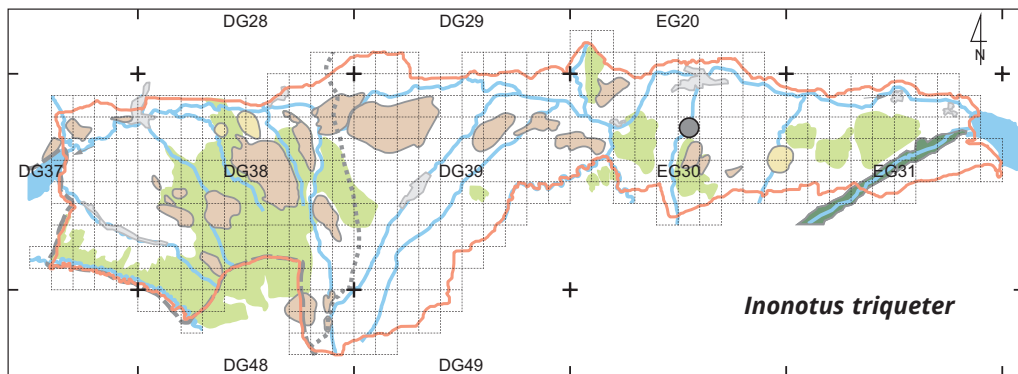


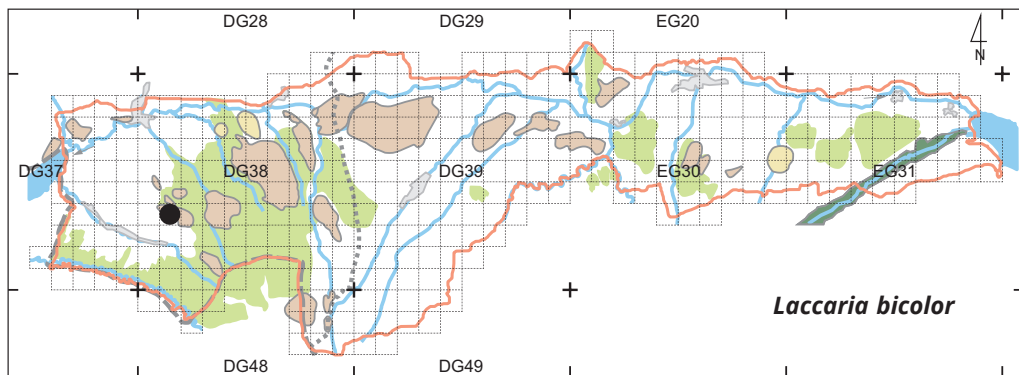
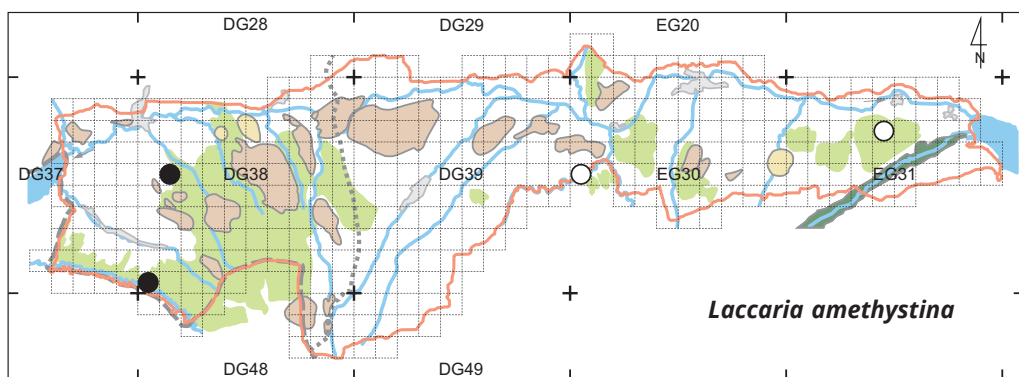
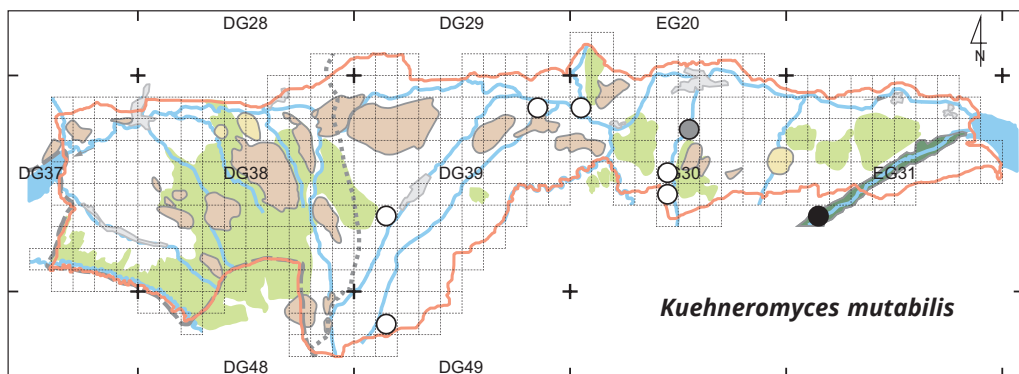
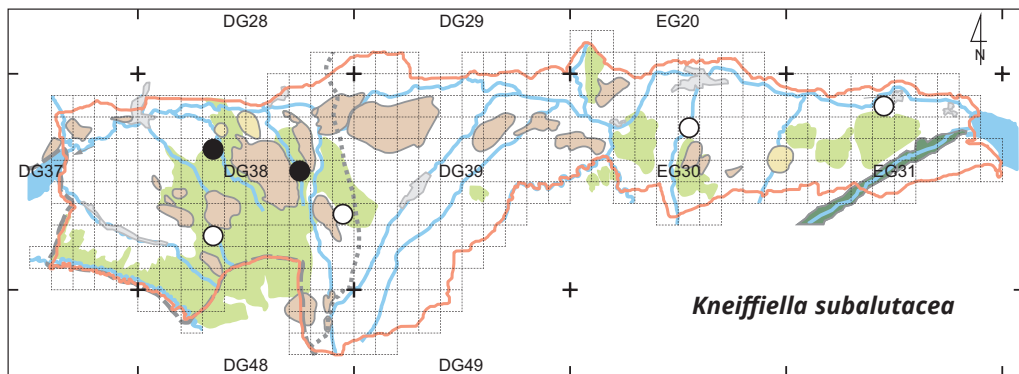


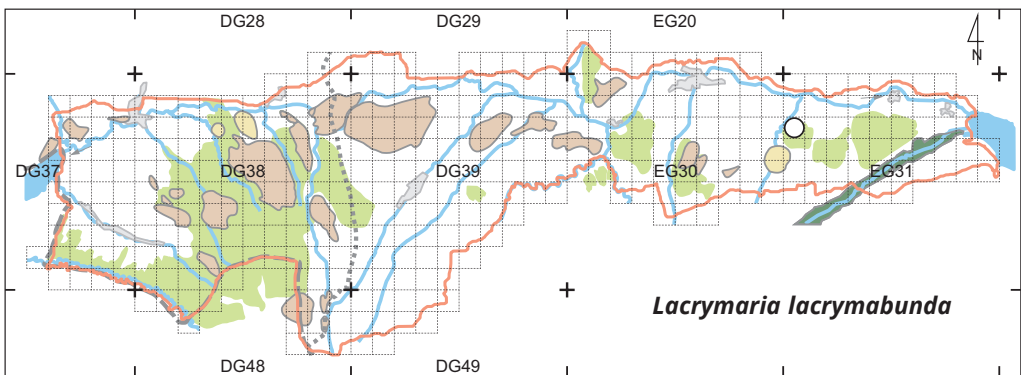
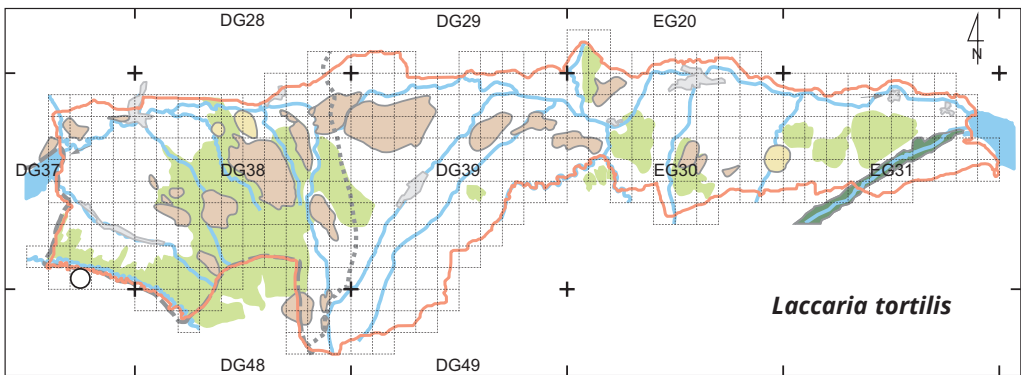
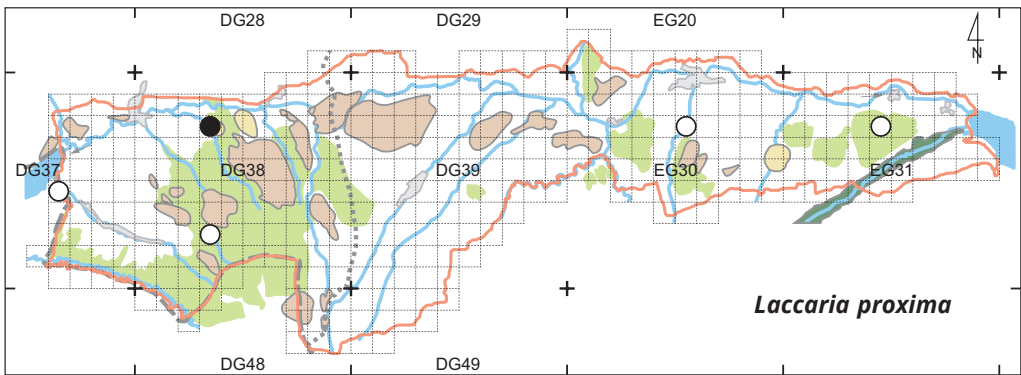
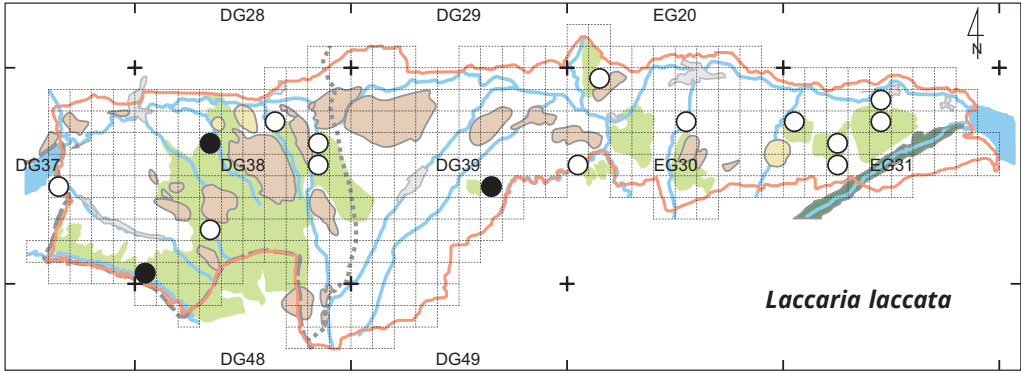


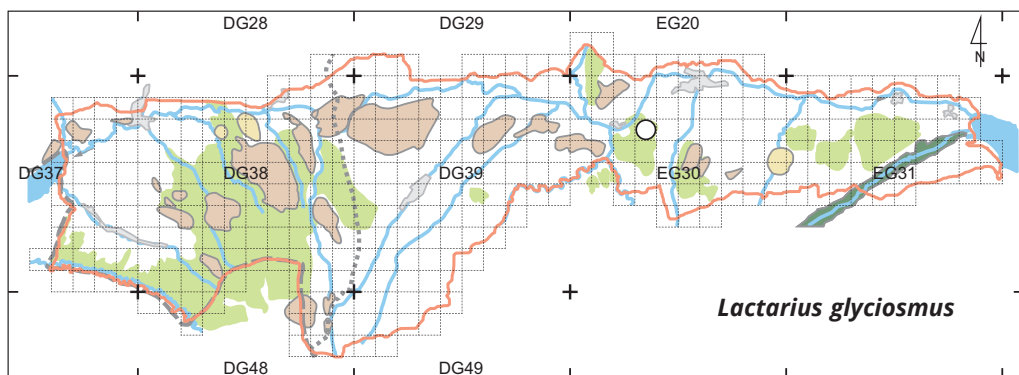
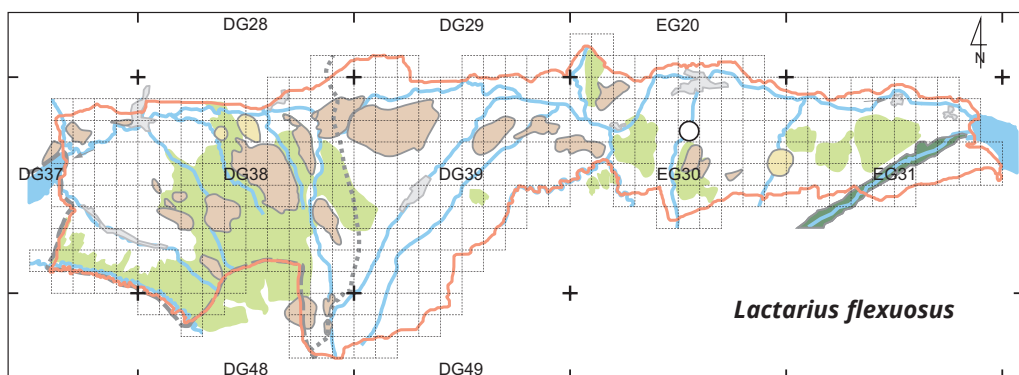
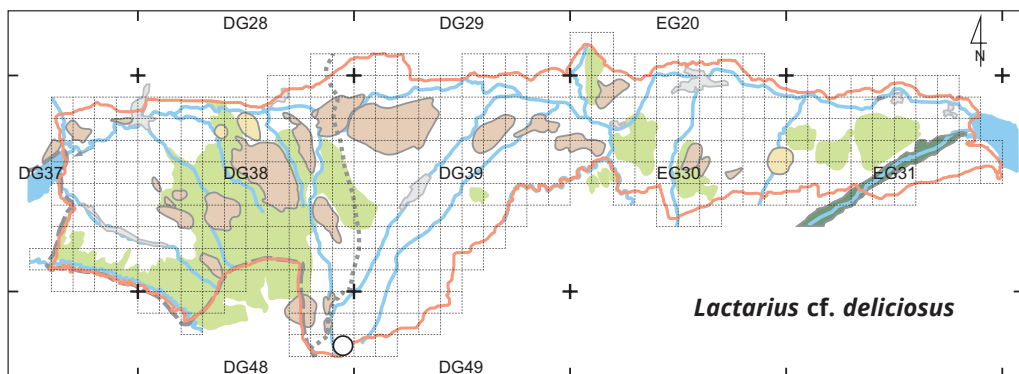
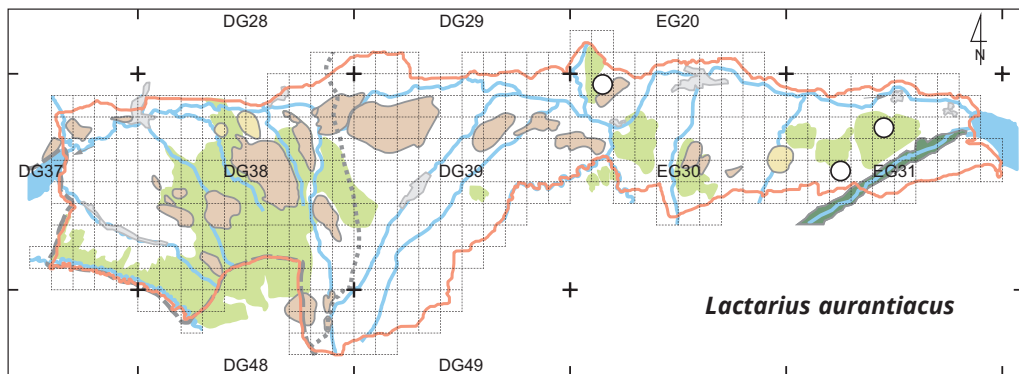


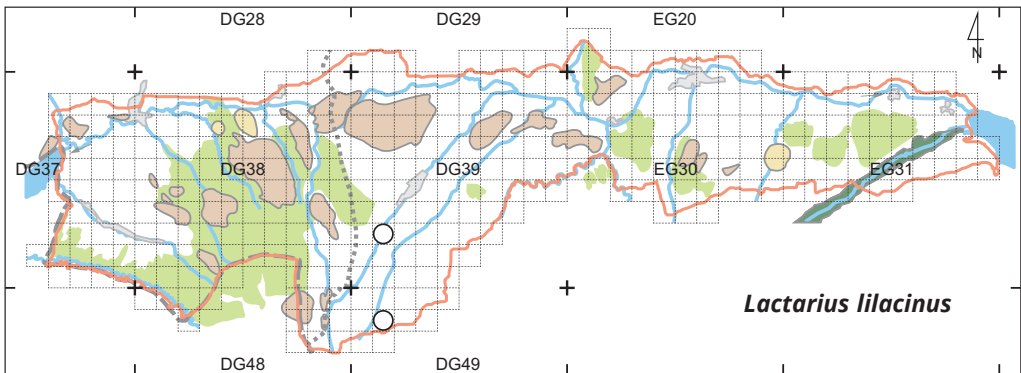
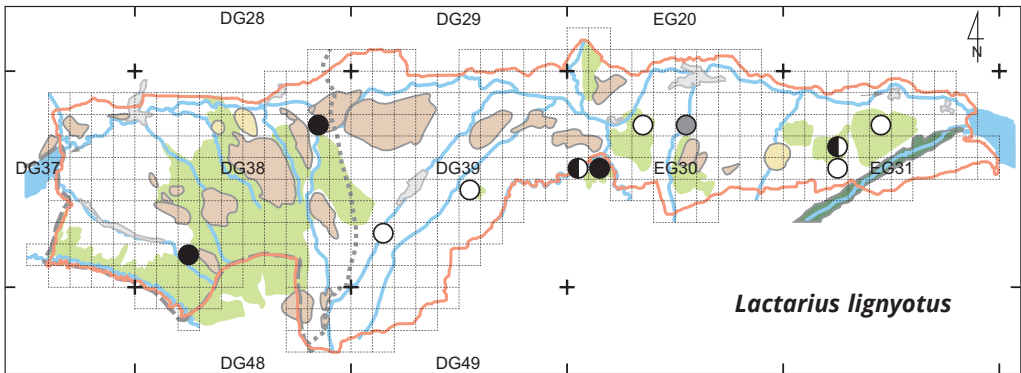
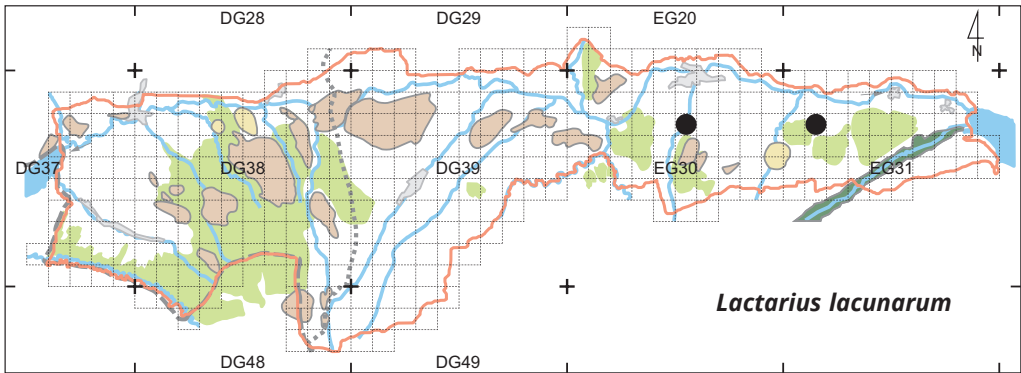
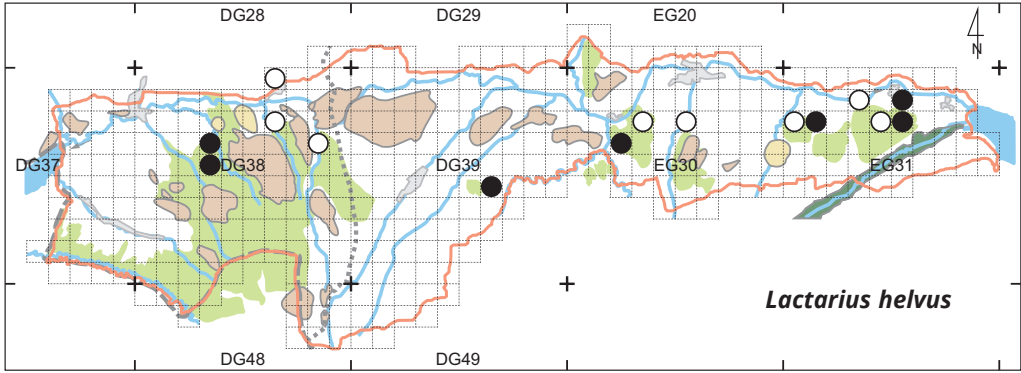


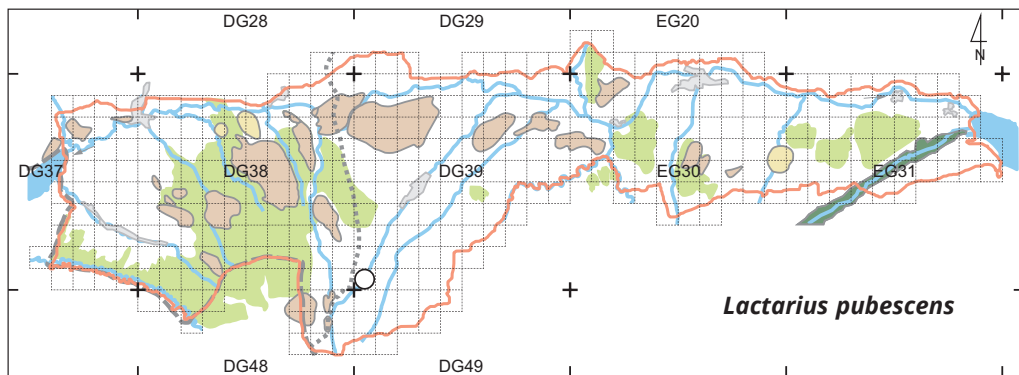
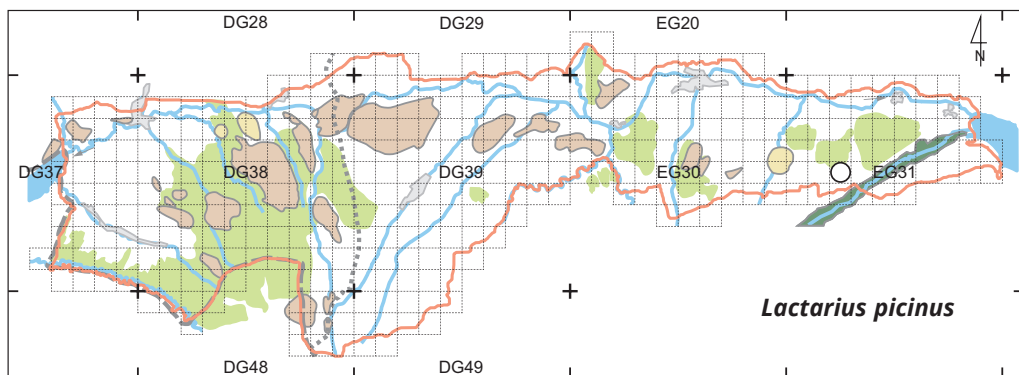
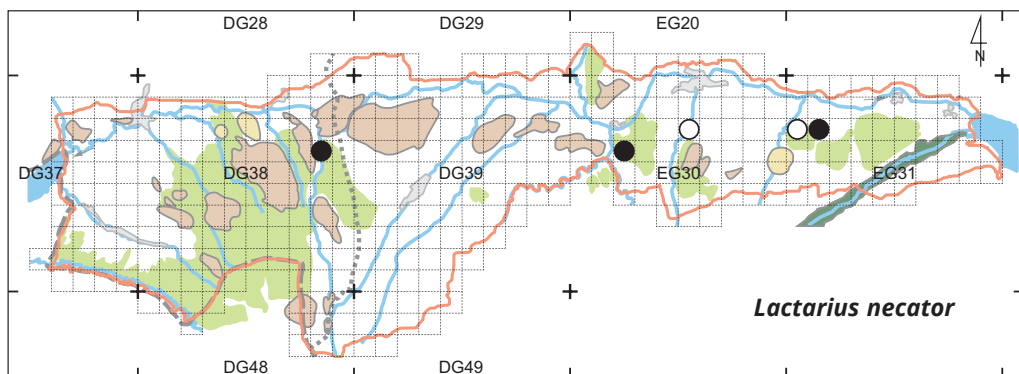
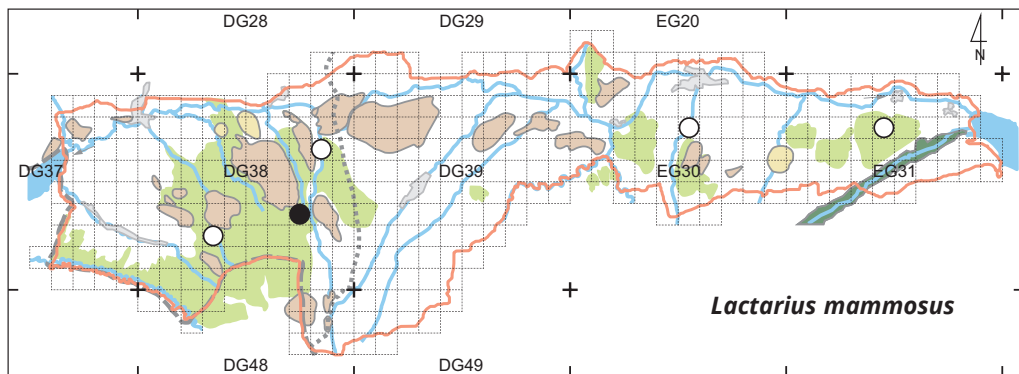


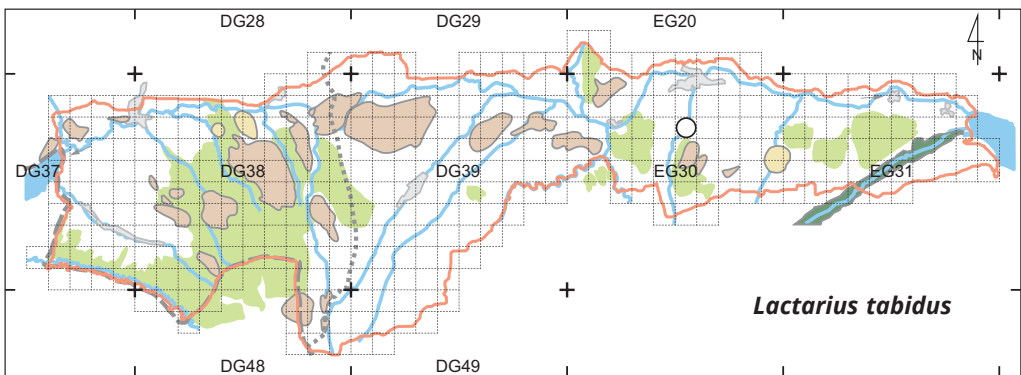
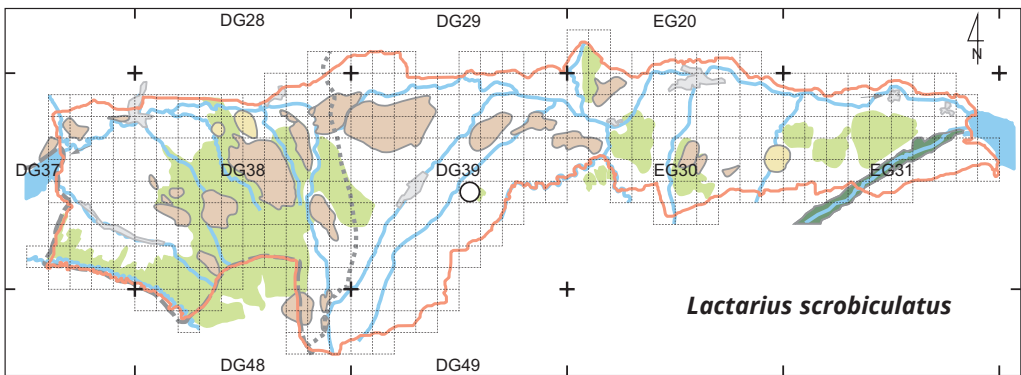
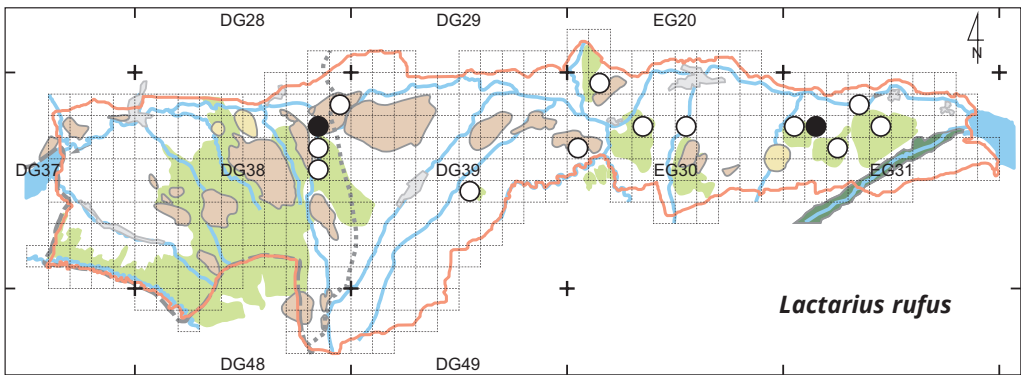
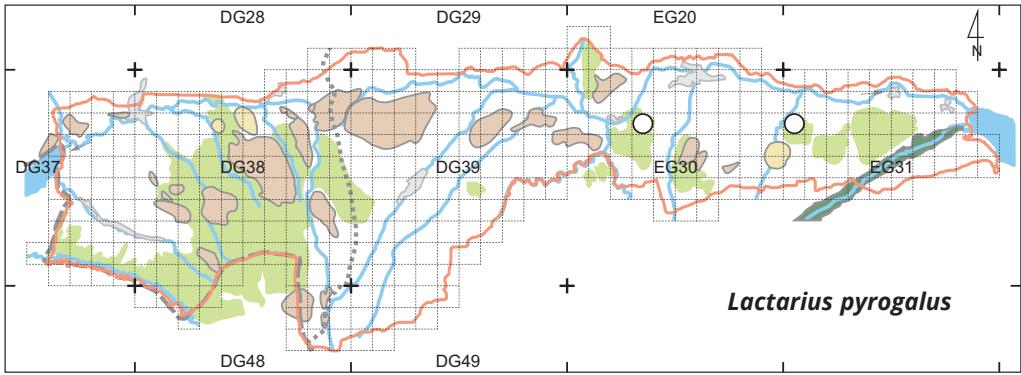


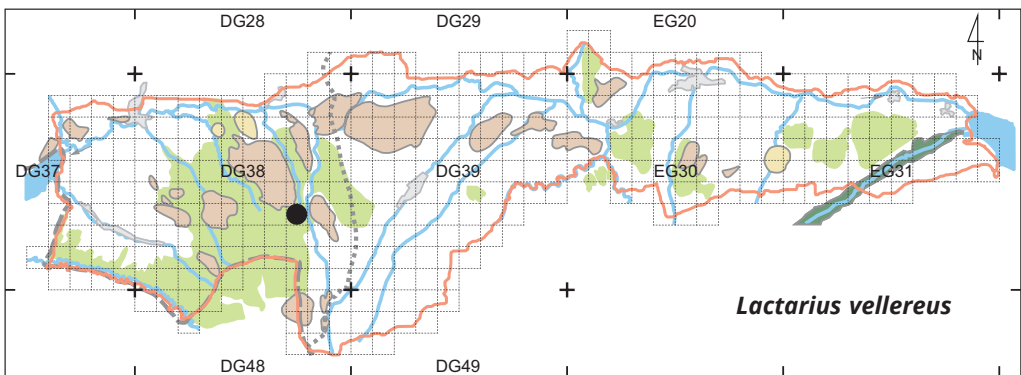
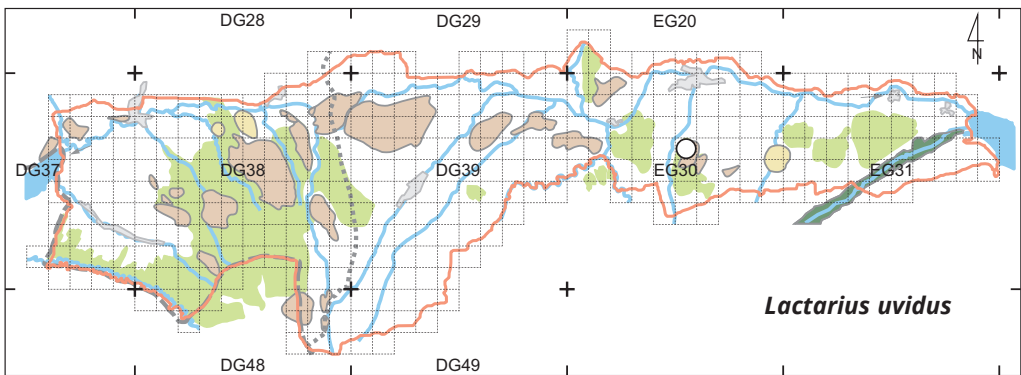
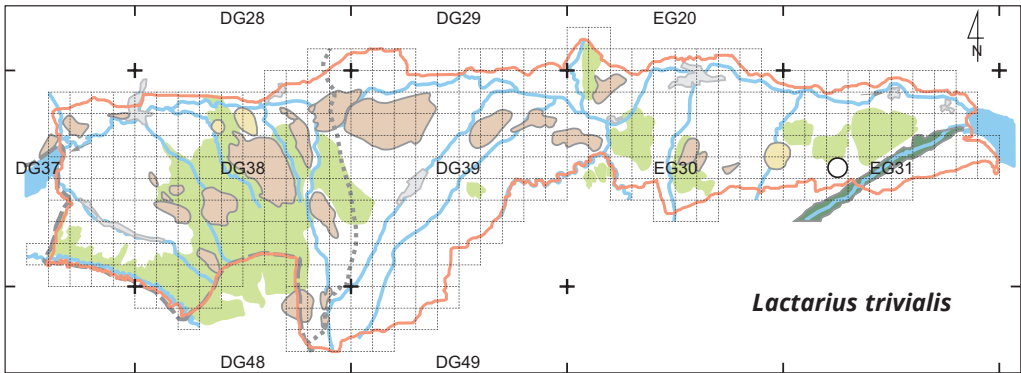
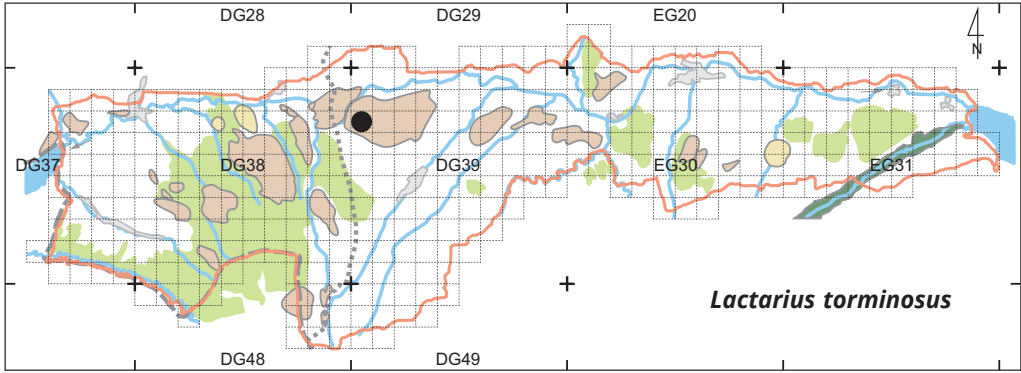




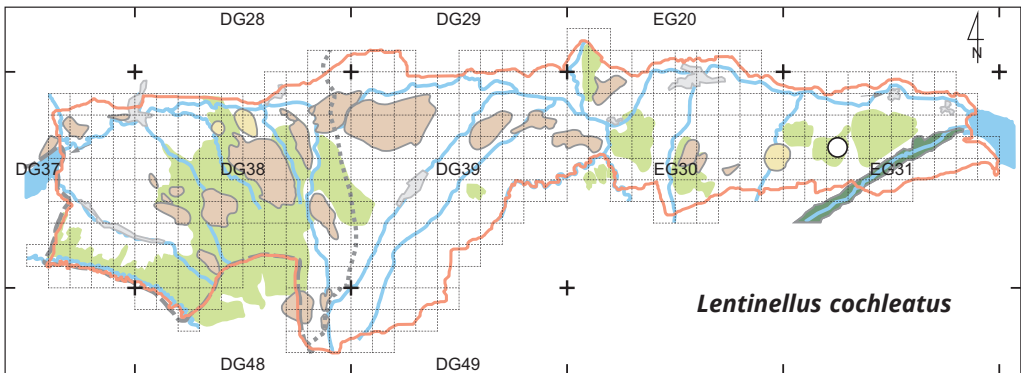
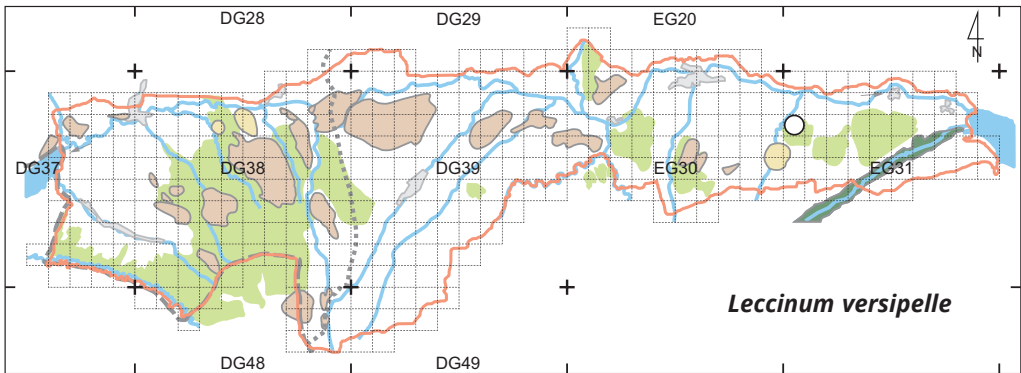
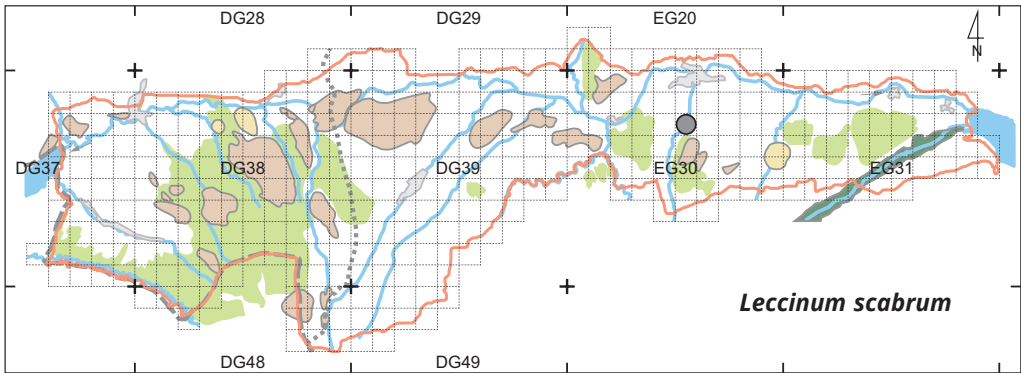
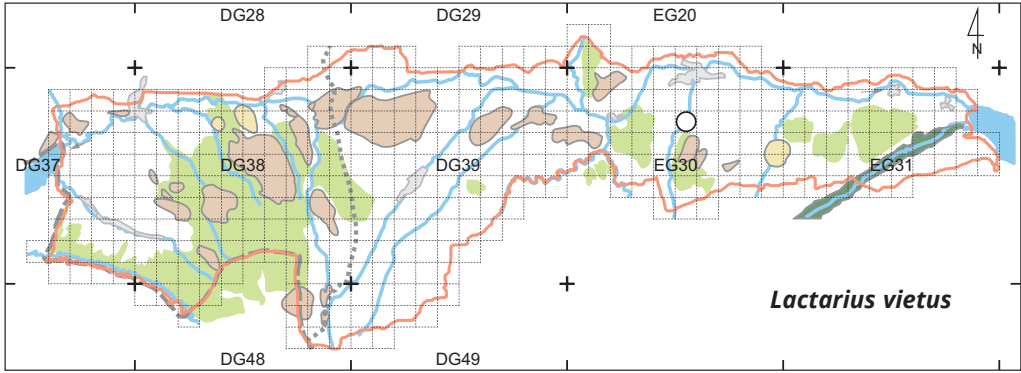


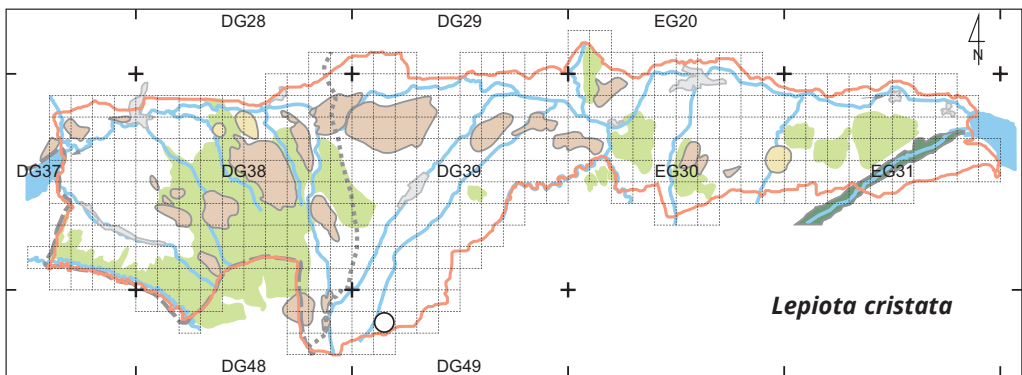
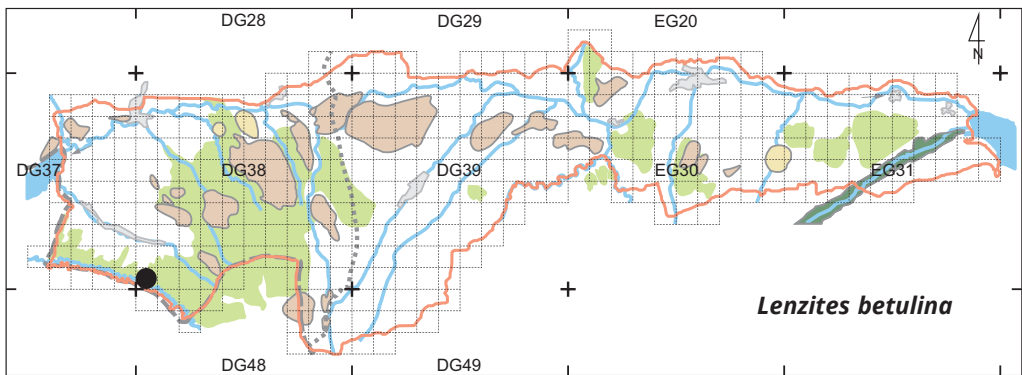
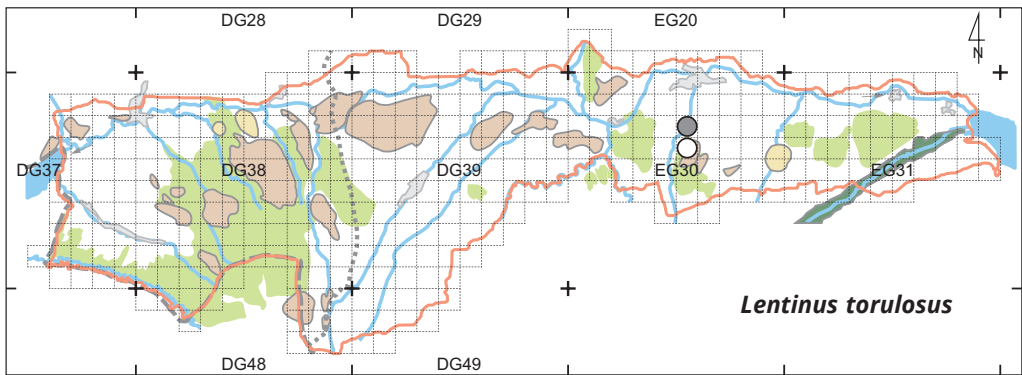
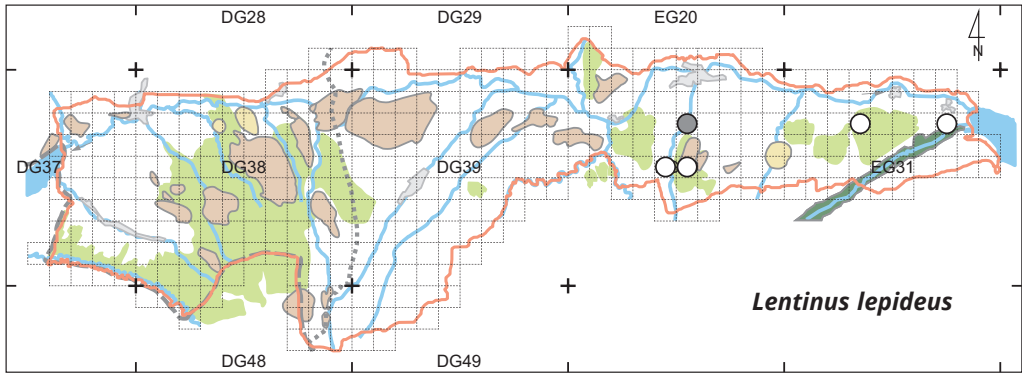


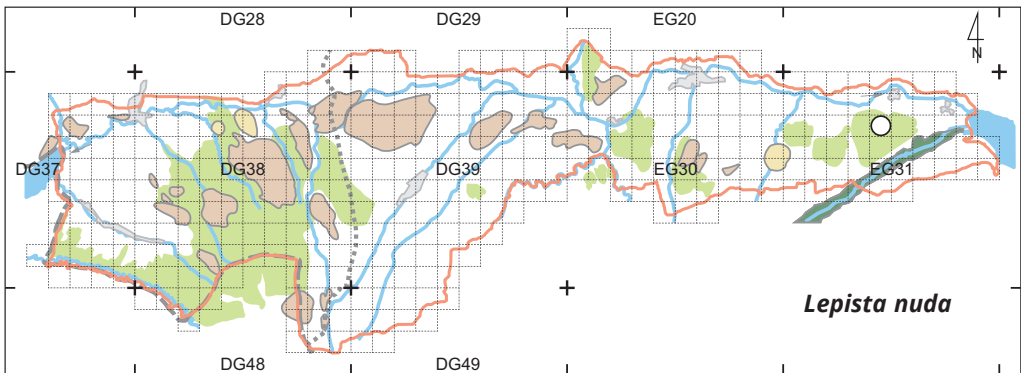
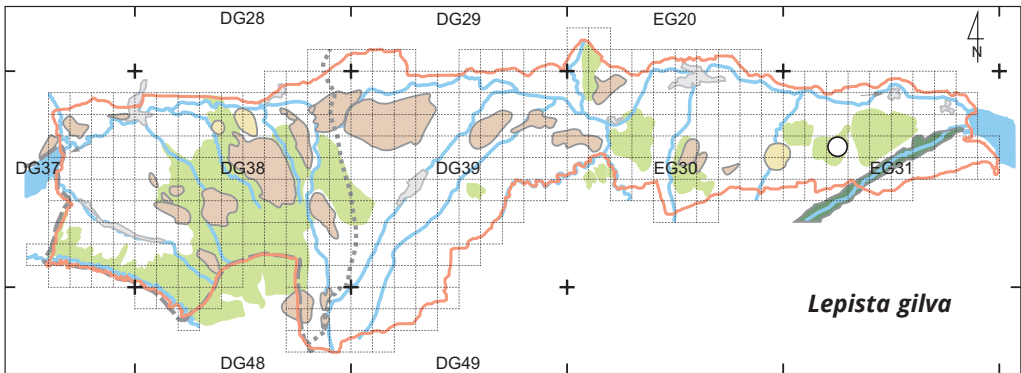
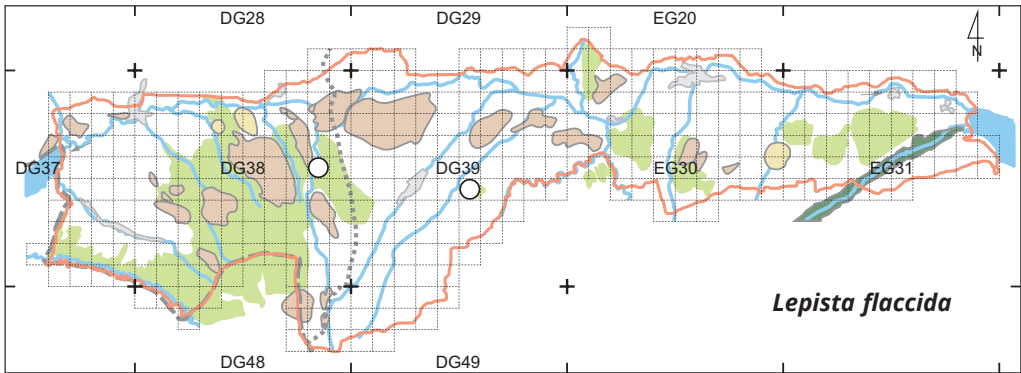
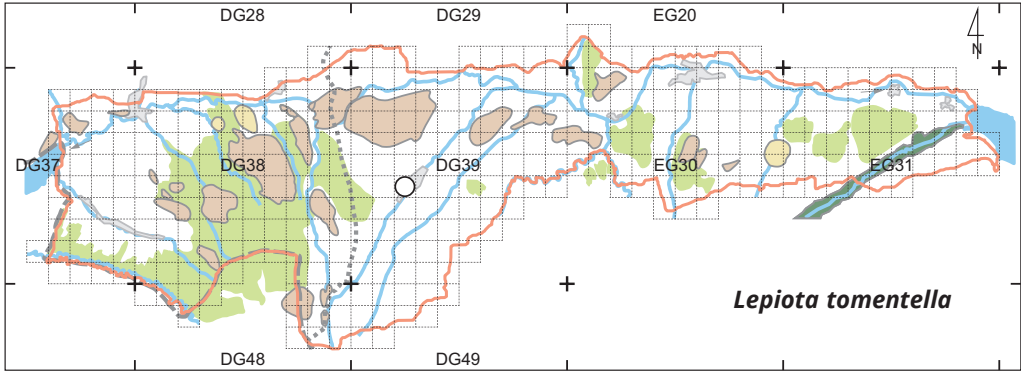


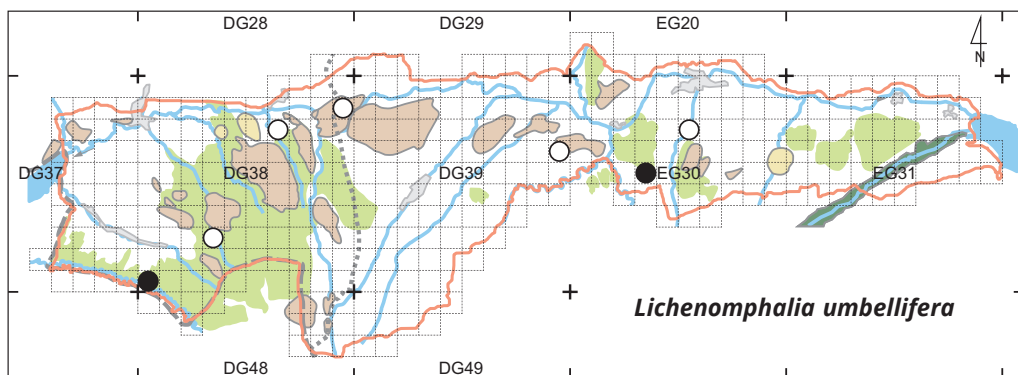
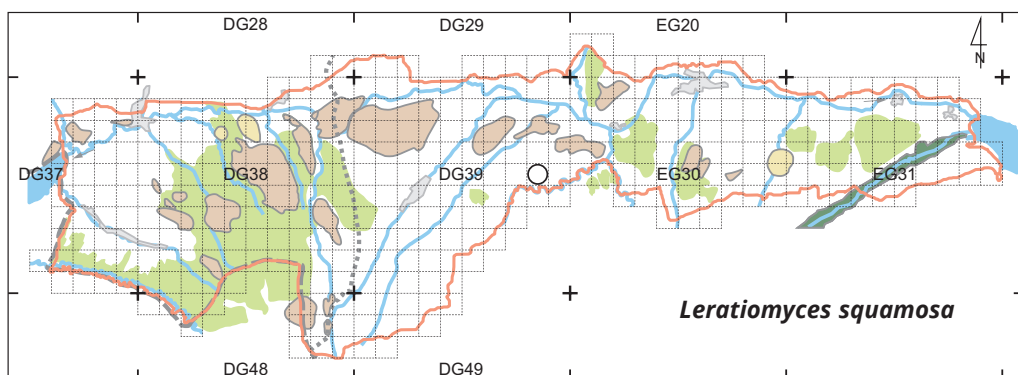
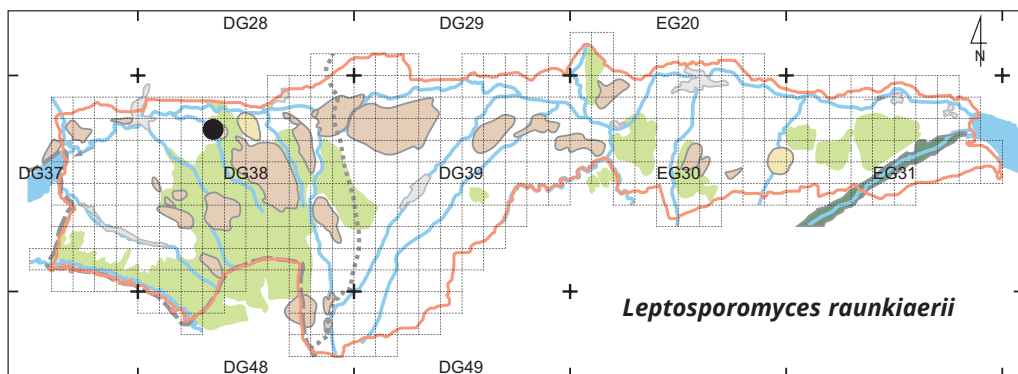
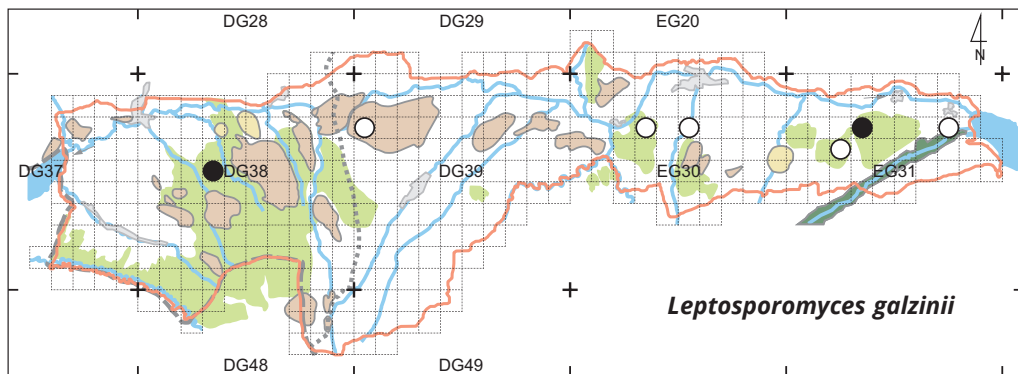


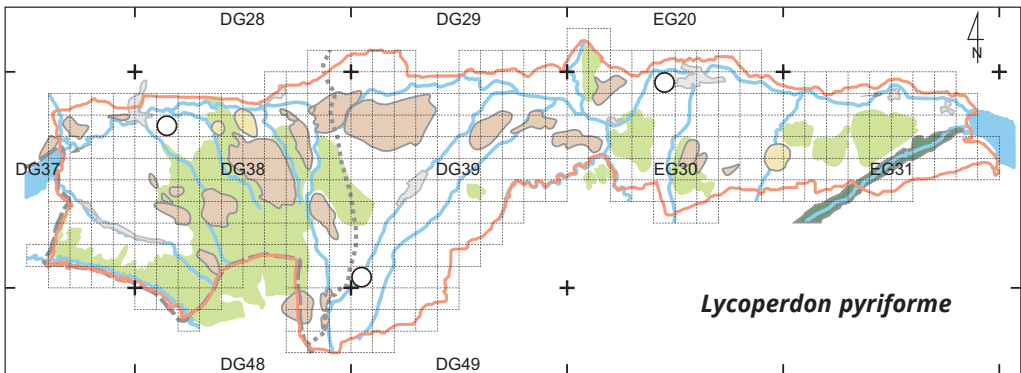
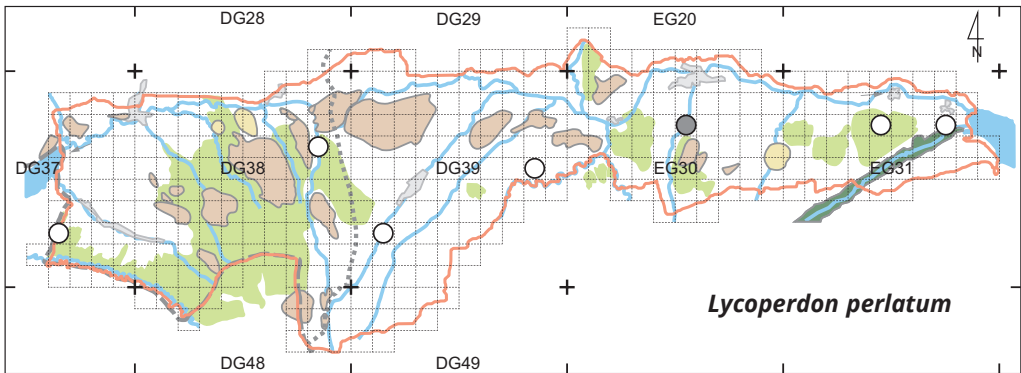
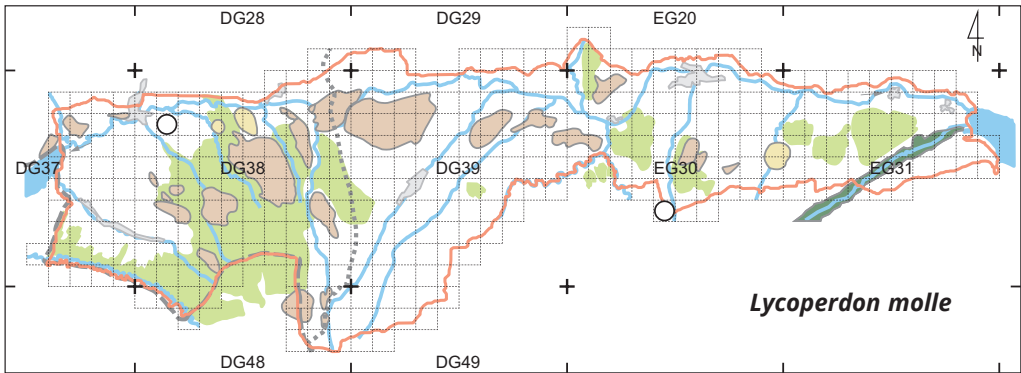
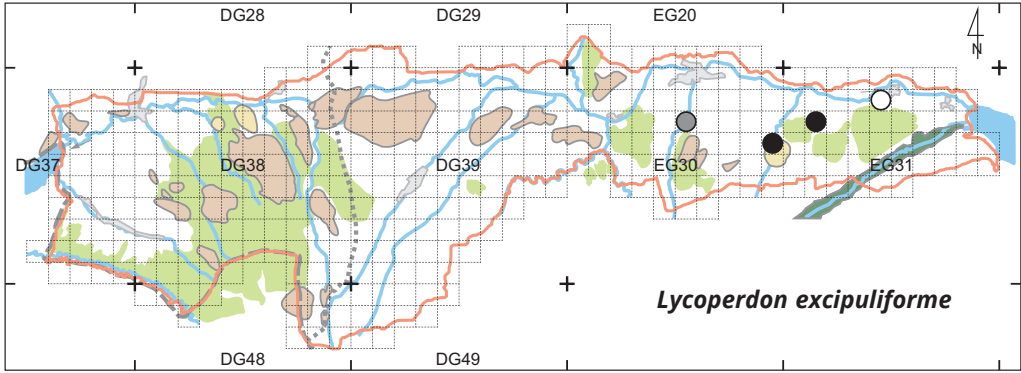


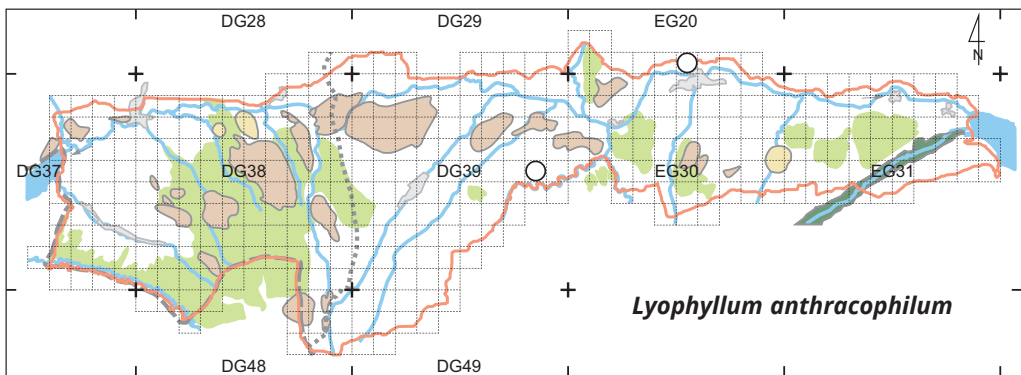
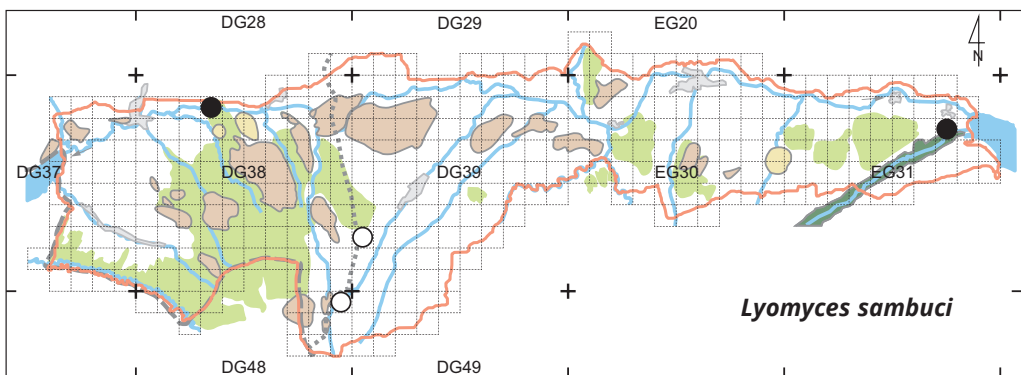
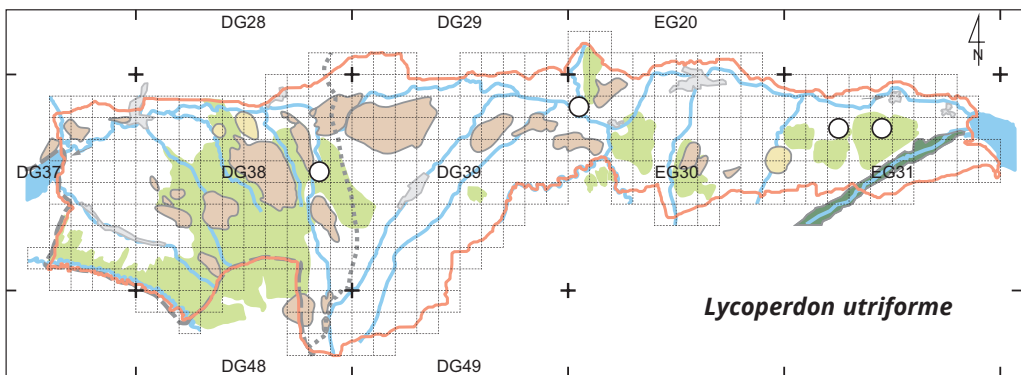
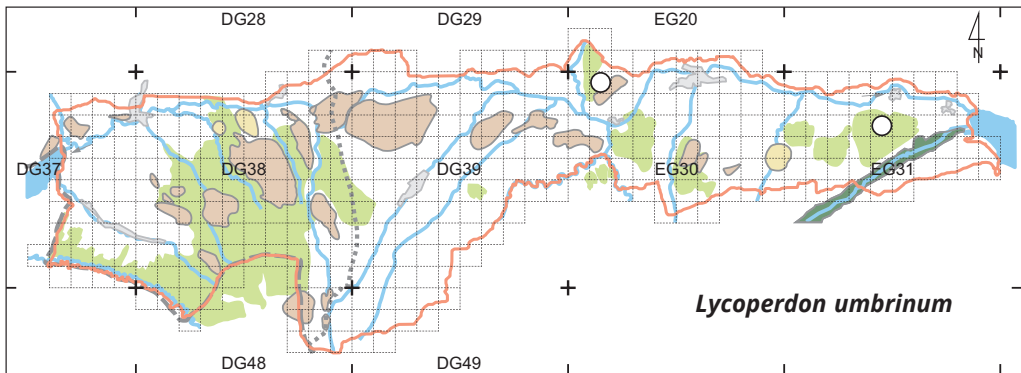


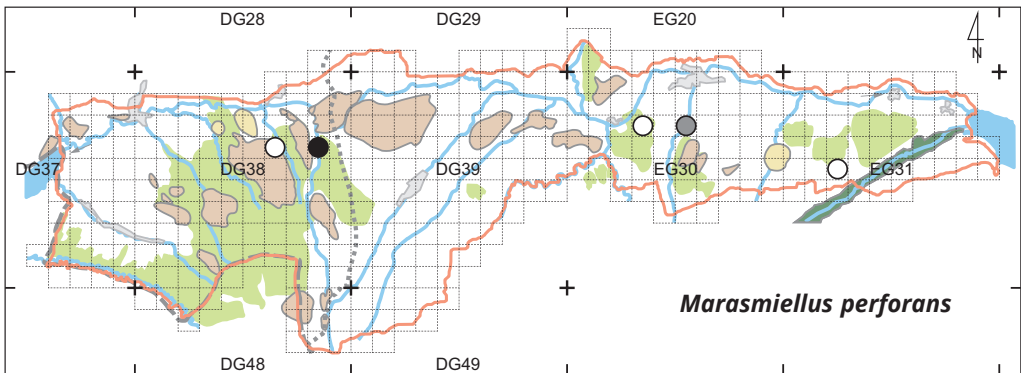
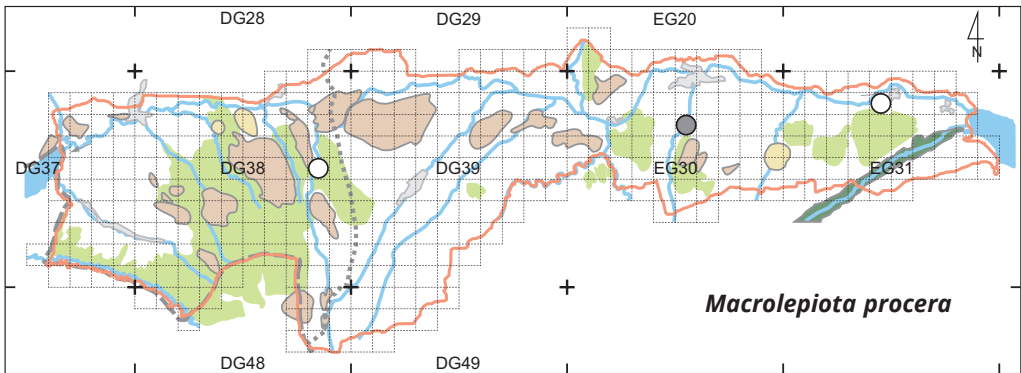
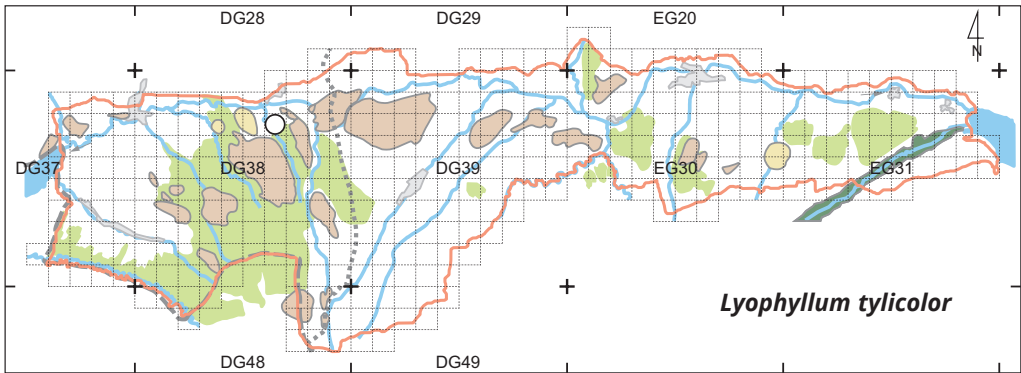
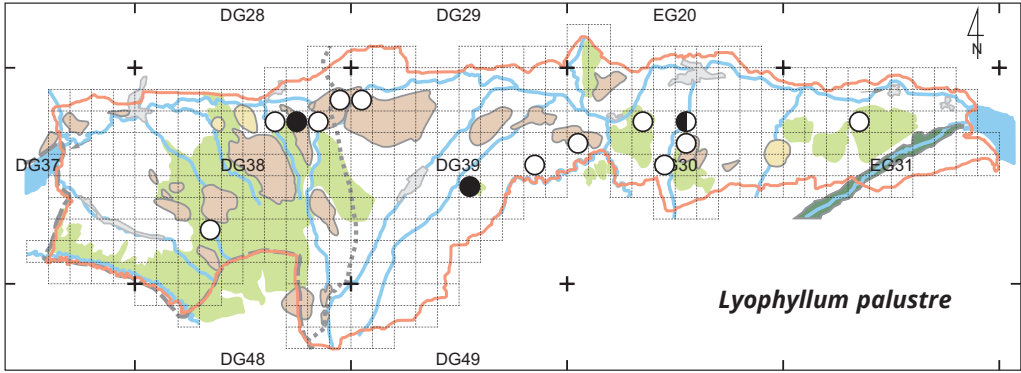


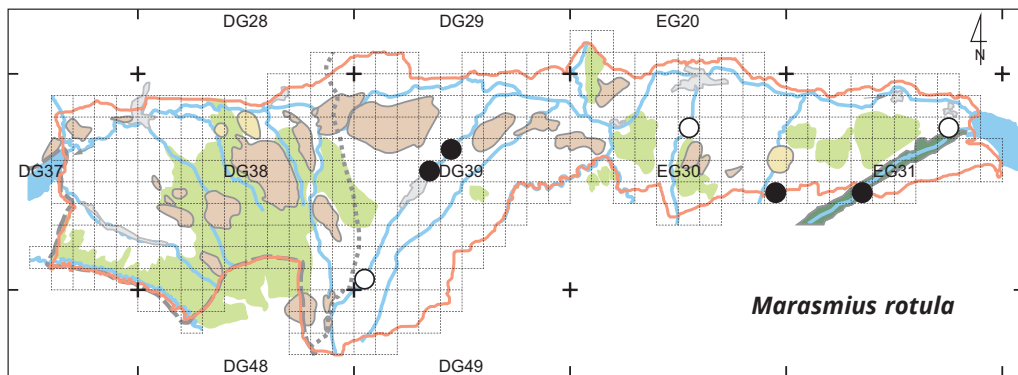
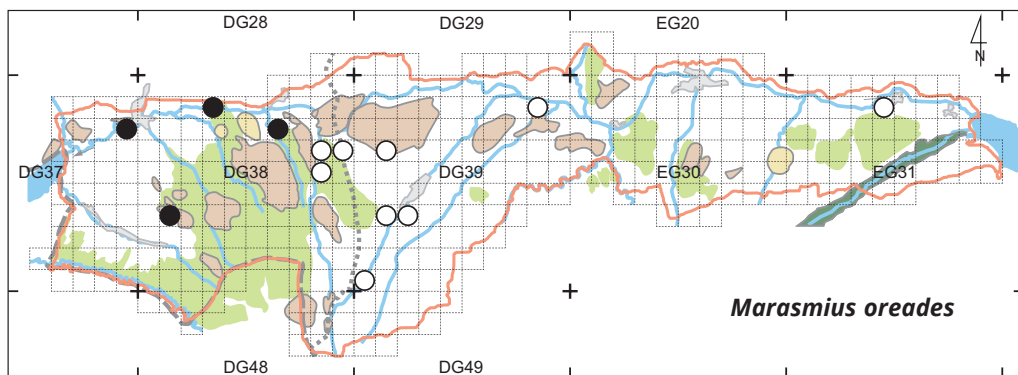
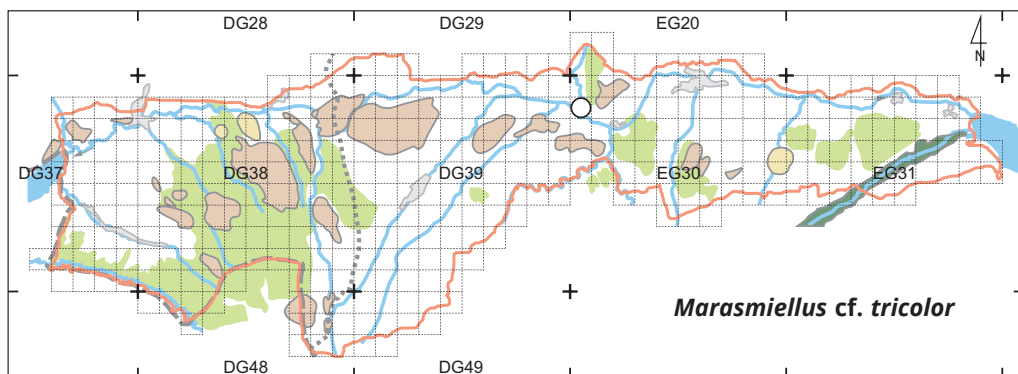
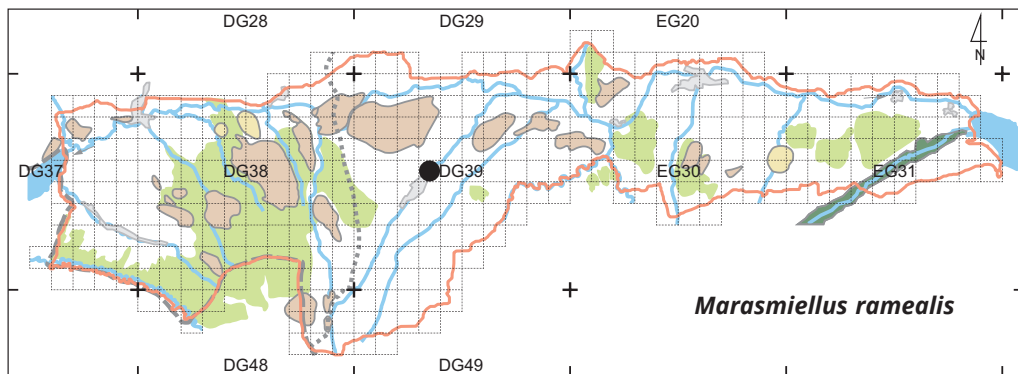




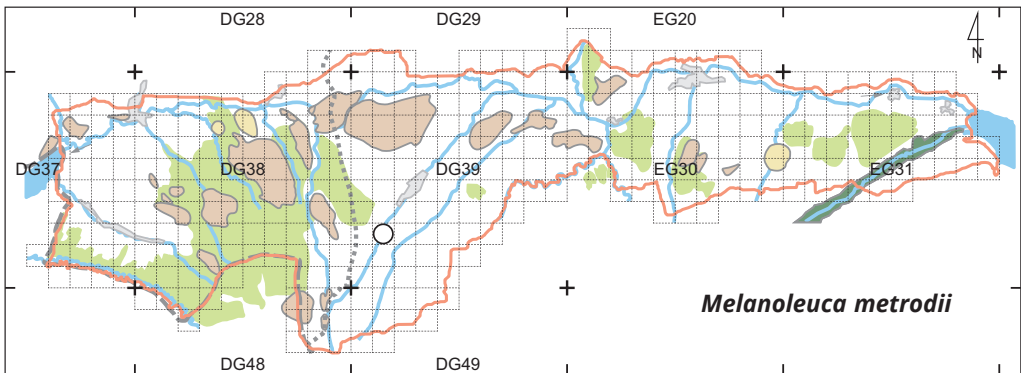
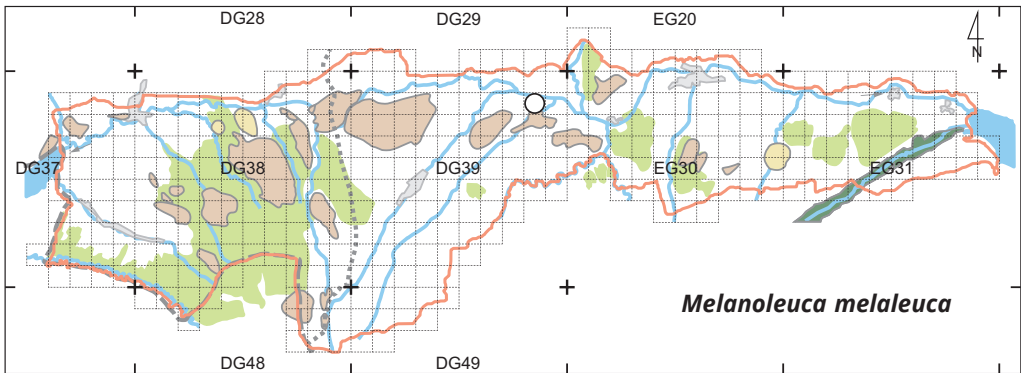
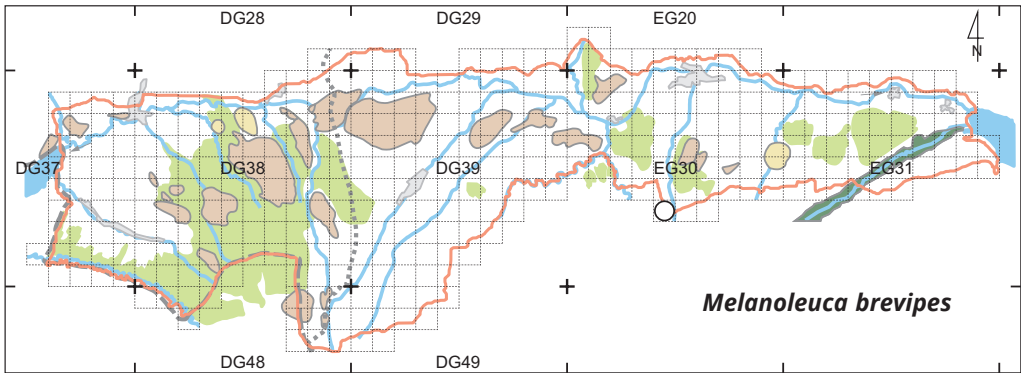
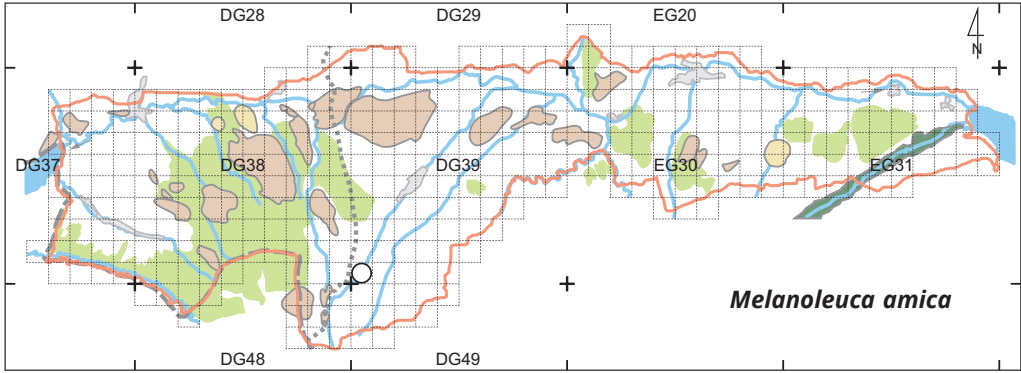


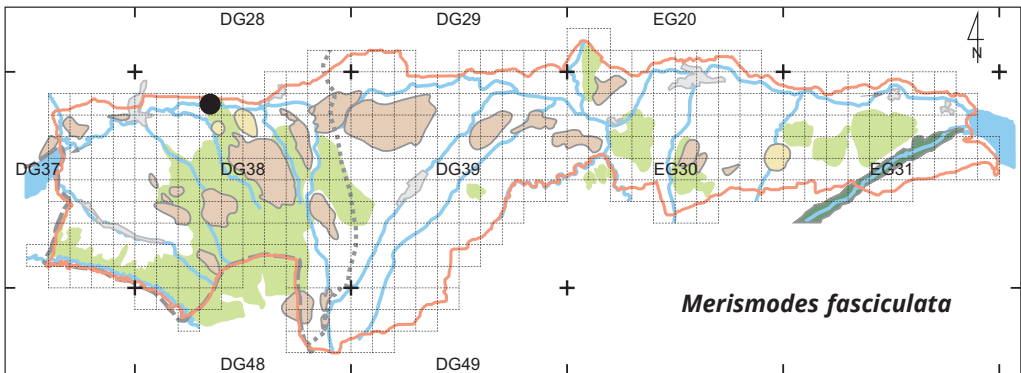
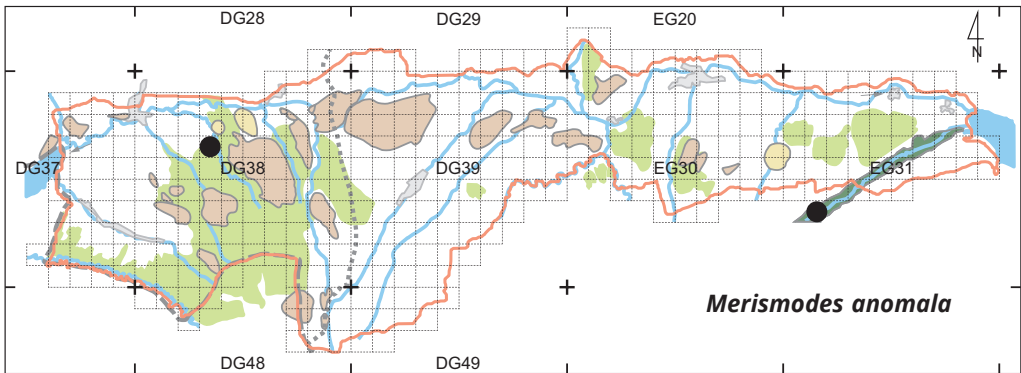
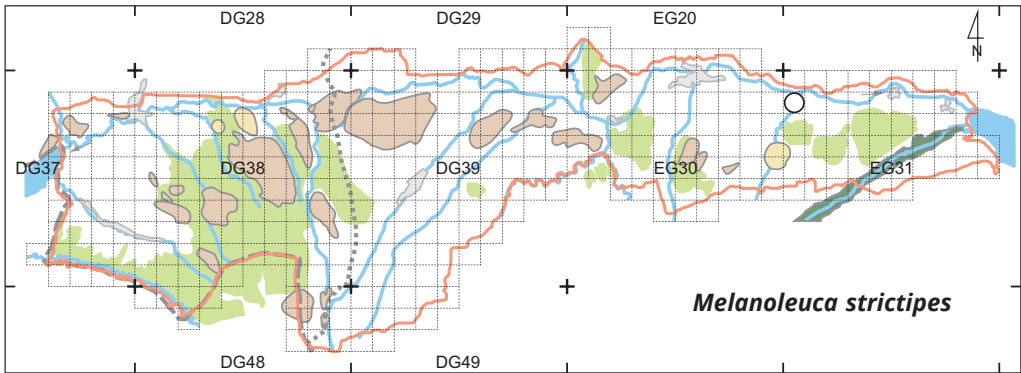
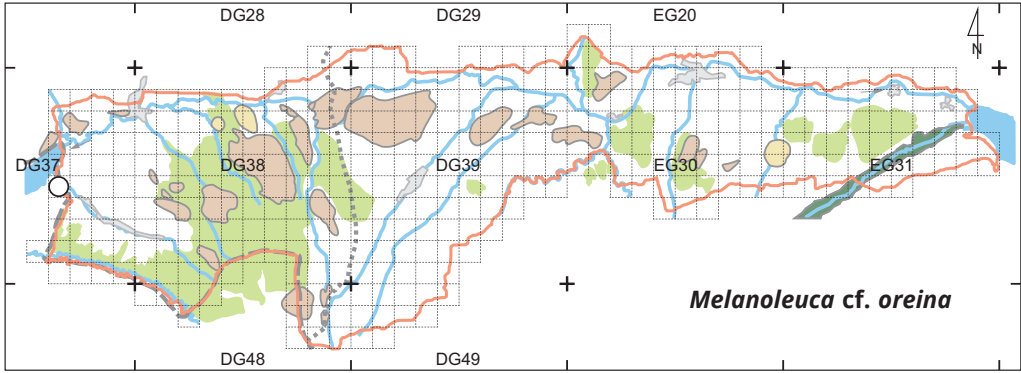


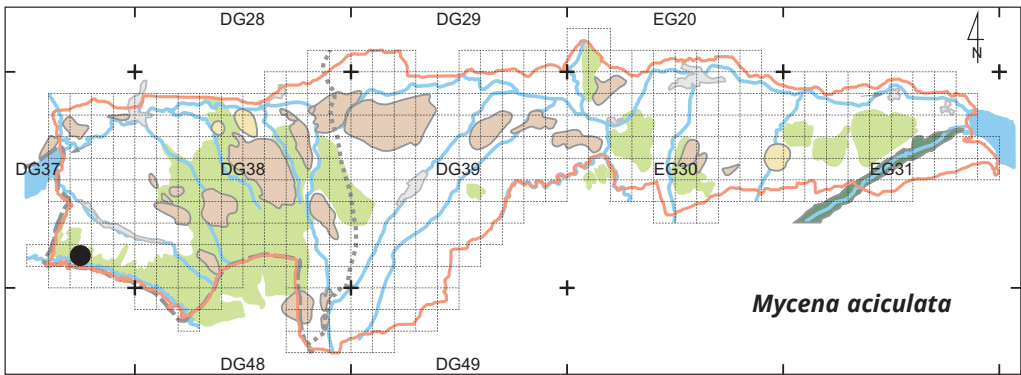
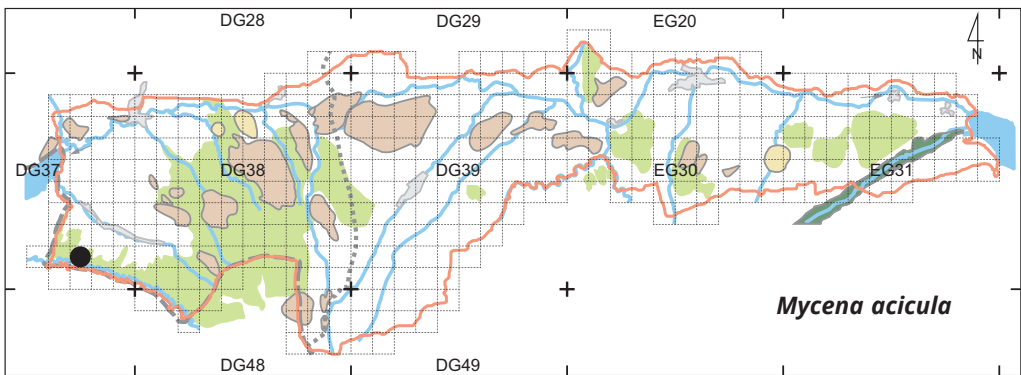
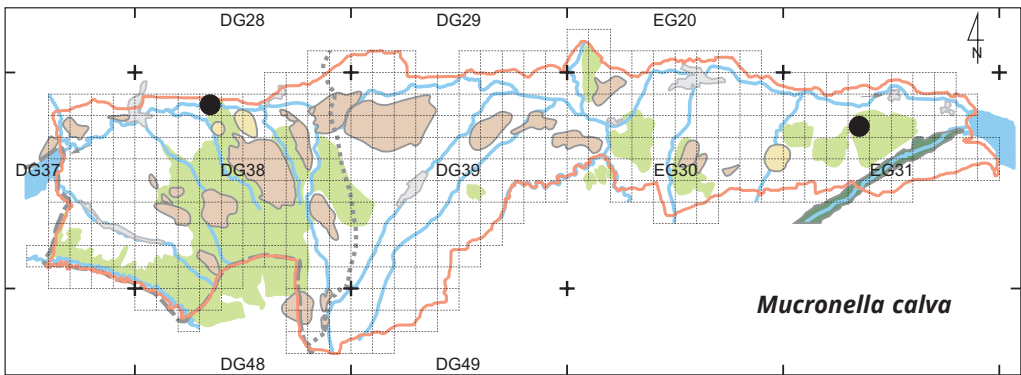
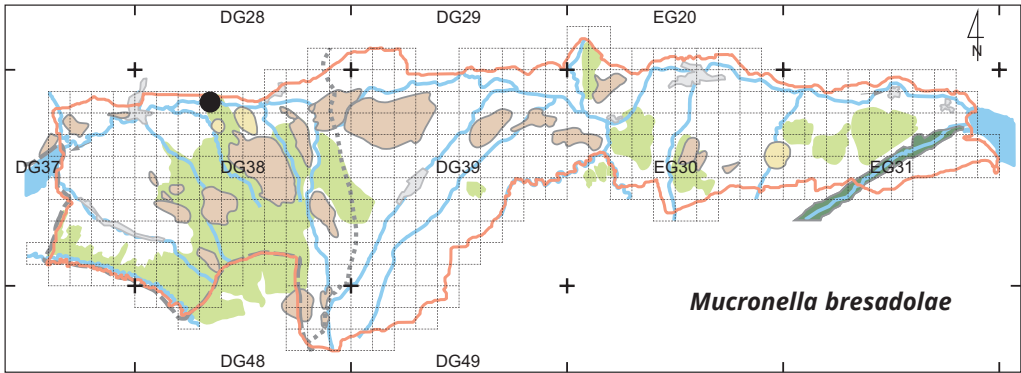


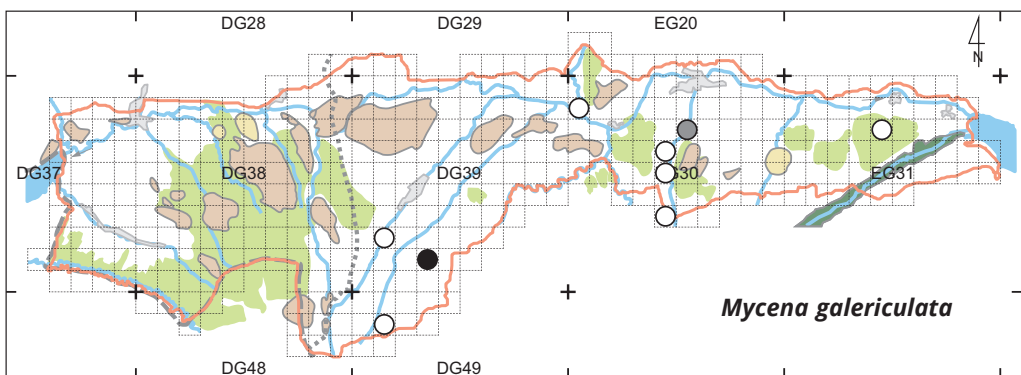
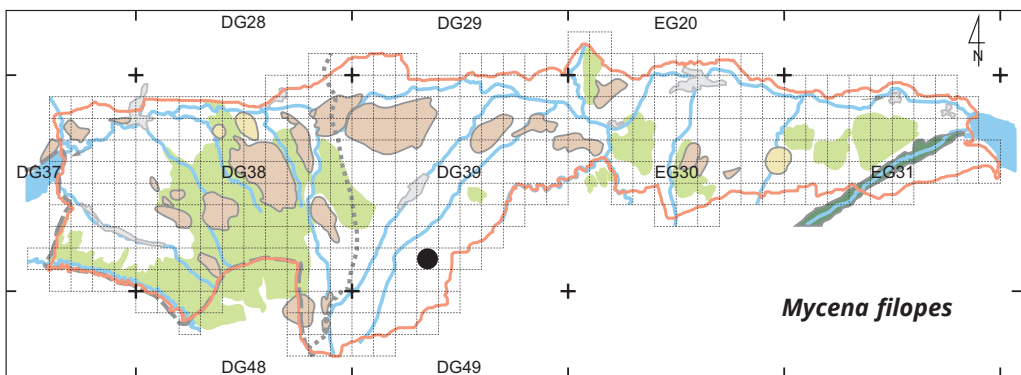
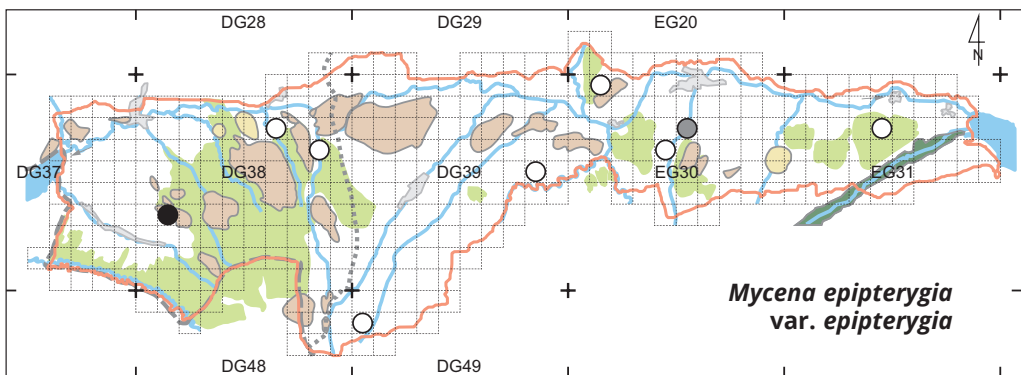
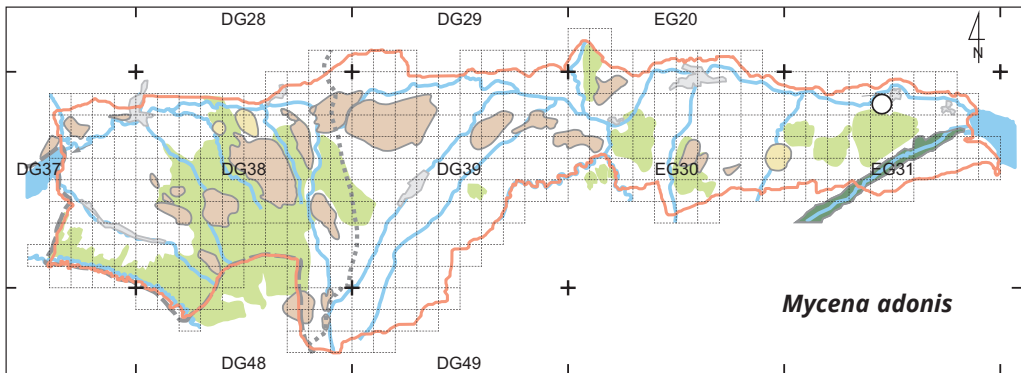


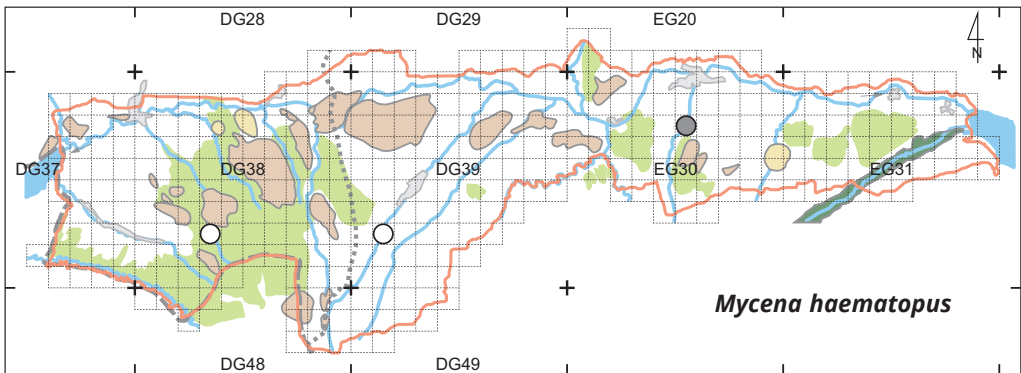
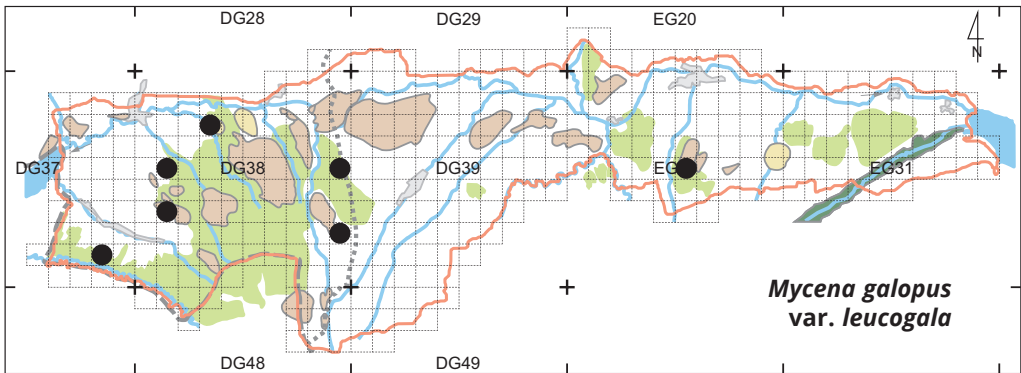
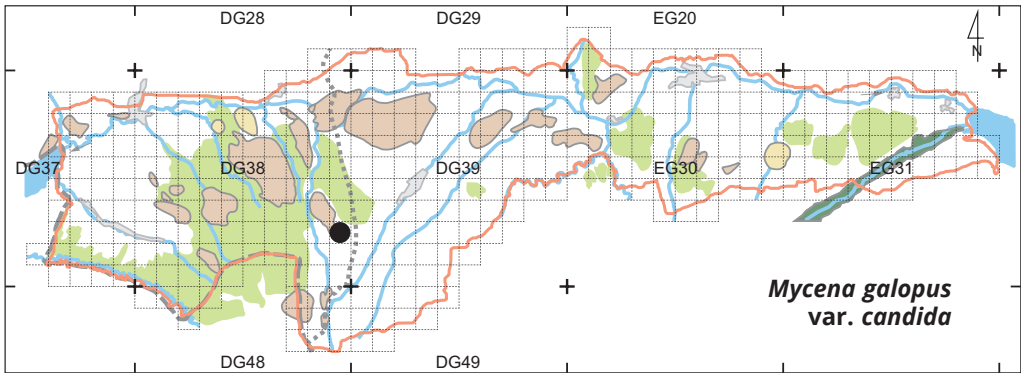
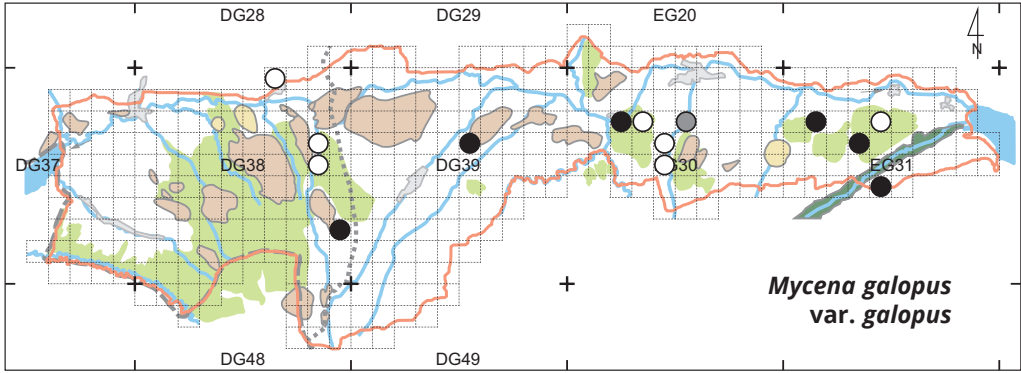


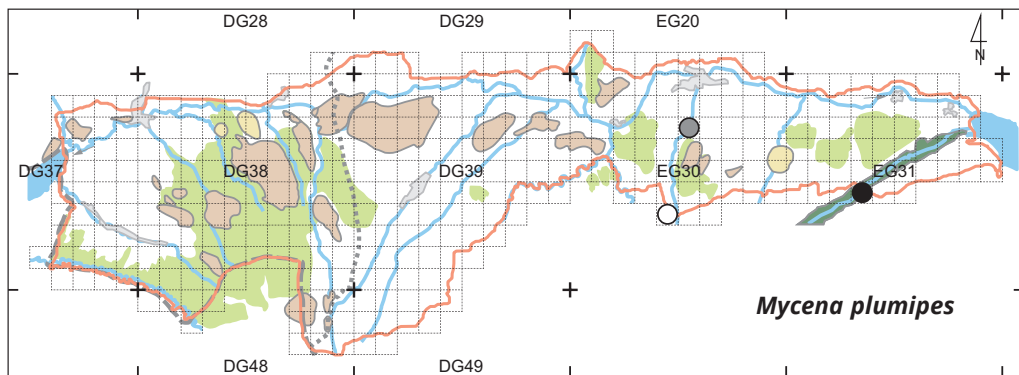
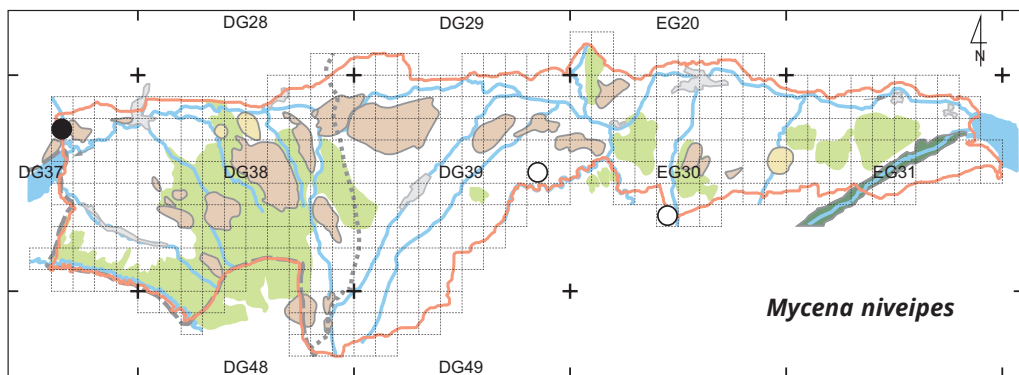
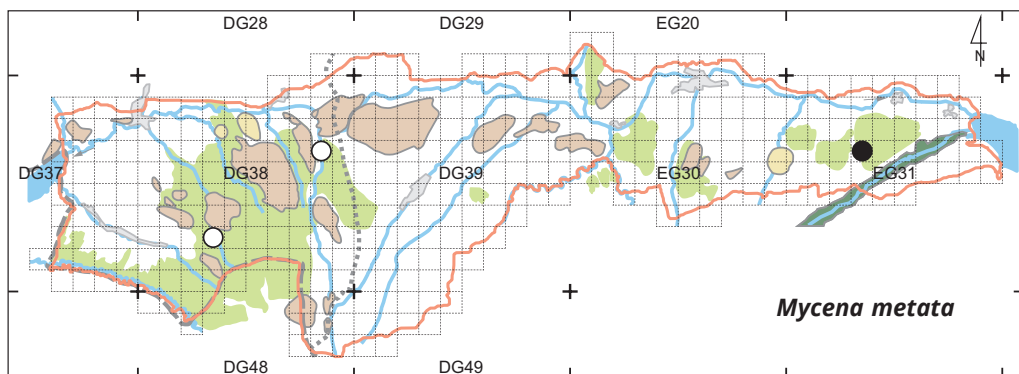
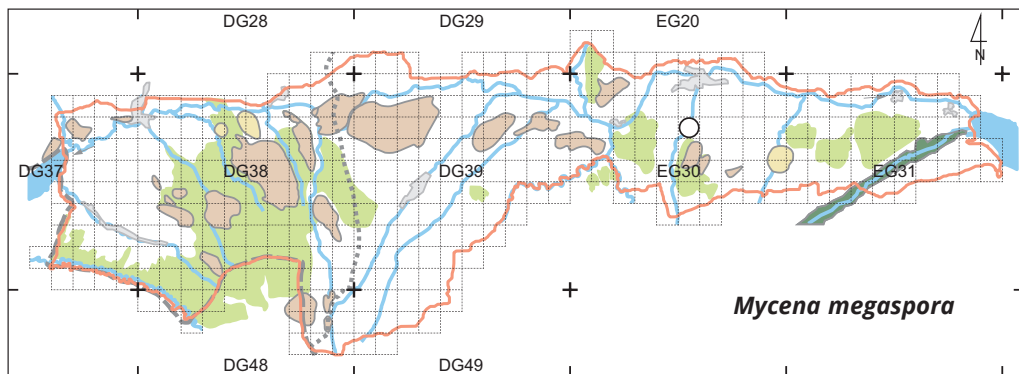


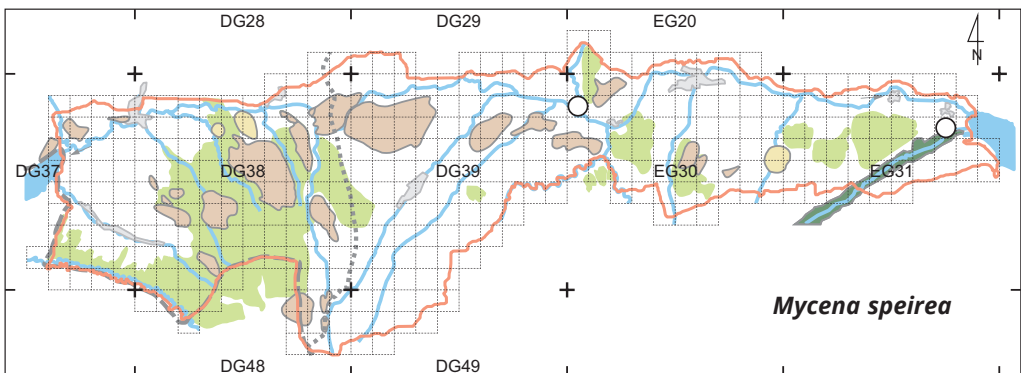
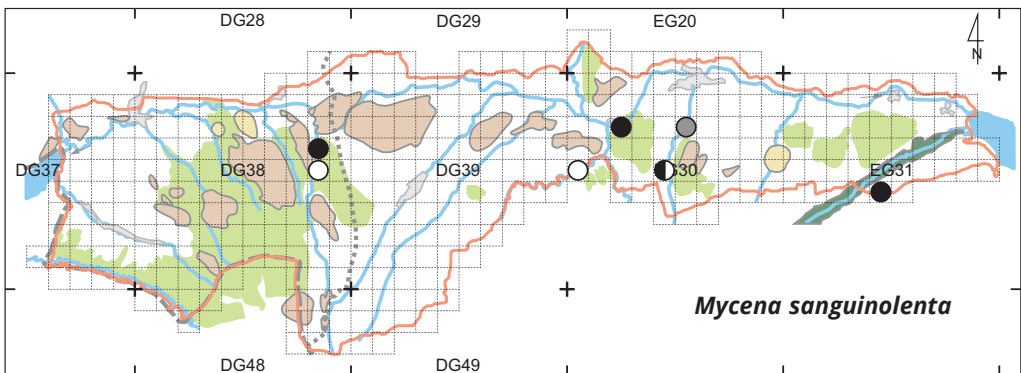
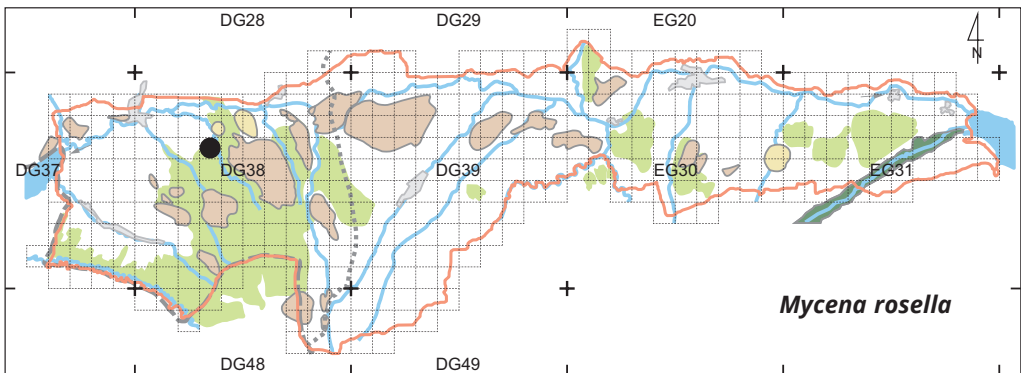
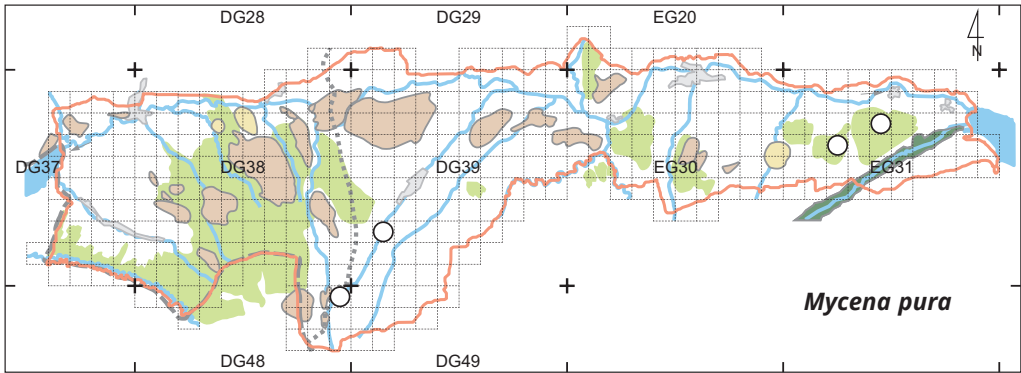


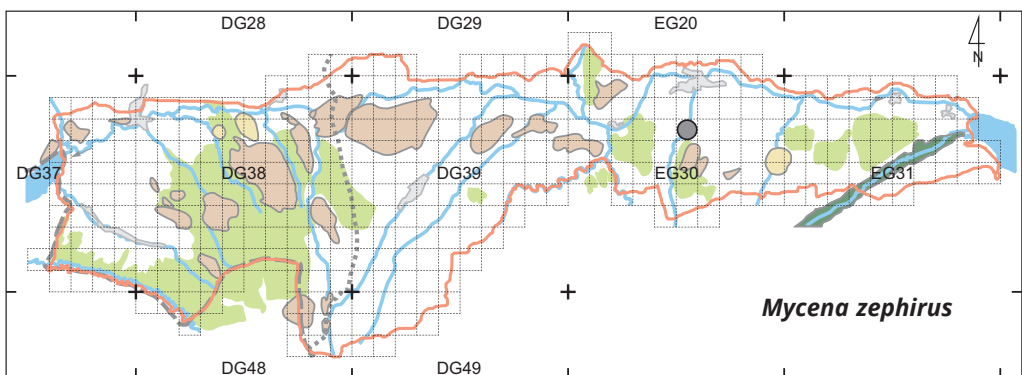
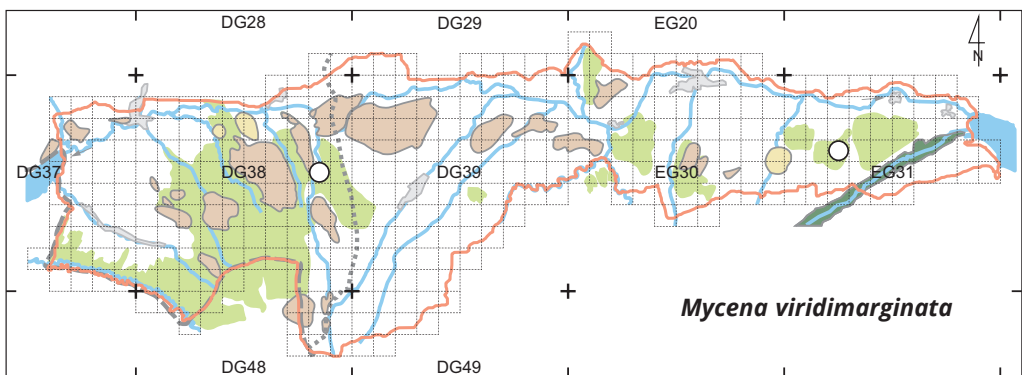
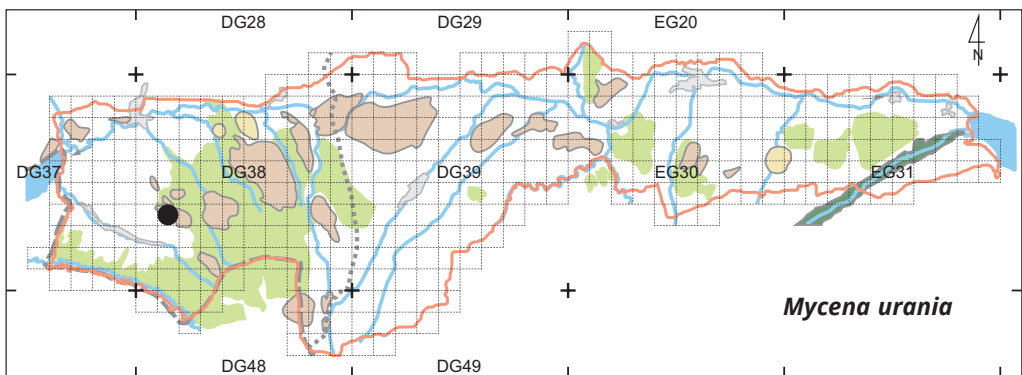
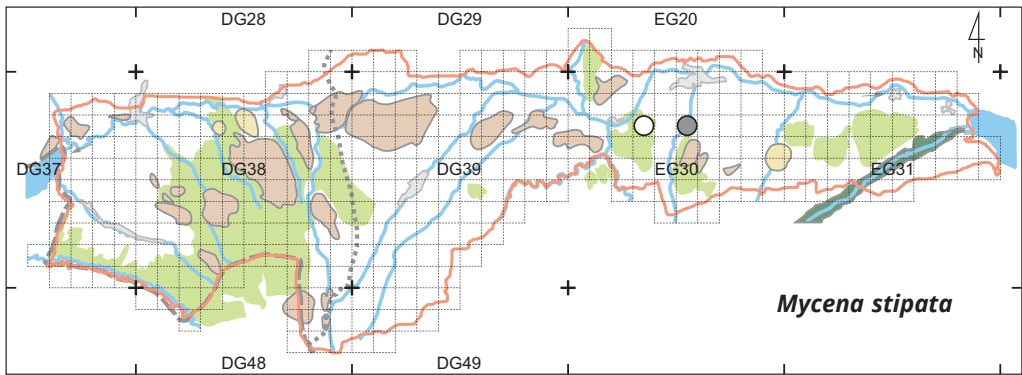




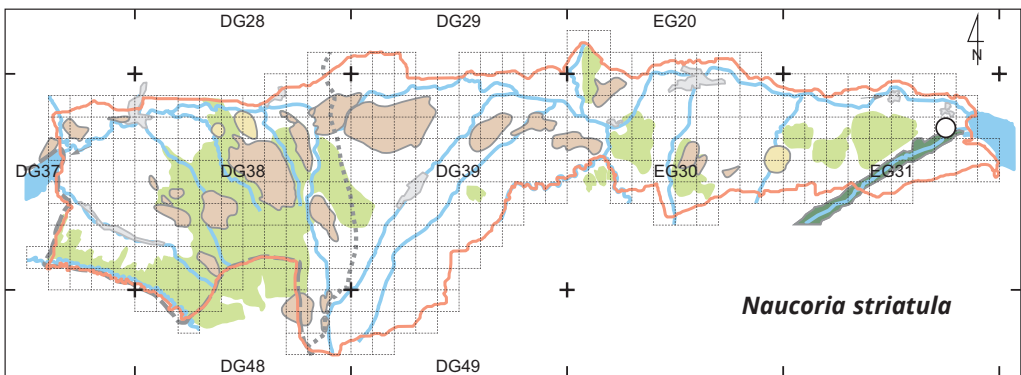
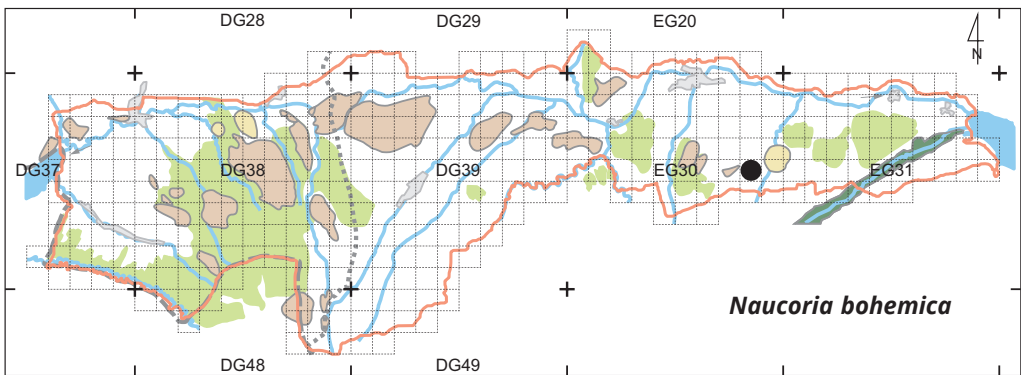
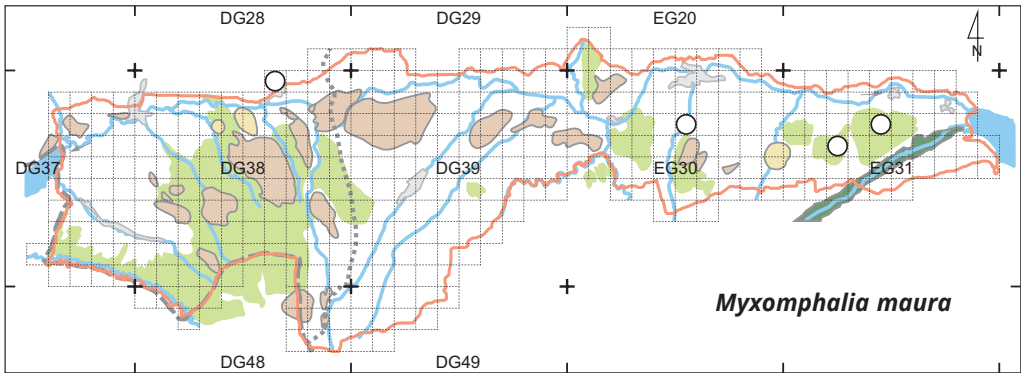
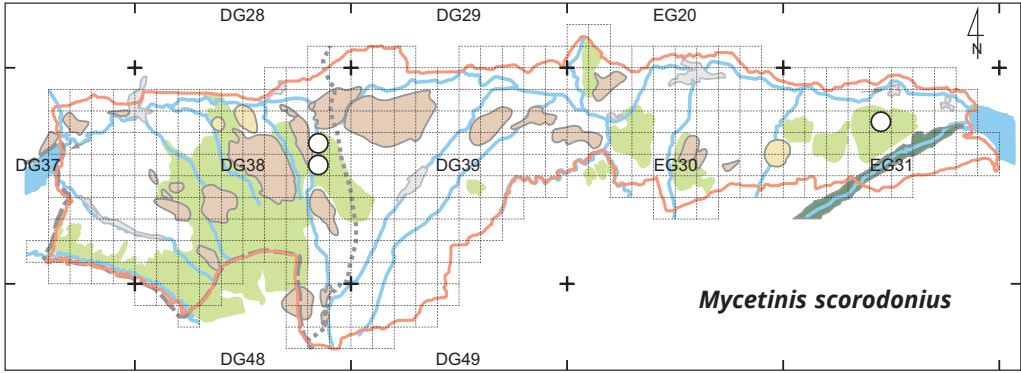


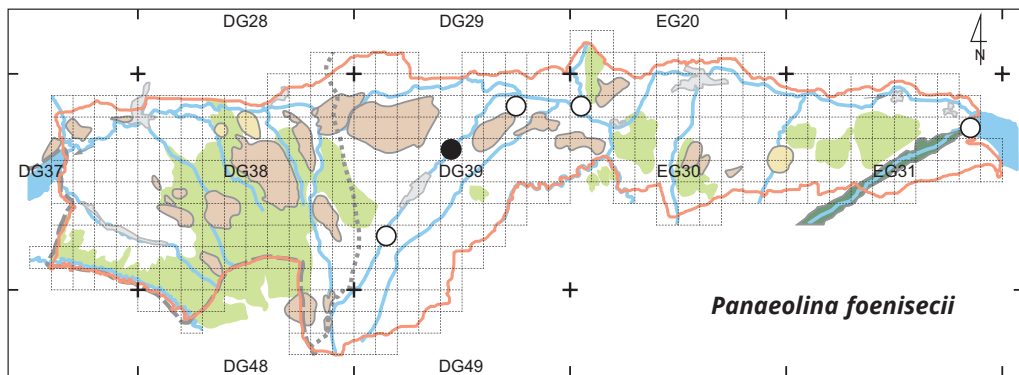
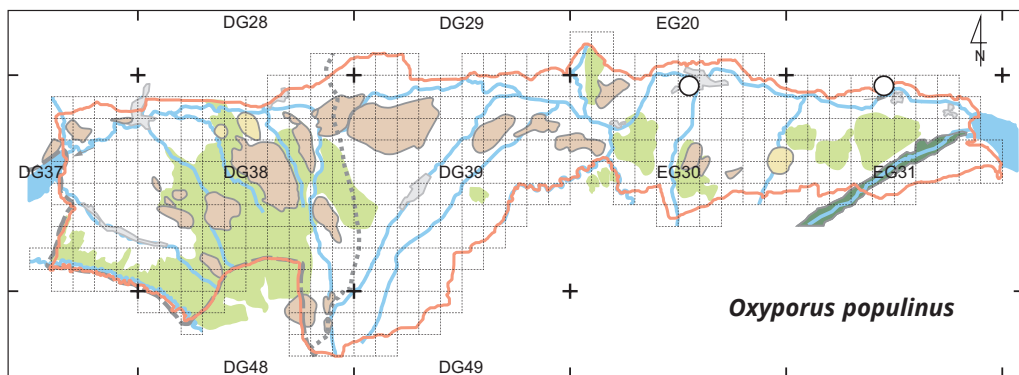
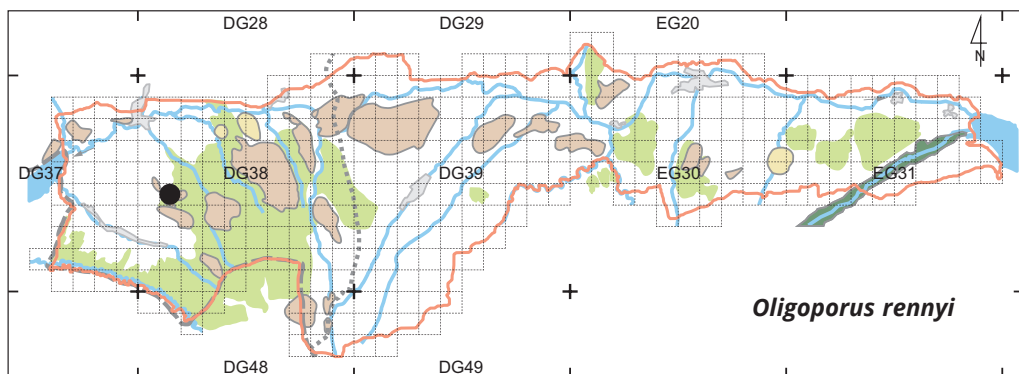
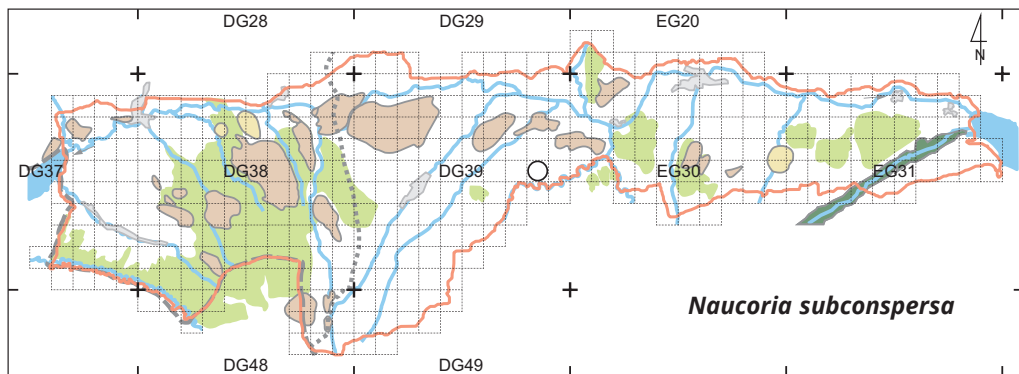


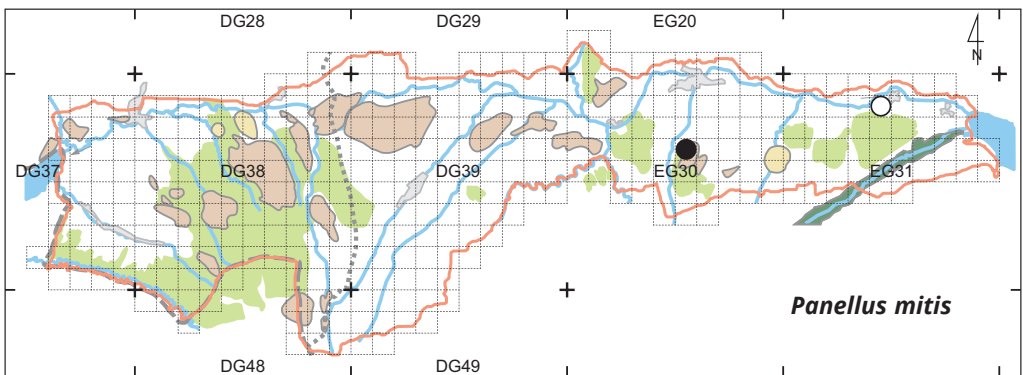
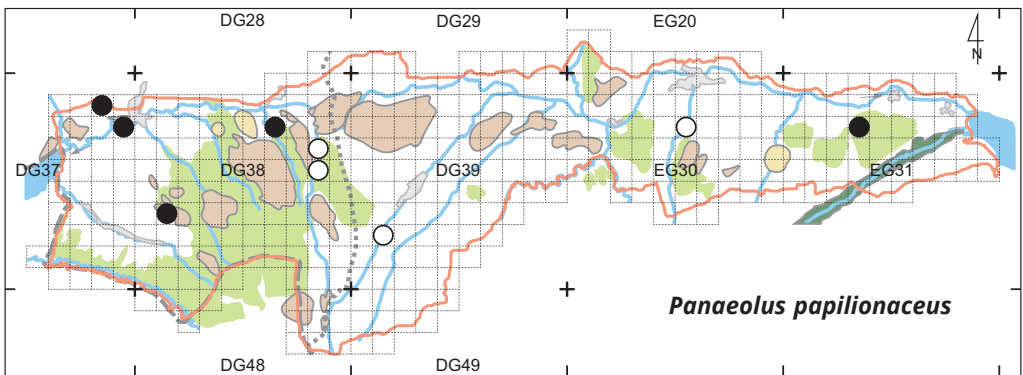
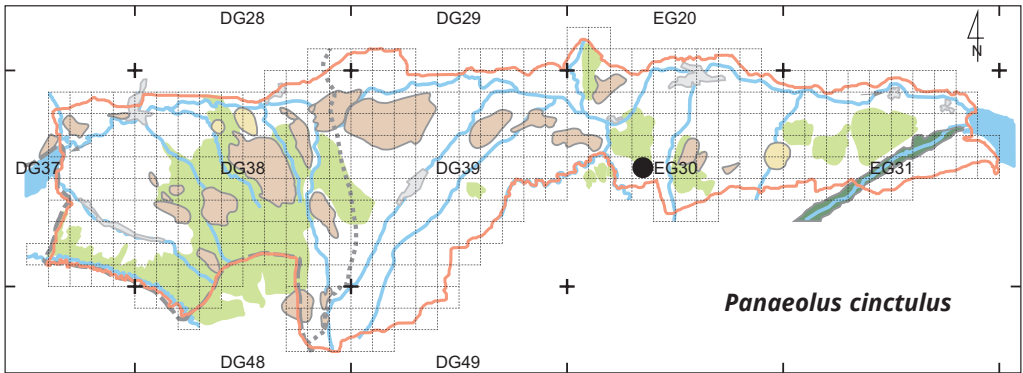
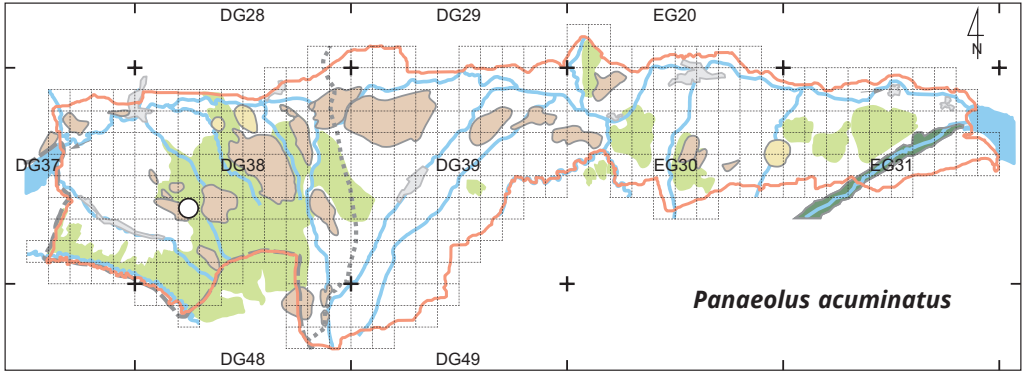


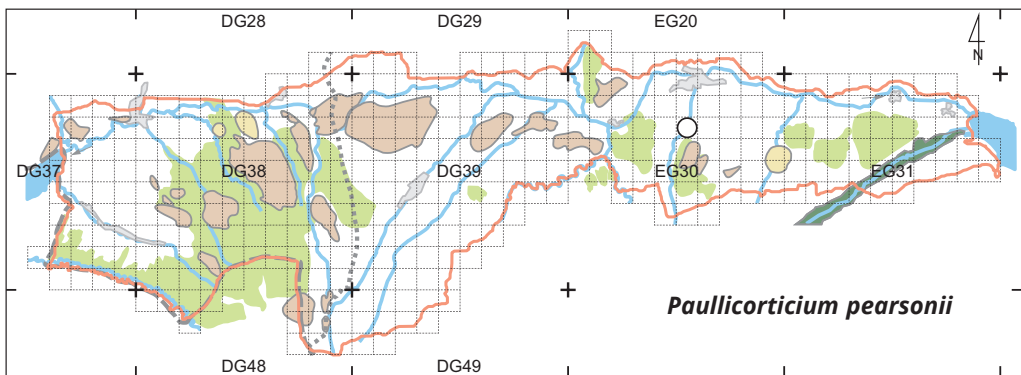
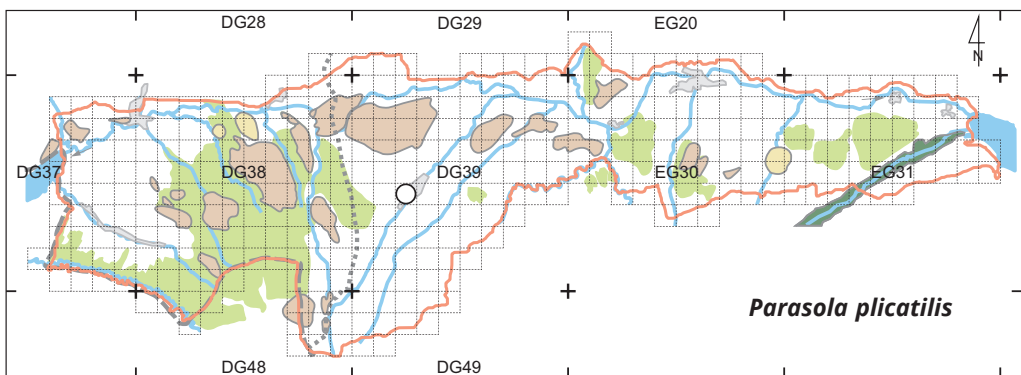
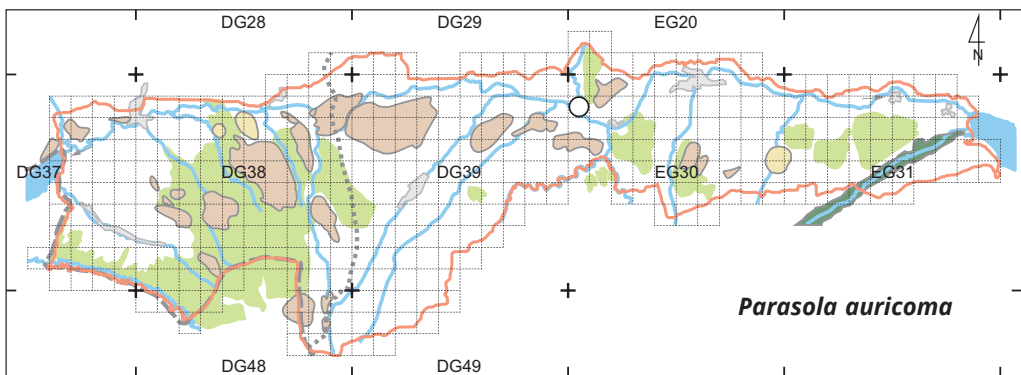
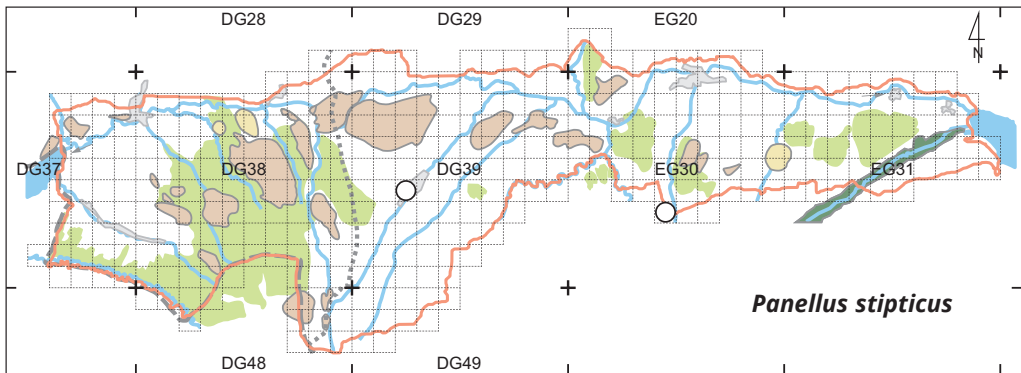


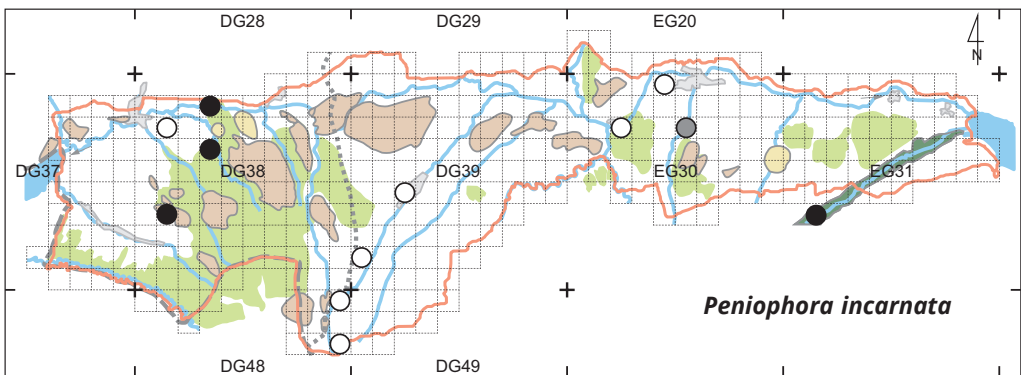
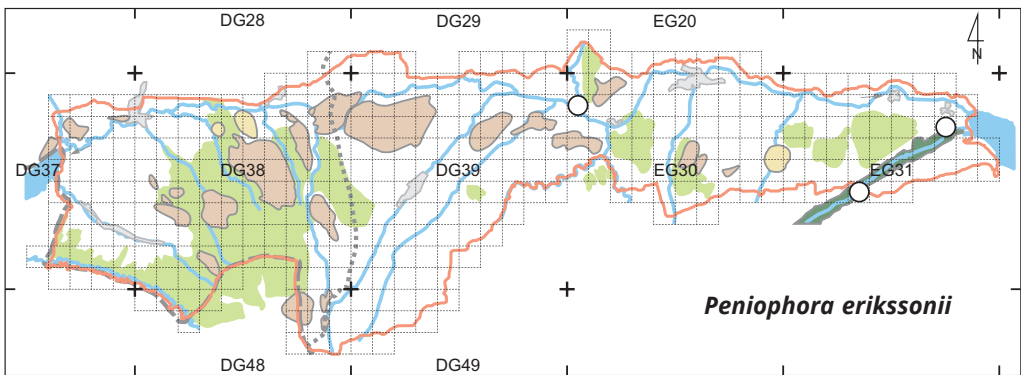
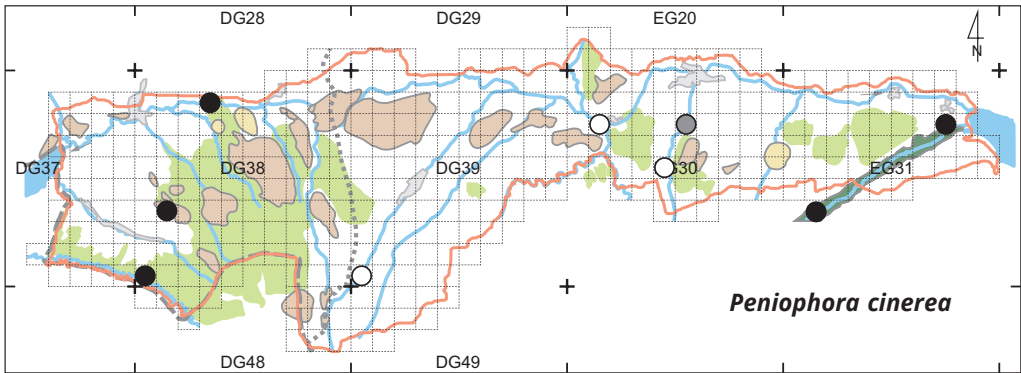
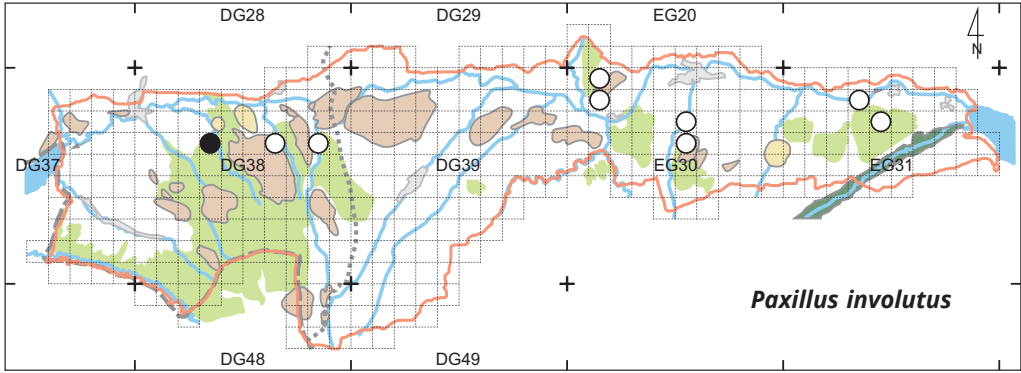


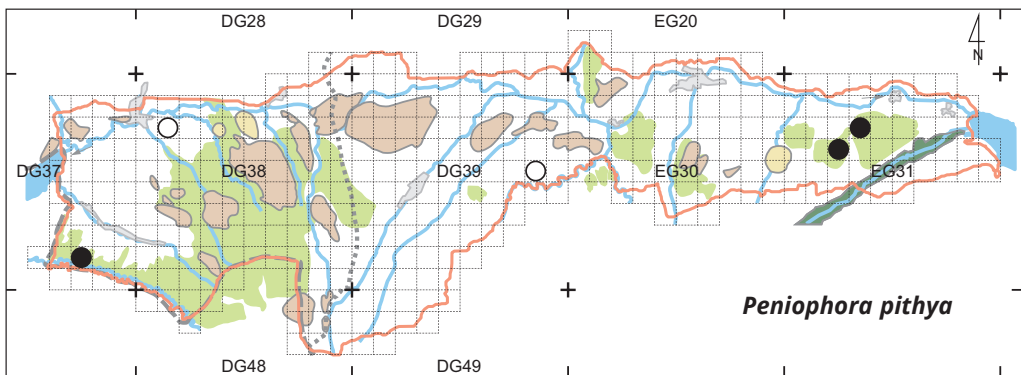
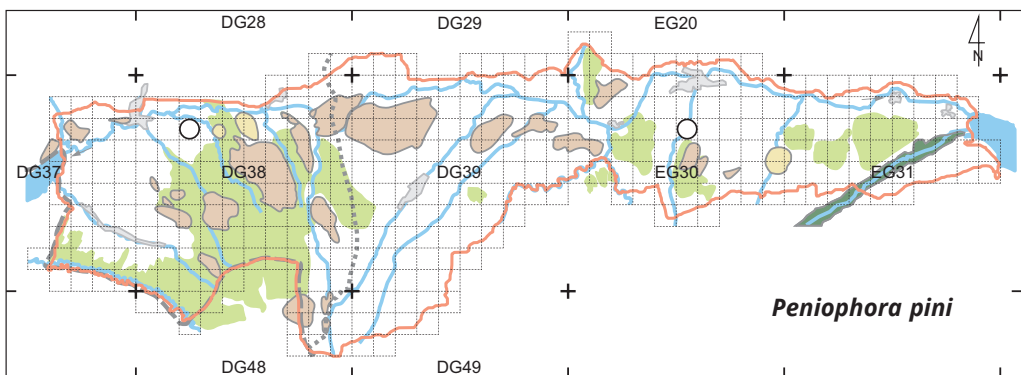
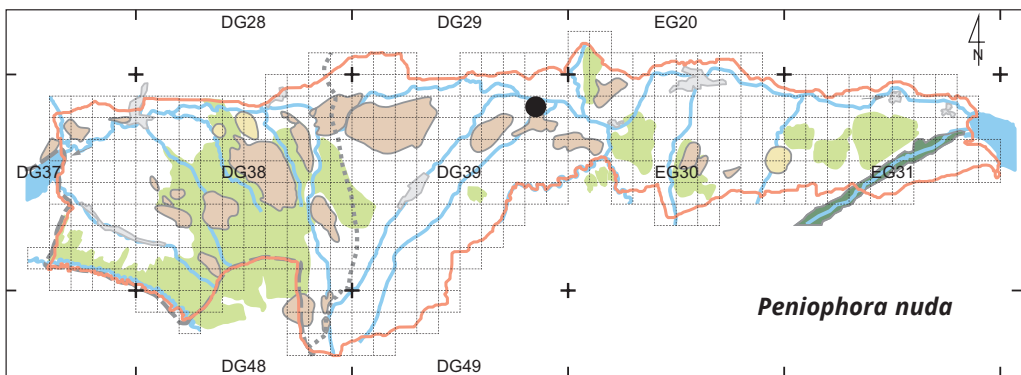
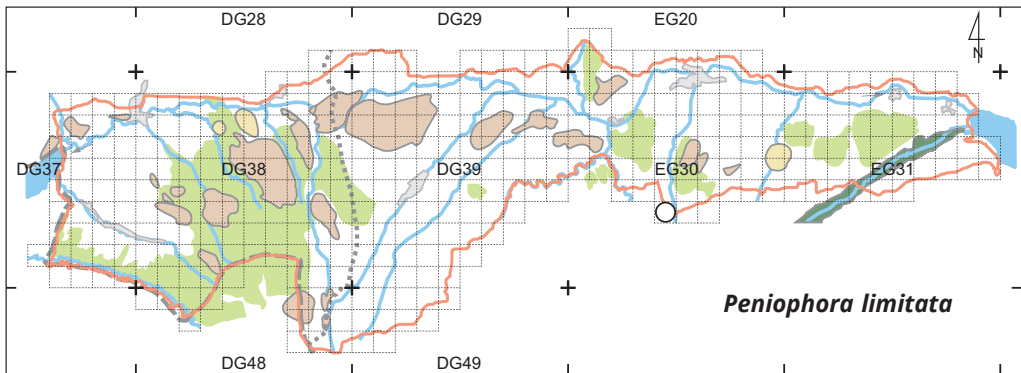


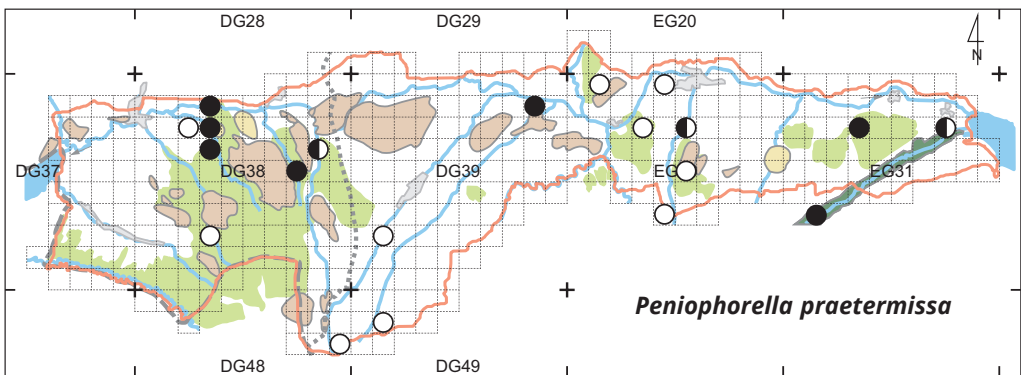
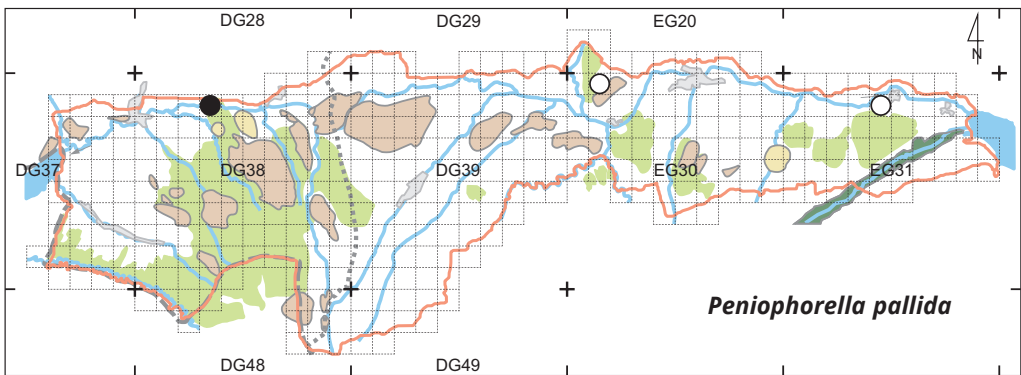
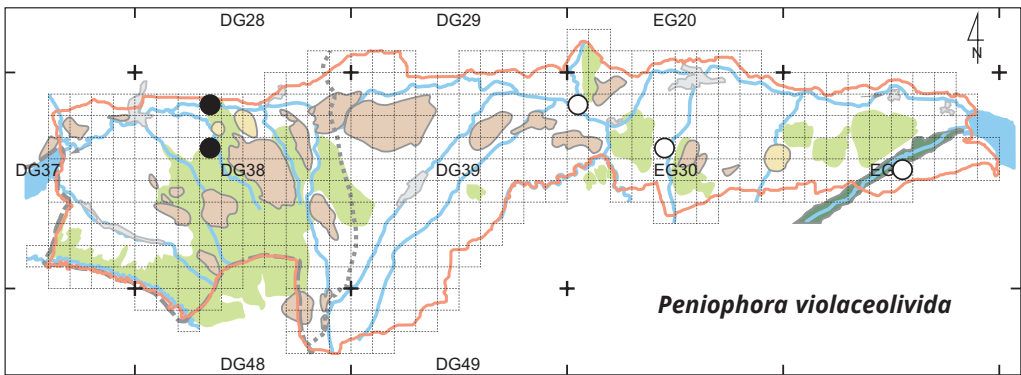
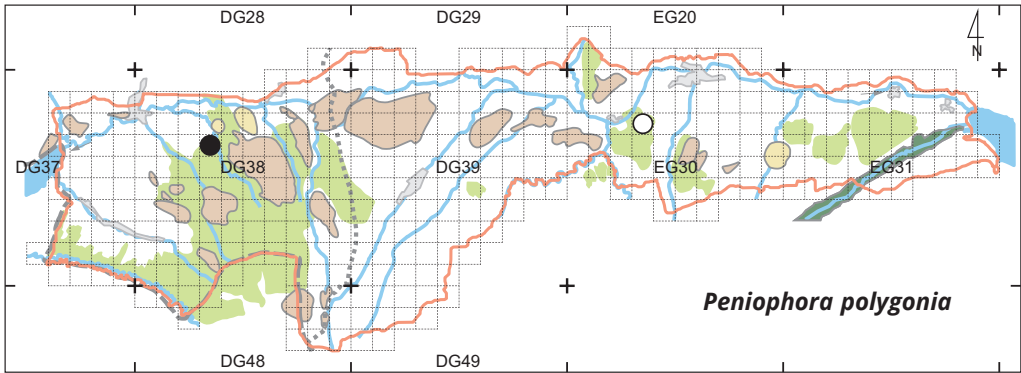


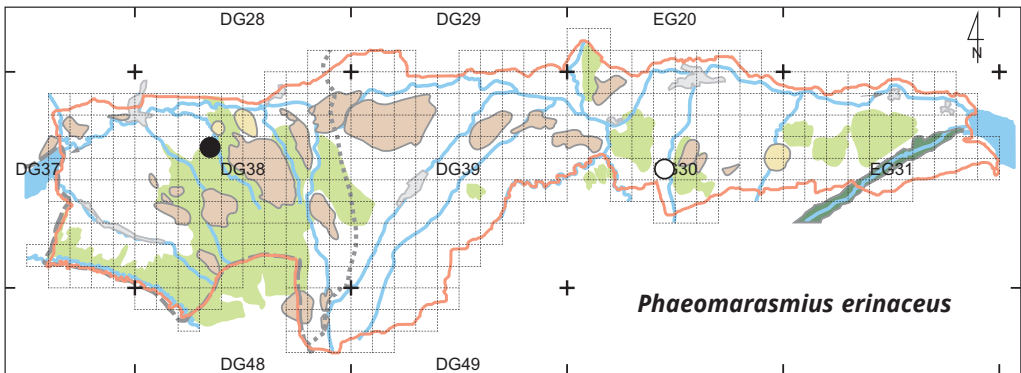
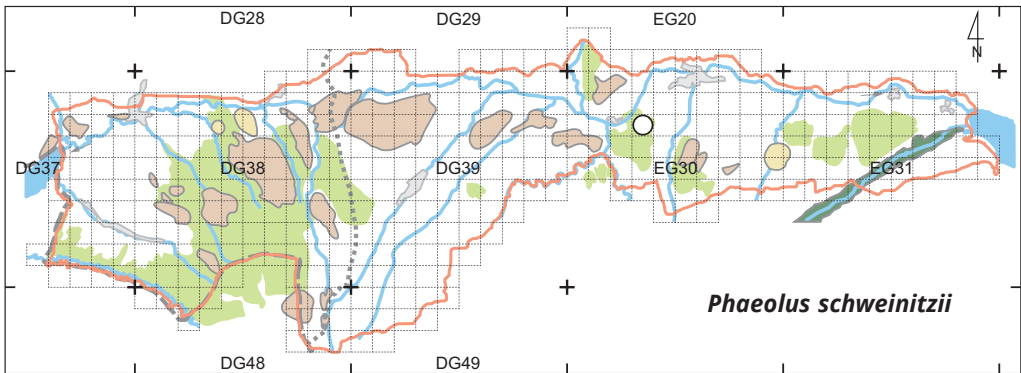
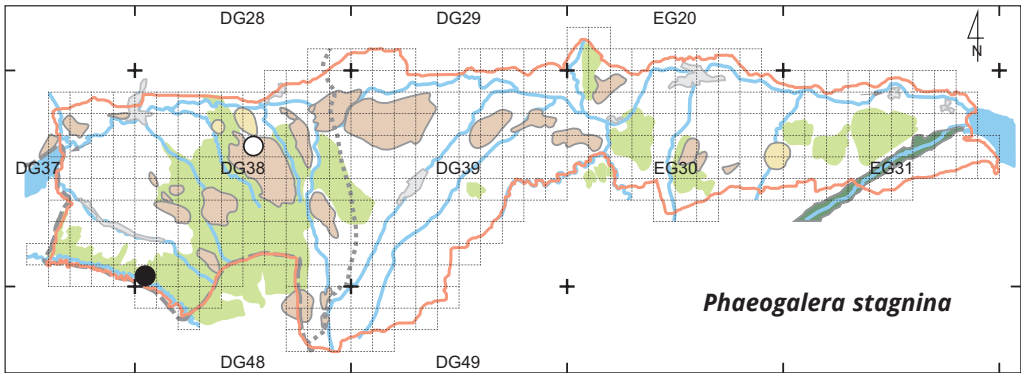
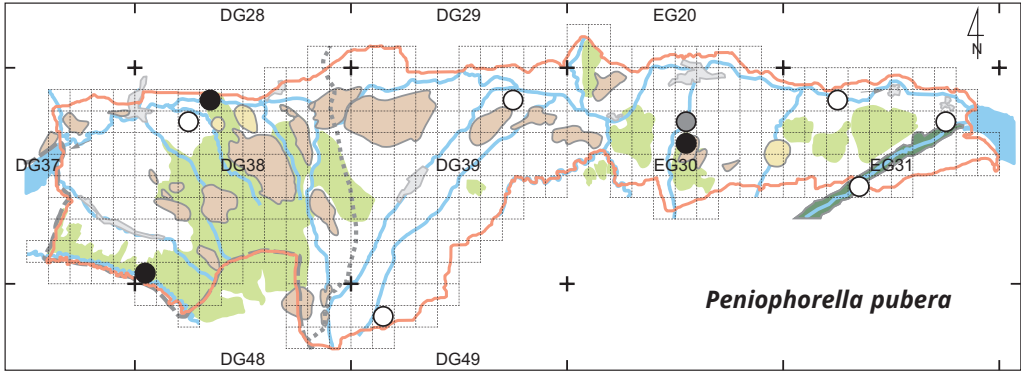




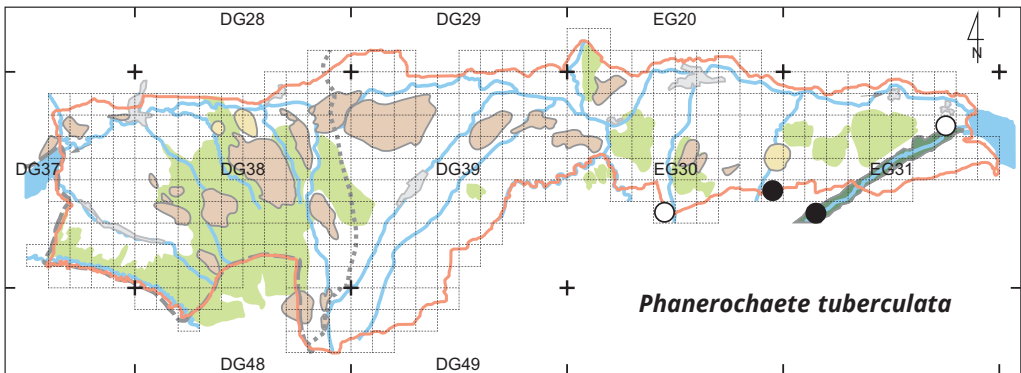
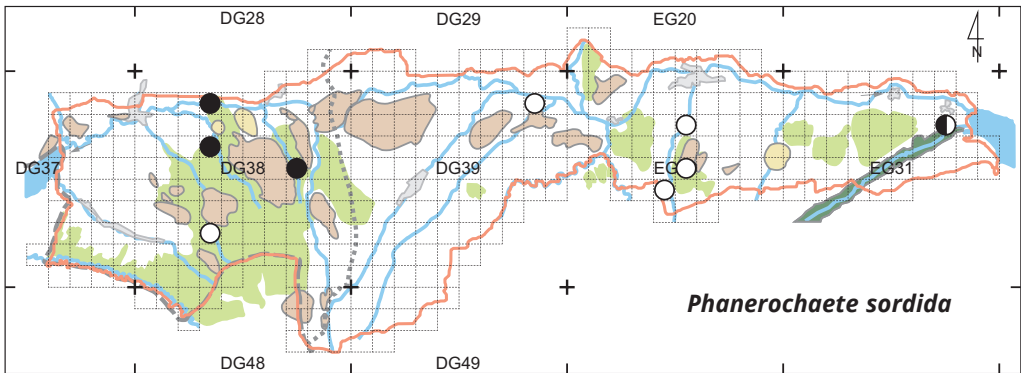
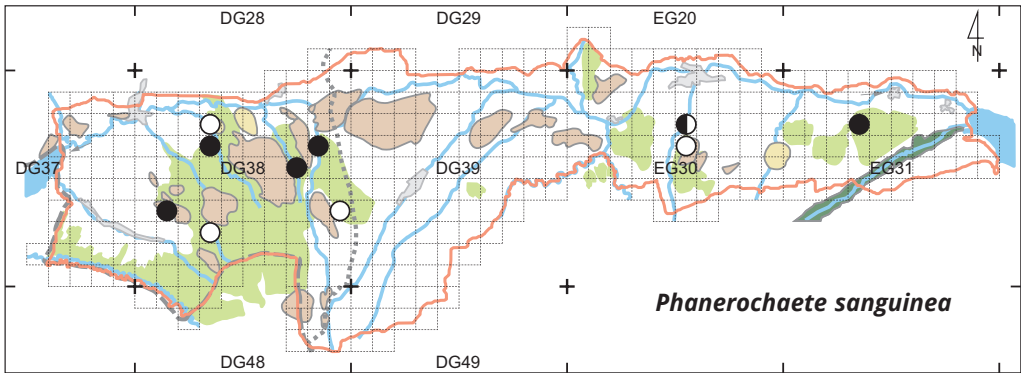
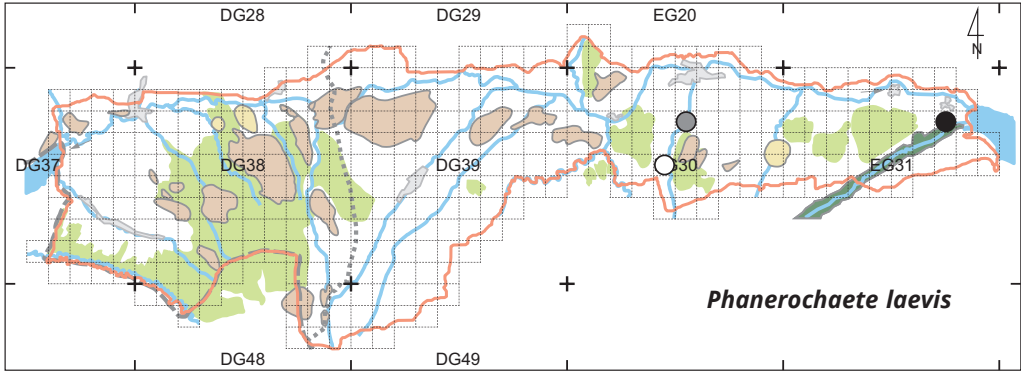


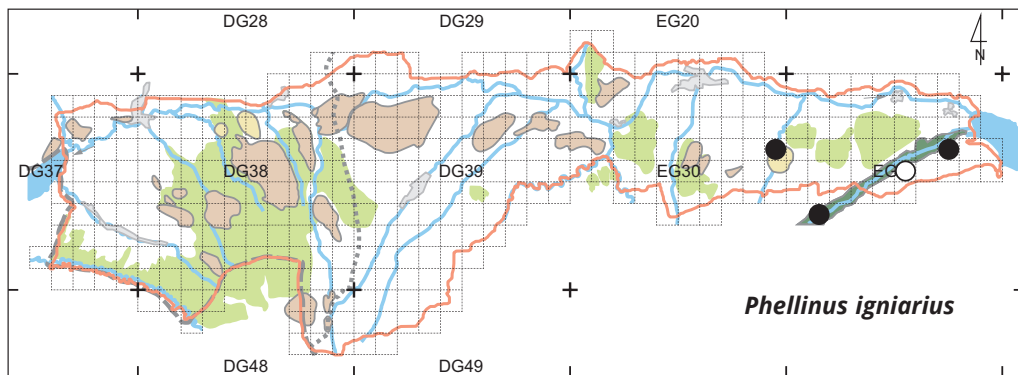
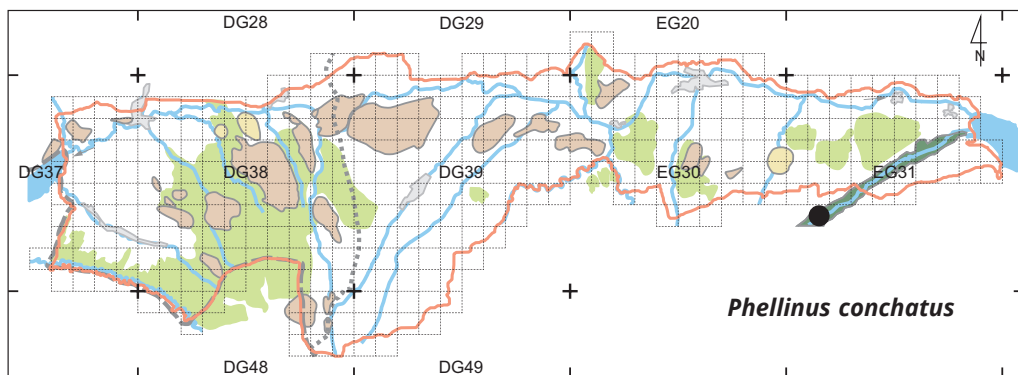
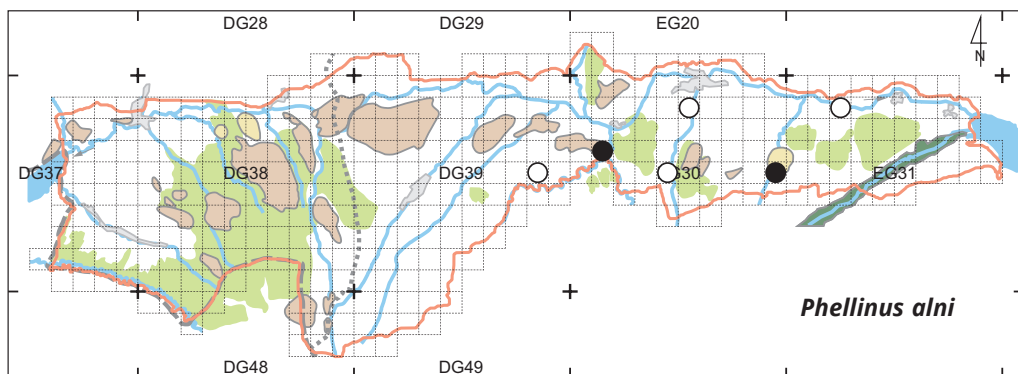
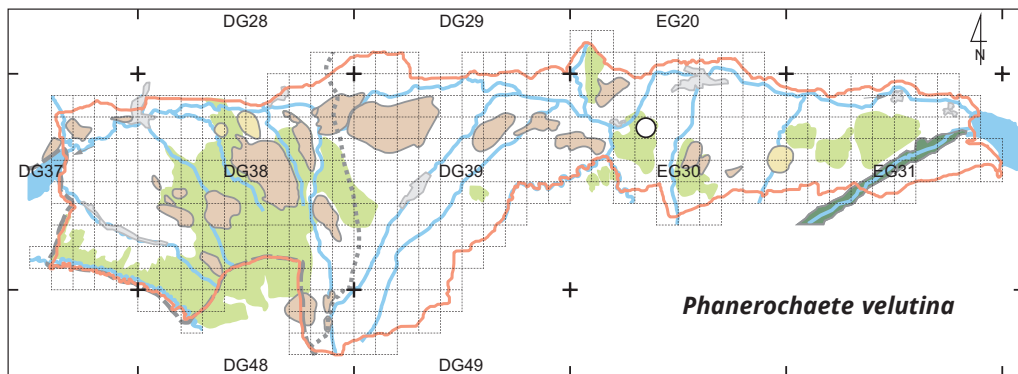


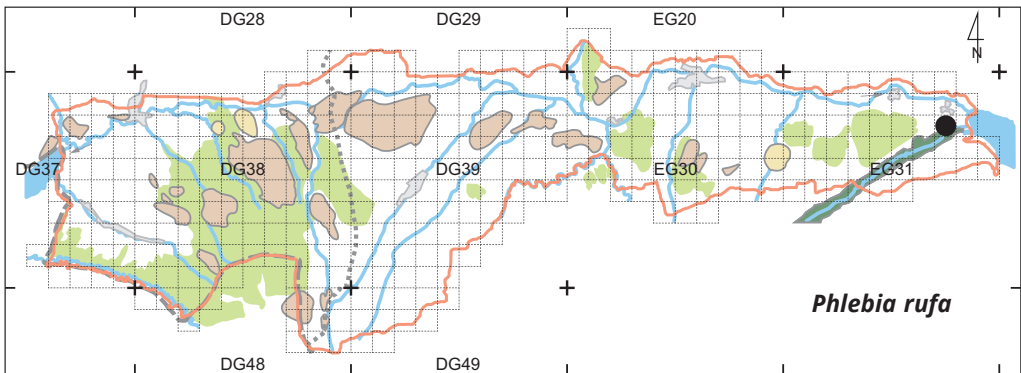
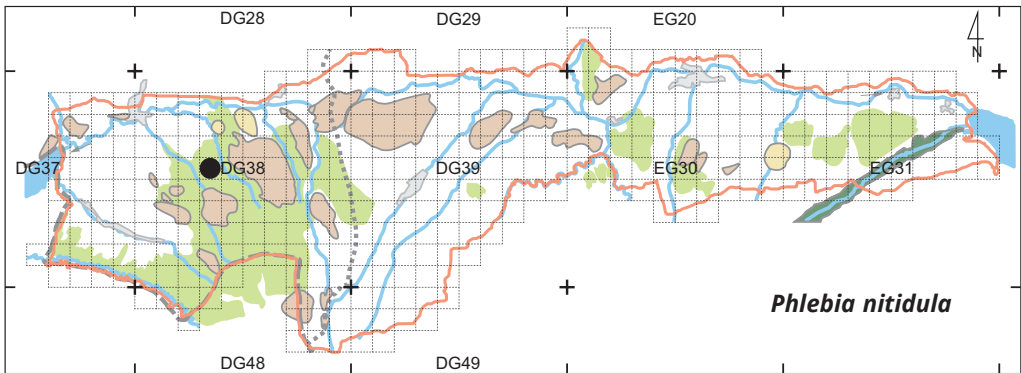
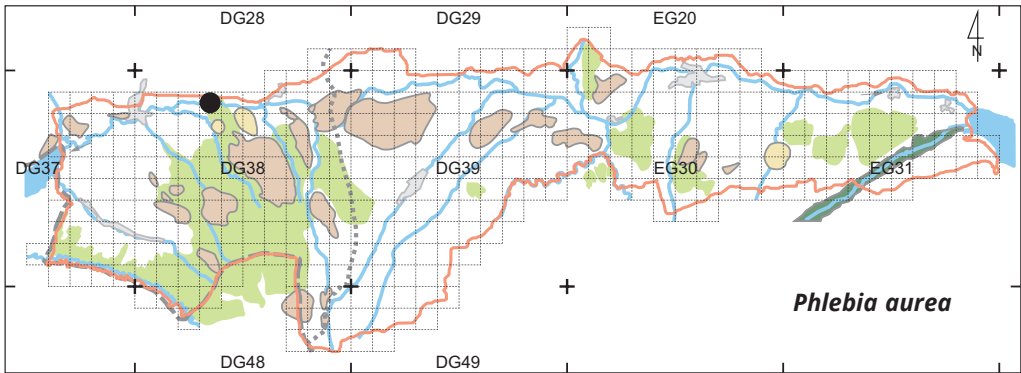
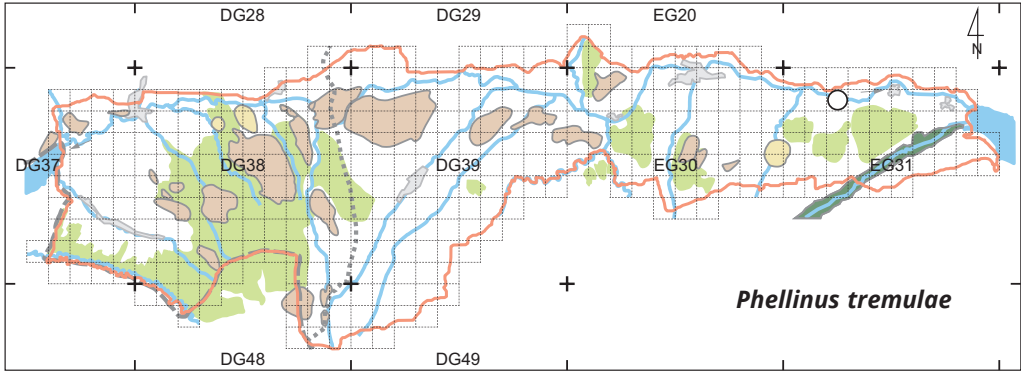


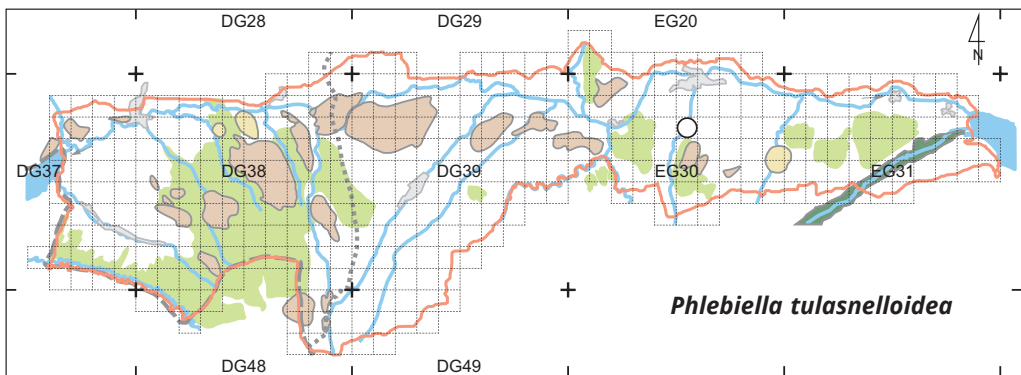
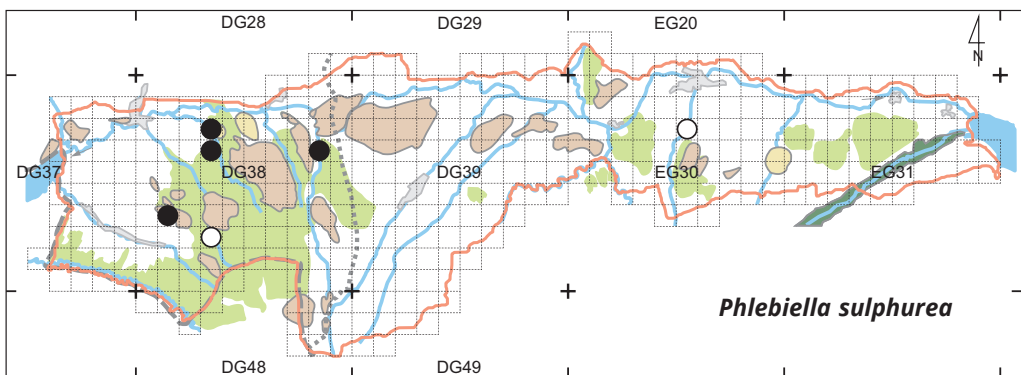
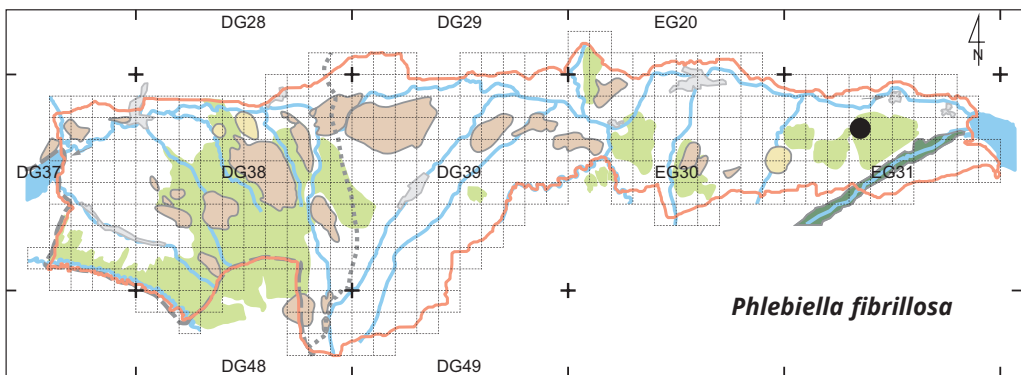
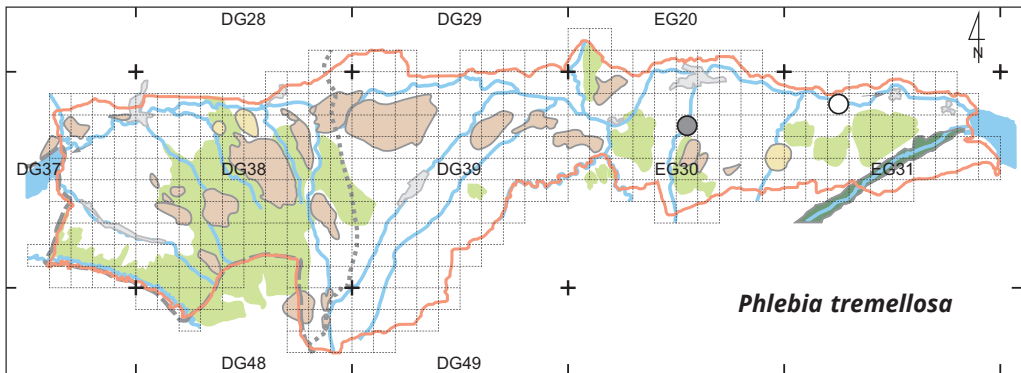


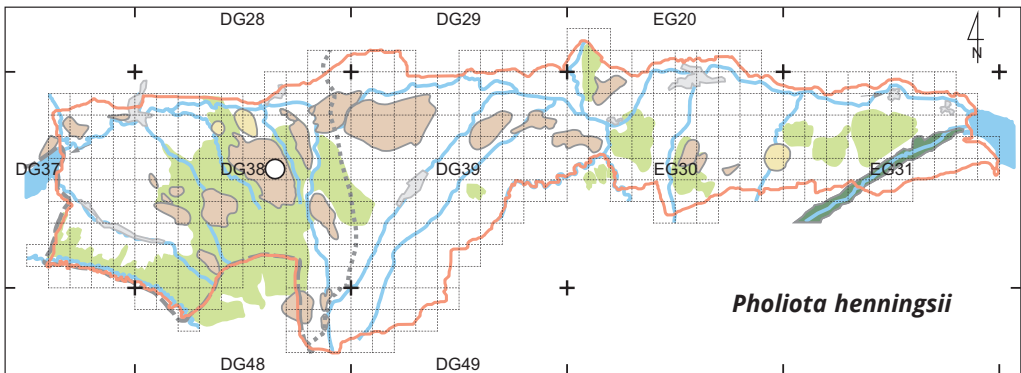
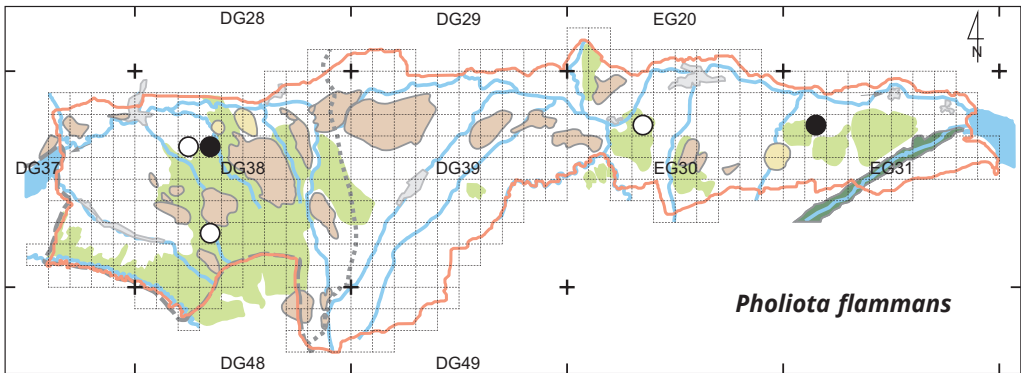
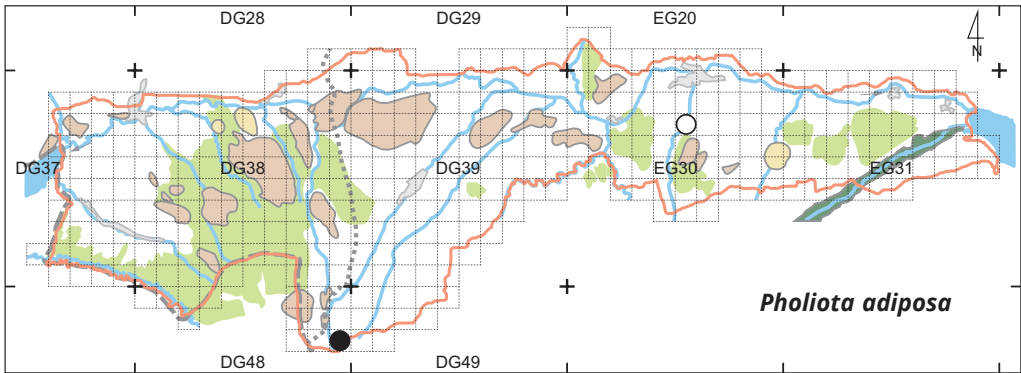
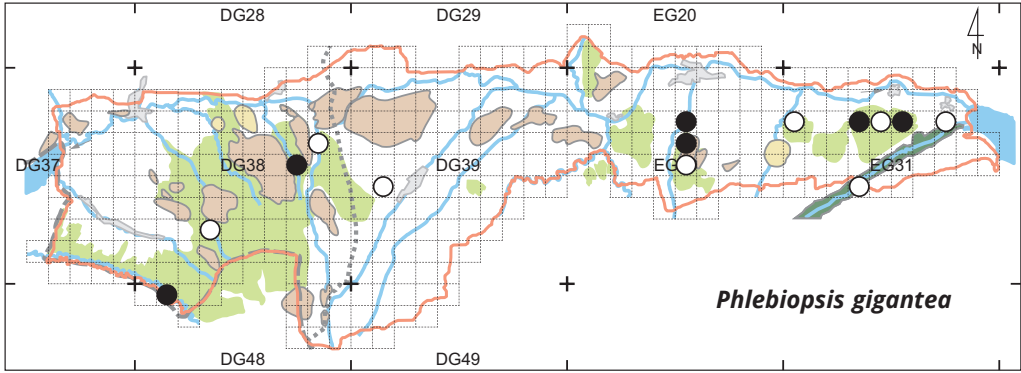


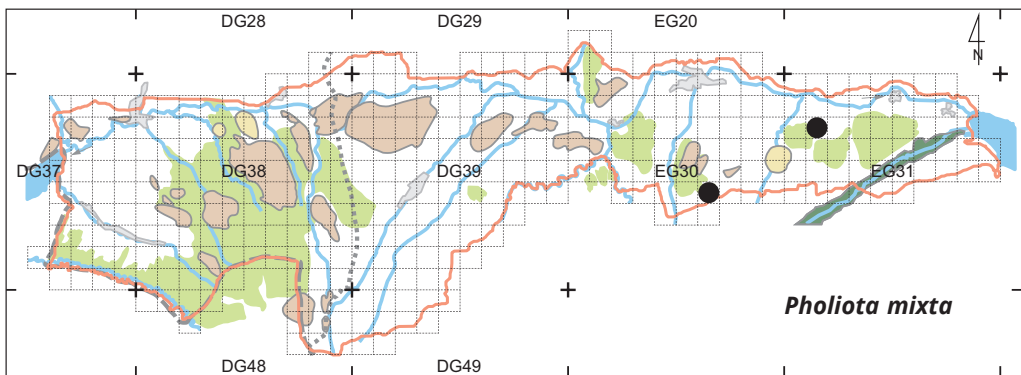
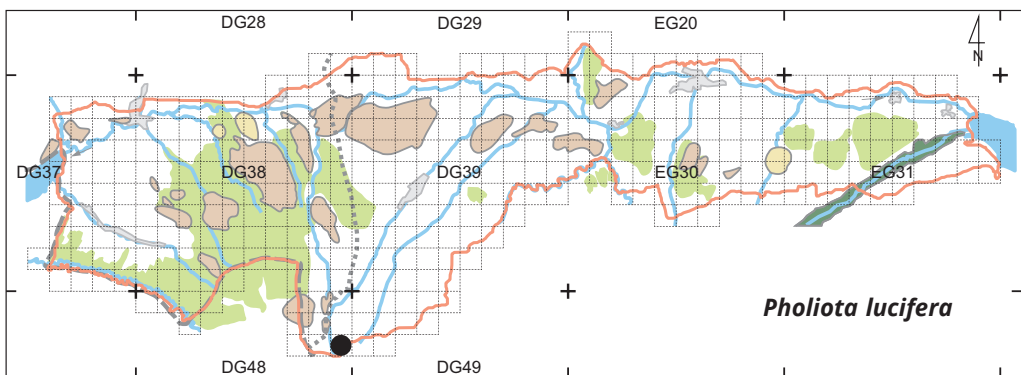
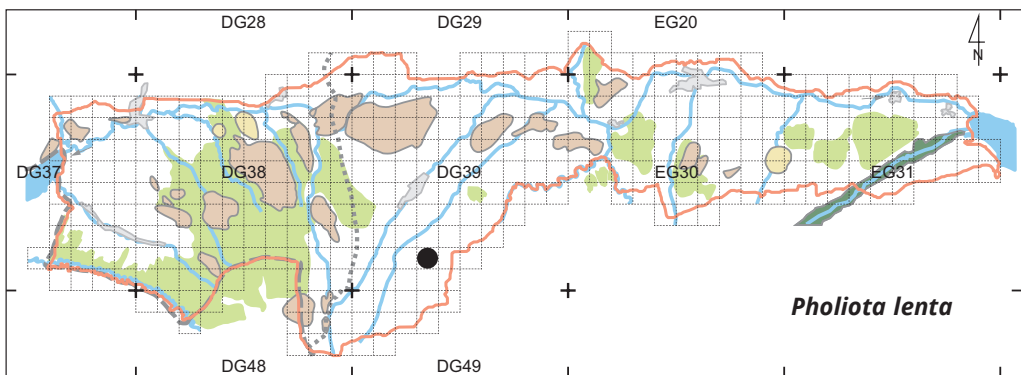
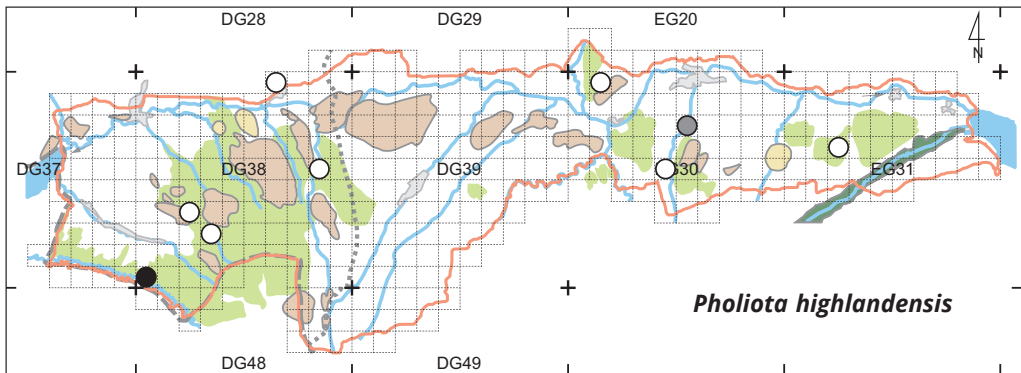


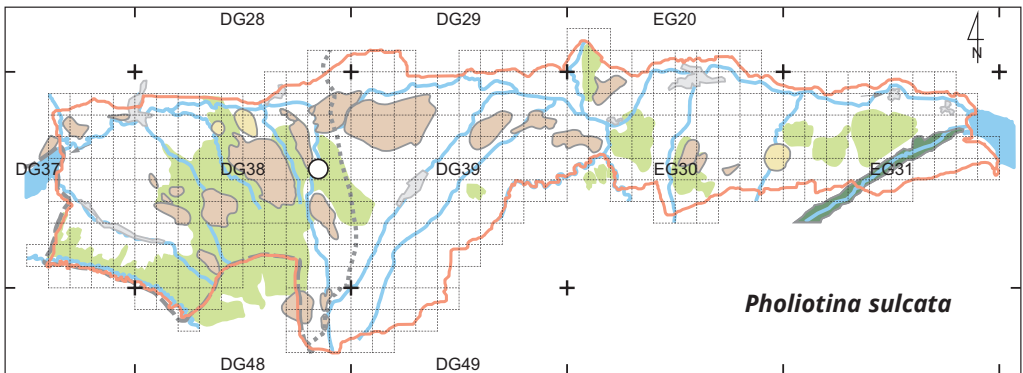
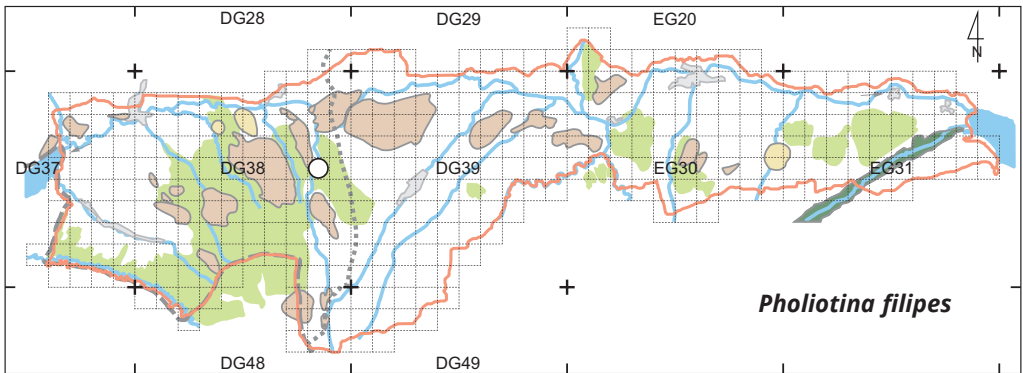
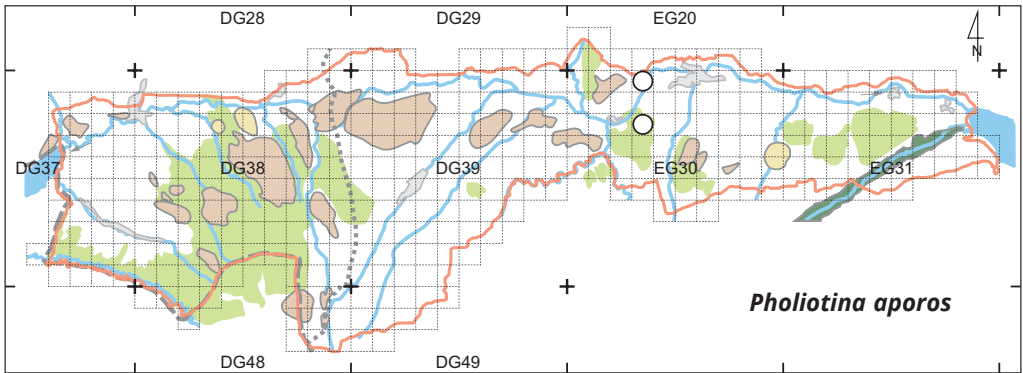
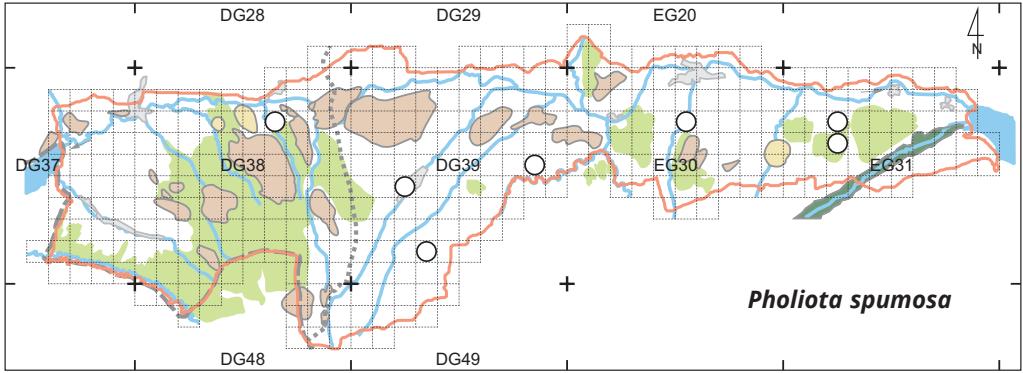


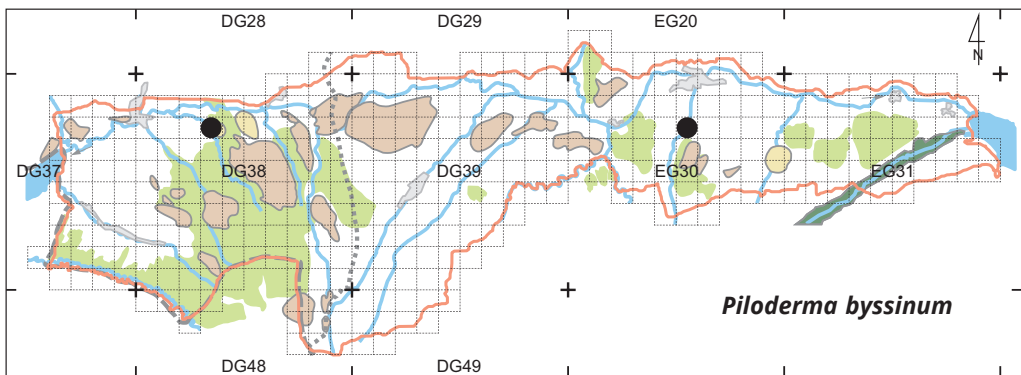
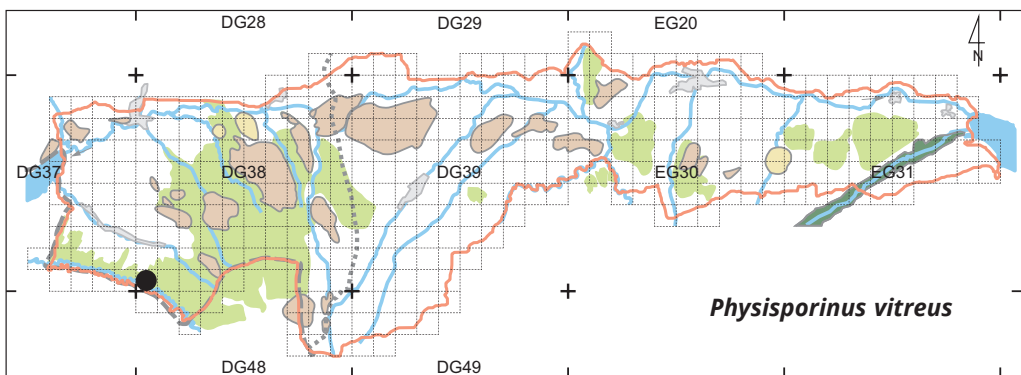
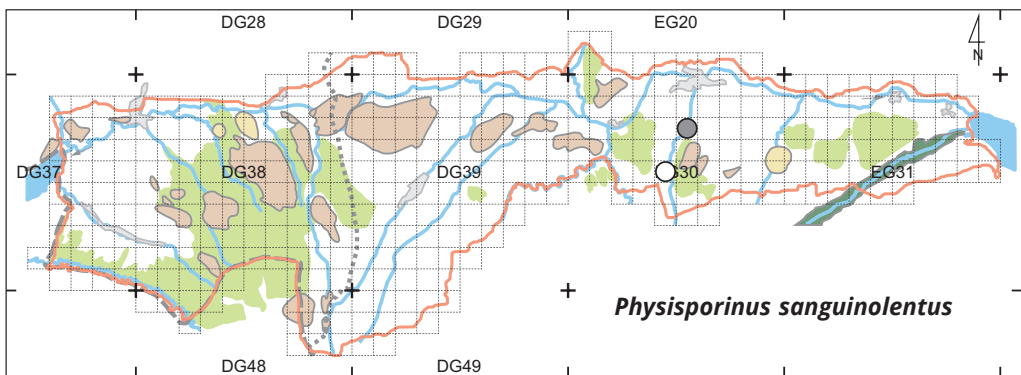
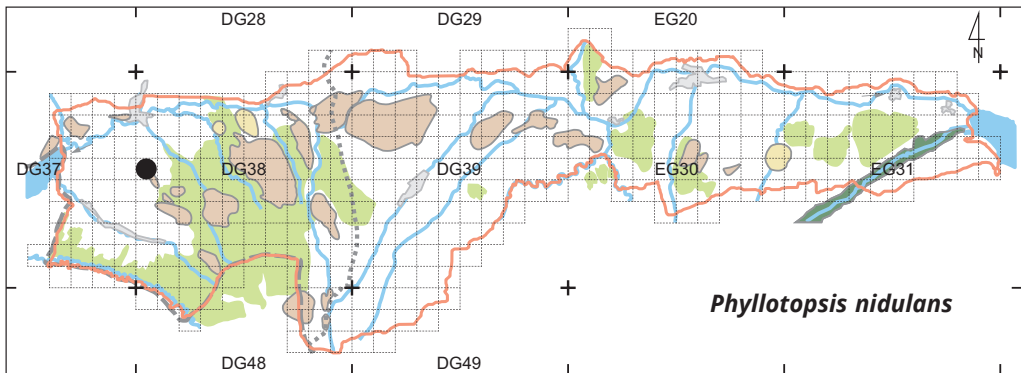




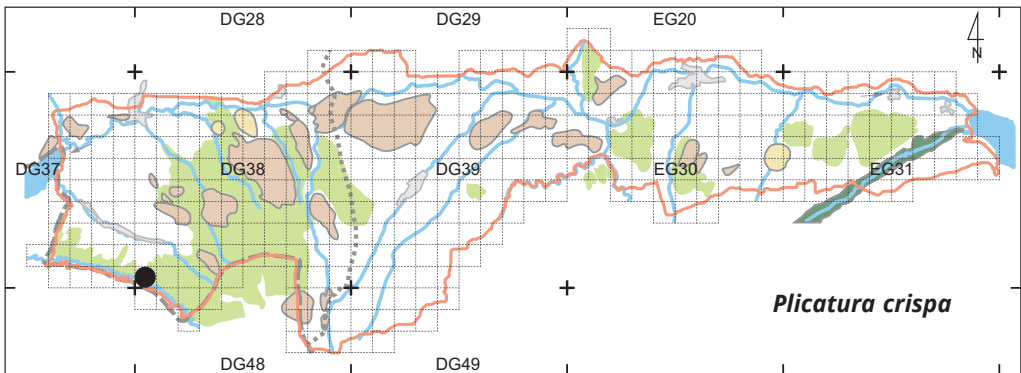
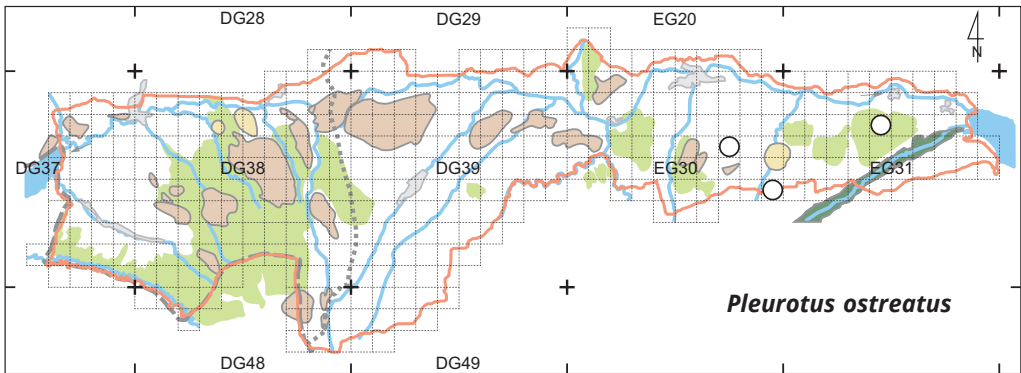
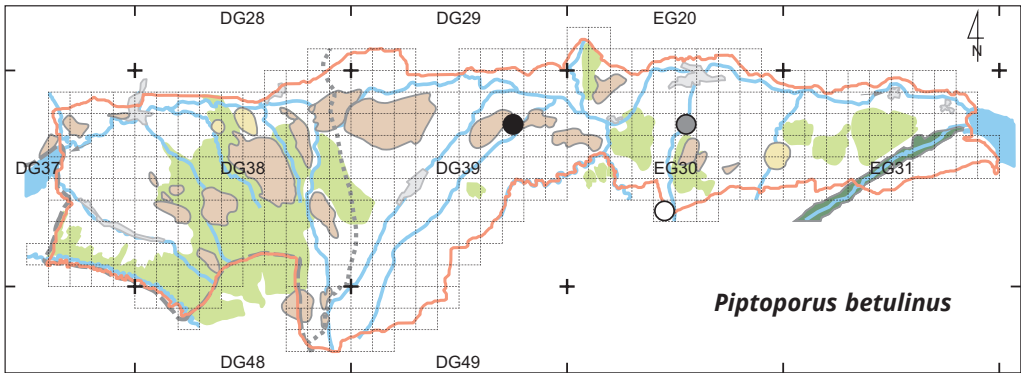
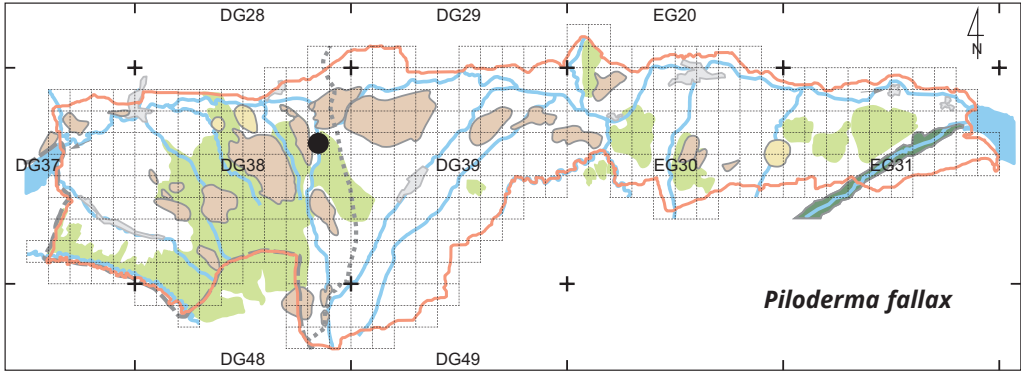


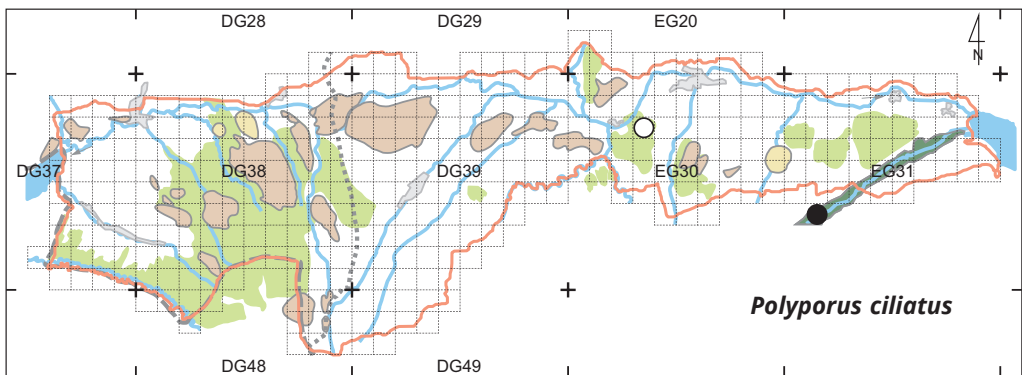
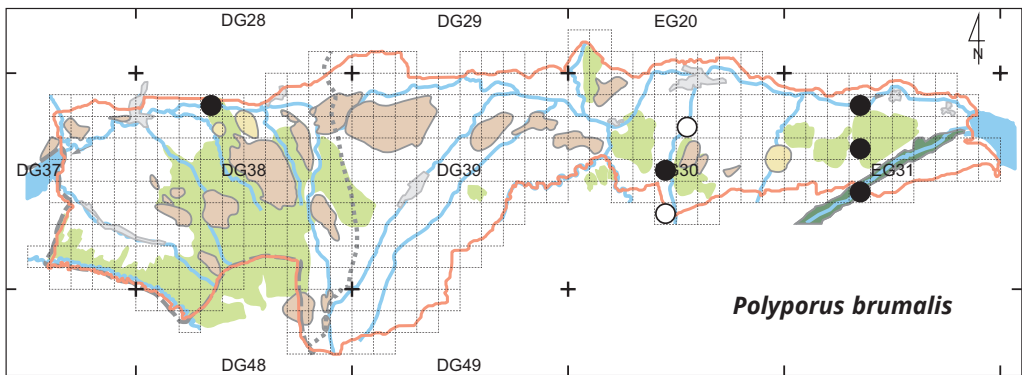
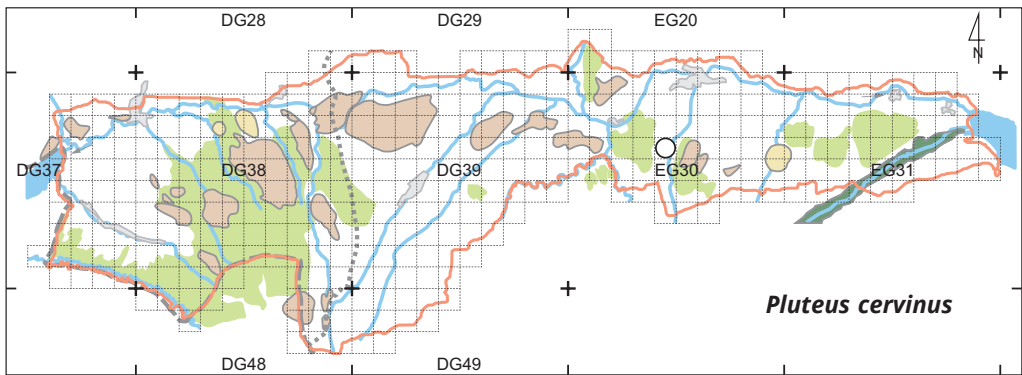
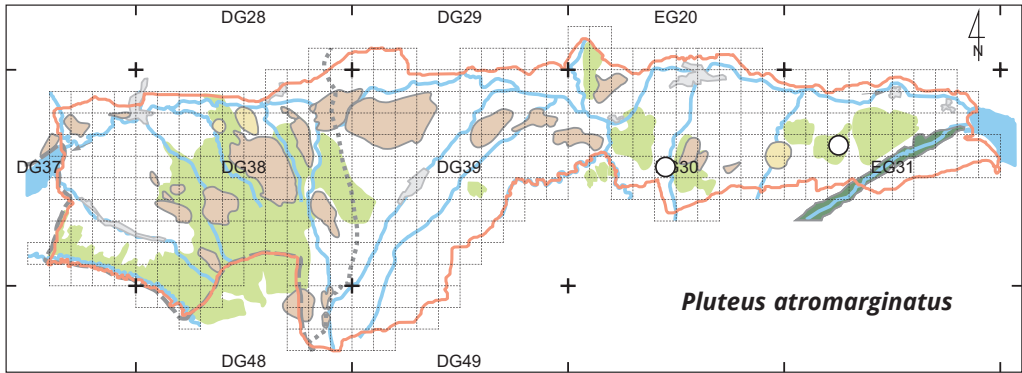


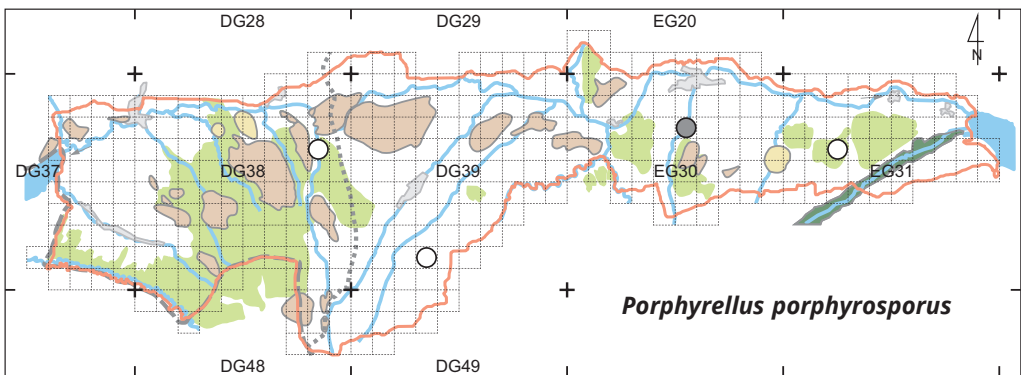
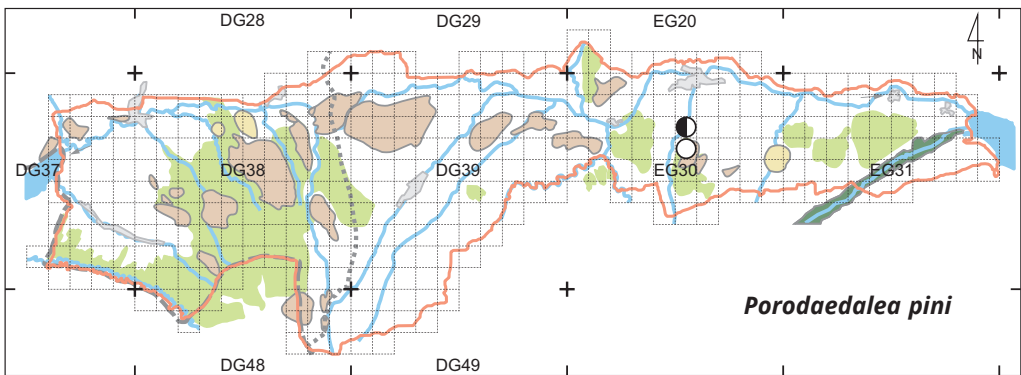
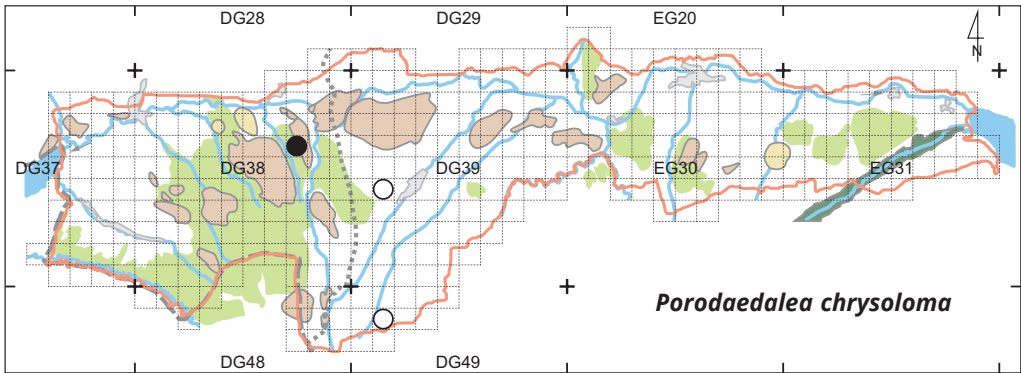
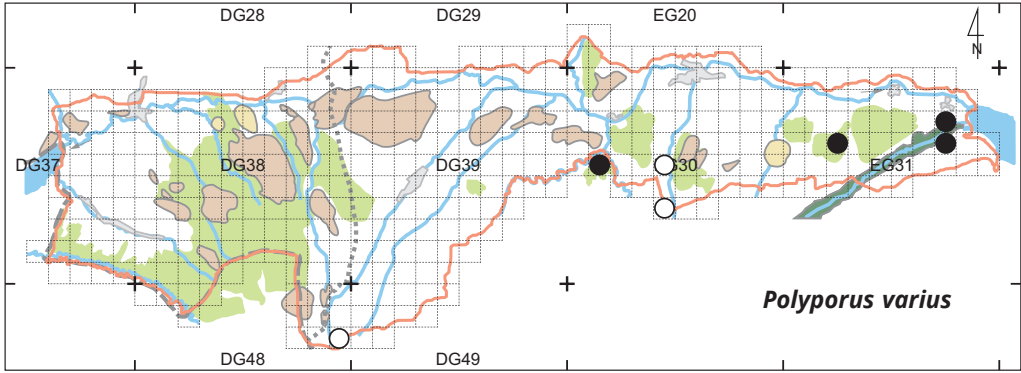


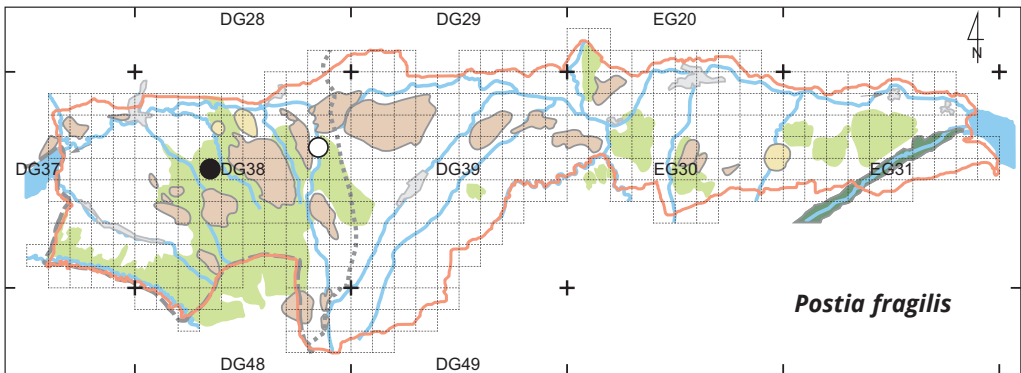
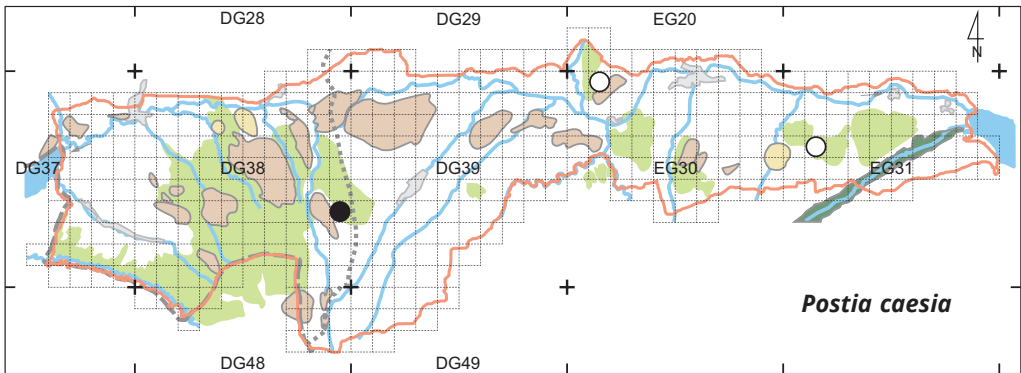
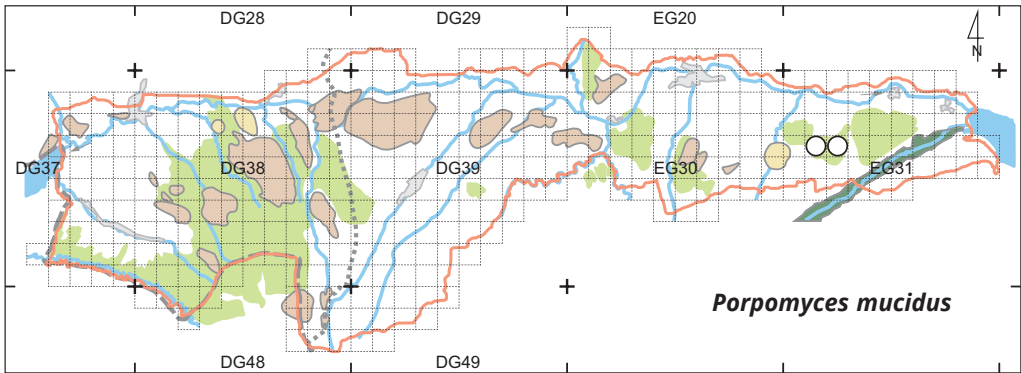
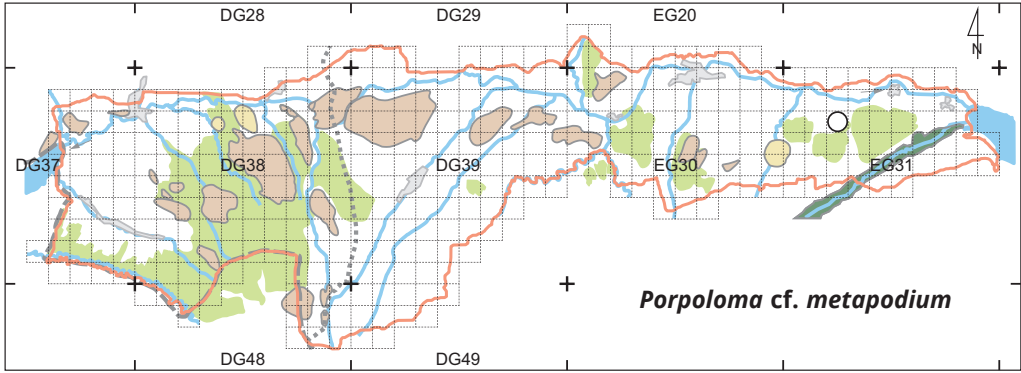


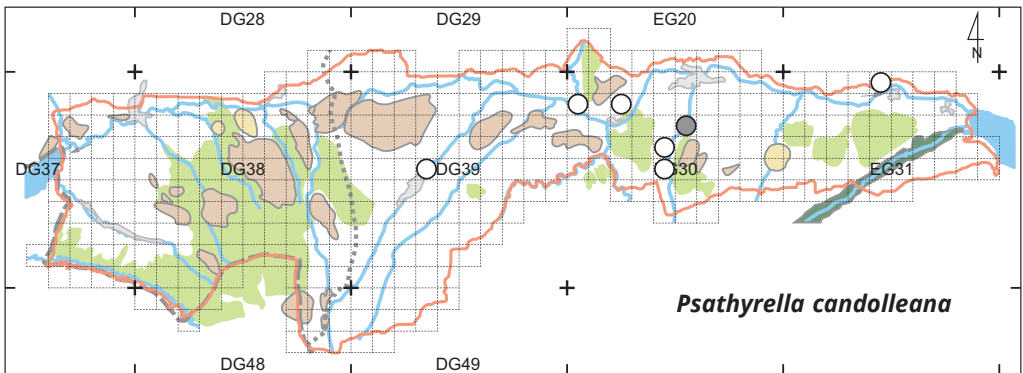
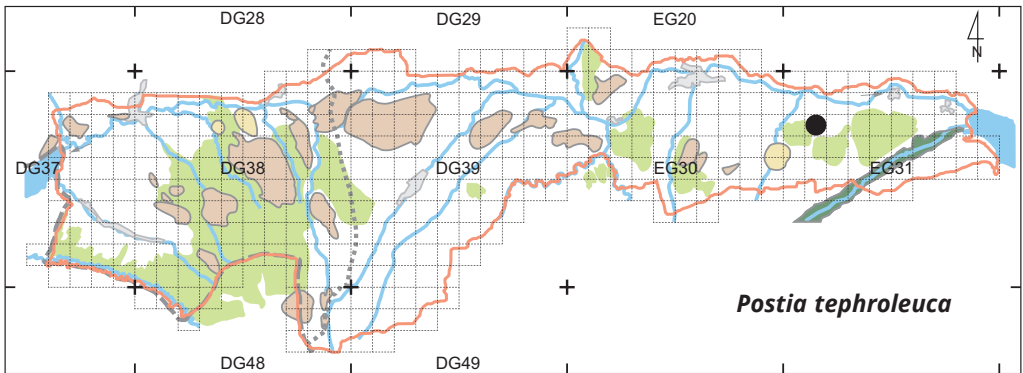
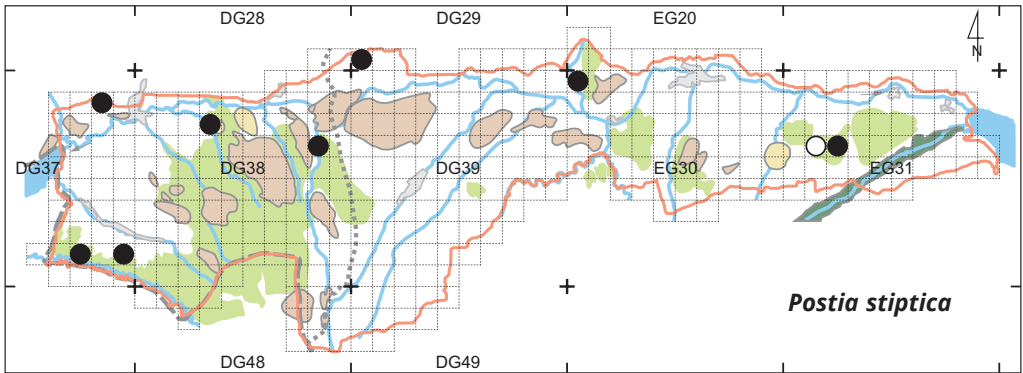
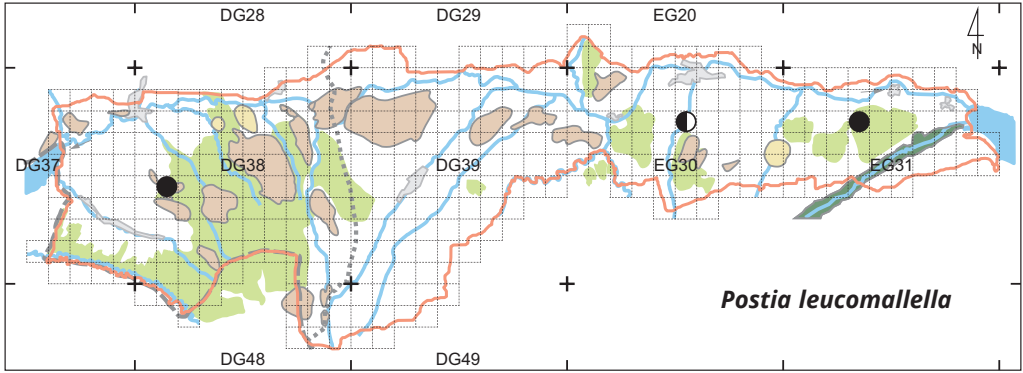


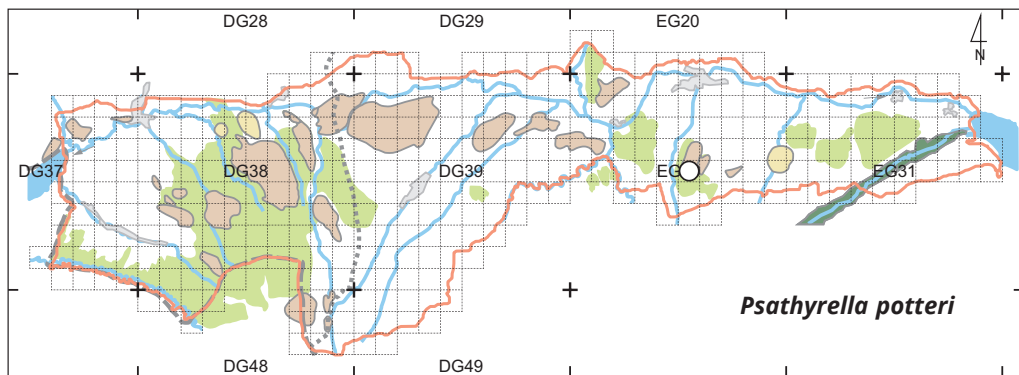
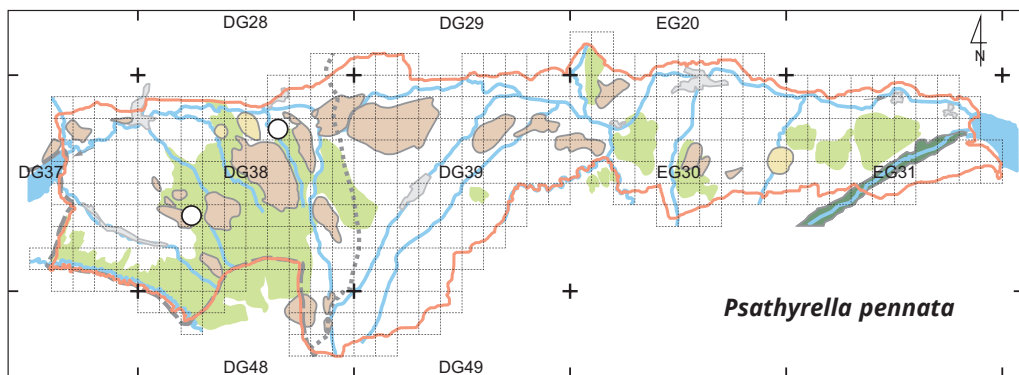
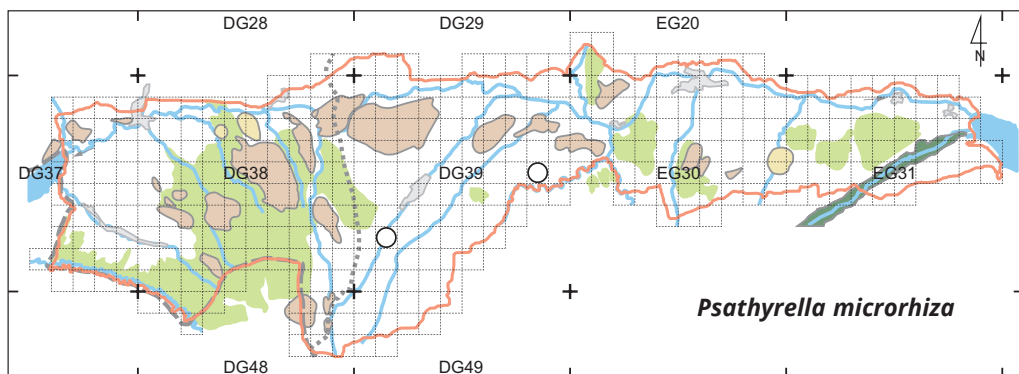
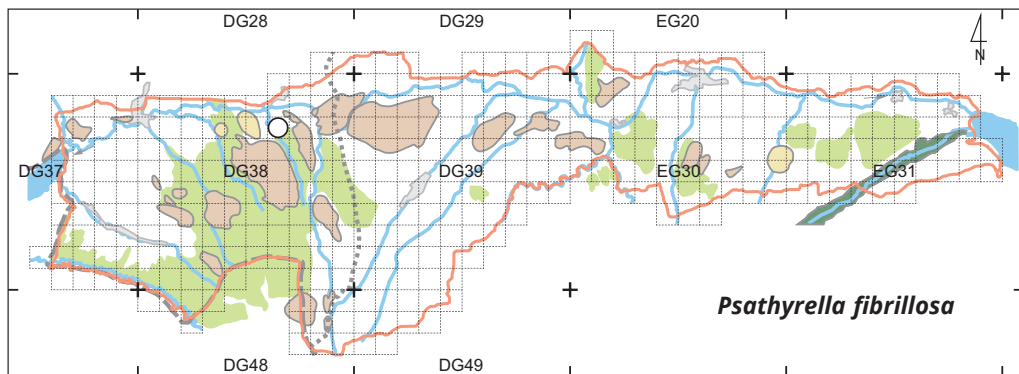


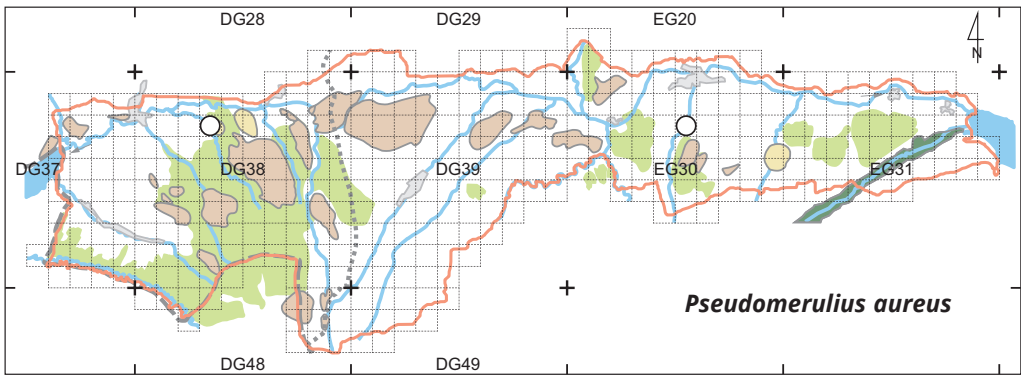
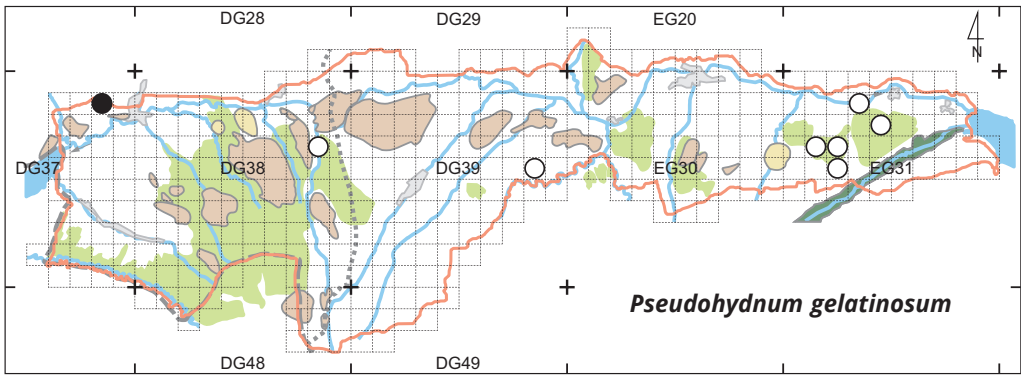
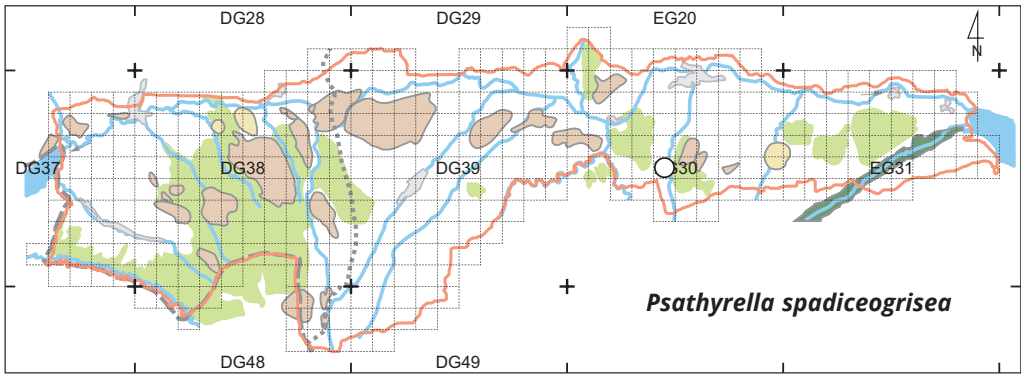
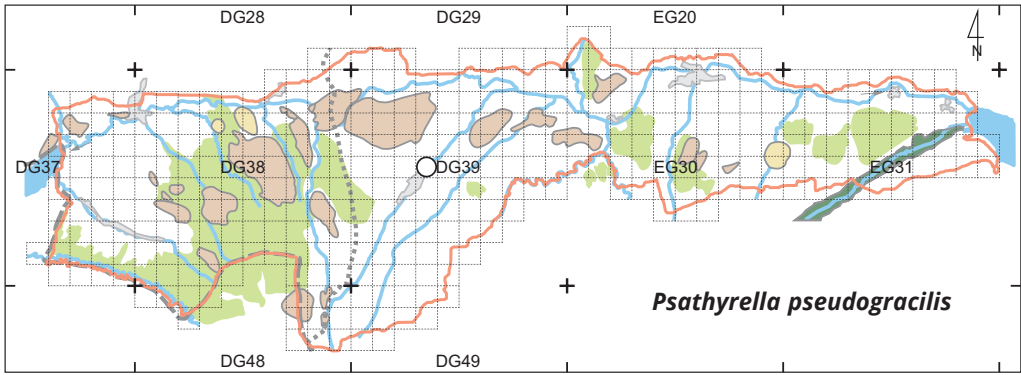


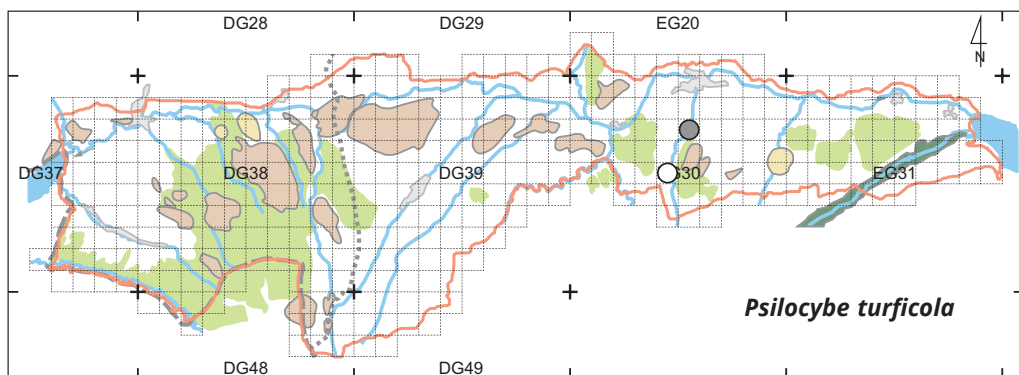
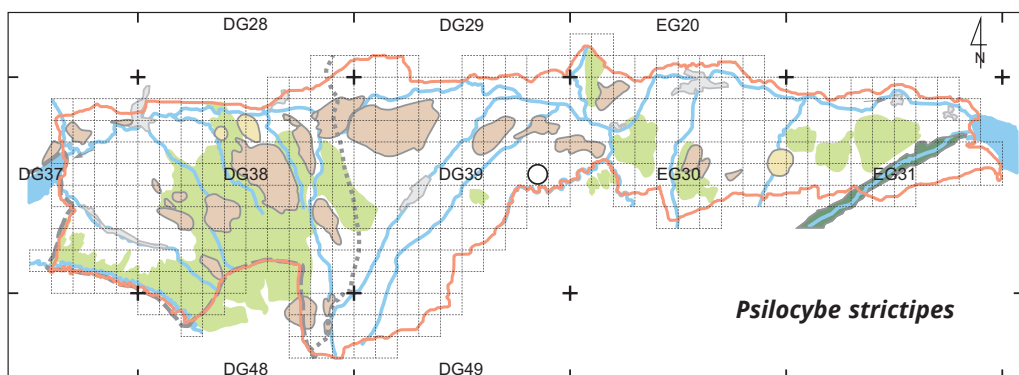
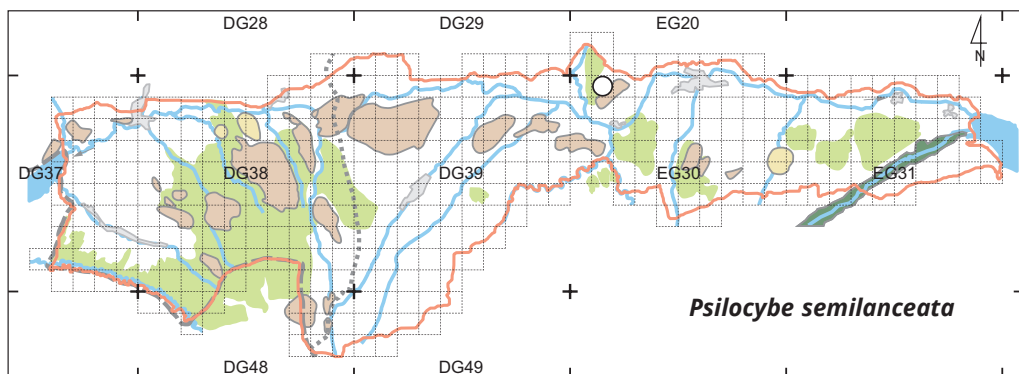
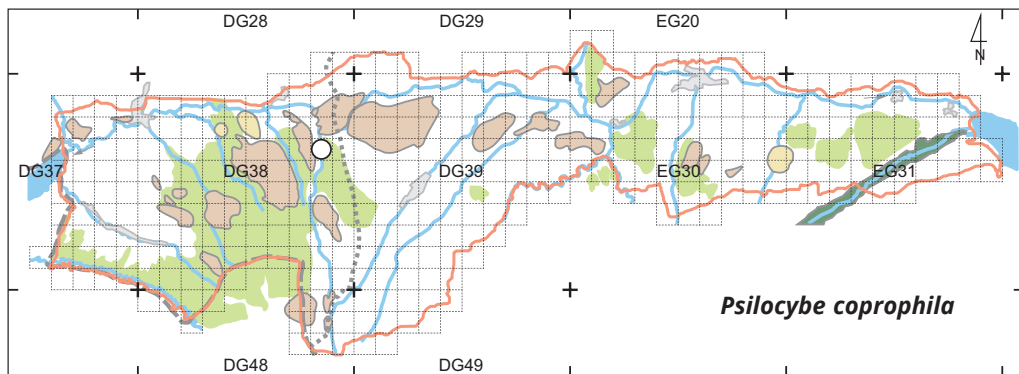




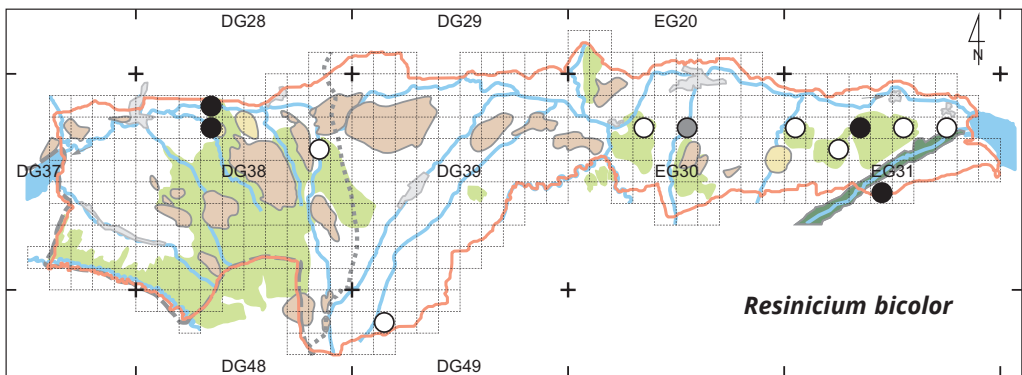
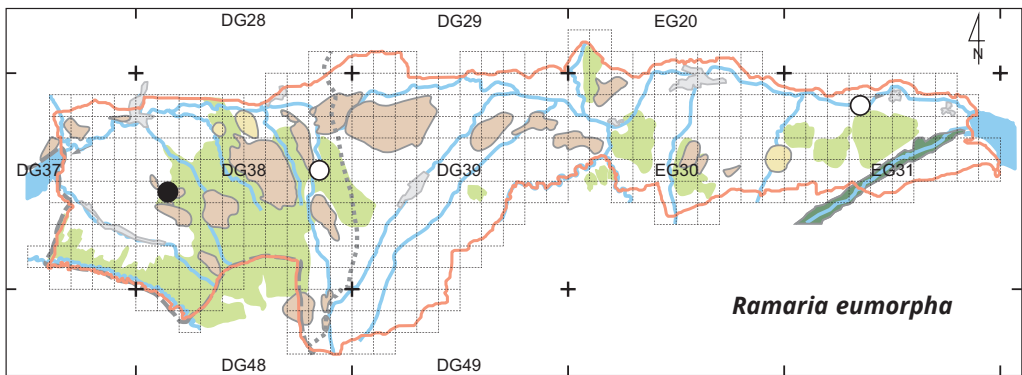
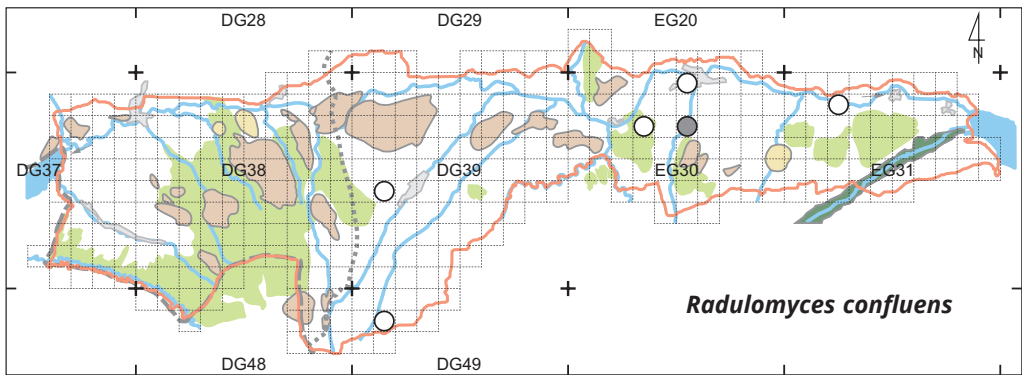
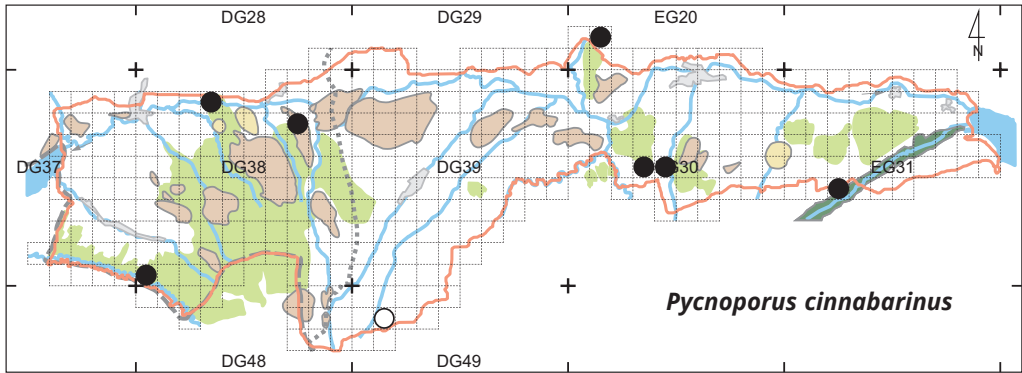


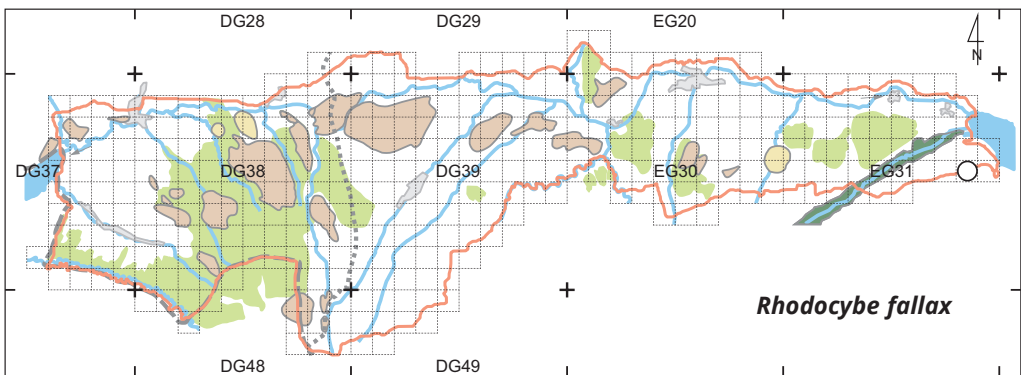
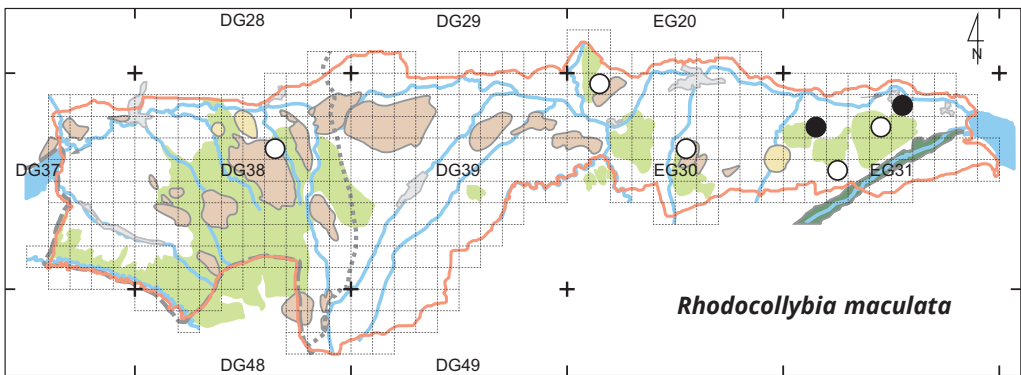
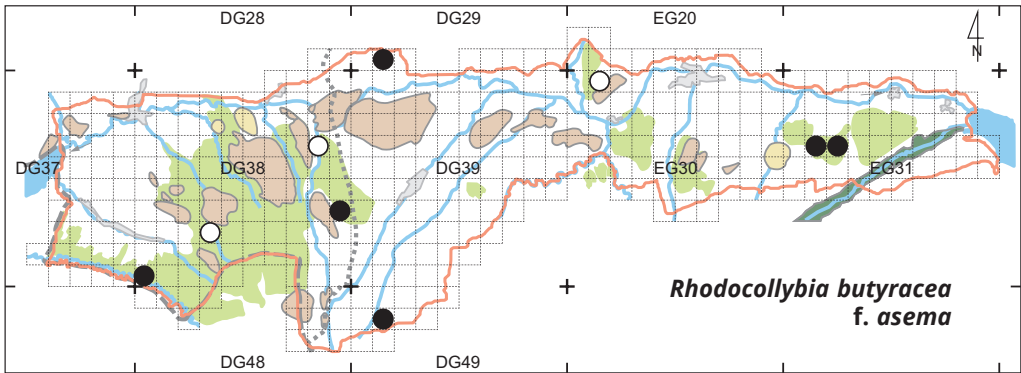
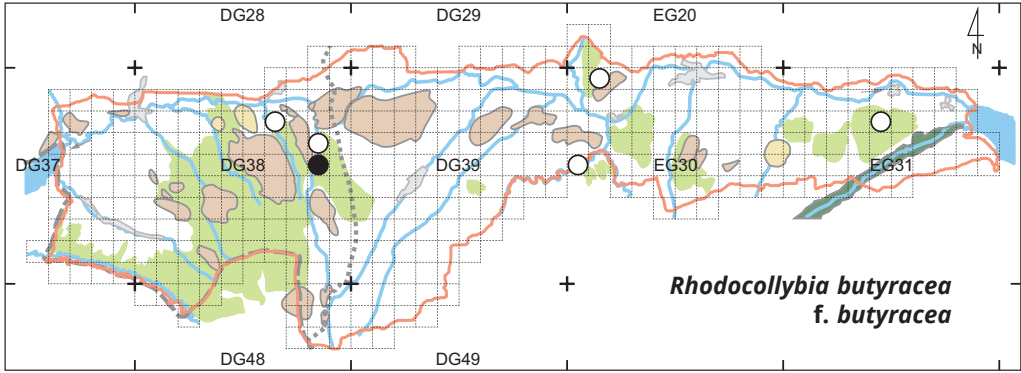


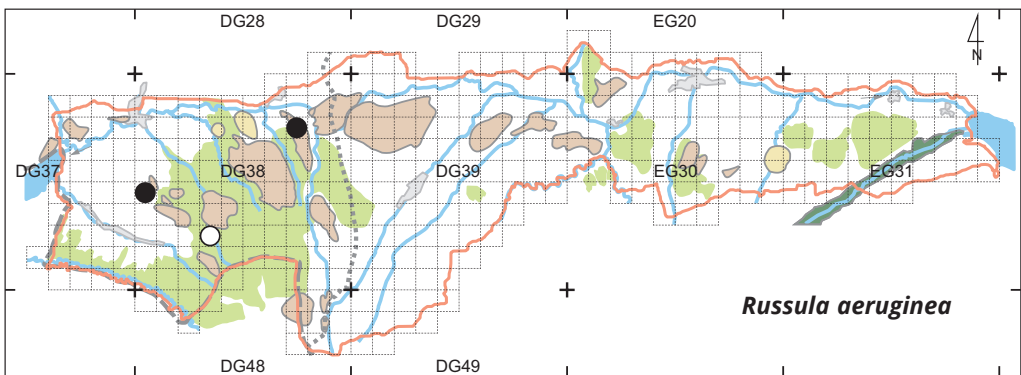
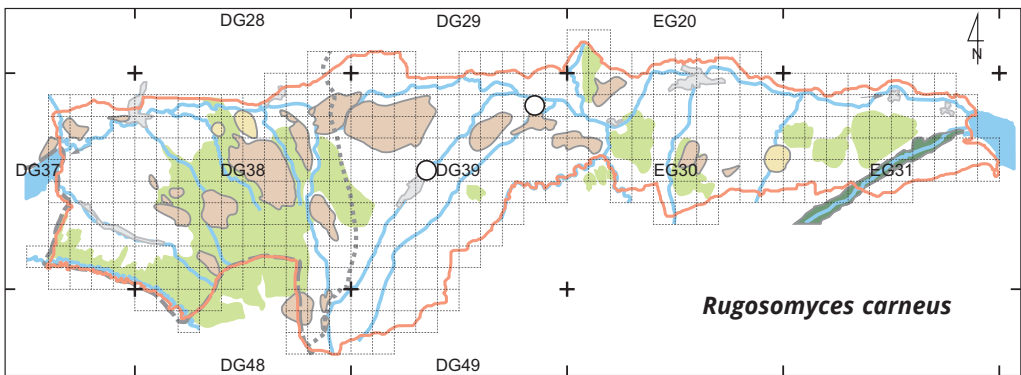
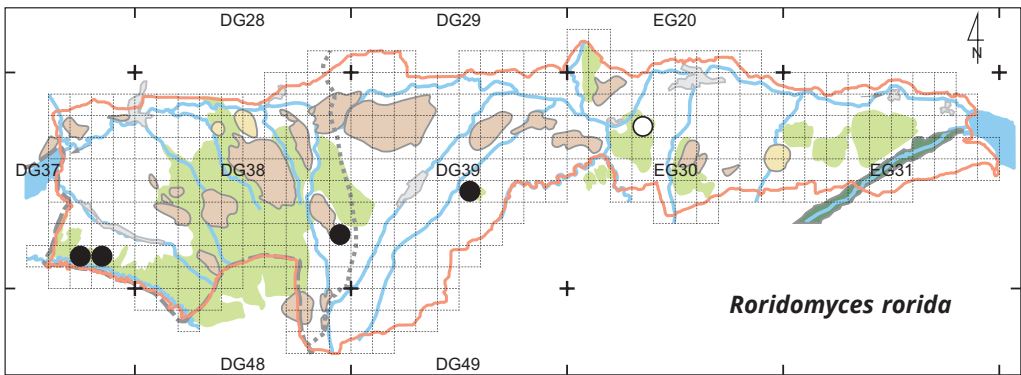
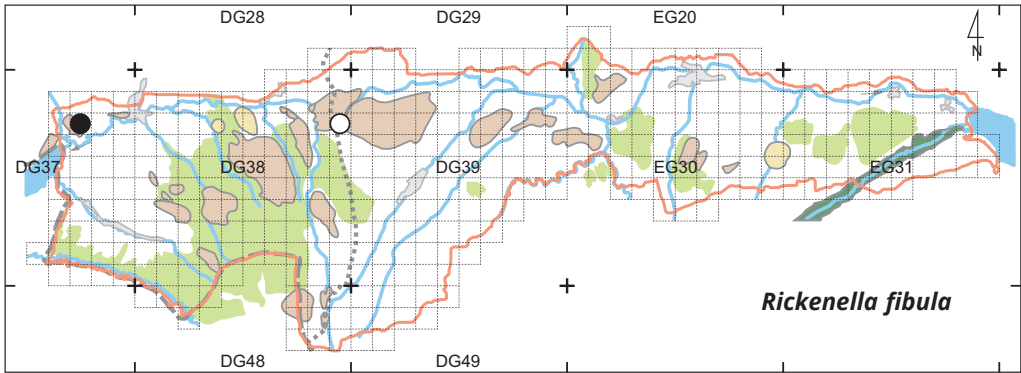


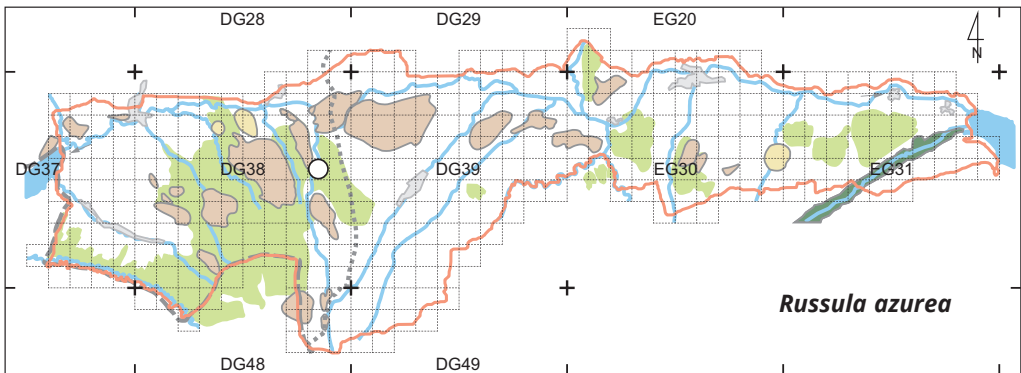
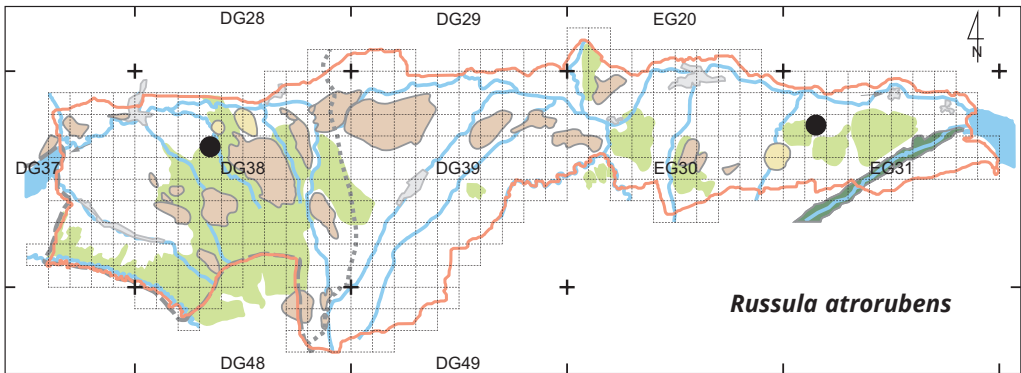
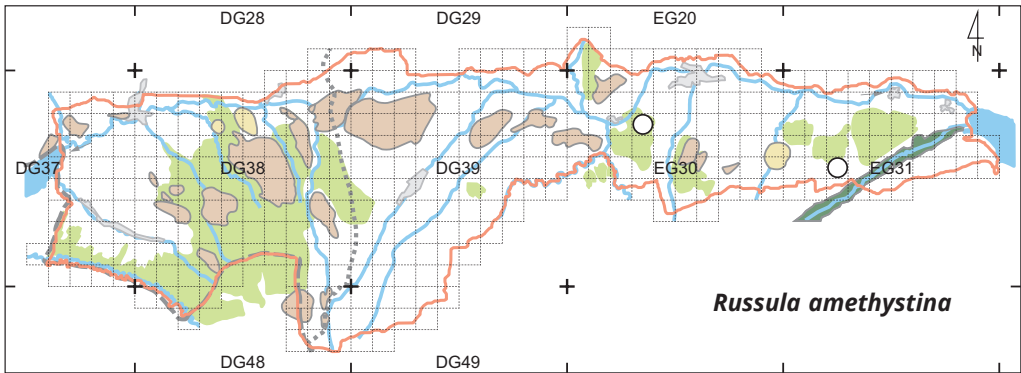
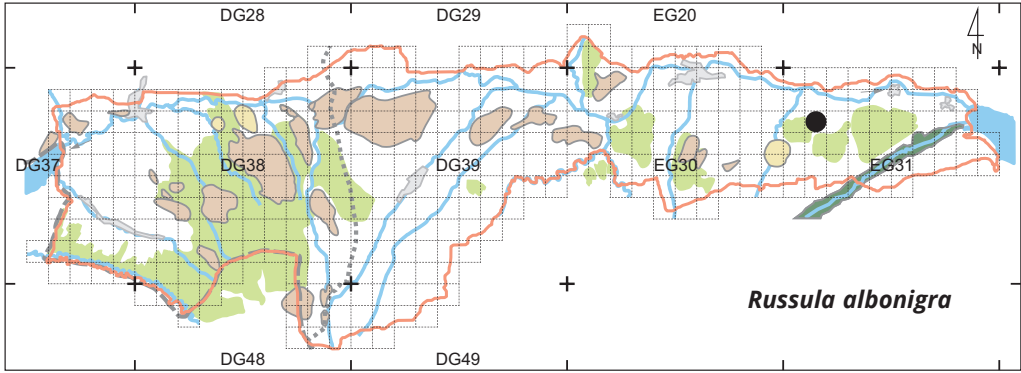


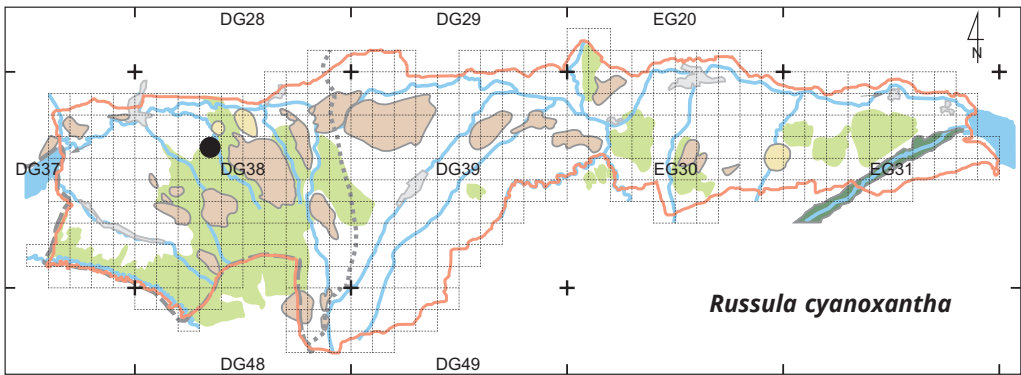
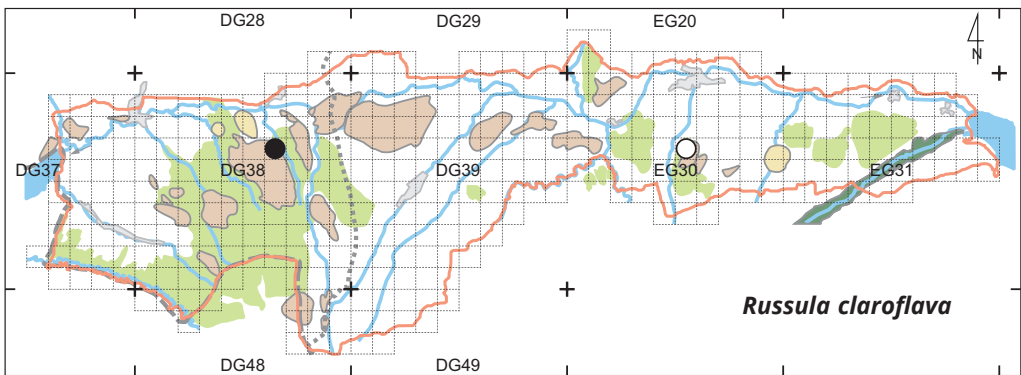
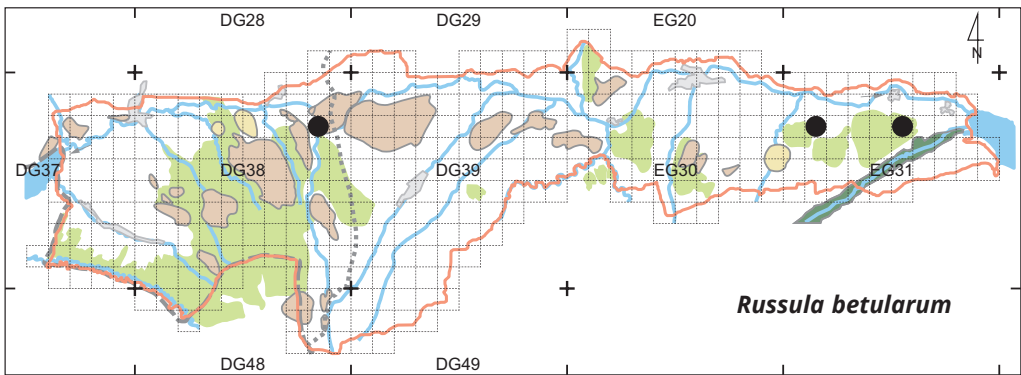
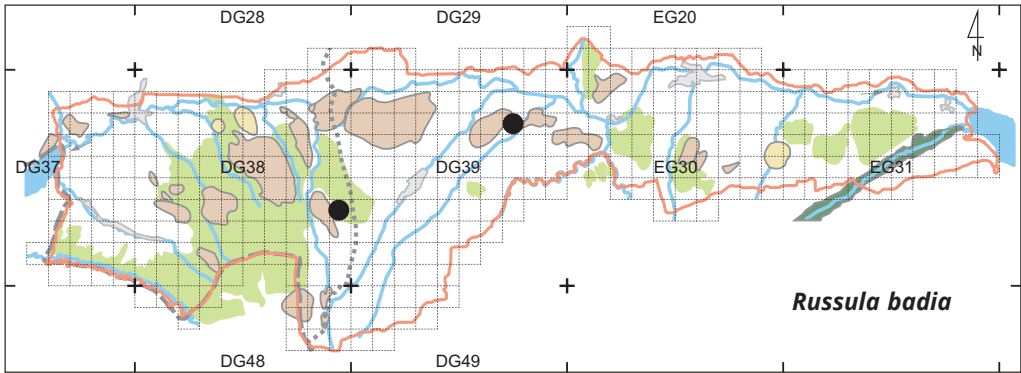


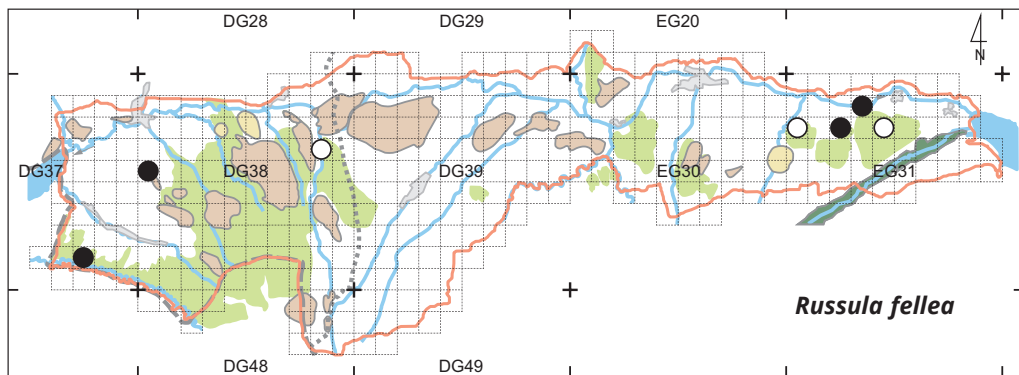
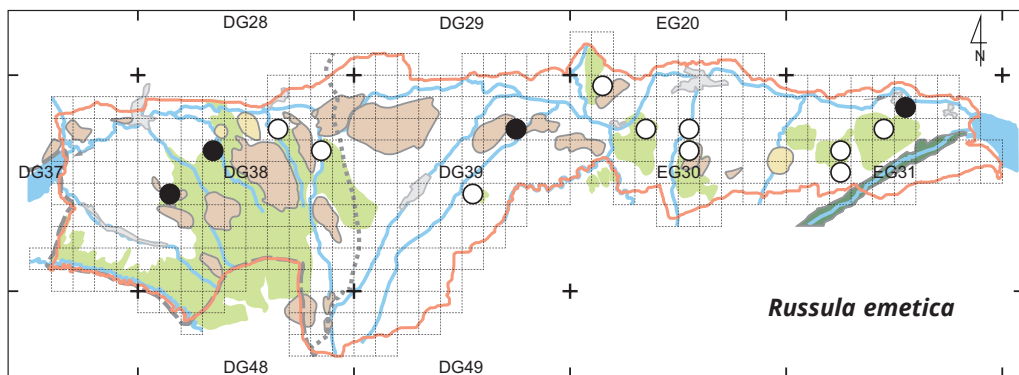
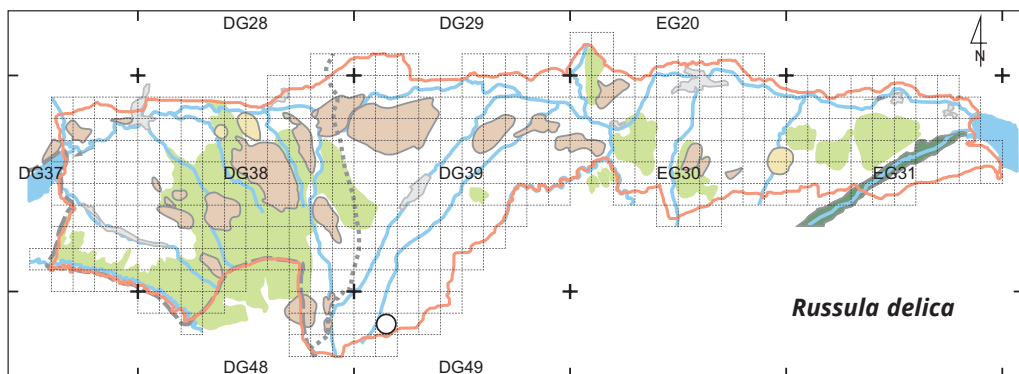
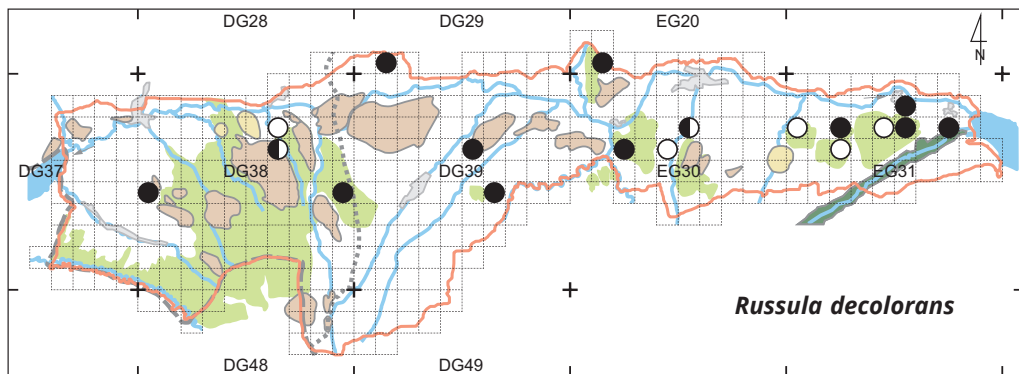


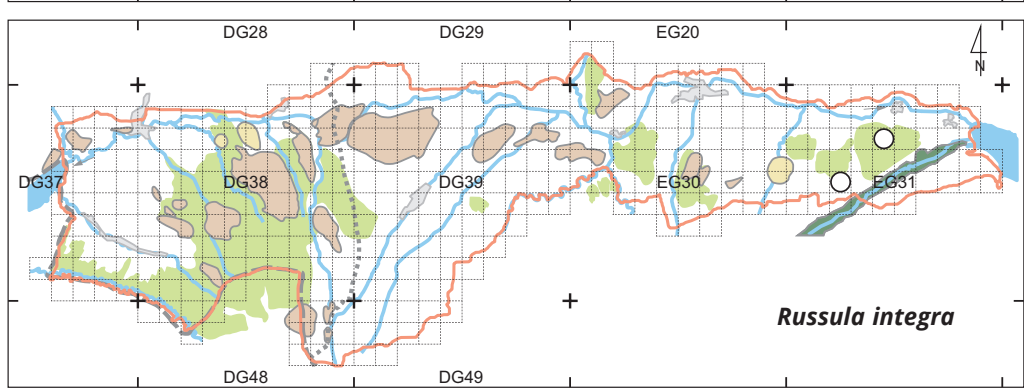
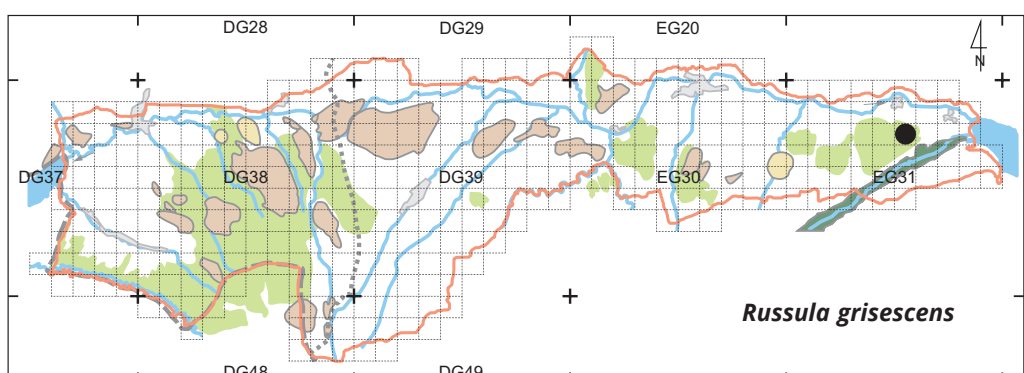
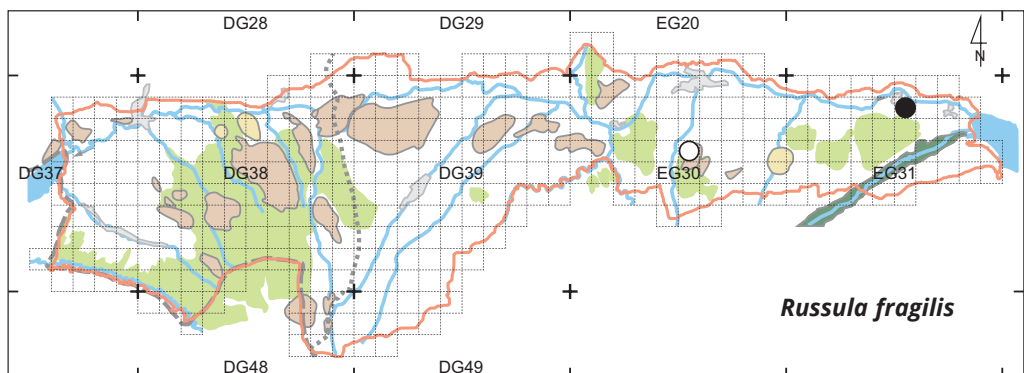
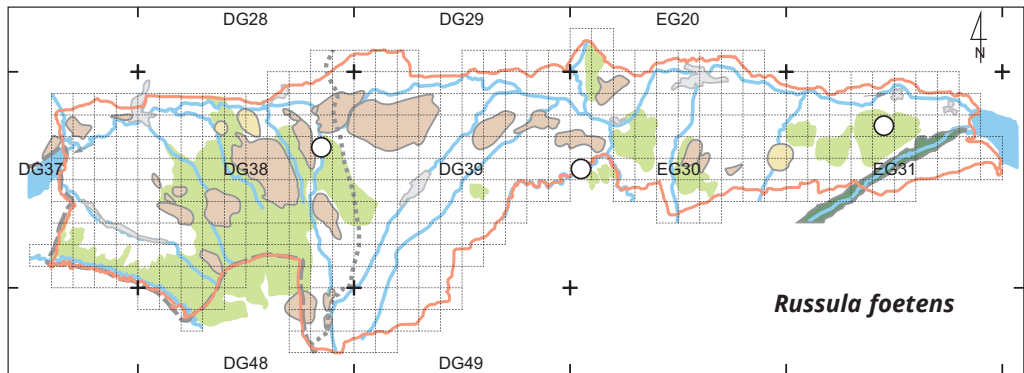


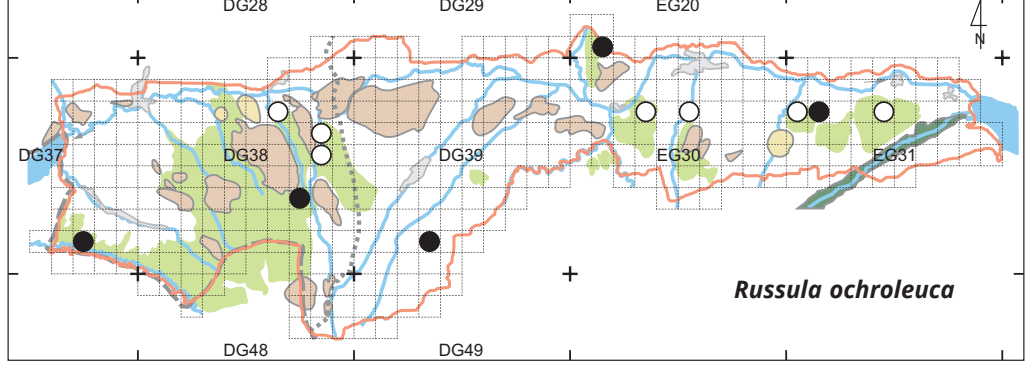
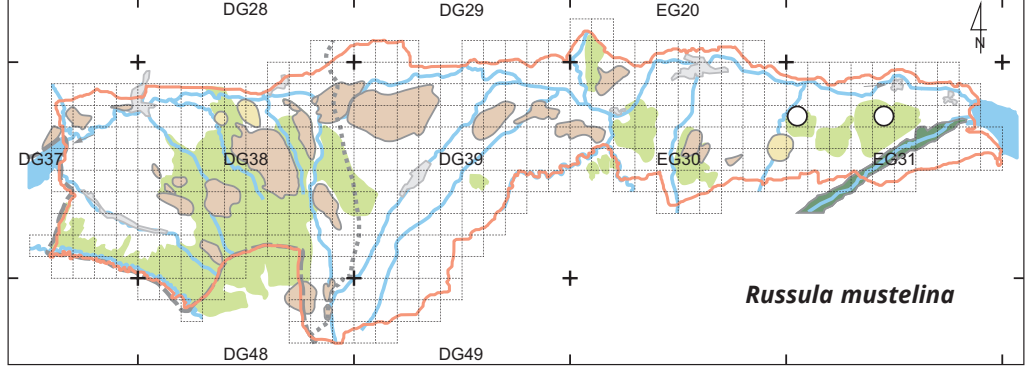
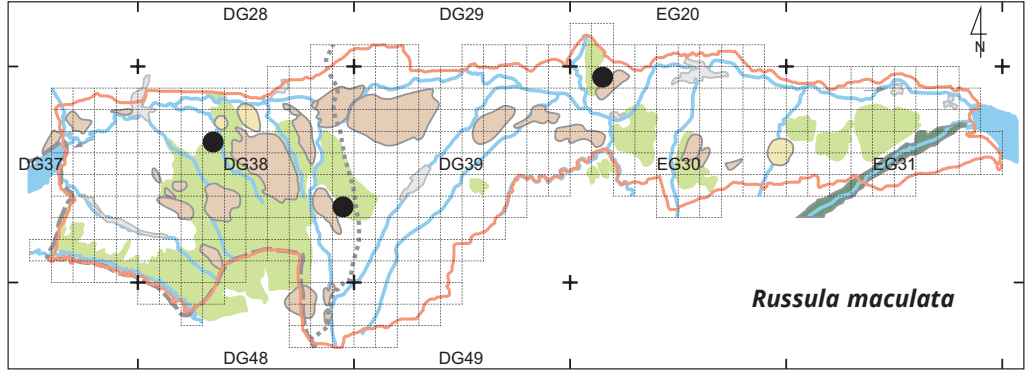
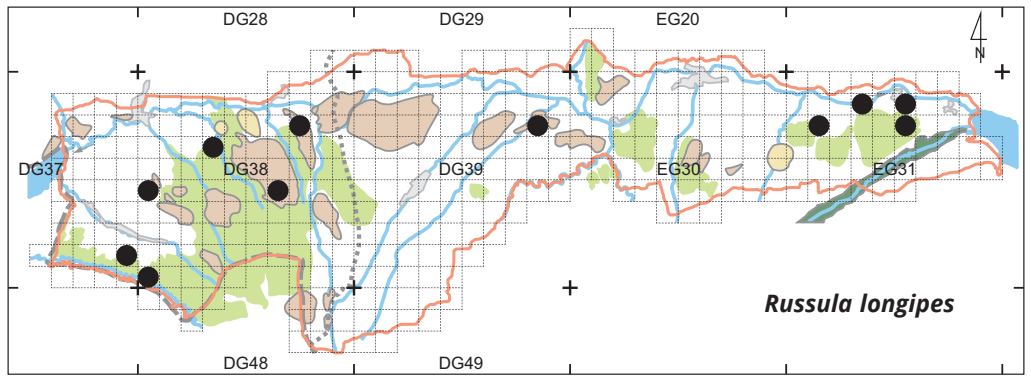




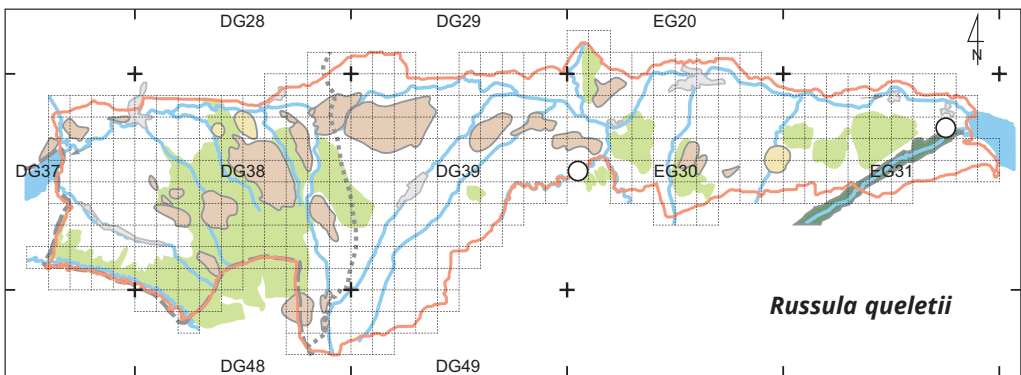
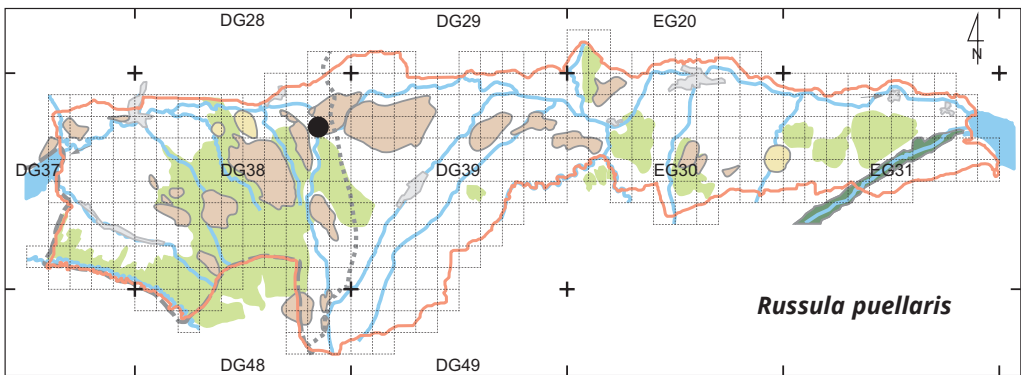
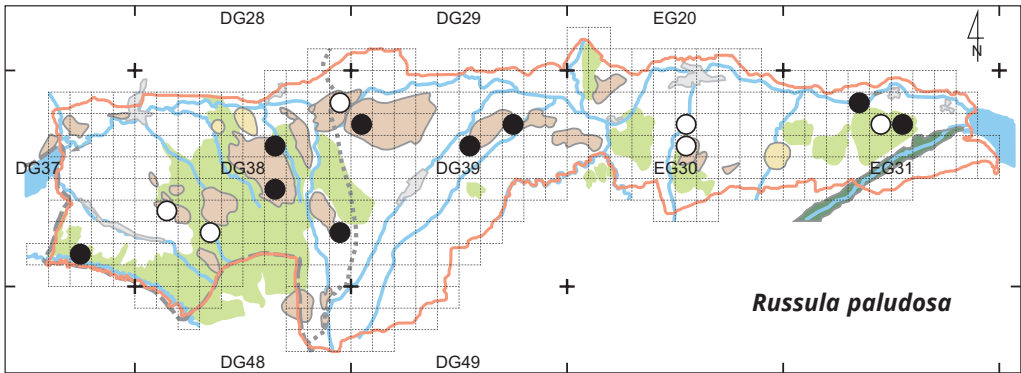
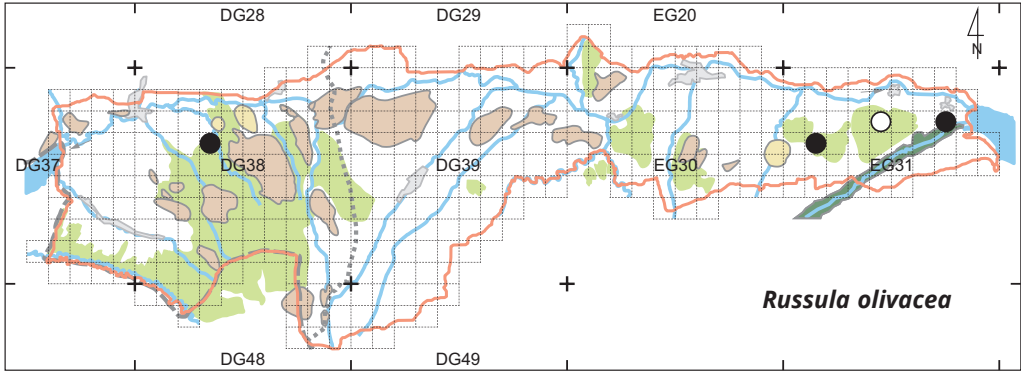


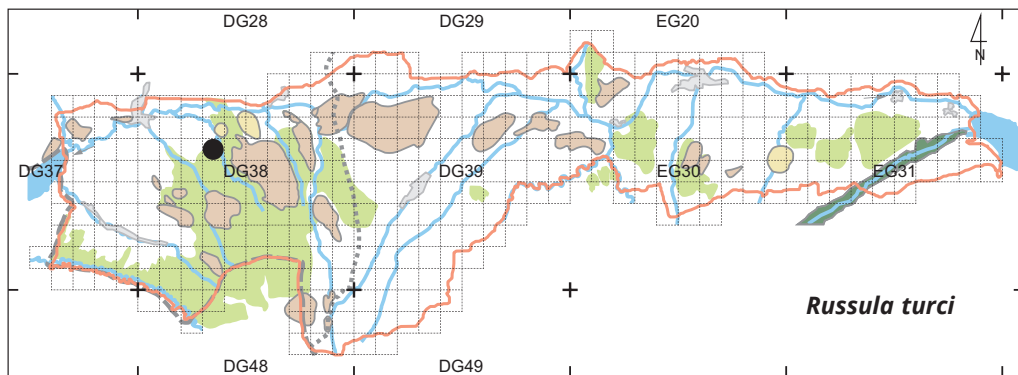
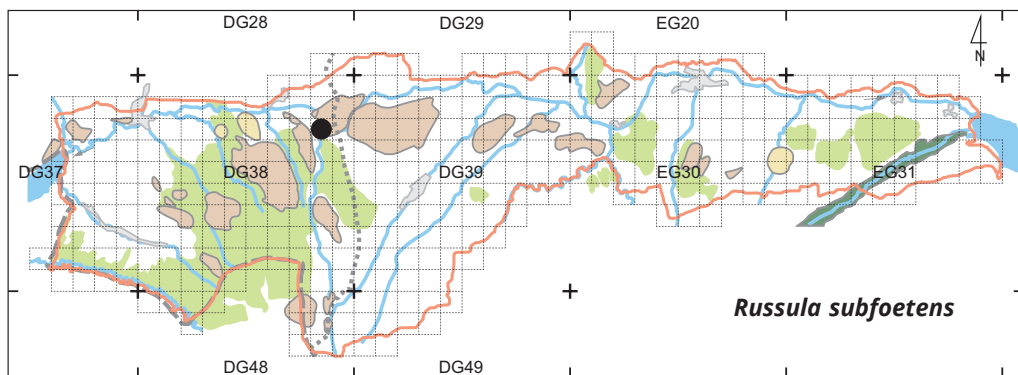
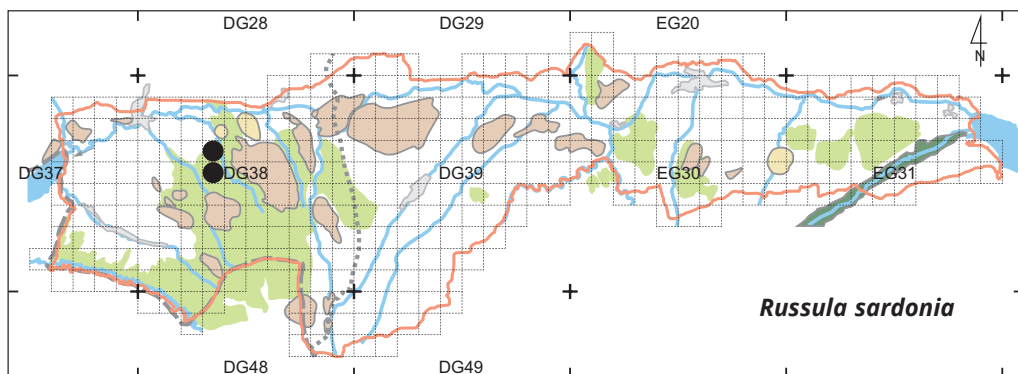
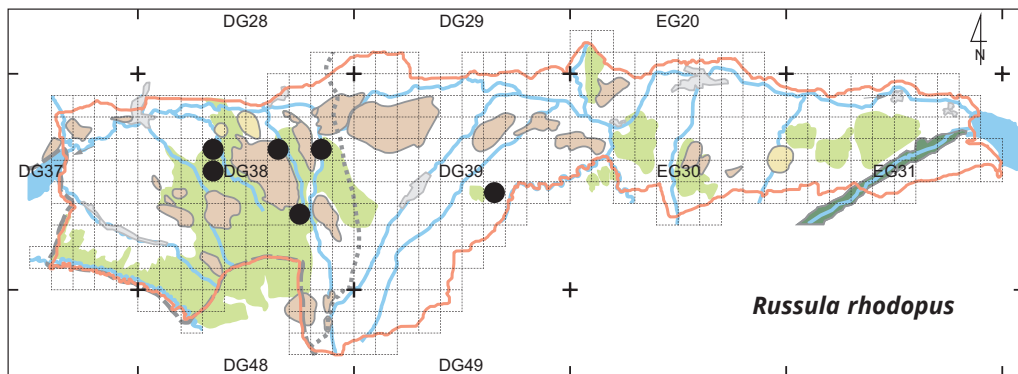


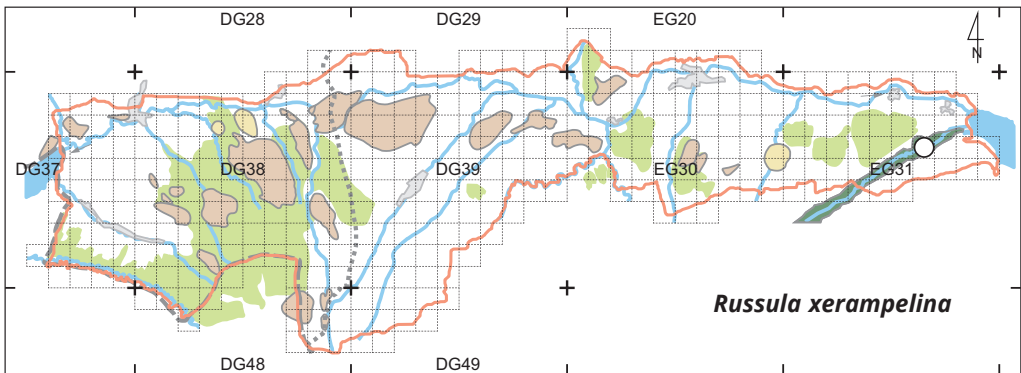
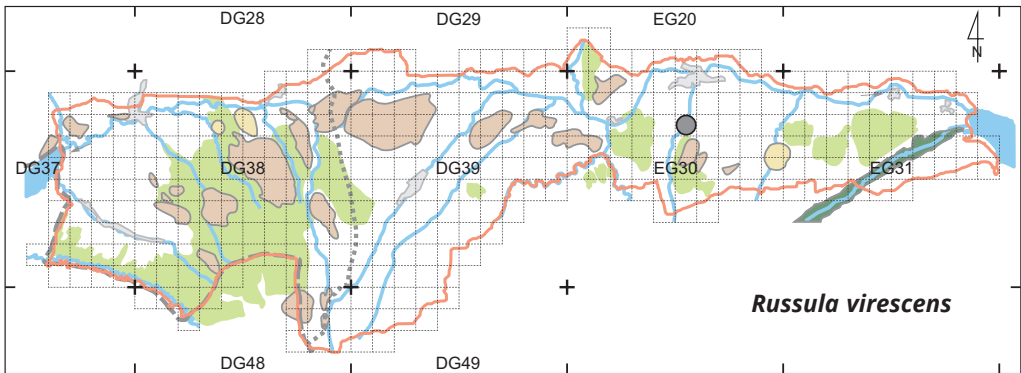
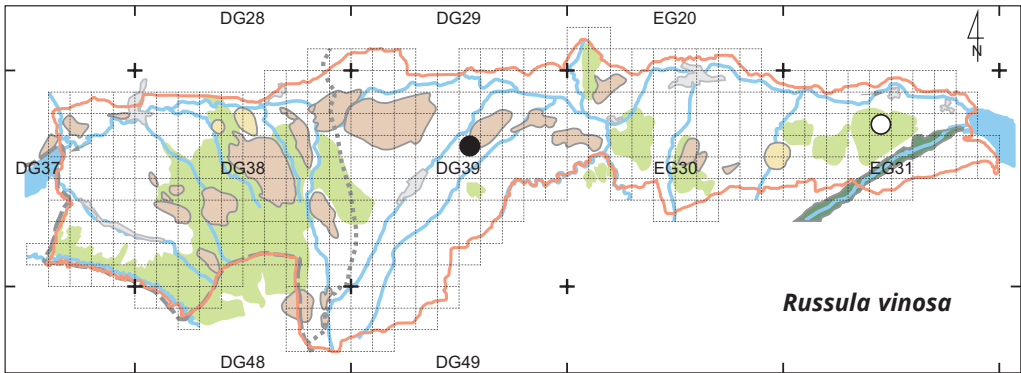
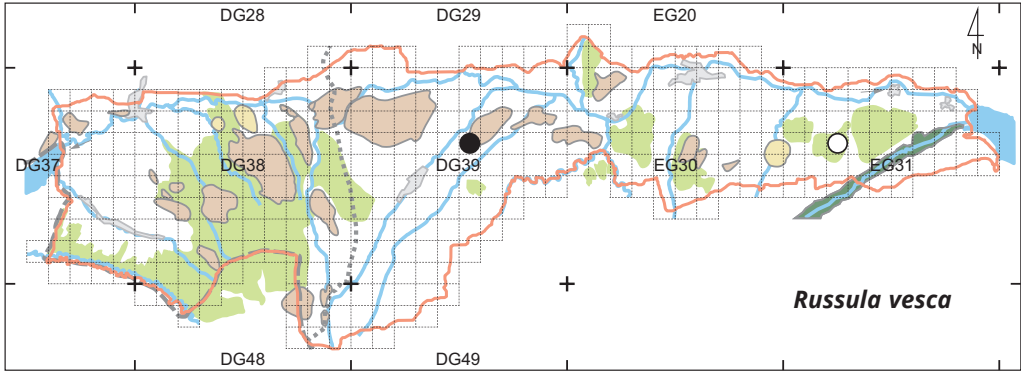


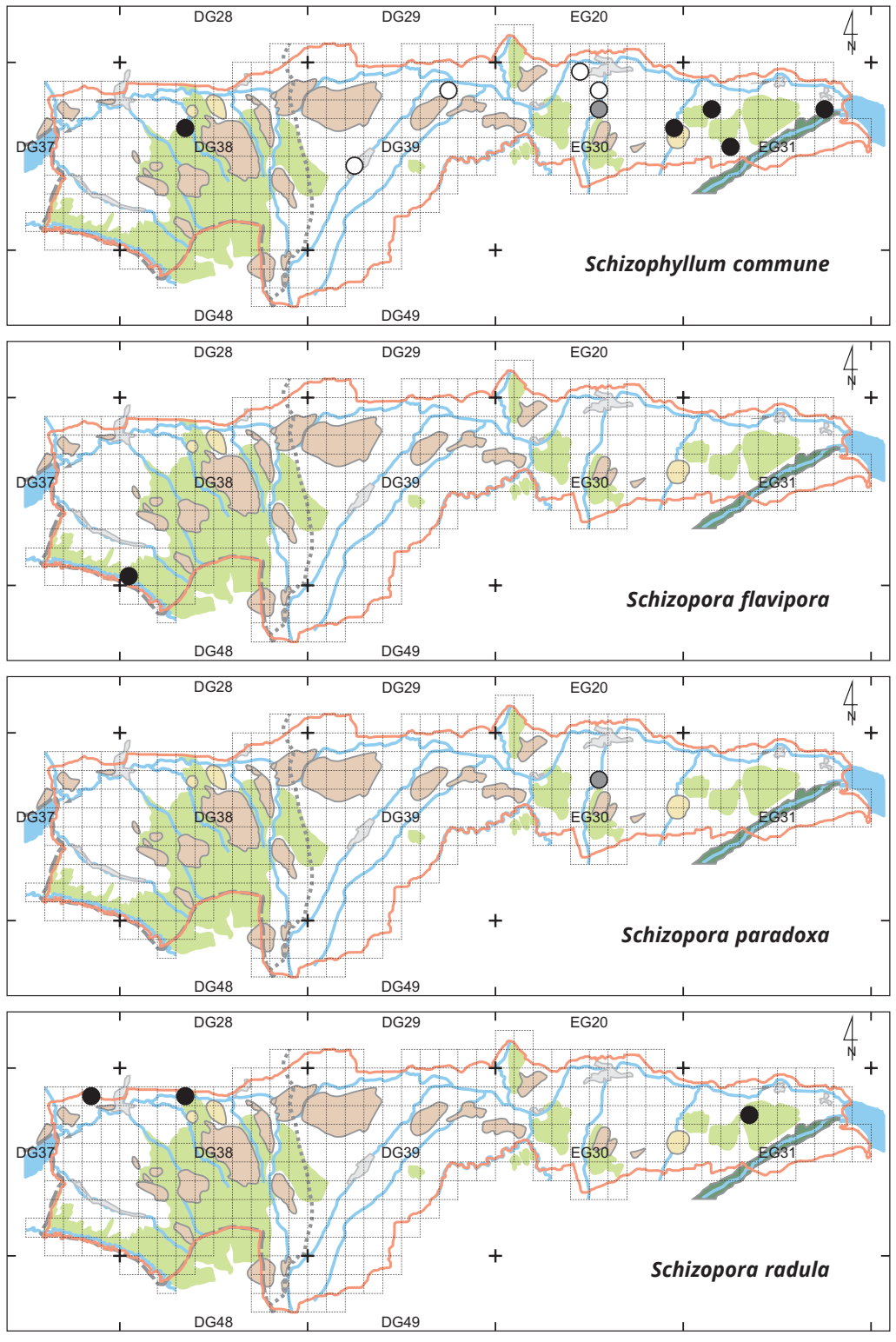


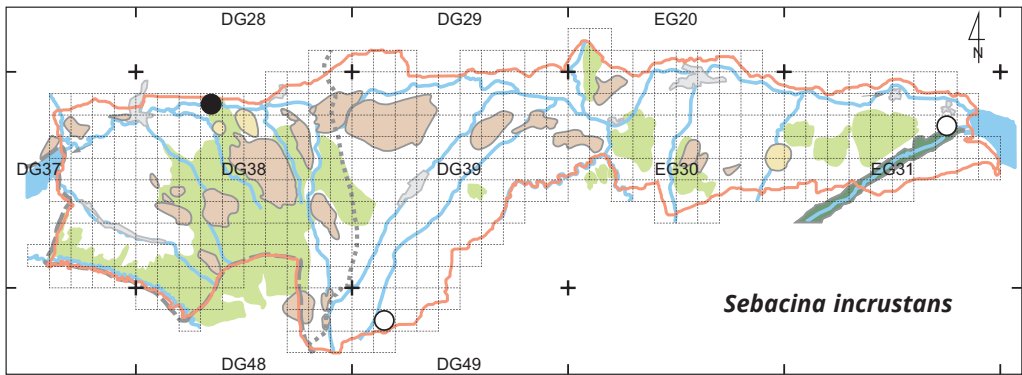
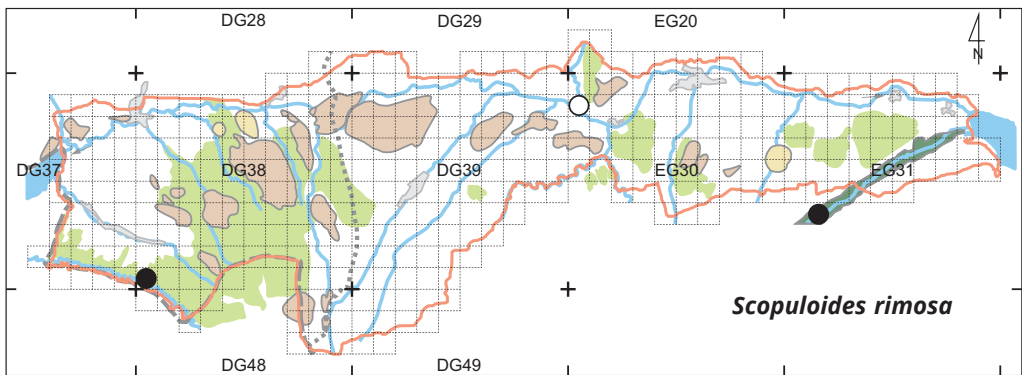
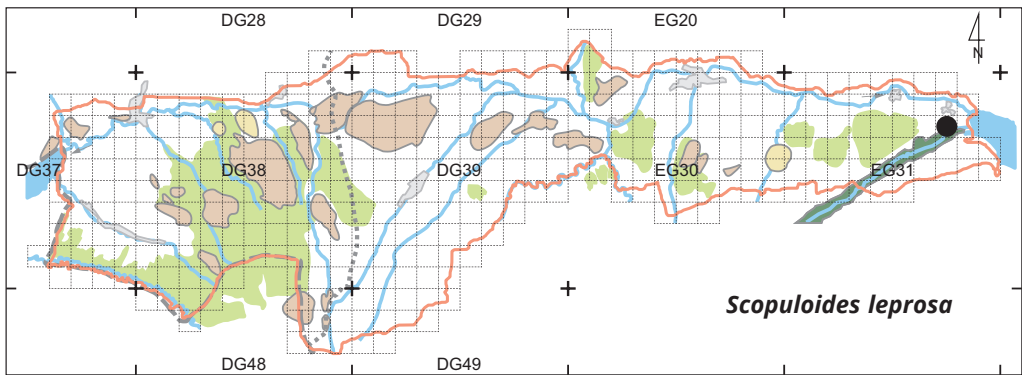
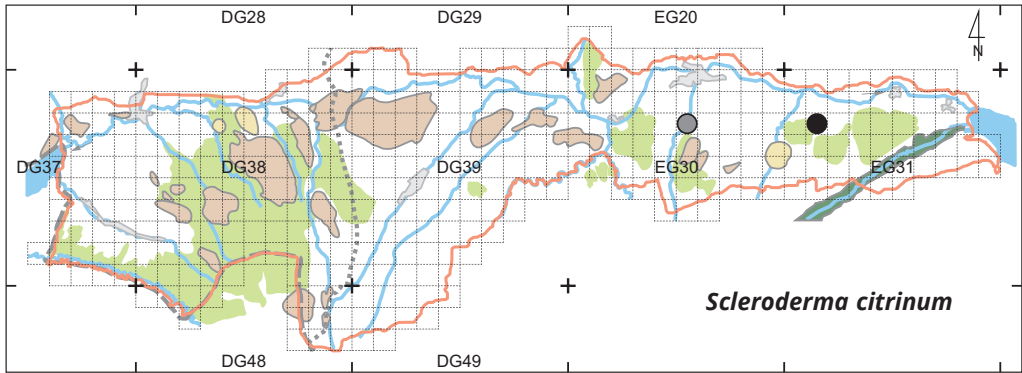


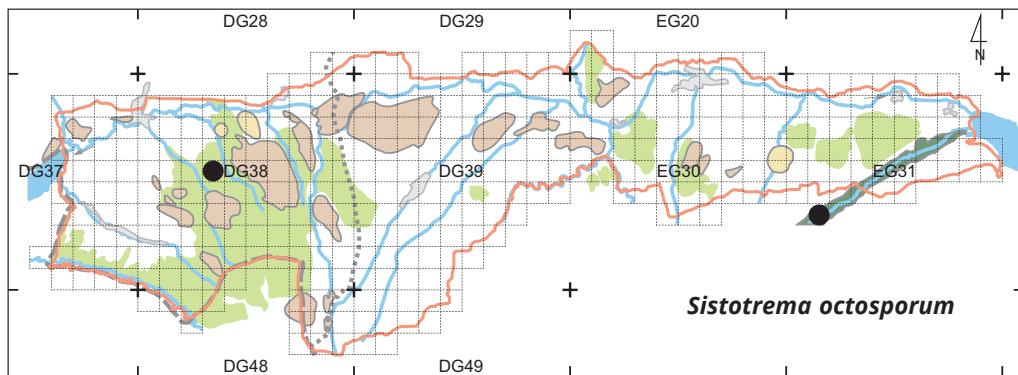
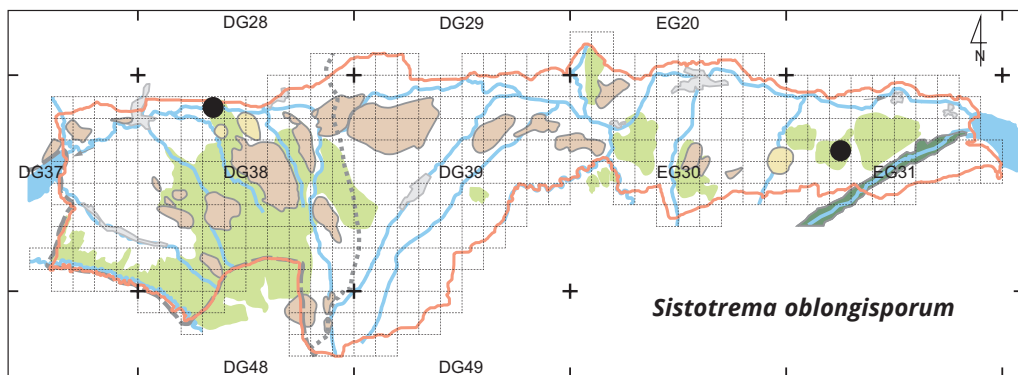
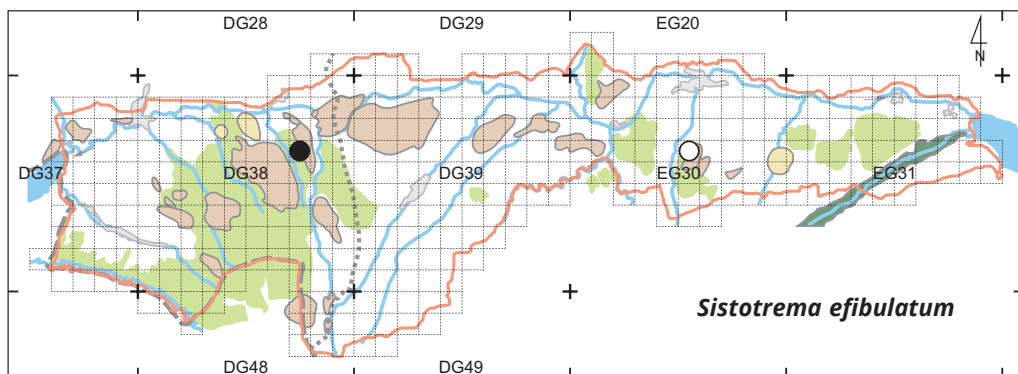
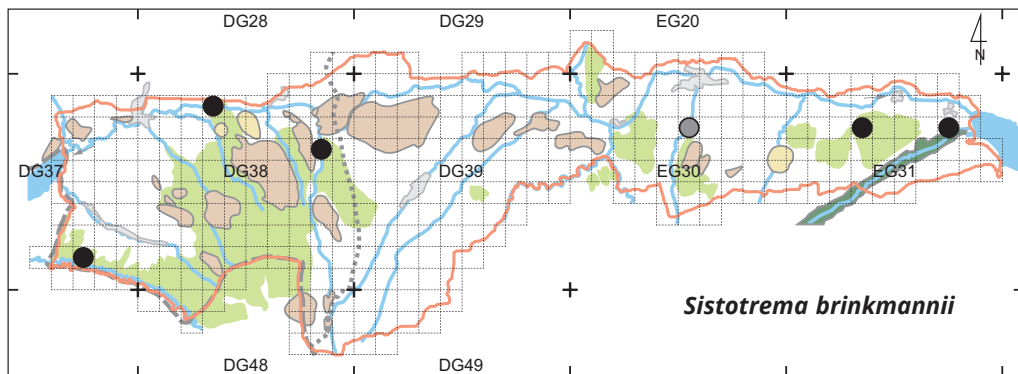


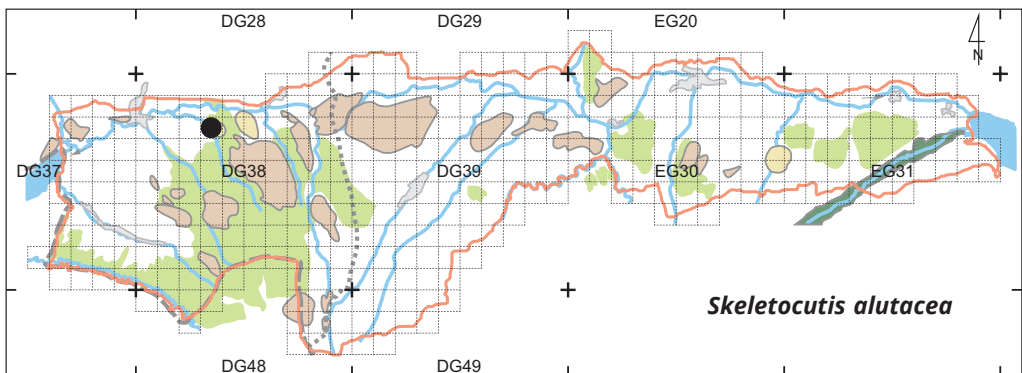
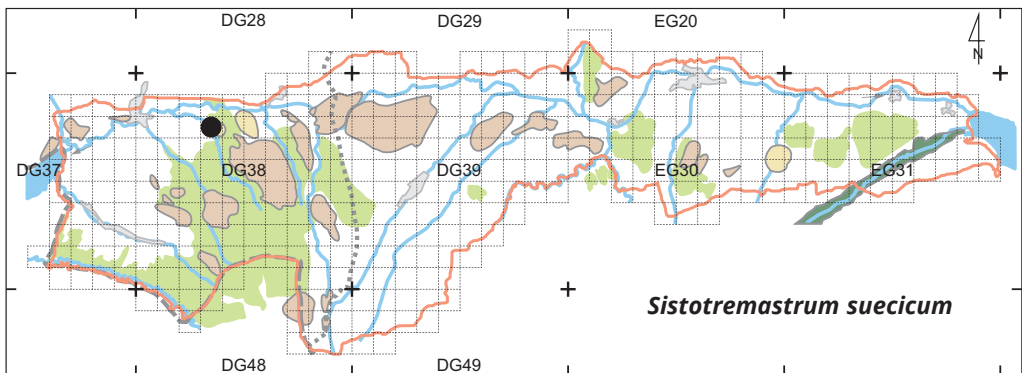
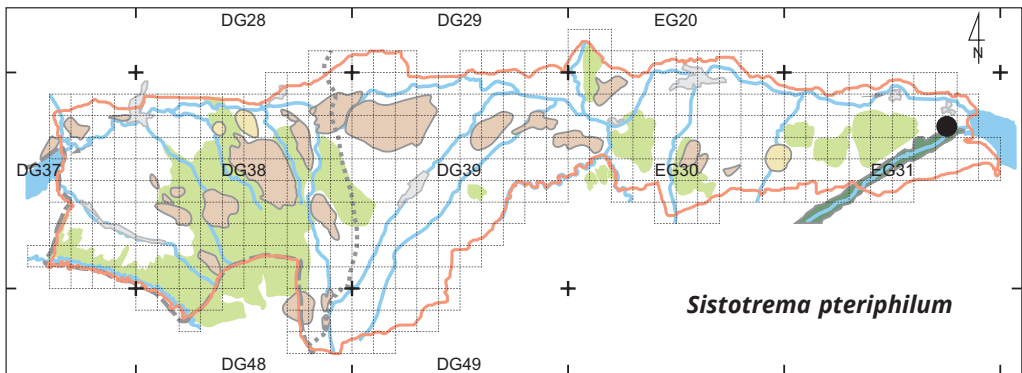
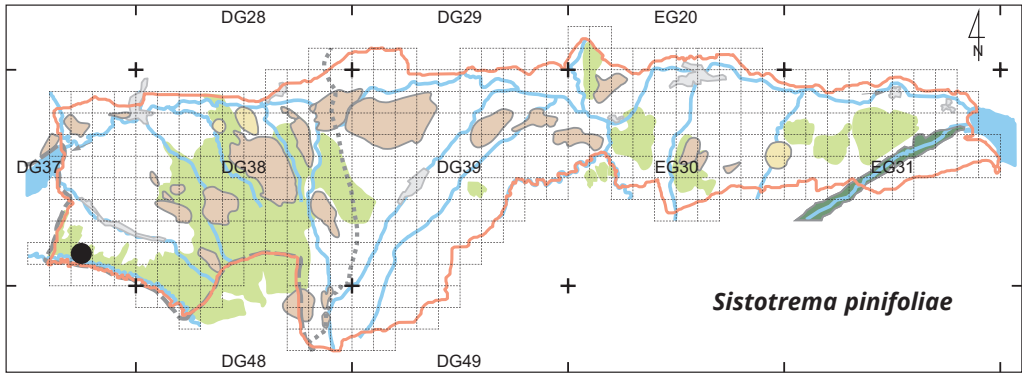


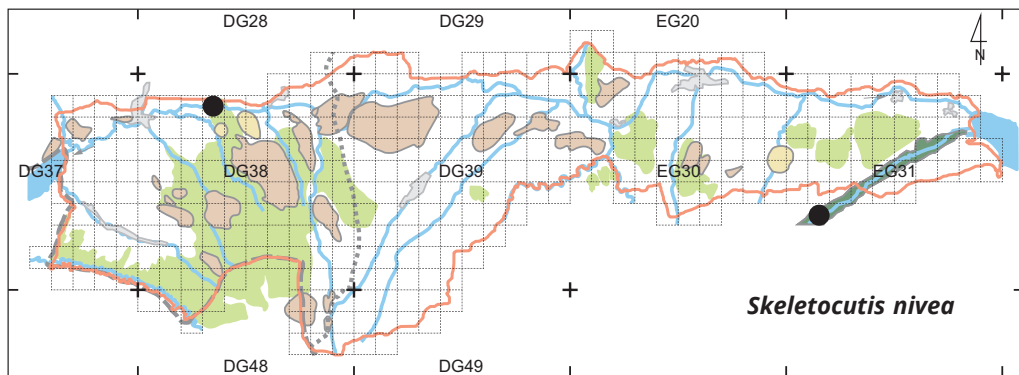
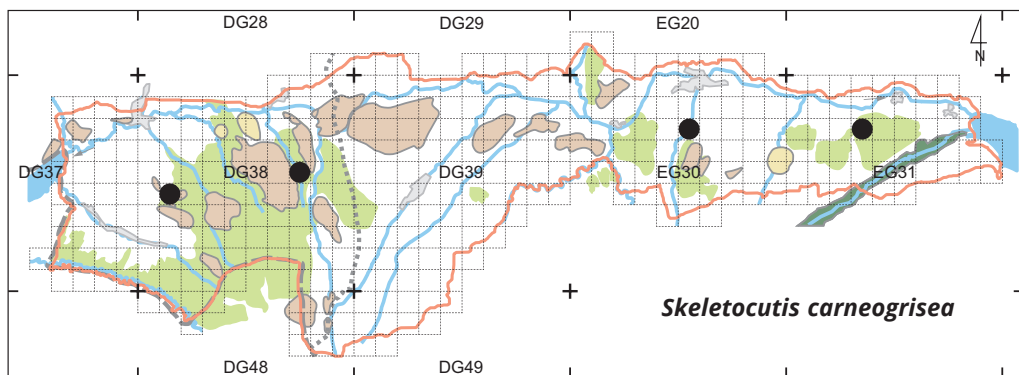
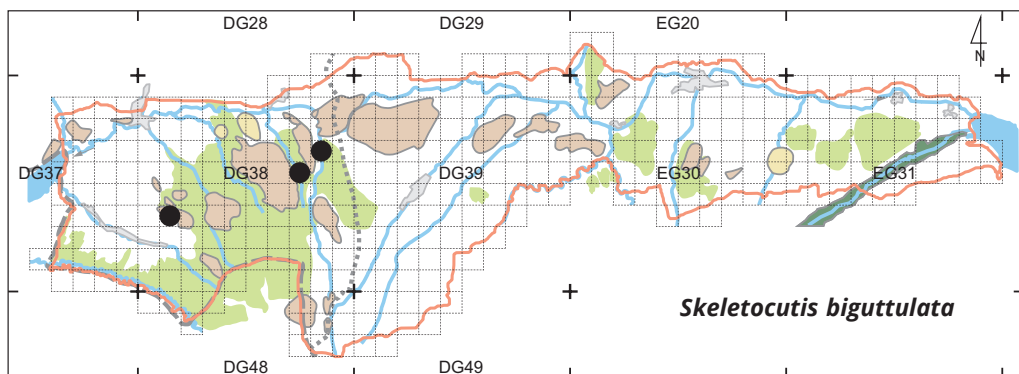
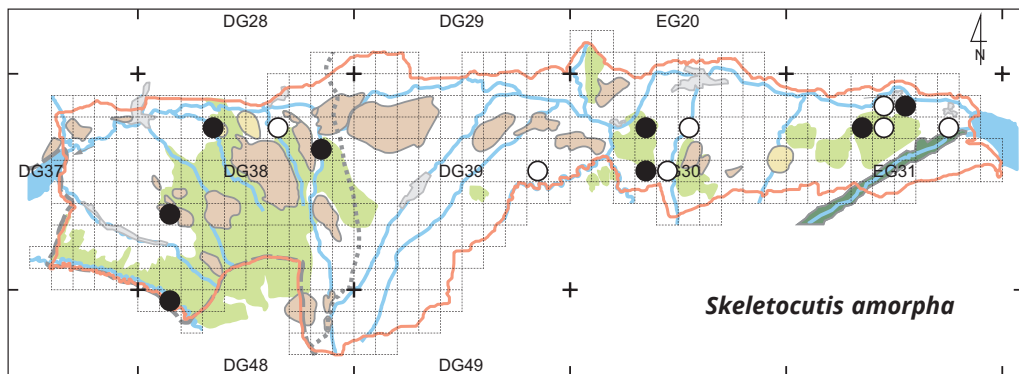




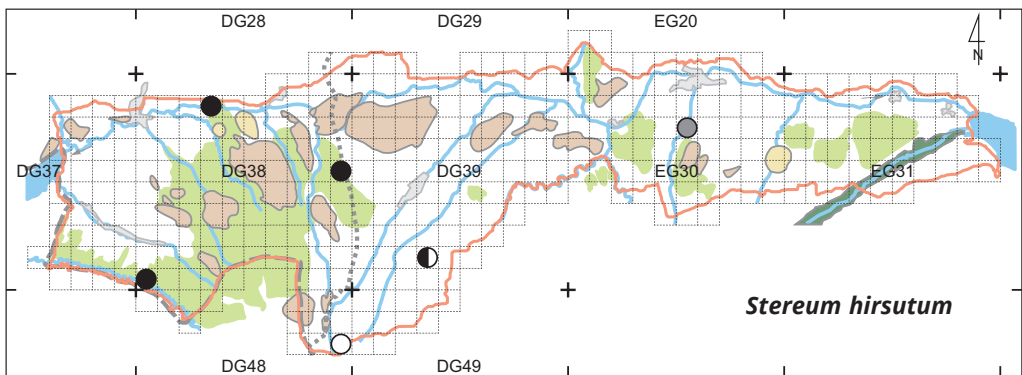
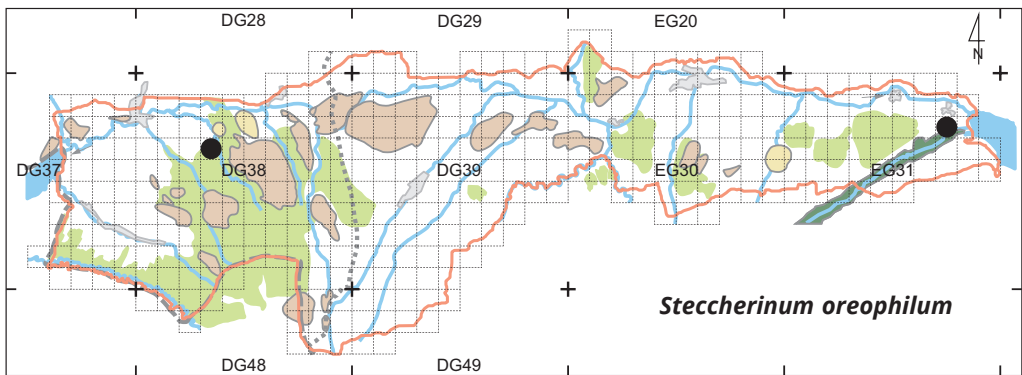
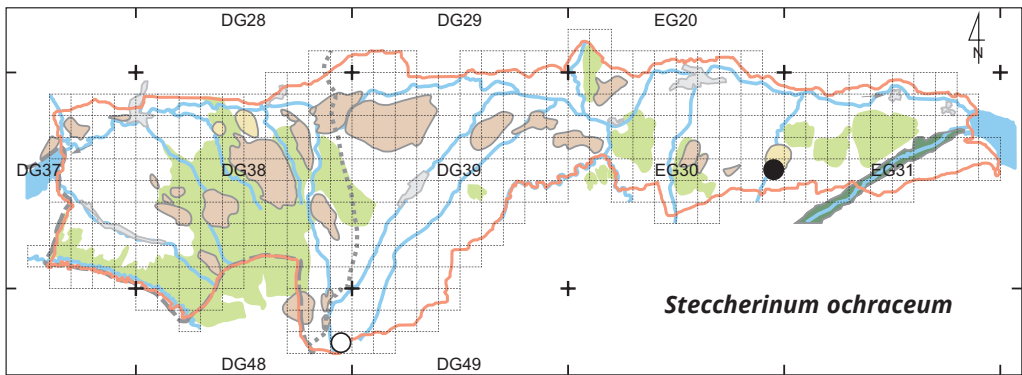
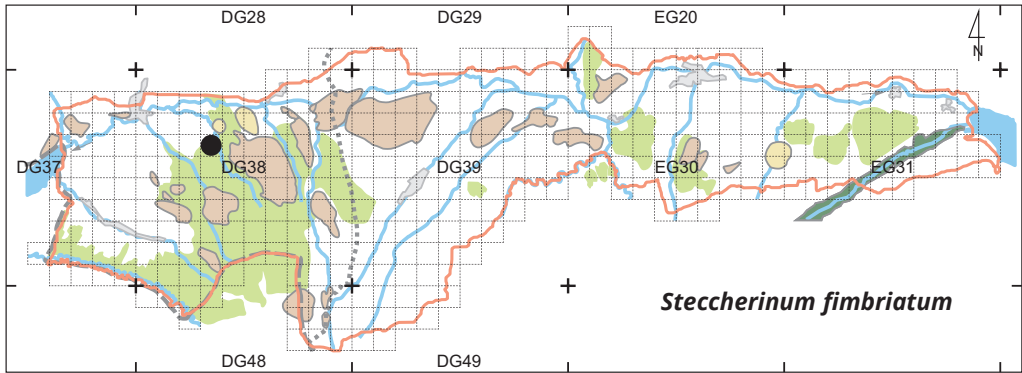


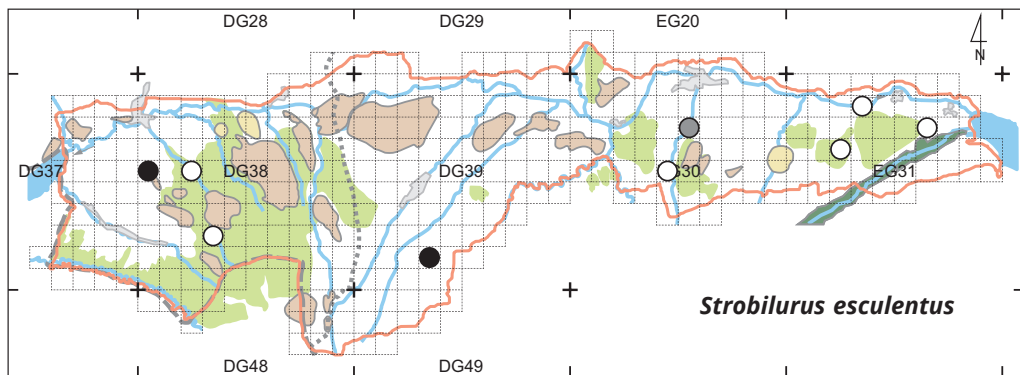
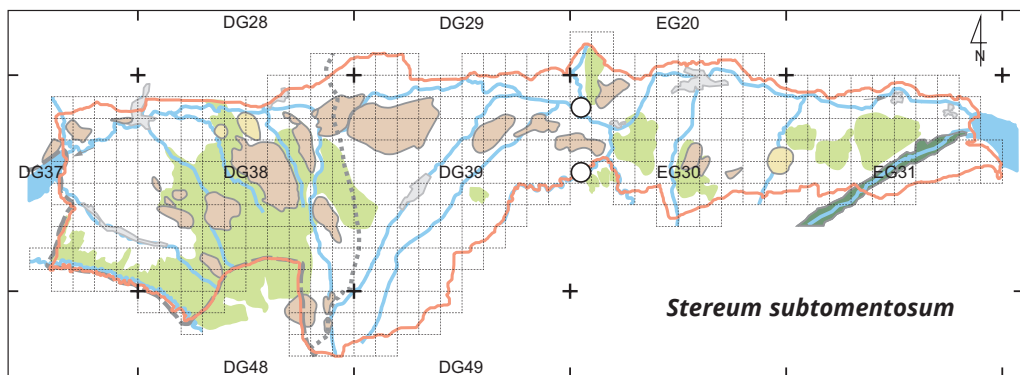
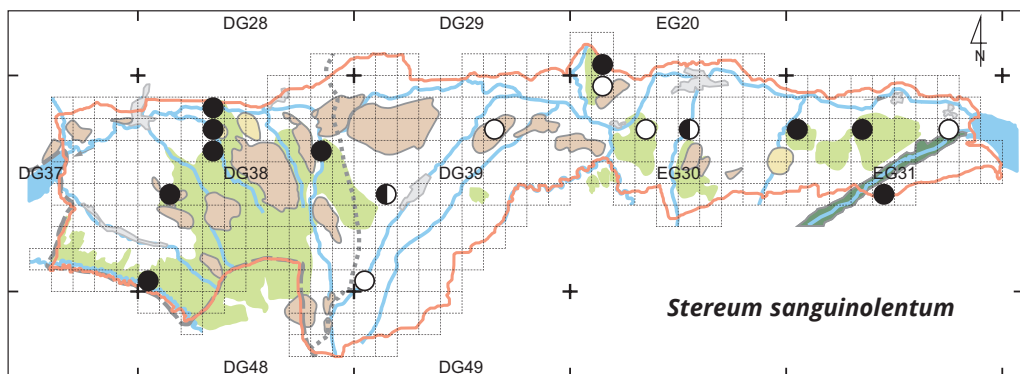
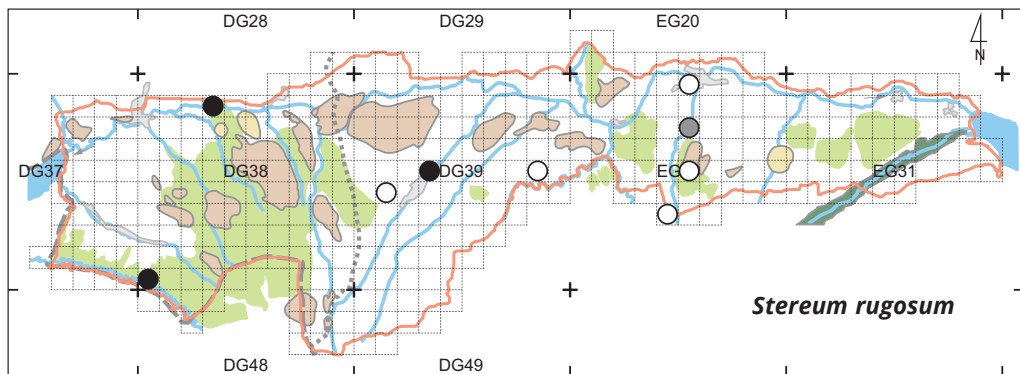


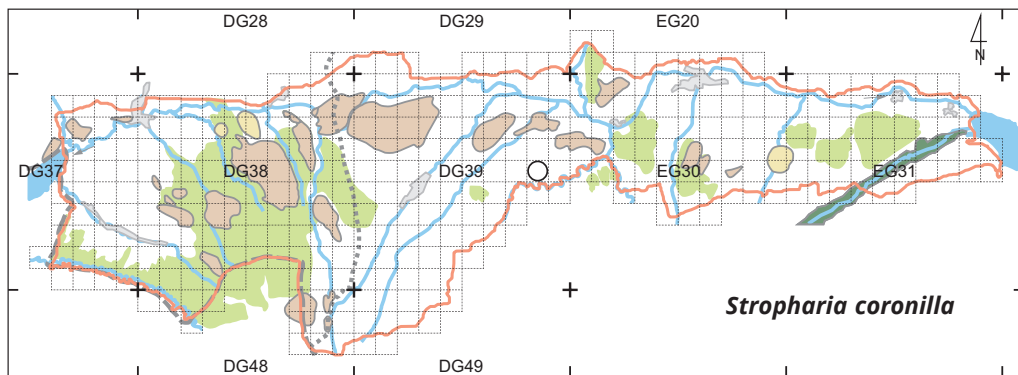
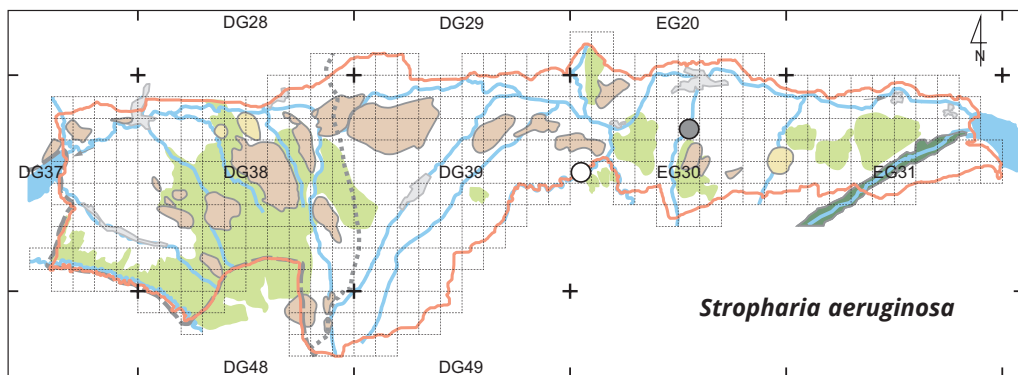
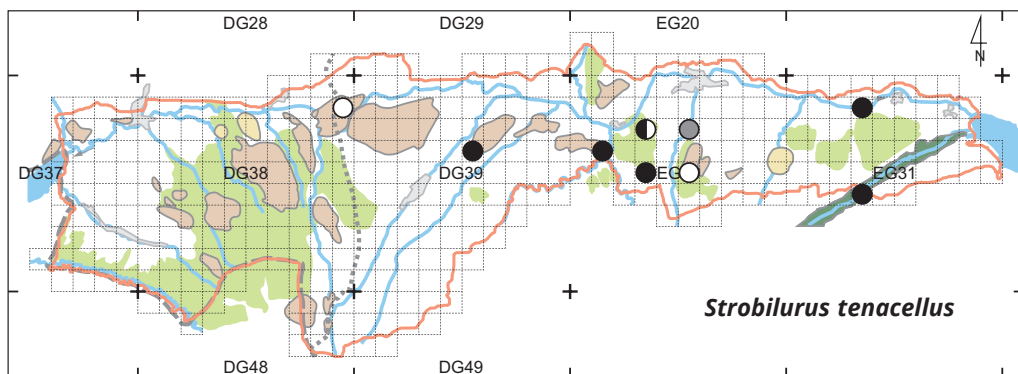
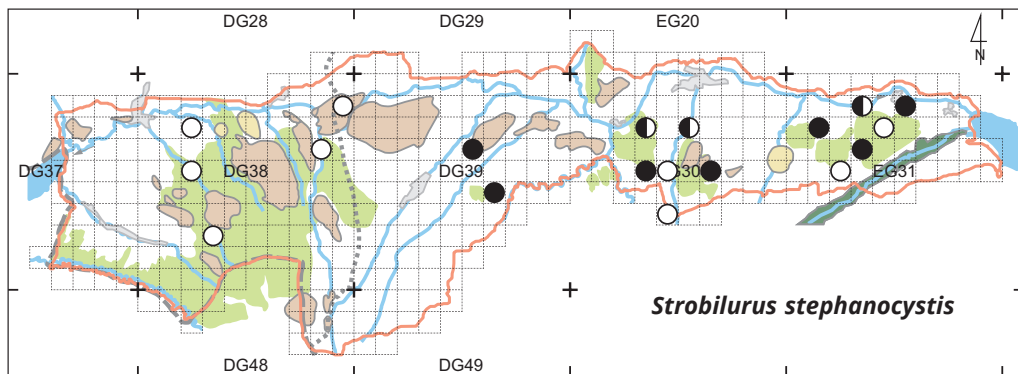


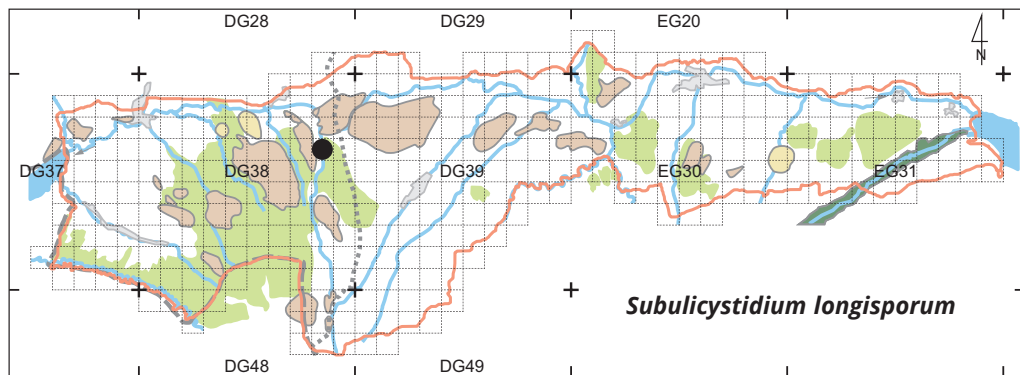
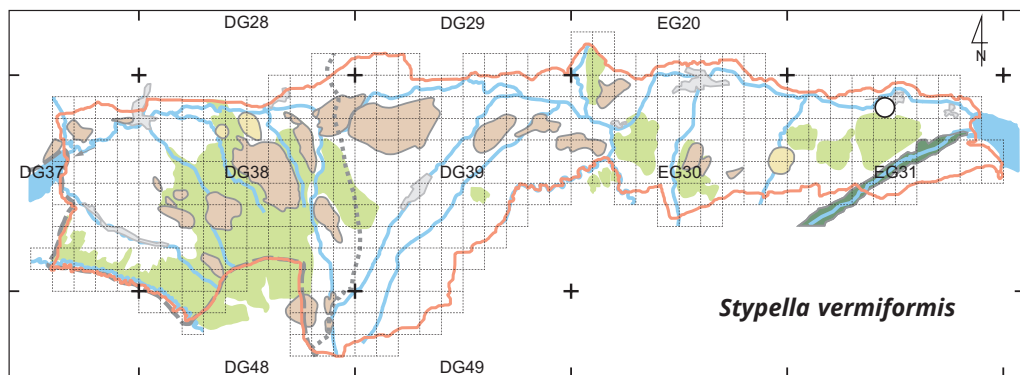
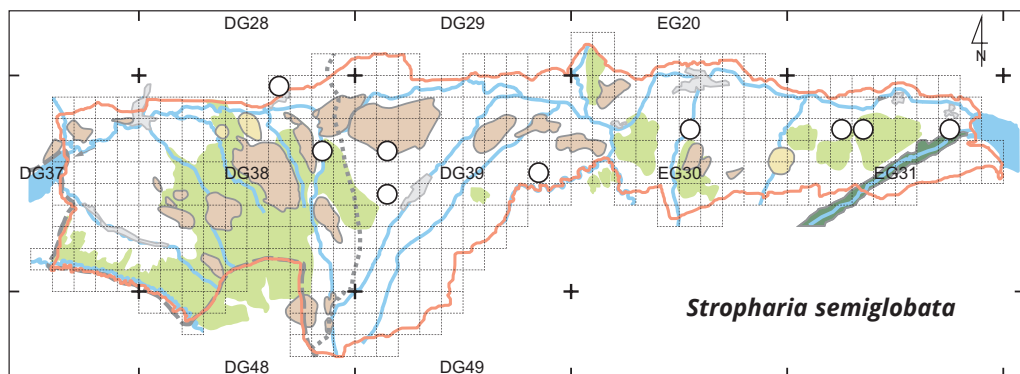
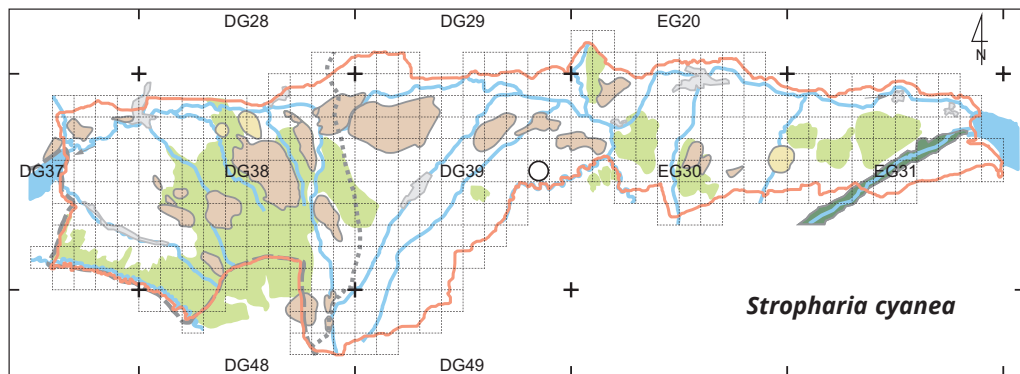


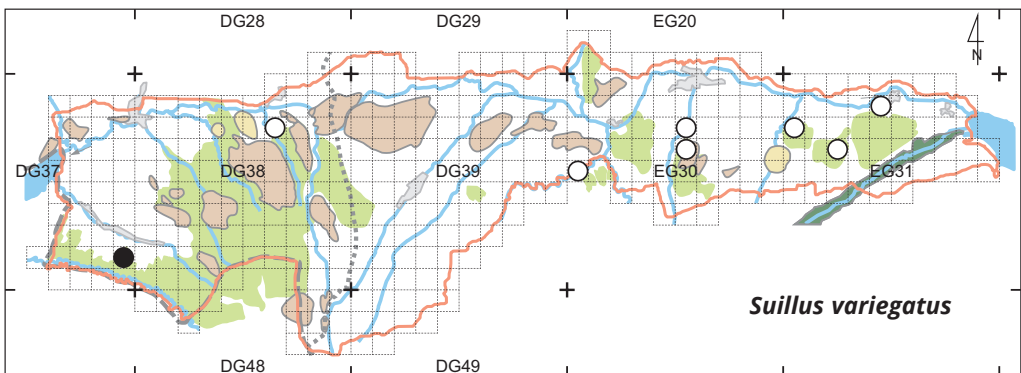
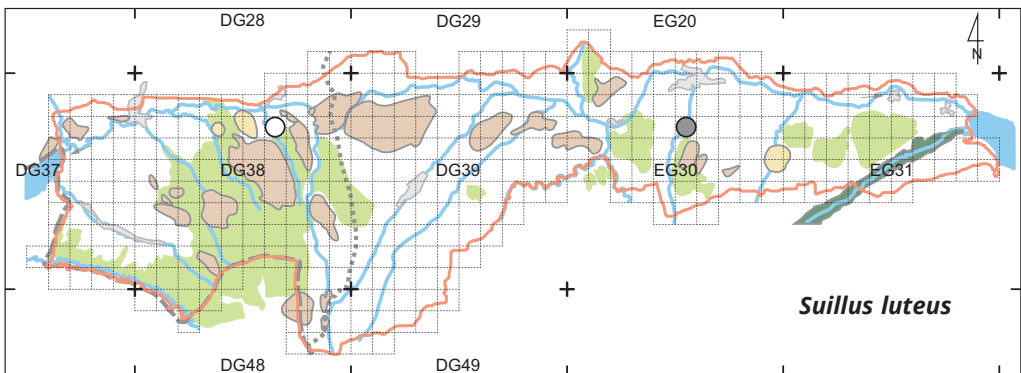
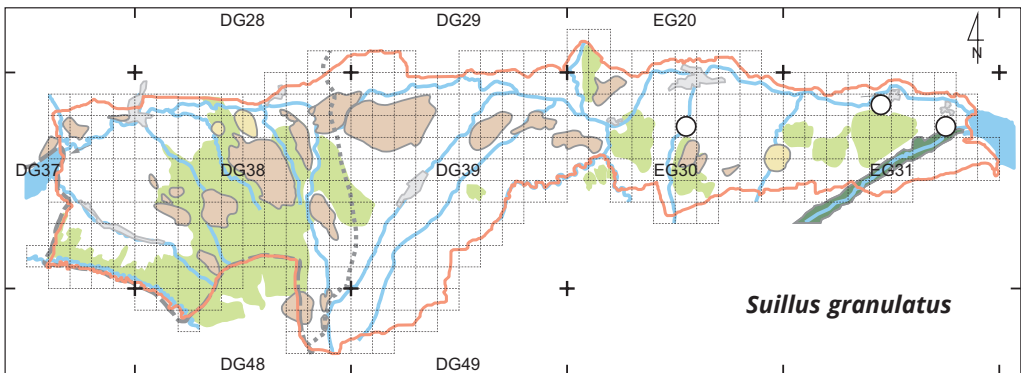
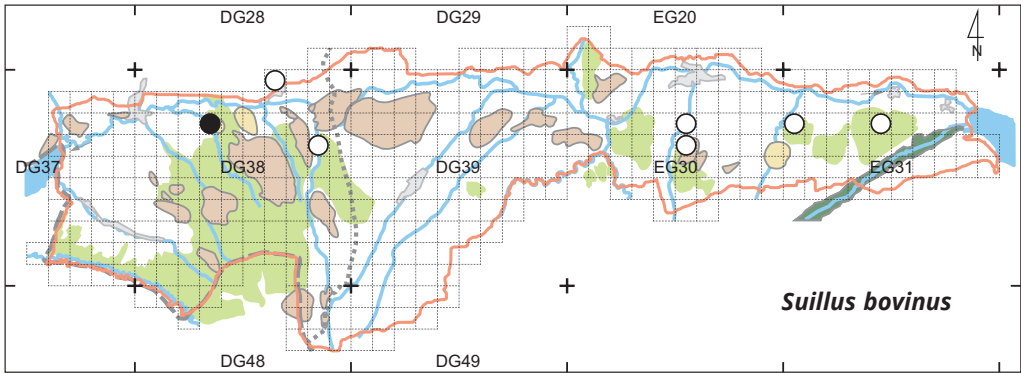


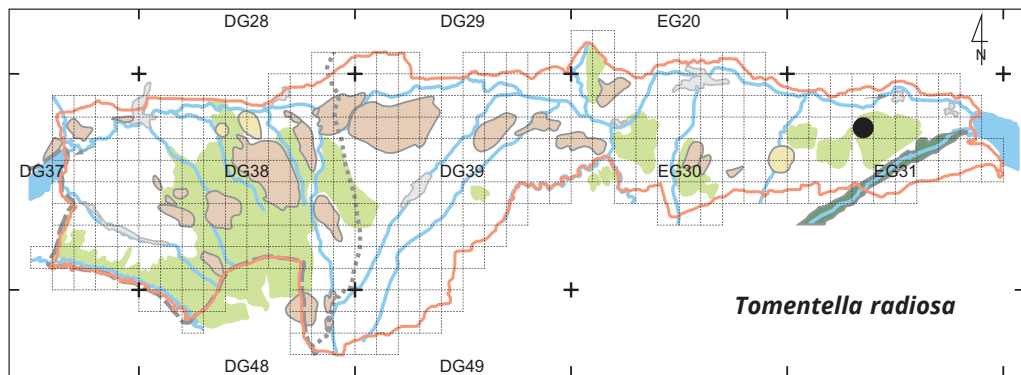
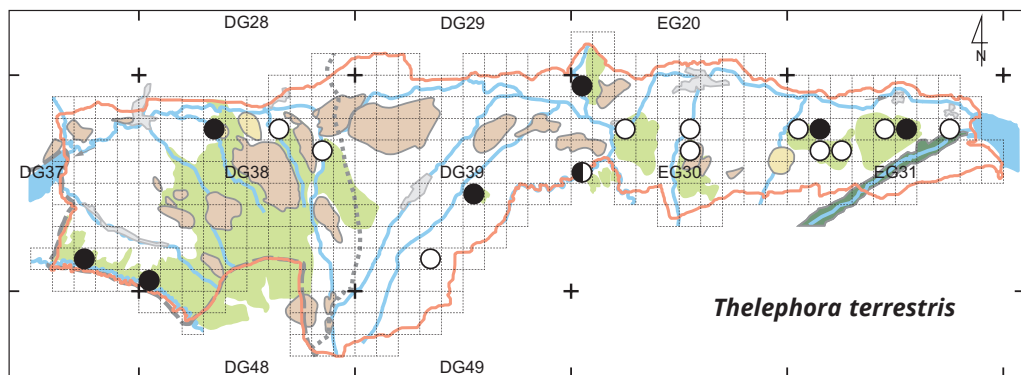
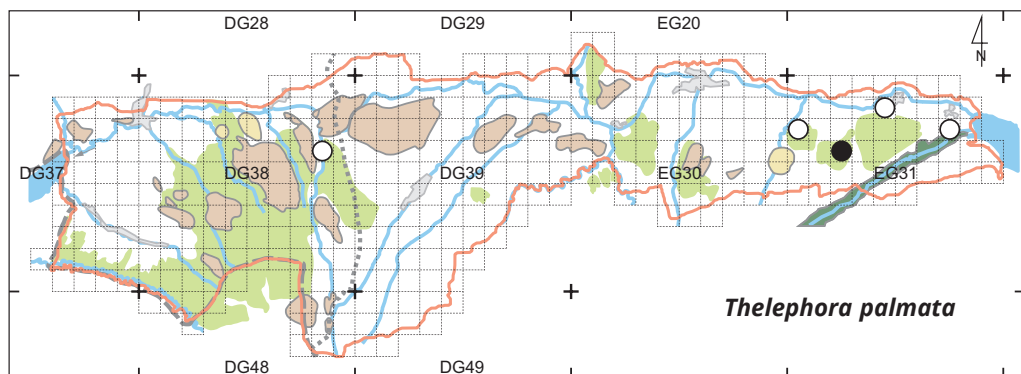
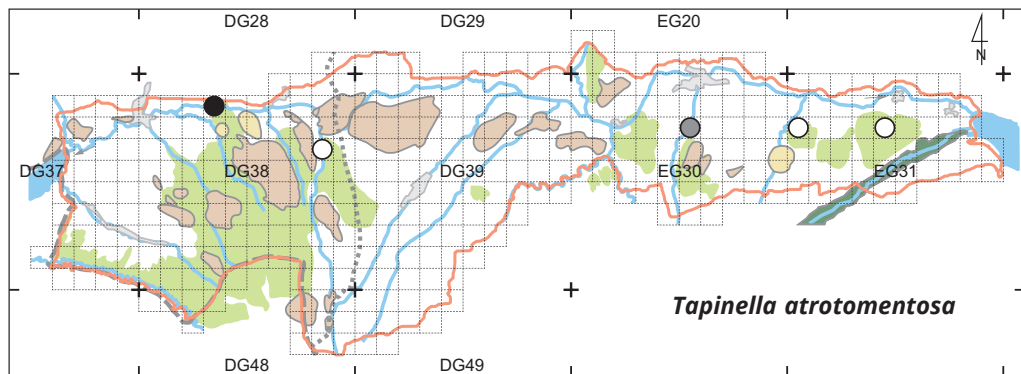


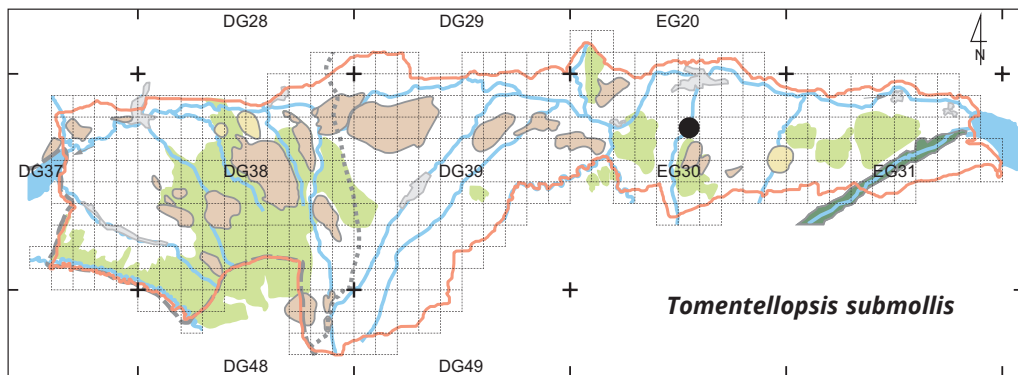
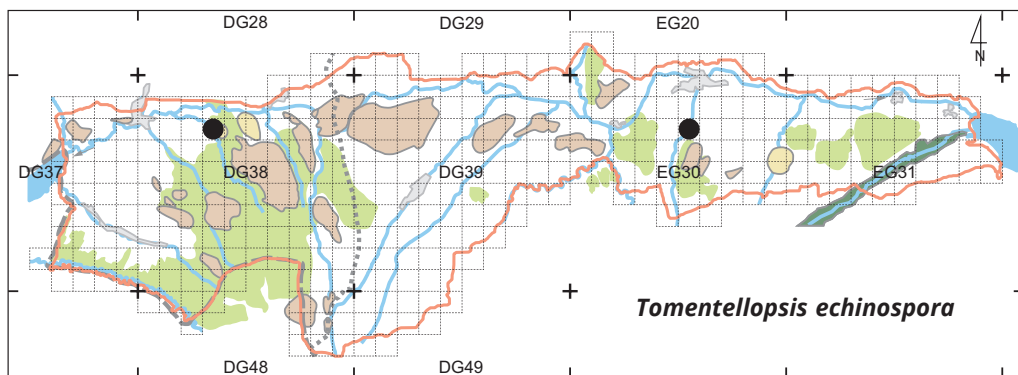
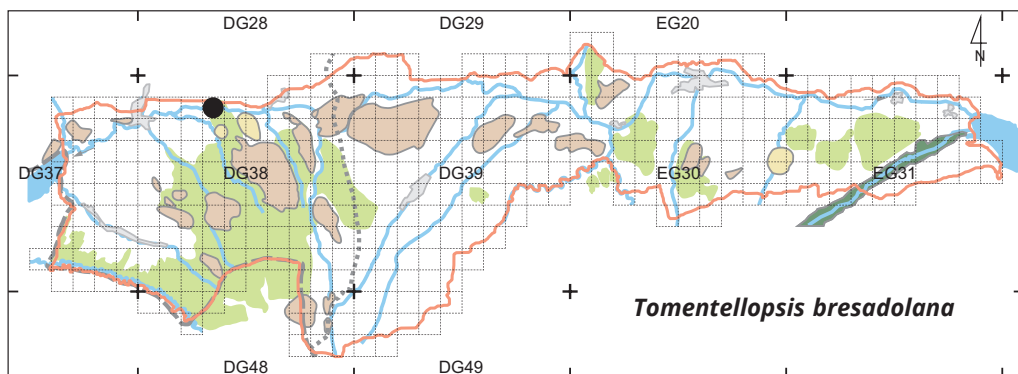
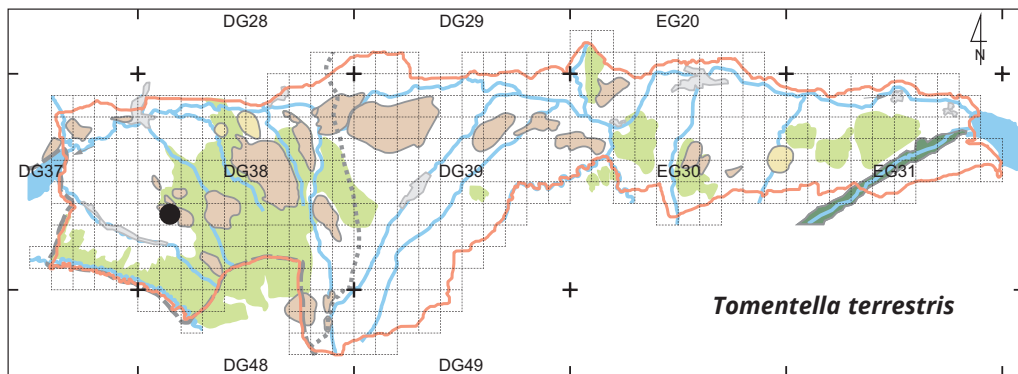


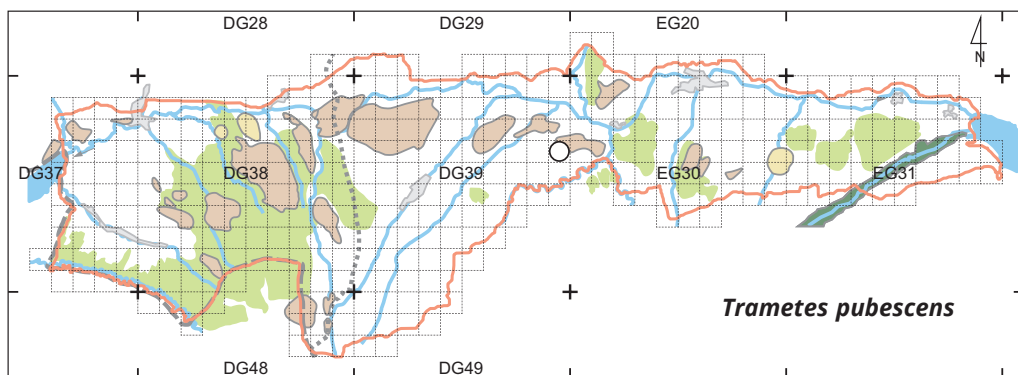
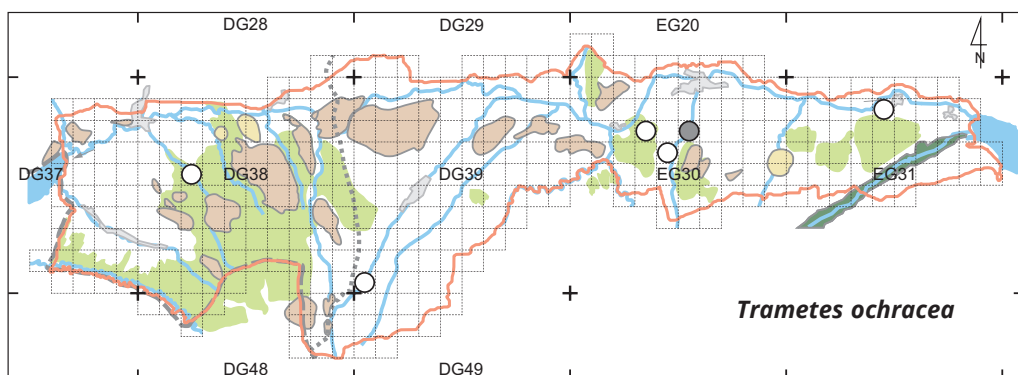
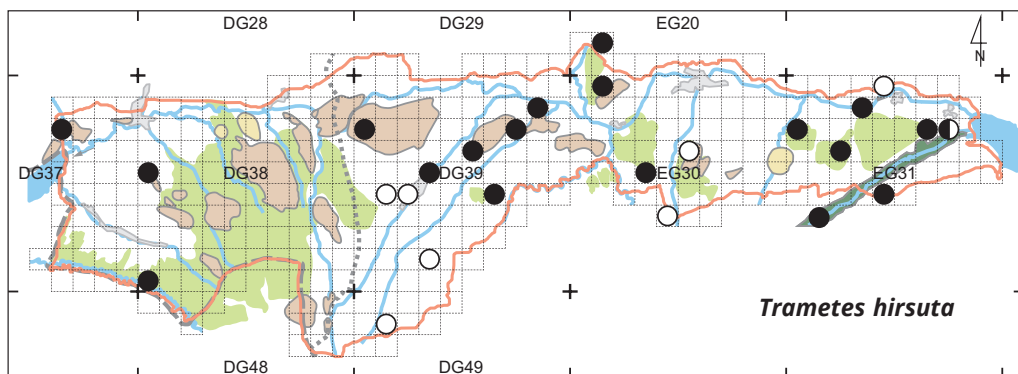
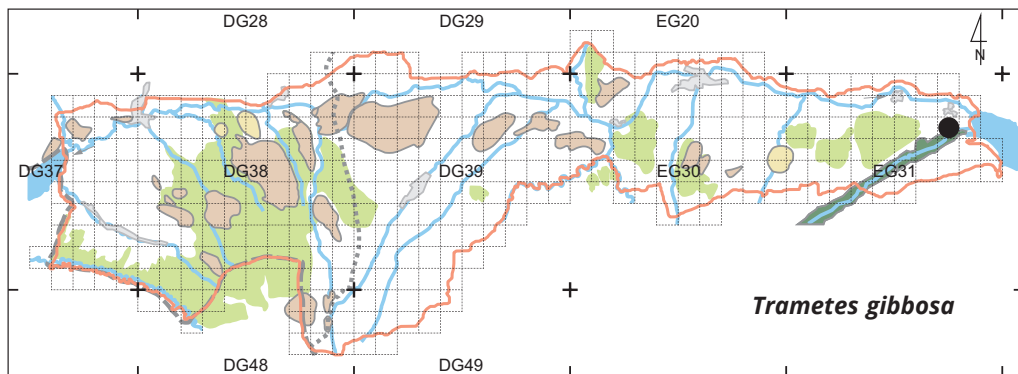




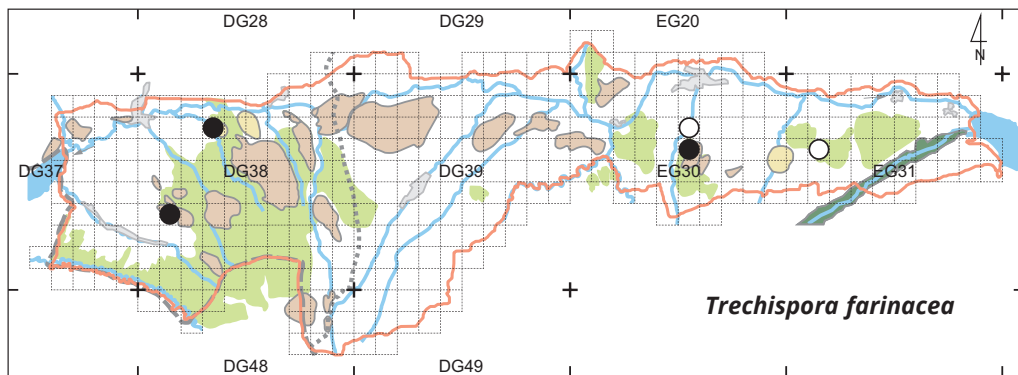
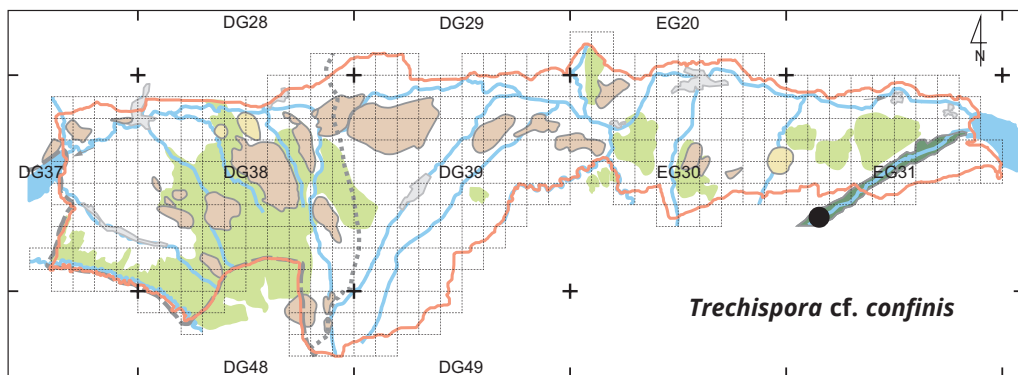
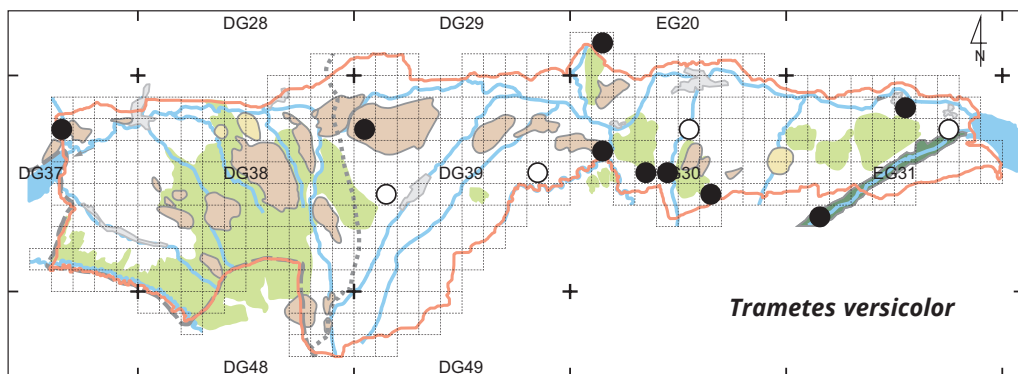
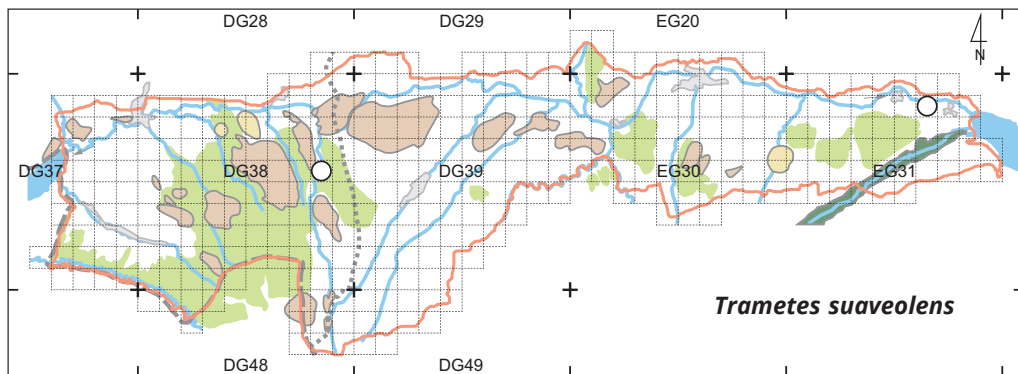


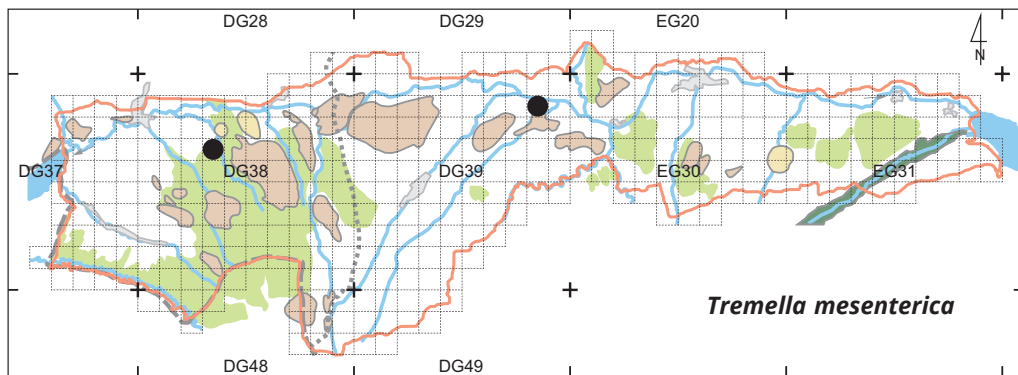
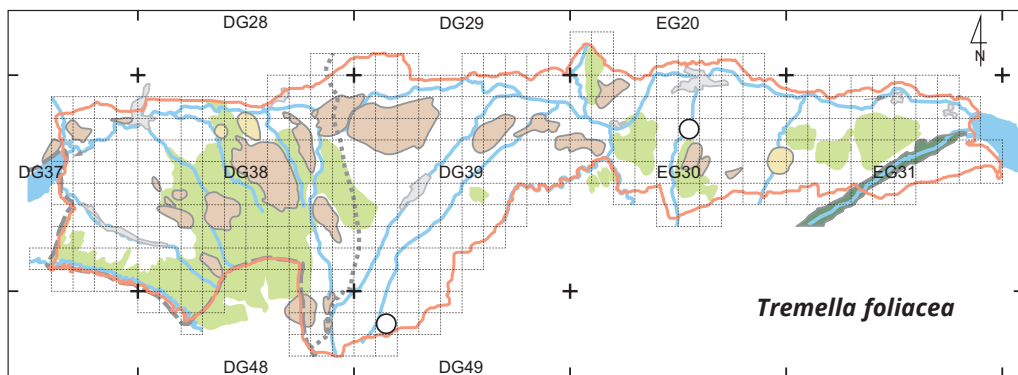
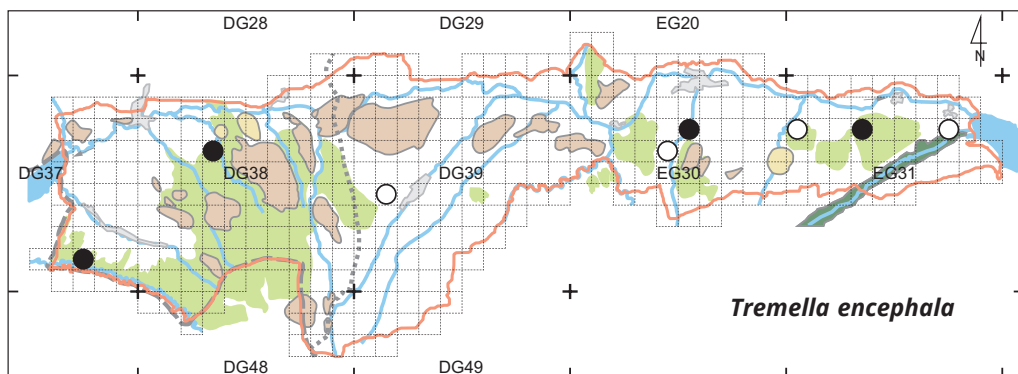
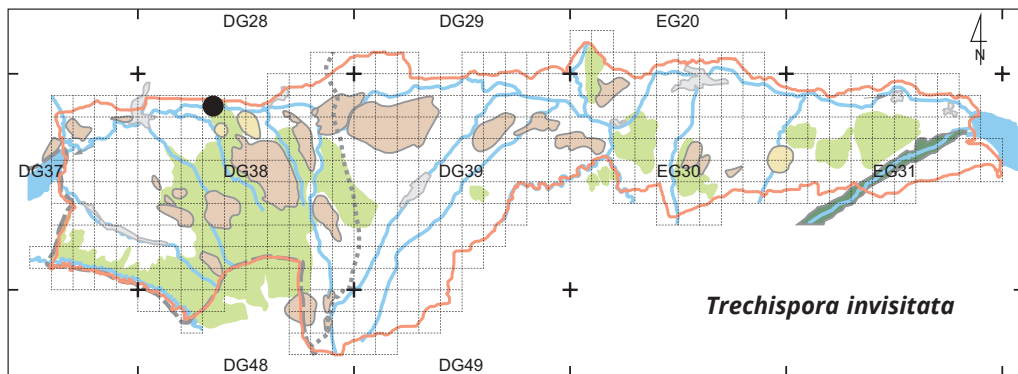


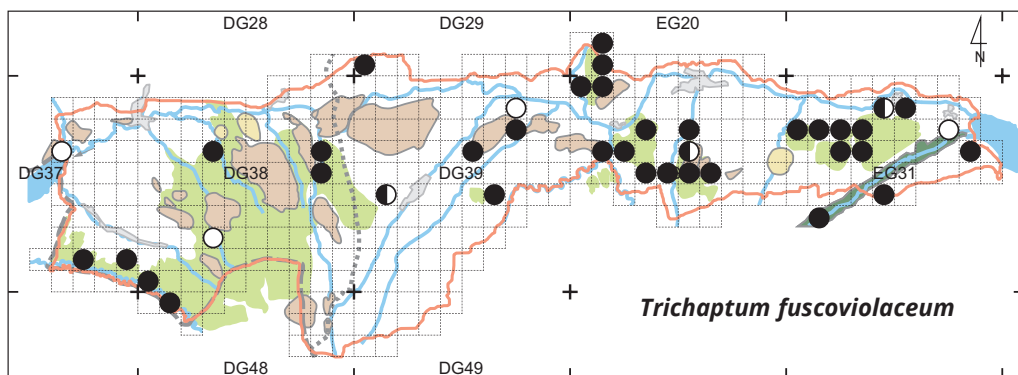
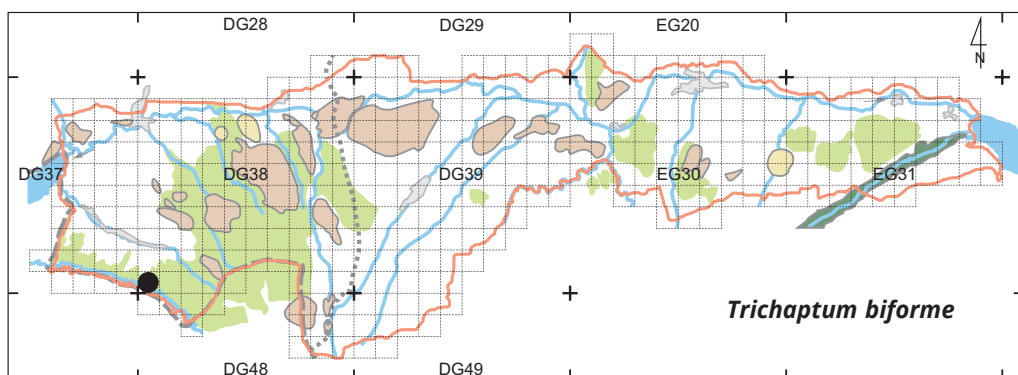
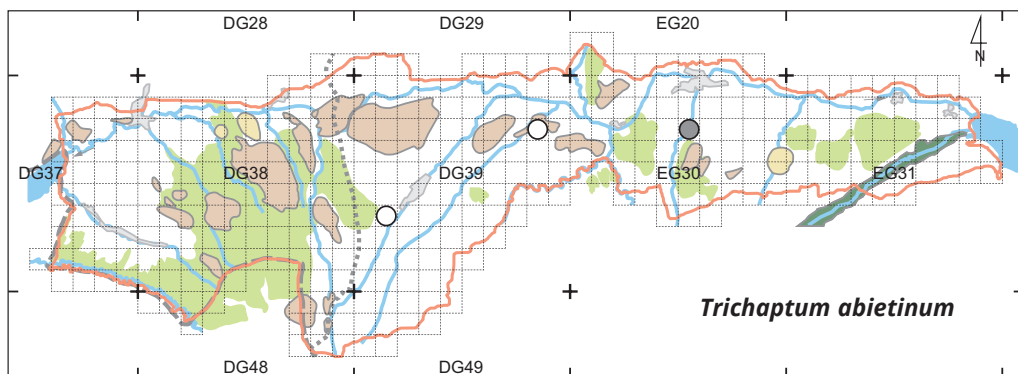
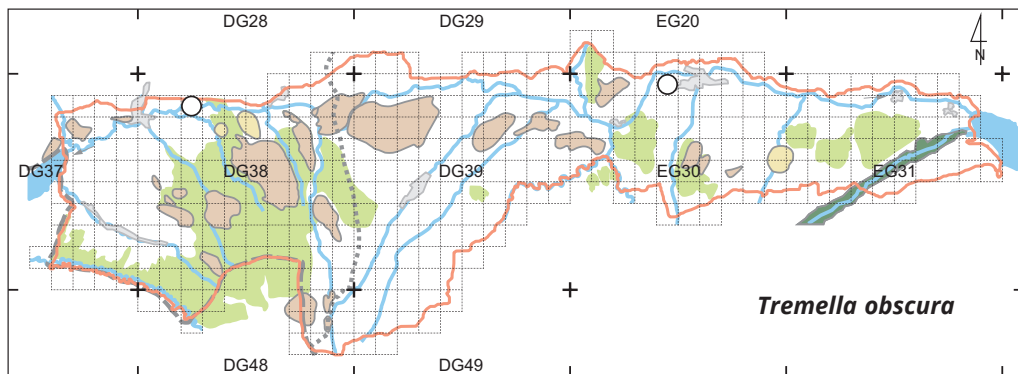


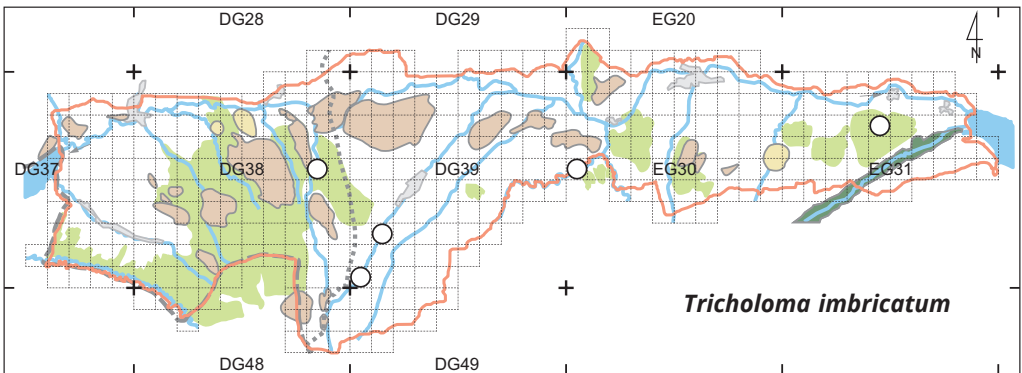
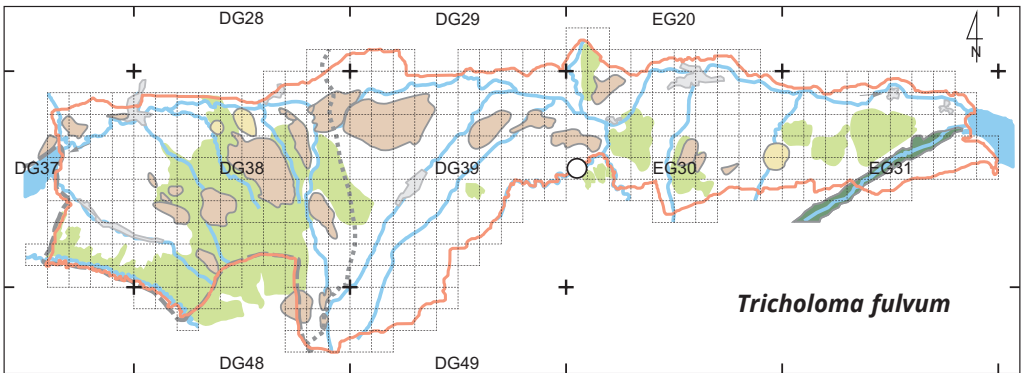
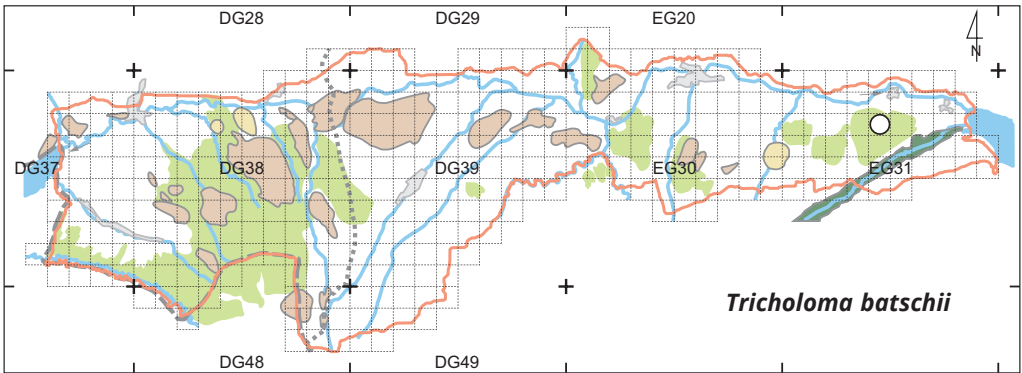
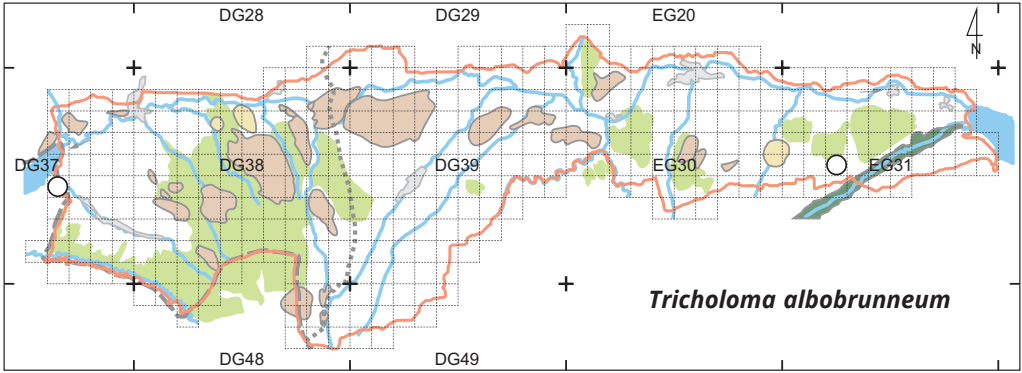


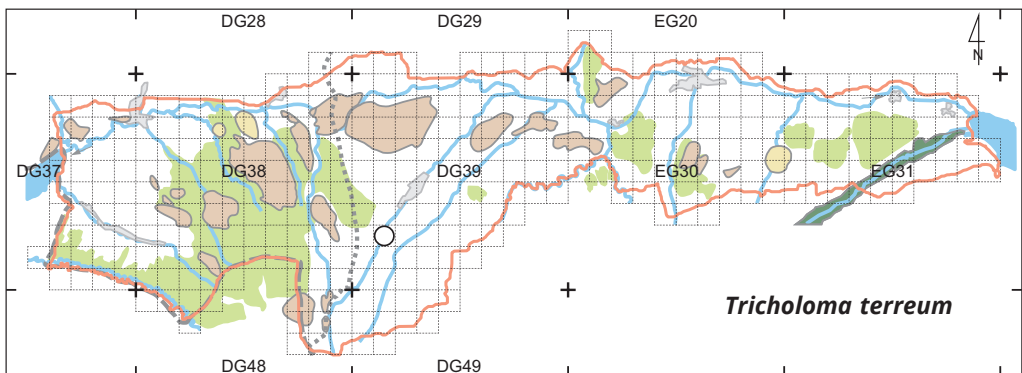
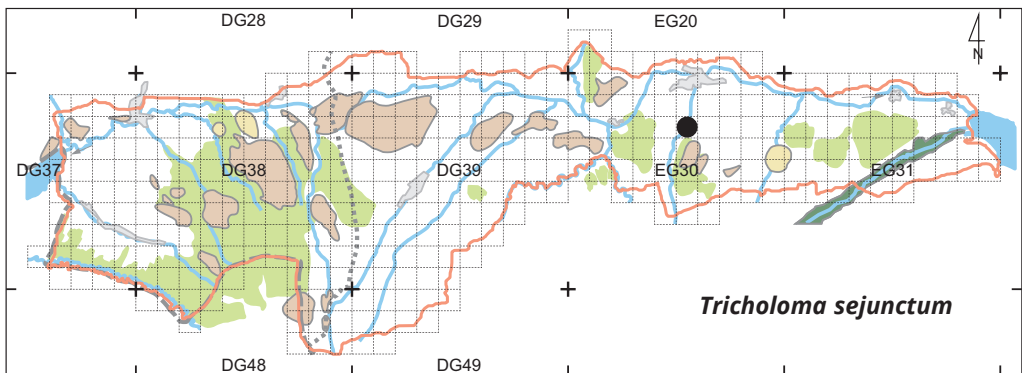
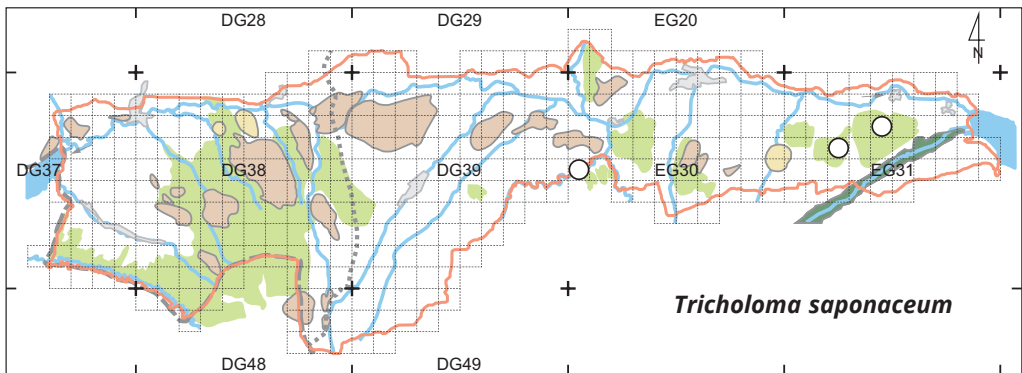
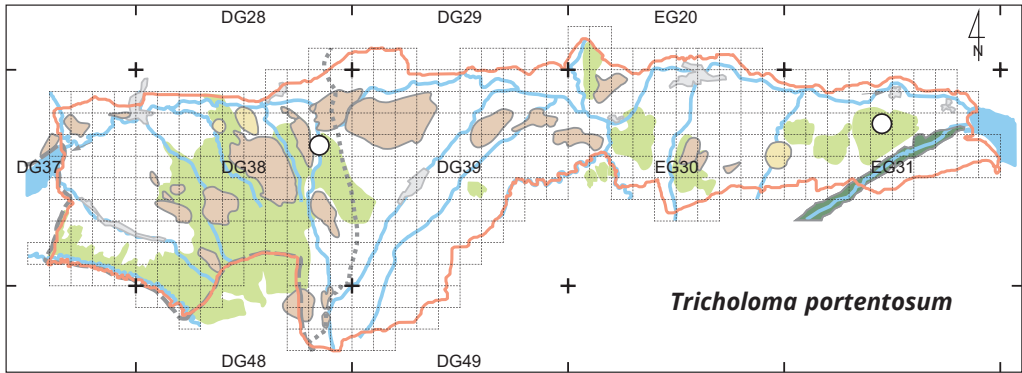


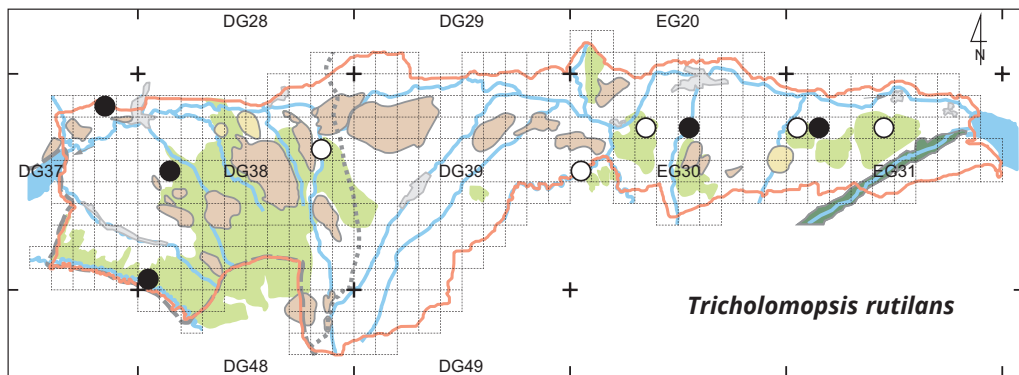
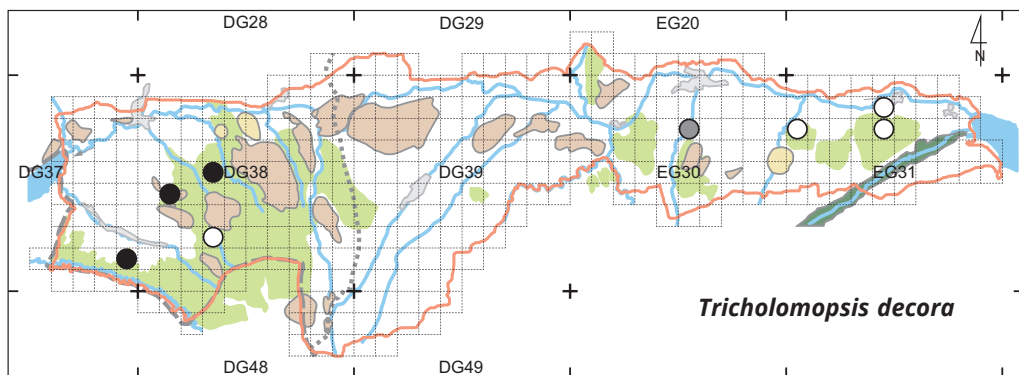
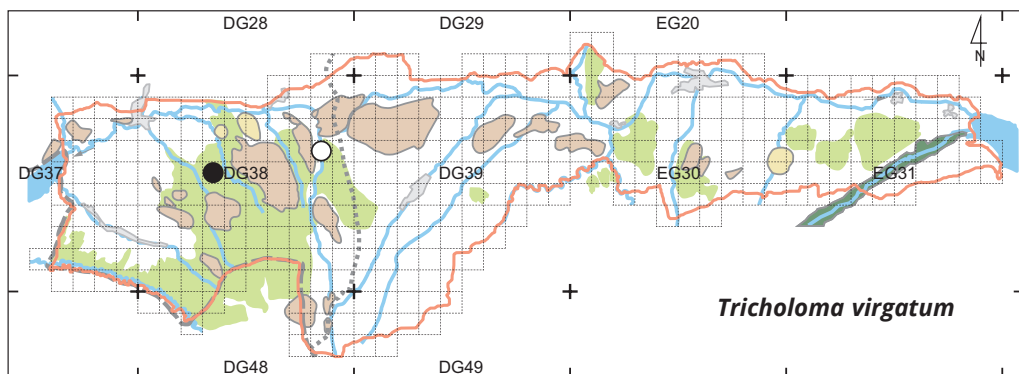
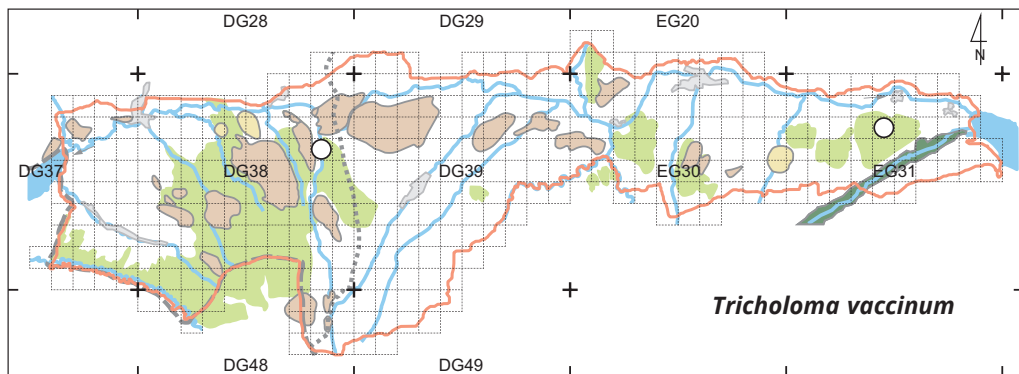


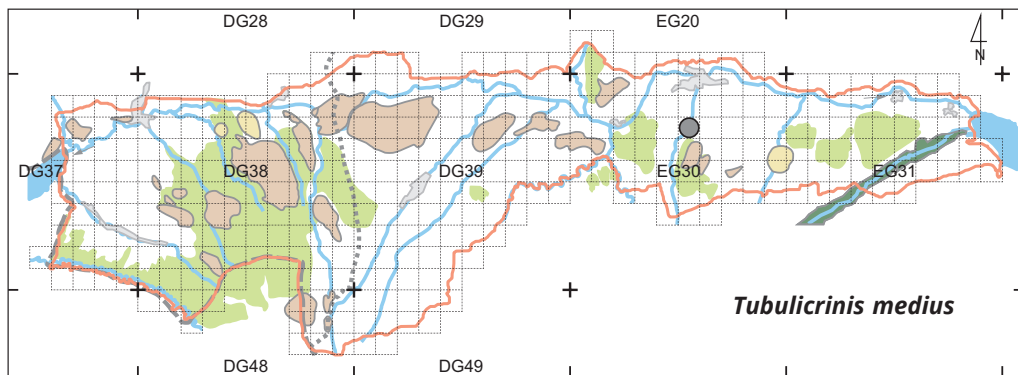
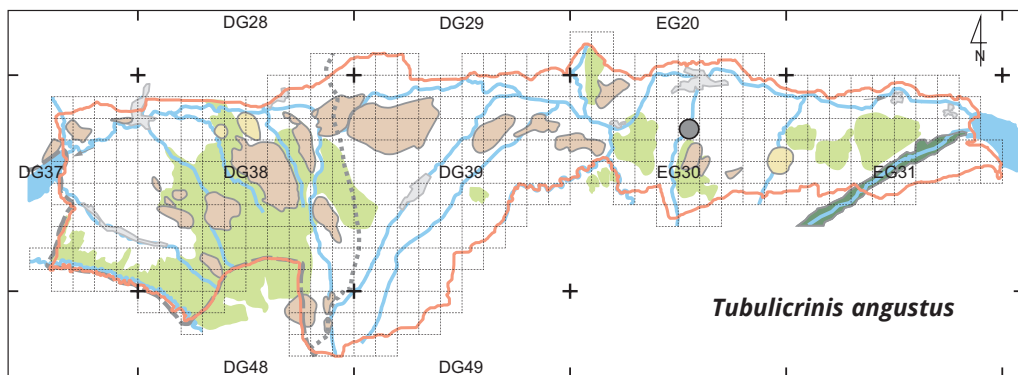
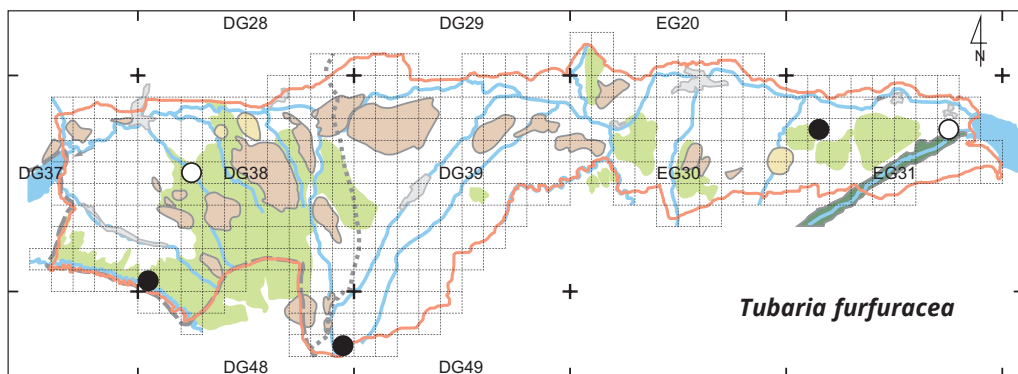
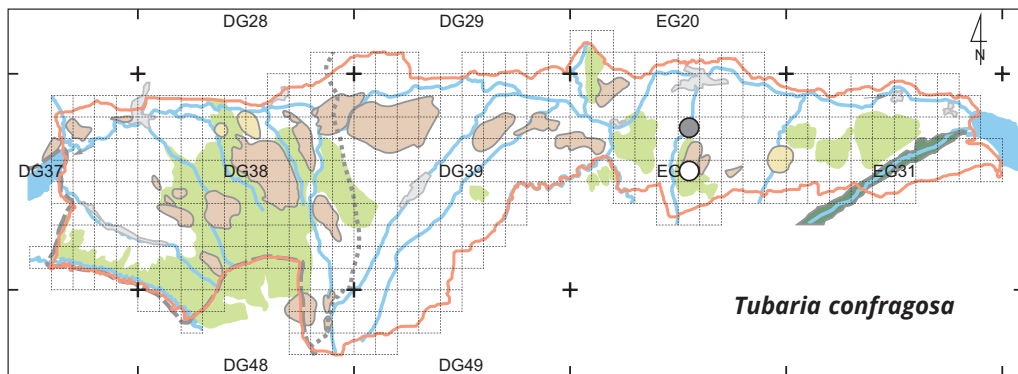


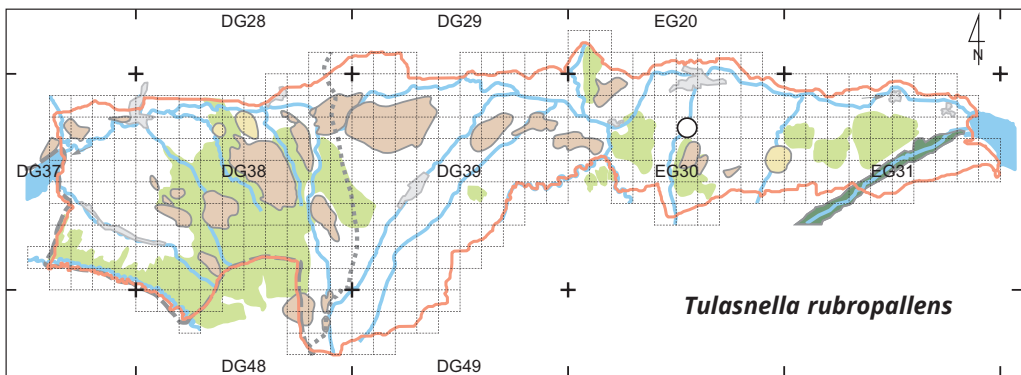
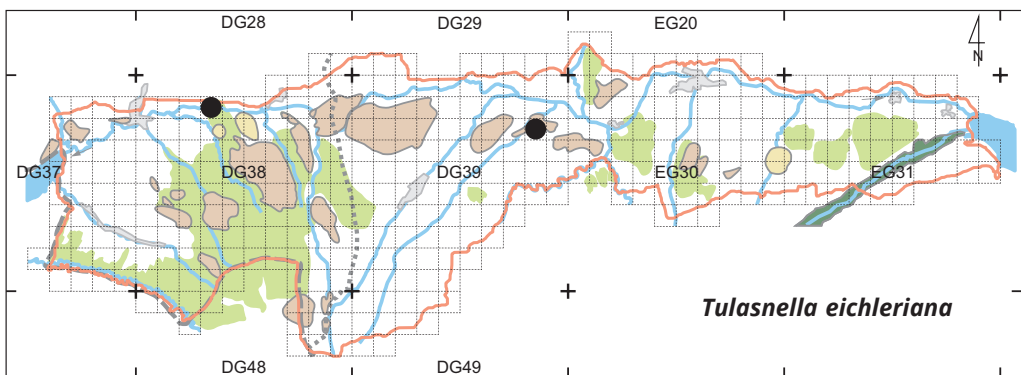
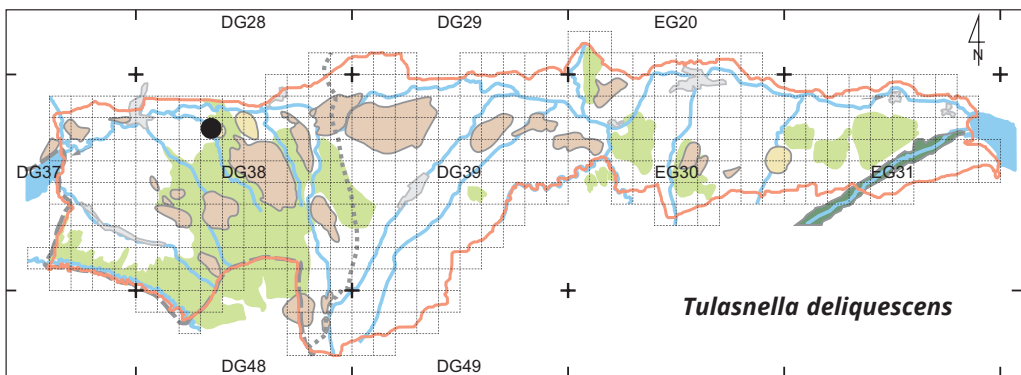
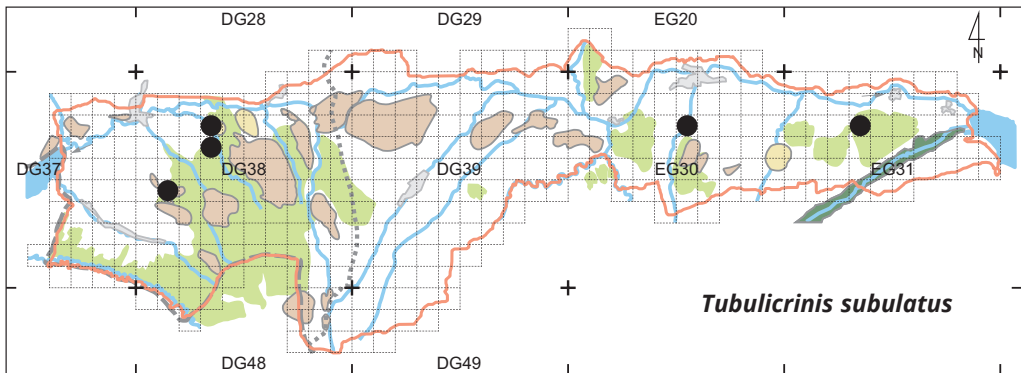




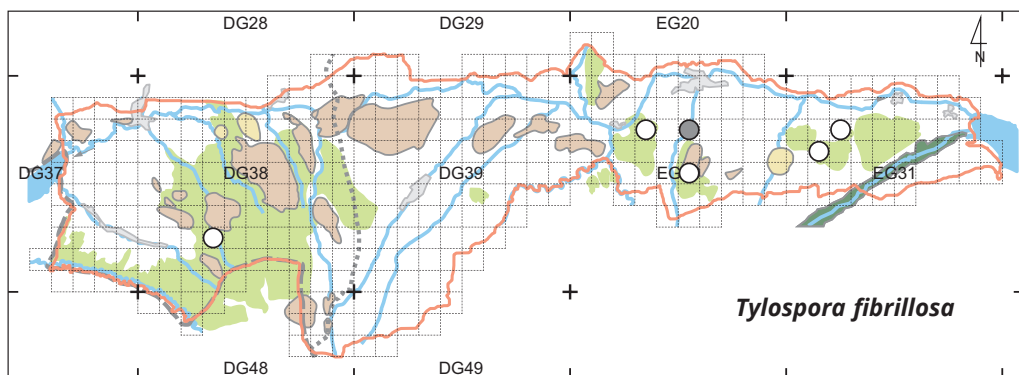
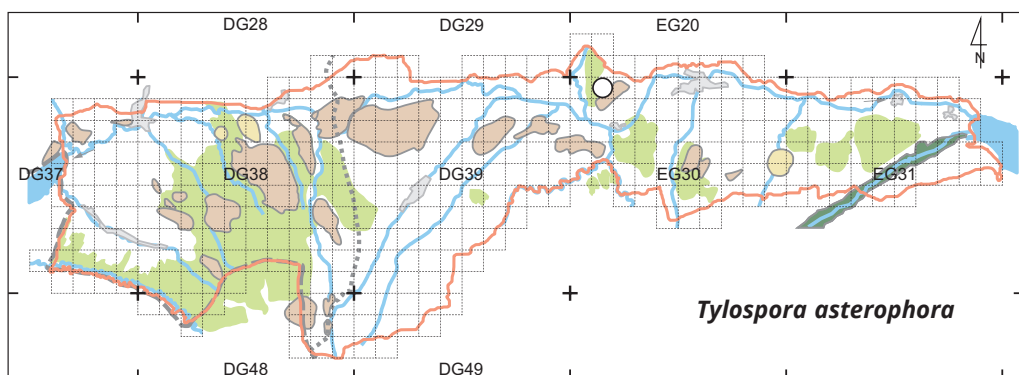
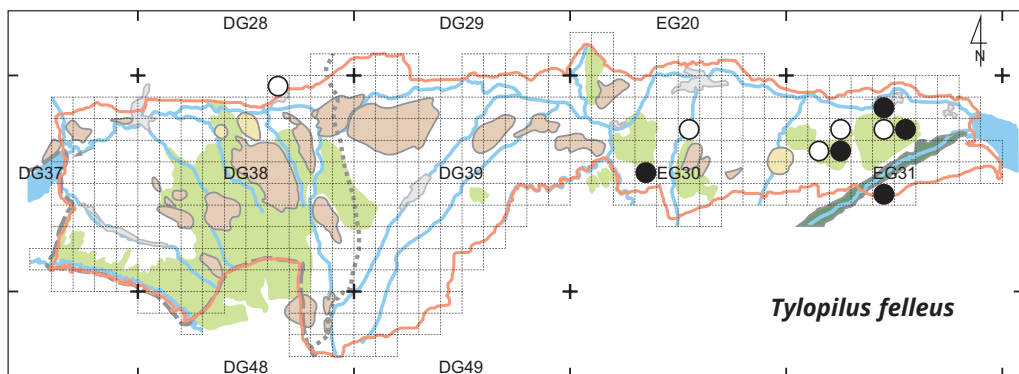
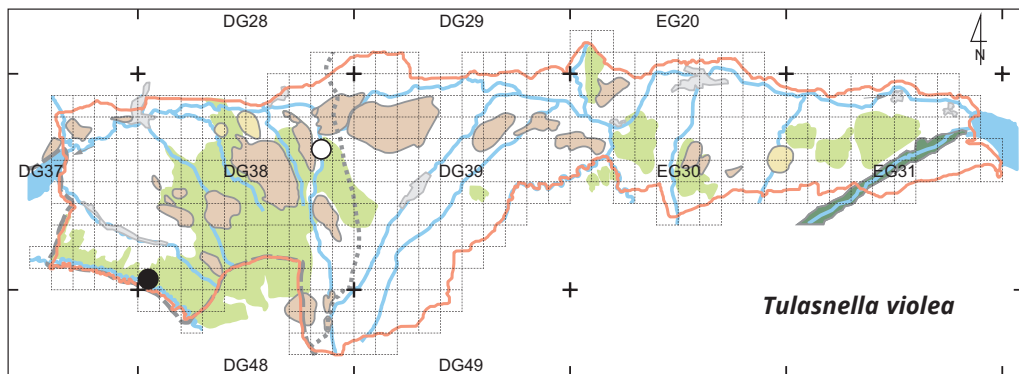


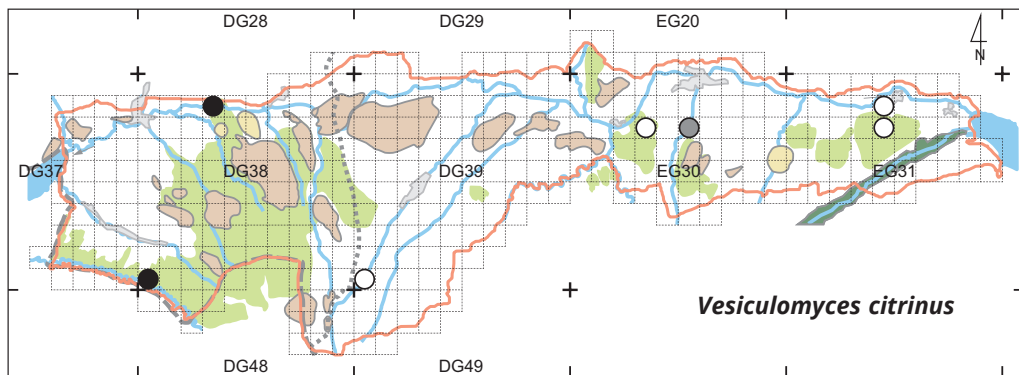
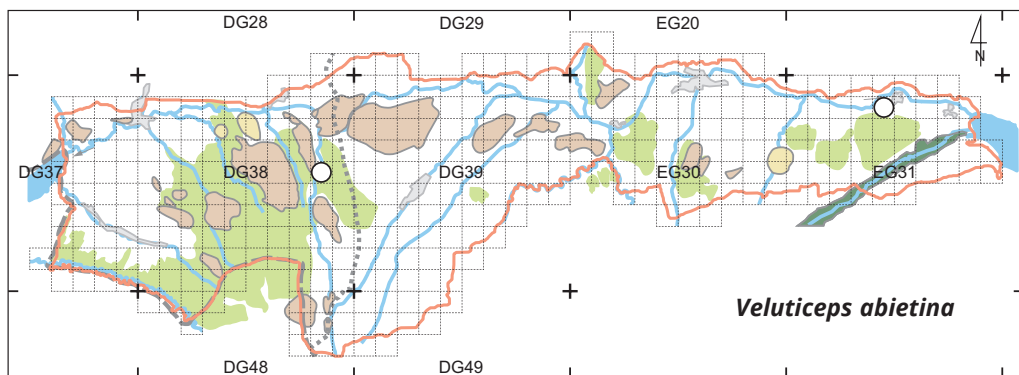
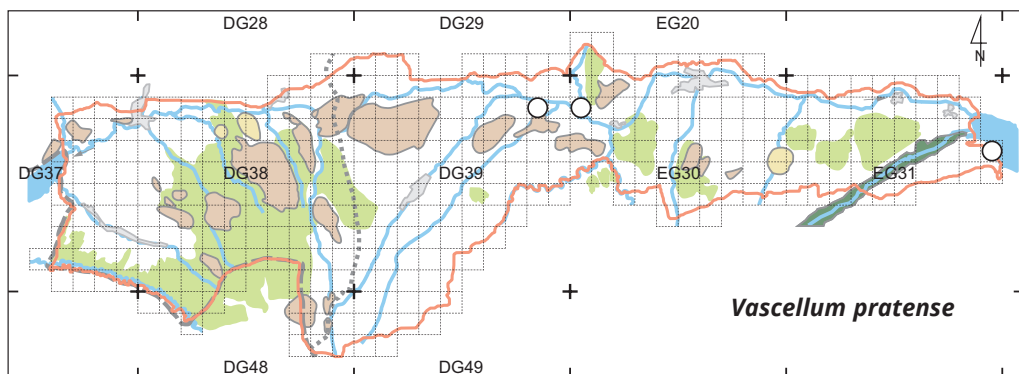
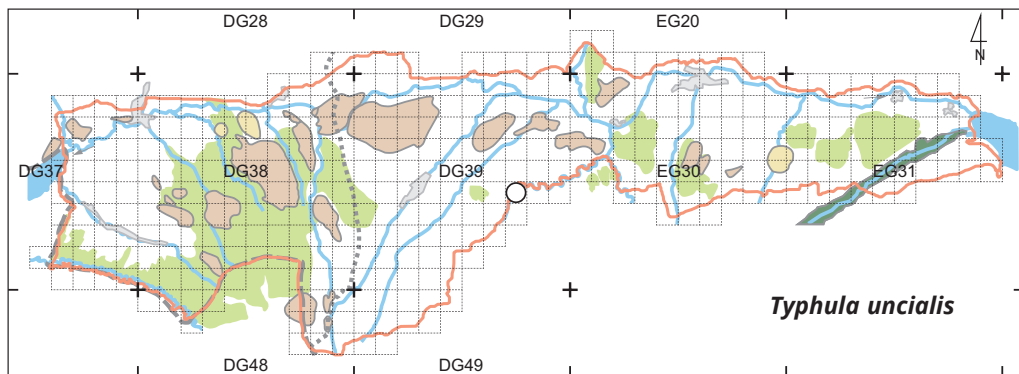


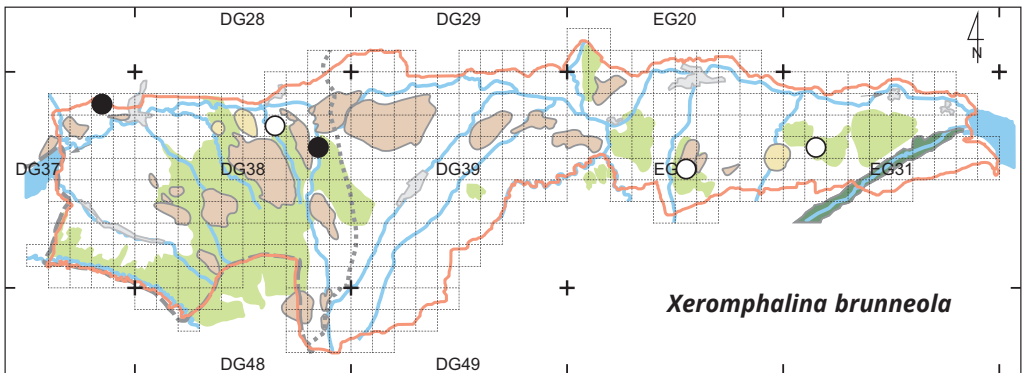
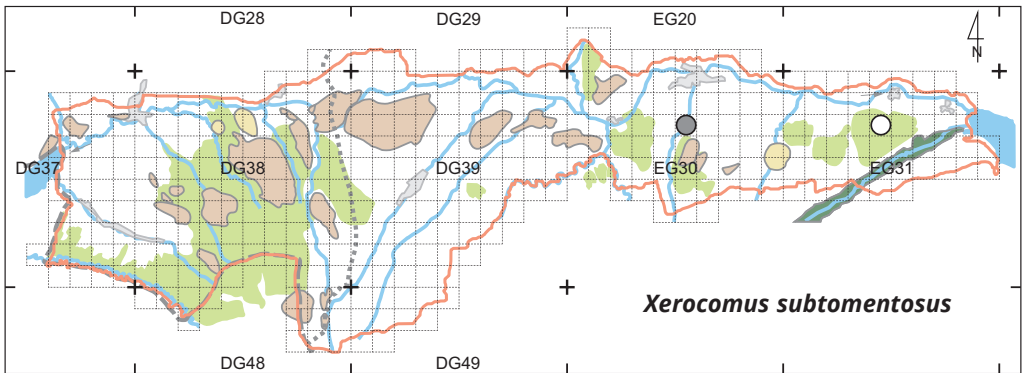
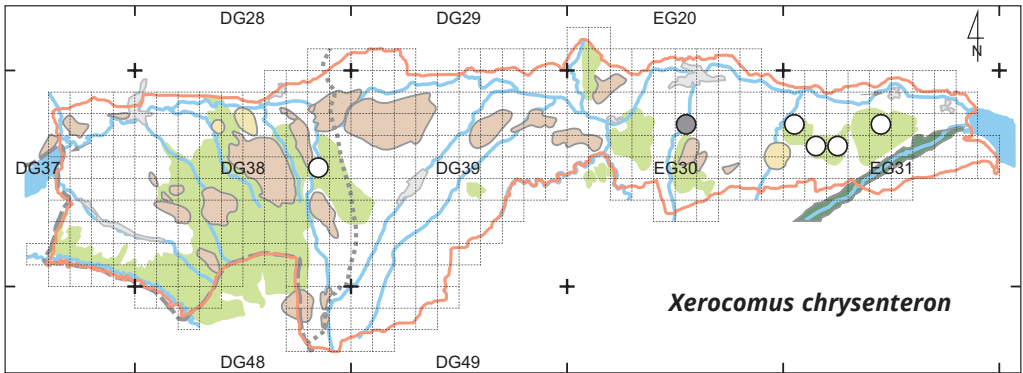
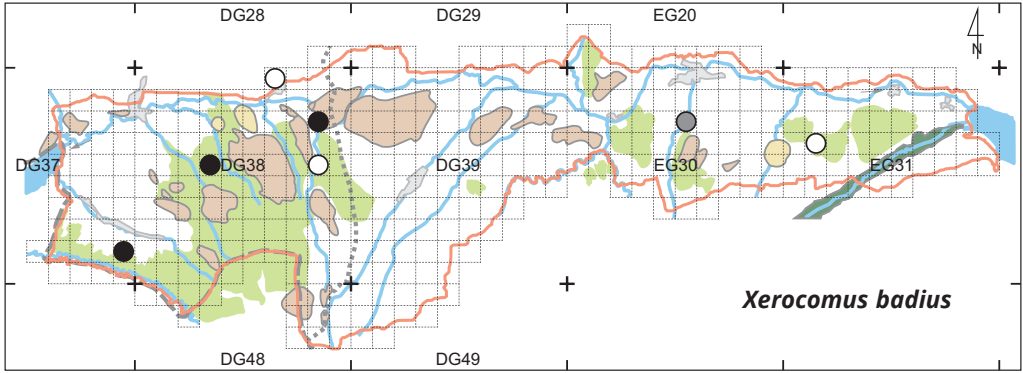


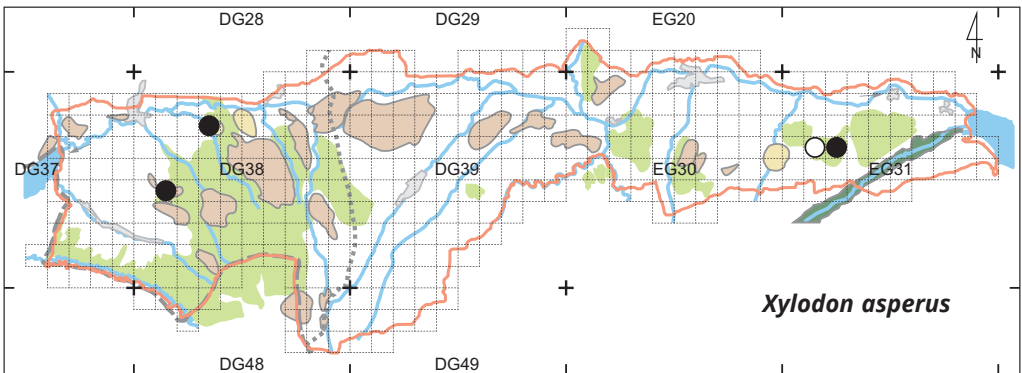
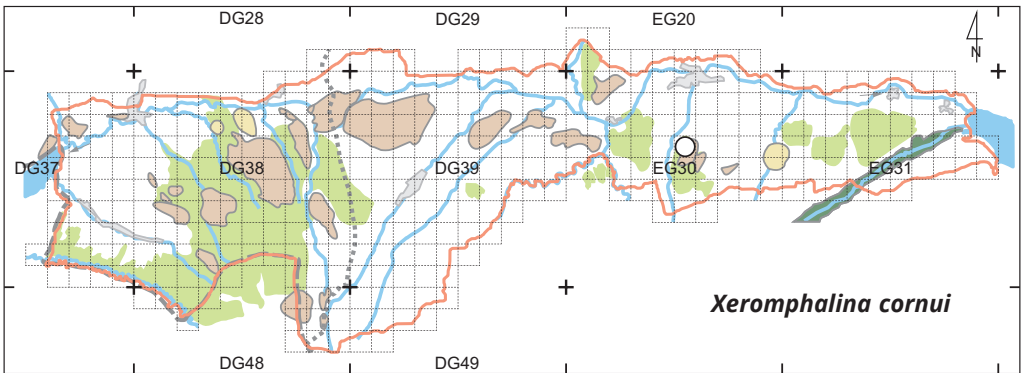
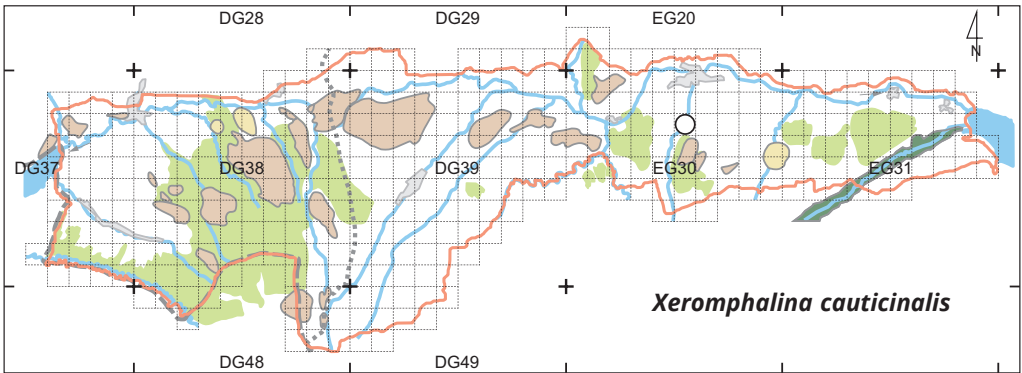
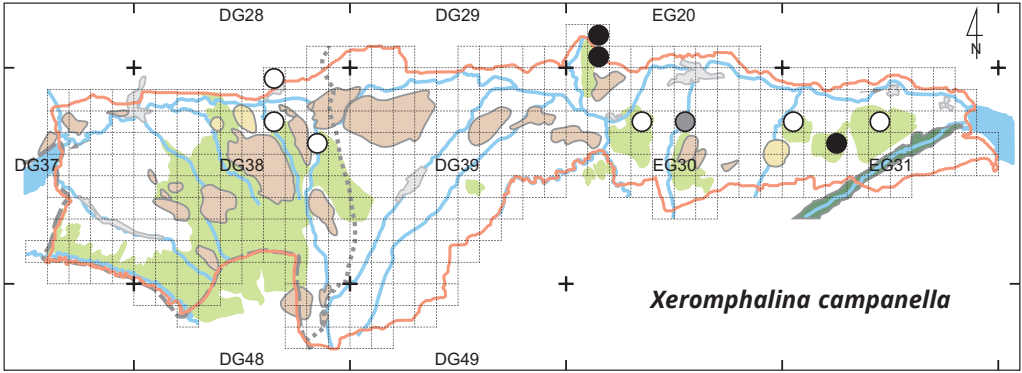


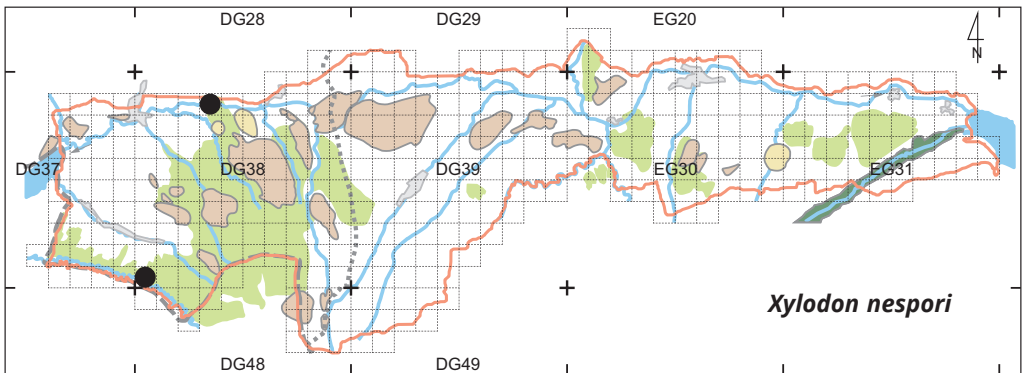
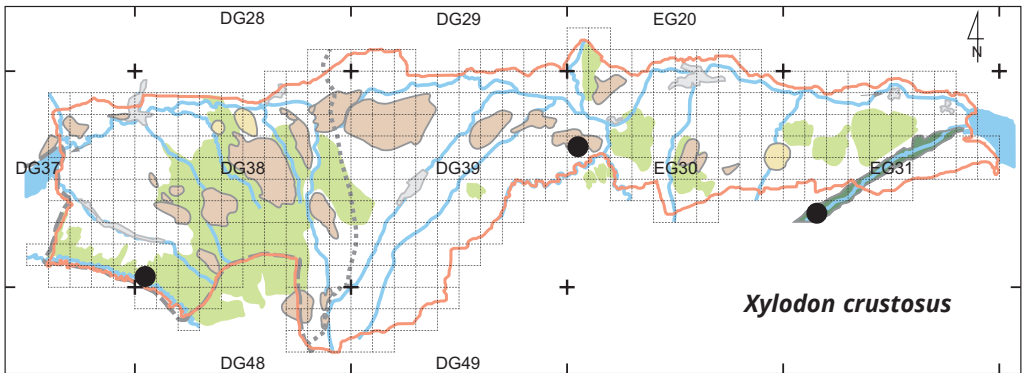
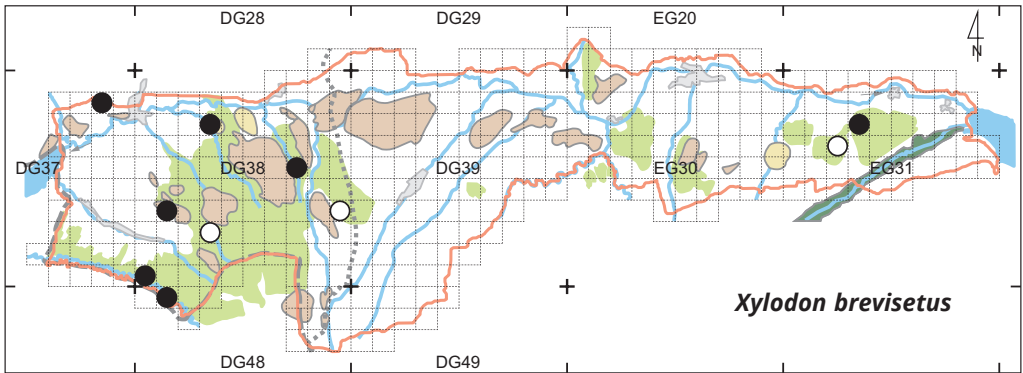
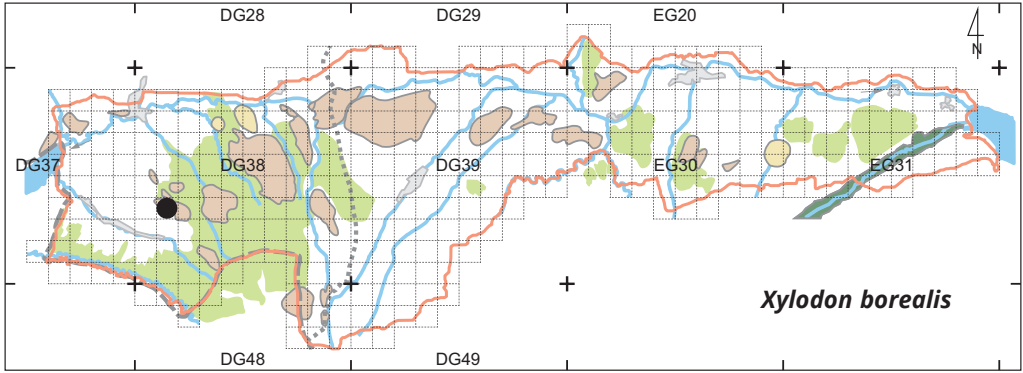


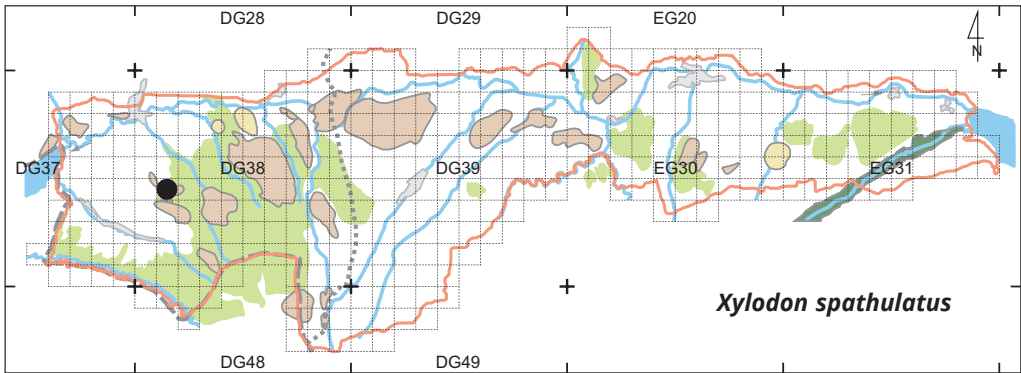
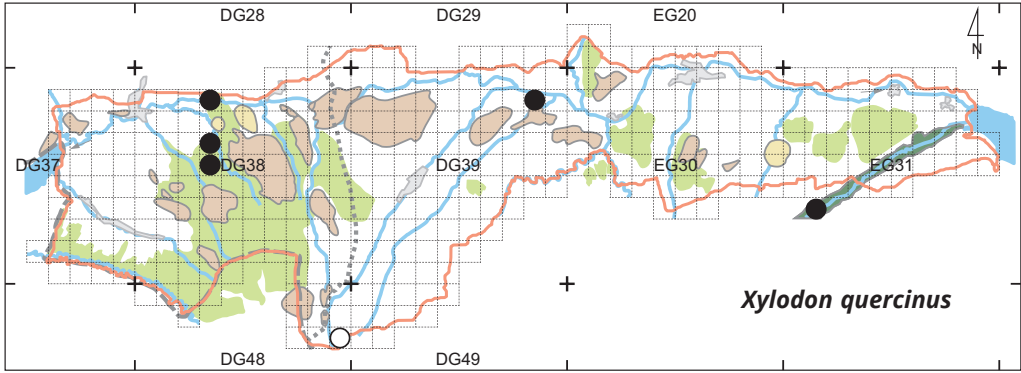






















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