

FAUNISTIC RECORDS FROM THE CZECH REPUBLIC – 530**Lepidoptera: Heliozelidae, Tineidae, Argyresthiidae, Gracillariidae, Oecophoridae, Batrachedridae, Elachistidae, Coleophoridae, Scythrididae, Gelechiidae, Choreutidae, Tortricidae, Pyralidae, Nymphalidae, Erebidae, Noctuidae**

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Heliozelidae

Coptodisca lucifluella (Clemens, 1861). Moravia mer.: Pasohlávky (7065), 26.viii.2018, Novosedly (7164), 26.viii.2018, Pavlov (7166), 26.viii.2018, Mikulov (7165), 26.viii.2018, Brno-Slatina (6866), 5.ix.2018, empty mines on *Juglans regia*; Sedlec u Mikulova (7266), 17.viii.2019, mines with larvae on *Juglans regia*, 2 ♀♀ emerged ix.2019; Želetice (6968), 12.ix.2020, mines with larvae on *Juglans regia*, 7 ♂♂, 5 ♀♀ emerged iii.2021 (Figs 1–2), all A. Laštůvka leg., det. et coll.

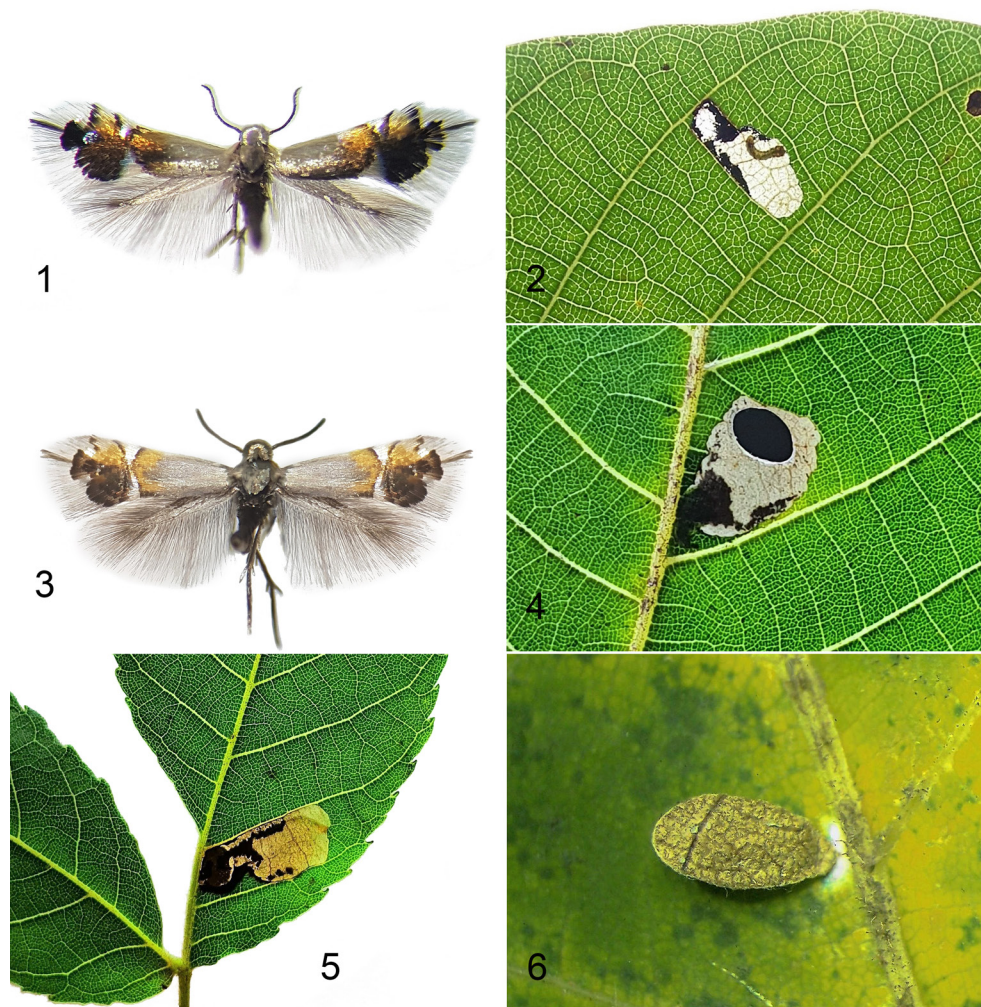
A species native to North America. In 2010, mines were found on walnut trees in two Italian provinces (Campania and Lazio) (Bernardo et al. 2012, 2015). Due to similar bionomics with the related *C. juglandiella*, the species was first identified only on the basis of barcoding, although these two taxa are distinguishable from both mines and forewing colouration. To date, the species has been recorded in Europe from Hungary (Takács et al. 2017), Bulgaria (Tomov 2020) and Ukraine (Pályi et al. 2020), and records in other countries can be expected. Larvae develop on *Carya* spp. in North America, and in Europe predominantly on *Juglans regia*, also on *Carya cordiformis* and *Pterocarya fraxinifolia* (Takács et al. 2020). The first records of this alien species in the Czech Republic.

Coptodisca juglandiella (Chambers, 1874). Moravia mer.: Sedlec u Mikulova (7266), 26.viii.2018, empty mines and one cocoon on a twig of *Juglans regia*, 1 ♂ emerged ix.2018; Hlohovec (7266), 5.ix.2020, mines with larvae on *Juglans nigra*, 2 ♂♂ emerged ix.2020, 14 ♂, 4 ♀♀ emerged iii.2021 (Figs 3–6), all A. Laštůvka leg., det. et coll.

A species native to North America. The first records from Europe were published by Bernardo et al. (2012) from Italy, but shortly afterwards (Bernardo et al. 2015) it was found by genetic analysis that these records actually refer to *Coptodisca lucifluella*. The first genuine records from Europe were only published by Takács et al. (2020) from Hungary, who also pointed to the occurrence of both related species (*Coptodisca lucifluella*, *C. juglandiella*) in Hungary and their clear genetic and bionomic differences. In the Czech Republic the species was published without complete faunistic details from Brno-Černá Pole by Laštůvka & Laštůvka (2020). Caterpillars develop on *Juglans nigra*, *J. cinerea* and *J. major*, and we confirm *J. regia* as another host plant in Europe. The first records of this alien species in the Czech Republic, and the second record from Europe.

Antispila petryi Martini, 1899. Bohemia centr.: Hlásná Třebáň env., Políčko Hill (6051), x.1986, mines with larvae on *Cornus sanguinea*, 2 ♂♂ emerged iii.1987 and x.1988, mines with larvae on *C. sanguinea*, 6 ♀♀ emerged iii.1989, J. Vávra leg., det. et coll.; Vonoklasy-Občina locality (6051), 24.vii.2019, 1 ♂ (Fig. 7), J. Liška leg. et det., coll. National Museum, Prague, Czech Republic (NMPC).

Species currently distinguished from *A. treitschkiella* (Fischer von Röslerstamm, 1843) by van Nieuwerkerken et al. (2018). Known from western, central and southern Europe, also from southern Sweden and Estonia; in Central Europe recorded in all countries (Laštůvka et al. 2018, van Nieuwerkerken et al. 2018). In the Czech Republic historically published by Skala (1936–1937) from Mikulov in southern Moravia (no voucher specimens were found), and recently from Brno-Černá Pole (Laštůvka & Laštůvka 2020). The food plant is *Cornus sanguinea* in contrast with the very similar *A. treitschkiella* whose larvae mine leaves of *Cornus mas*. New species for Bohemia.



Figs 1–6. Voucher specimens of recorded species. 1–2: *Coptodisca lucifluella* (Clemens, 1861), Sedlec. 1. Specimen. 2. Mine with larvae *Juglans regia*. 3–6: *C. juglandiella* (Chambers, 1874), Hlohovec. 3. Specimen. 4. Mine. 5. Larvae. 6. Cocoon. Photographs by A. Laštůvka.

Obr. 1–6. Sbírkové doklady zaznamenaných druhů. 1–2: *Coptodisca lucifluella* (Clemens, 1861), Sedlec. 1. Motýl. 2. Mína s housenkou na *Juglans regia*. 3–6: *C. juglandiella* (Chambers, 1874), Hlohovec. 3. Motýl. 4. Mína. 5. Housenka. 6. Kokon. Fotografie A. Laštůvka.

Tineidae

Trichophaga scandinaviella Zagulajev, 1960. Bohemia or.: Hradec Králové-Svinary, Dehetník Hill (5761), 18.vi.2019, 1 ♂, at light; Hradec Králové, Na Plachtě 3 Natural Monument (5861), 20.vi.2019, 1 ♀; Lovčice env., Kněžičky National Nature Reserve, Bludy locality

(5858), 31.viii.2019, 1 ♀, all M. Mikát leg., det. et coll. Bohemia centr.: Milovice-Mladá, Pozorovatelna locality (5755), 21.viii.2020, 1 spec., J. Liška observ.; Vonoklasy (6051), 27.viii.2019, 1 ♀ (Fig. 8), Vonoklasy-Krásná stráň Natural Monument (6051), 24.vii.2021, 1 ♀, both J. Liška leg. et det., coll. NMPC.

Until recently, this species was known only from Scandinavia, the Baltic countries and the European part of Russia (Gaedike 2013a), recently recorded in Iran (Gaedike 2013b), Slovakia (Štefanovič 2018), Hungary and the Czech Republic (Sitek et al. 2019). In the Czech Republic it was hitherto recorded only in southern Moravia, where it seems to be widely distributed in non-synanthropic habitats (e.g., steppe habitats, sparse deciduous forests). Larvae are probably associated with the nests of birds of prey (Štefanovič 2018). New species for Bohemia.

Argyresthiidae

Argyresthia amiantella (Zeller, 1847). Moravia bor.: Hrubý Jeseník Mts., Červená hora Mt. (5868), 1250 m a.s.l., 5.v.2018, larvae, 4 ♂♂, 1 ♀ emerged v.2018, 14.v.2019, larvae, 2 ♂♂, emerged v.2019; Velké Vrbno, Travná hora Mt. (5768), 1100 m a.s.l., 28.iv.2018, larvae on *Picea abies*, 2 ♂♂, 1 ♀ emerged v.2018, 8.v.2019 larvae, 4 ♂♂, 2 ♀ emerged v.2019 (Fig. 9), all A. Laštůvka leg., det. et coll.

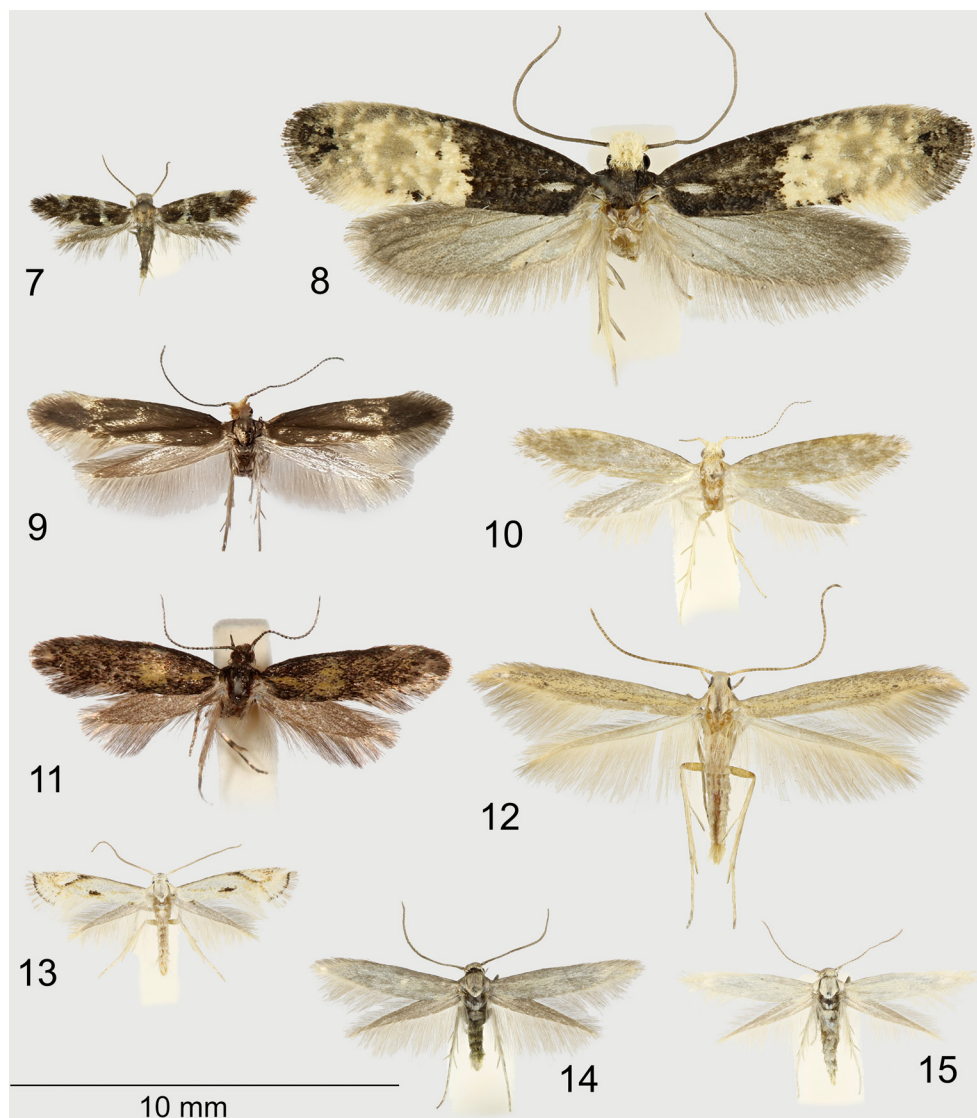
A European species, at present frequently confused with several related species (Bengtsson & Johansson 2012). Known from mountain areas in Austria, northern Italy and Slovenia (Bengtsson & Johansson 2012, Laštůvka et al. 2018). The published records from the Giant Mts. (Liška et al. 2001) in fact refer to *Argyresthia svenssoni*. Caterpillars develop on *Picea abies*. New species for the Czech Republic.

Argyresthia svenssoni Bengtsson et Johansson, 2012. Moravia bor.: Hrubý Jeseník Mts., Červená hora Mt. (5868), 1250 m a.s.l., 5.v.2018, larvae on *Picea abies*, 2 ♂♂, 1 ♀ emerged v.2018, 5.v.2019 larvae, 2 ♂♂, 1 ♀ emerged v.2019; Velké Vrbno, Paprsek (5767), 1020 m a.s.l., 8.v.2019, larvae, 3 ♂♂, 1 ♀ emerged v.2019, all A. Laštůvka leg., det. et coll.

Species recently described from Sweden, recorded also in Italy, Norway and Slovakia (Bengtsson & Johansson 2012). From the Czech Republic it was published from Bohemia (Giant Mts.) as *Argyresthia amiantella* (Liška et al. 2001). Caterpillars develop on *Picea abies*. New species for Moravia.

Argyresthia illuminatella Zeller, 1839. Bohemia mer., Novohradské hory Mts., Kraví hora Mt. (7254), 750 m a.s.l., 15.vi.2017, 1 ♂. Bohemia centr., Brdy Mts., Tok Mt. (6249), 800 m a.s.l., 17.vi.2021, 1 ♂, swept from larch branches. Moravia occ., Třebětice near Jemnice (6959), 16.v.2017, mixed forest of *Picea abies*, *Abies alba* and *Larix decidua*, 1 ♂ (Fig. 10). All J. Liška leg. et det., coll. NMPC.

Due to often confusion with related taxa from the subgenus *Blastotere* Ratzeburg, 1840 its distribution is not still exactly known. Sporadic records are known from western, central and northern Europe (Laštůvka et al. 2018). All previous published records from the Czech Republic probably refer to related species, mostly to *A. kulfani* Bengtsson et Johansson, 2012 (which is confined to *Abies alba*). The food plant of *A. illuminatella* is *Larix decidua*. The first reliable records from Bohemia, new species for Moravia.



Figs 7–15. Voucher specimens of recorded species. 7. *Antispila petryi* Martini, 1899, Vonoklasy. 8. *Trichophaga scandinaviella* Zagulajev, 1960, Vonoklasy. 9. *Argyresthia amiantella* (Zeller, 1847). Hrubý Jeseník Mts, Červená hora Mt. 10. *A. illuminatella* Zeller, 1839, Jemnice. 11. *Buvatina tineiformis* Leraut, 1984, Ptenský Dvorek. 12. *Batrachedra parvulipunctella* Chrétien, 1915, Sedlec. 13. *Elachista contaminatella* Zeller, 1847, Sedlec. 14–15: *E. lastrella* Chrétien, 1896, Písečný vrch. 14. Male. 15. female. Photographs by A. Laštůvka (9), Z. Laštůvka (11), J. Šumpich (7, 8, 10, 12–15). Obr. 7–15. Sbírkové doklady zaznamenaných druhů. 7. *Antispila petryi* Martini, 1899, Vonoklasy. 8. *Trichophaga scandinaviella* Zagulajev, 1960, Vonoklasy. 9. *Argyresthia amiantella* (Zeller, 1847). Hrubý Jeseník, Červená hora. 10. *A. illuminatella* Zeller, 1839, Jemnice. 11. *Buvatina tineiformis* Leraut, 1984, Ptenský Dvorek. 12. *Batrachedra parvulipunctella* Chrétien, 1915, Sedlec. 13. *Elachista contaminatella* Zeller, 1847, Sedlec. 14–15: *E. lastrella* Chrétien, 1896, Písečný vrch. 14. Male. 15. samice. Fotografie A. Laštůvka (9), Z. Laštůvka (11), J. Šumpich (7, 8, 10, 12–15).

Argyresthia pulchella Lienig et Zeller, 1846. Moravia mer., Podyjí National Park, Vranov nad Dyjí-Zadní Hamry (7060), 8.ix.1999, 1 ♀, J. Marek leg. et coll., A. Laštůvka det.

Generally rare species, occurring in northern, western and central Europe, very sporadic in southern parts of Europe (Laštůvka et al. 2018). In the Czech Republic known old published records from Bohemia: Frydlant and Šluknov (Sterneck & Zimmermann 1933), recently reported only from České středohoří Mts. (Laštůvka et al. 2018). The caterpillars eat fruits of *Sorbus aucuparia* and *Malus*. New species for Moravia.

Gracillariidae

Ornixola caudulatella (Zeller, 1839). Bohemia bor., Litoměřice district, Píšťany near Žalhostice, (5450), 8.vi.2021, M. Žemlička leg., det. et coll.; Bohemia or., Pamětník, Pamětník Natural Monument (5858), 5.vii.2017, 1 spec.; Hradec Králové, Na Plachtě Natural Monument (5861), 30.vi.–1.vii.2004, 2 spec.; Hradec Králové, Na Plachtě 3 Natural Monument env. (5861), 25.vi.2005, 2 spec.; Hradec Králové, Nový Hradec Králové, Rozárka locality (5861), 20.vi.2021, 1 ♂, all M. Mikát leg., det. et coll., partly coll. in Museum of Eastern Bohemia in Hradec Králové, Czech Republic.

In Central Europe recorded in all neighbouring countries (Laštůvka et al. 2018). In the Czech Republic sparsely distributed in central and southern Moravia (Laštůvka et al. 2018), from Bohemia only one old record from Kralupy nad Vltavou (12.vii.1906) is so far known (Sterneck & Zimmermann 1933). A record was also published from Kvasiny – Hamernice (Orlické hory Mts.) from 2000 (Rotter 2002) but it in fact refers to *Caloptilia populetorum* (Zeller, 1839) (J. Šumpich revid.). Larvae develop on *Salix* spp. Confirmed occurrence in Bohemia after more than 110 years.

Oecophoridae

Buvatina tineiformis Leraut, 1984. Moravia centr., Ptenský Dvorek (6467), 400 m a.s.l., 25.v.2016, 1 ♂ (Fig. 11), A. Laštůvka leg., det. et coll.

Little known species described from the Savoy Alps (France). It is further distributed in the alpine areas of Austria, northern Italy and Switzerland, but it was also found in the Carpathians (Slovakia) (Tokár et al. 2005, Laštůvka et al. 2018). It usually occurs in higher altitude, e.g., in Slovakia at approximately 950 m a.s.l., but the Moravian specimen was recorded at 400 m a.s.l. in old mixed forest with a large proportion of fir trees when beating lower branches of fir trees in search of *Argyresthia* spp. Bionomics unknown, larvae probably develop in rotting wood, like many other Oecophoridae. New species for the Czech Republic.

Denisia albimaculea (Haworth, 1828). Moravia occ., Mutná u Cizkrajova, Mutenská obora Nature Reserve (7058), 5.vi.2020, 2 ♂♂ (1 ♂ gen. prep.), I. Dvořák leg., det. et coll.

A European species, mainly distributed in western and southern parts (Laštůvka et al. 2018). In Central Europe very rare, hitherto recorded only in Germany and Poland, mostly only in the past (Tokár et al. 2005); recent records are available from Slovenia (Primorje, Črnotiče near Črni Kal, 2019, J. Liška, unpublished records). In the Czech Republic several older records (1939) and one recent (Tlustec Hill, 2007) from Bohemia are available (Šumpich et al. 2009). It is associated with open deciduous forests, glades, clearings etc., larvae develop under the bark of old trees, e.g., *Larix* sp., *Ulmus* sp. or *Aesculus* sp. New species for Moravia.

Batrachedridae

Batrachedra parvulipunctella Chrétien, 1915. Moravia mer., Sedlec env., Slanisko u Nesytu National Nature Reserve (7262), 12.vi.2020, 2 ♂♂, 16.ix.2020, 1 ♂ (Fig. 12), all J. Liška leg. et det., coll. NMPC; Valtice env., Rendezvous (7266), 220 m a.s.l., 12.vi.2020, 1 ♀, 27.vi.2020, 1 ♀, at light, both J. Sitek leg., det. et coll.

Described from Tunisia, in Europe predominantly in southern countries (France, Italy, Malta, Portugal, Spain) (Lepiforum 2021). In Central Europe, first recorded in Austria in 2017 (Huemer 2019). Moravian records from the salt marsh near Sedlec correspond to records in the Austrian salt marshes of the Neusiedler See, where hundreds of specimens of this species were collected (Huemer 2019). The larvae feed on waxy secretions of coccids on *Phragmites australis* and other grasses. New species for the Czech Republic.

Elachistidae

Elachista contaminatella Zeller, 1847. Moravia mer., Sedlec env., Slanisko u Nesytu National Nature Reserve (7262), 22.viii.2018, 2 ♂♂, 30.viii.2018, 2 ♂♂ (Fig. 13), all J. Liška leg. et det., coll. NMPC; 23.viii.2018, 1 ♂, J. Sitek leg., det. et coll.

Distributed from Canary Islands, across Morocco, Algeria and southern Europe to Turkey, and further to East Russia and Mongolia (Parenti & Pizzolato 2015). In Central Europe only recorded in Austria, Hungary, Slovakia and Slovenia (Laštůvka et al. 2018). Salt marsh species, caterpillars develop in mines on *Carex* sp. New species for the Czech Republic.

Elachista lastrella Chrétien, 1896. Bohemia bor., Písečný vrch Nature Reserve (5548), 12.v.2017, 1 ♂, 2 ♀♀, 15.v.2017, 1 ♀, adults disturbed in scarce vegetation on the steppe habitat at dusk, J. Vávra leg., det. et coll.; 23.v.2019, 3 ♂♂ (and additional 4 spec. observ.) (Figs 14–15), 27.v.2019, 1 ♀ (2 spec. observ.), all J. Liška leg. et det., coll. NMPC.

A West-European species, in Central Europe hitherto recorded only in Germany and Switzerland (Laštůvka et al. 2018). Predominantly associated with steppe habitats, larvae on *Bromus erectus*. New species for the Czech Republic.

Coleophoridae

Coleophora chrysanthemi Hofmann, 1869. Moravia mer., Popice (7066), 31.vii.2020, 1 ♀, A. Laštůvka & Z. Laštůvka leg., A. Laštůvka det. et coll.

Species known in all Central European countries with the exception of Poland and Slovenia, also recorded in Finland and Italy (e.g., Laštůvka et al. 2018). In the Czech Republic only one record from southern Moravia (Pouzďanská step Steppe) from 1947 (Marek & Gregor 1989). Larvae mine leaves of *Pyrethrum corymbosum*. Confirmed occurrence in the Czech Republic after more than 70 years.

Coleophora jaernaensis Björklund et Palmquist, 2002. Moravia mer.: Lanžhot-Soutok, Důbravka hunting lodge (7367), floodplain forest, 150 m a.s.l., 12.vii.2012, 1 ♀ (Figs 16–17), J. Šumpich leg. et coll., Ig. Richter det., G. Baldizzone revid.; sand steppe near Důbravka (7367), 7.vii.1992, 1 ♀; sand steppe near Polínka (7367), 30.vi.2012, 1 ♀, 27.vii.2012, 1 ♂, 1 ♀, 18.vii.2014, 1 ♀, 1.viii.2017, 1 ♀, 9.viii.2019, 1 ♀, all J. Liška leg. et det., coll. NMPC.

Recently described species from Sweden (Södermanland, Järna) (Björklund & Palmquist 2002), recorded also in Finland (Björklund & Palmquist 2002) and Germany (Niedersachsen, Schleswig-Holstein) (Roweck & Savenkov 2007, Gaedike et al. 2017). Bionomy unknown. Moravian findings were made on dry sandy banks situated in the floodplain forest. New species for the Czech Republic.

Coleophora preisseckeri Toll, 1942. Moravia mer., Znojmo env., Načeratice, Načeratický kopec Hill (7162), 4.vi.2020, 1 ♂, 13.vi.2020, 1 ♂, 9.vii.2020, 1 ♂ (Fig. 18), all J. Liška leg. et det., coll. NMPC.

Thermophilous species, known from Spain to Russia and Turkey, in Central Europe only in Austria, Hungary, Slovakia and Switzerland (Laštůvka et al. 2018). Bionomy unknown. New species for the Czech Republic.

Coleophora pseudorepentis Toll, 1960. Moravia mer., Dyjákovičky env., Ječmeniště (7262), 11.vi.2011, 2 ♂♂, (1 ♂ gen. prep. Ig. Richter 28430) (Fig. 19), J. Šumpich leg. et coll., Ig. Richter det.

A European species, scattered distributed from France to South Ural in Russia. In Central Europe found in Austria, Germany, Hungary and Slovakia (Laštůvka et al. 2018). Caterpillar on seeds of *Achillea* spp. New species for the Czech Republic.

Scythrididae

Scythris tributella (Zeller, 1847). Bohemia centr., Mladá Boleslav env., Nepřevázka, Chlum Hill (5655), 20.vii.2019, 1 ♀ (Fig. 20), J. Liška leg. et det., coll. NMPC.

A West-Palaearctic species, in Central Europe known from all countries except Poland (Laštůvka et al. 2018). In the Czech Republic found in more localities in southern and central Moravia, but in Bohemia only once near Soběslav in 1936 (Krampl et al. 1988). However, this record is considered as unreliable (Laštůvka & Liška 2011). Bionomy insufficiently known, moths occur in open steppe habitats, larvae probably on *Securigera varia*. The first reliable record from Bohemia.

Scythris buszkoii Baran, 2004. Bohemia or., Úhřetická Lhota (6061), 250 m a.s.l., 5.ix.2020, larvae and mines on *Lycium barbarum*, D. Vacula leg., observ. et det., J. Sitek revid.

An invasive species spreading to the west, known from Ukraine (locus typicus) (Baran 2004), Austria (Huemer 2013), Hungary (Szabóky & Buschmann 2010), Poland (Walczak et al. 2013), Slovakia (Pastoralis et al. 2013), and the Czech Republic (southern Moravia) (Sitek & Vacula 2014). Larvae on *Lycium barbarum*. New species for Bohemia.

Figs 16–22. Voucher specimens of recorded species. 16–17: *Coleophora jaernaensis* Björklund et Palmquist 2002, Lanžhot-Soutok. 16. Female genitalia. 17. Female. 18. *C. preisseckeri* Toll, 1942, Načeratický kopec. 19. *C. pseudorepentis* Toll, 1960, Ječmeniště. 20. *Scythris tributella* (Zeller, 1847), Nepřevázka-Chlum. 21. *Dactylotula altithermella* (Walsingham, 1903), Hnanice. 22. *D. kinkerella* (Snellen, 1876), Hustopeče, male. Photographs by Ig. Richter (16–17), J. Šumpich (18–22).

Obr. 16–22. Sbírkové doklady zaznamenaných druhů. 16–17: *Coleophora jaernaensis* Björklund et Palmquist 2002, Lanžhot-Soutok. 16. Samičí genitálie. 17. Samice. 18. *C. preisseckeri* Toll, 1942, Načeratický kopec. 19. *C. pseudorepentis* Toll, 1960, Ječmeniště. 20. *Scythris tributella* (Zeller, 1847), Nepřevázka-Chlum. 21. *Dactylotula altithermella* (Walsingham, 1903), Hnanice. 22. *D. kinkerella* (Snellen, 1876), Hustopeče, samec. Fotografie Ig. Richter (16–17), J. Šumpich (18–22).

16



17



18



19



20



21



22



10 mm

Gelechiidae

Dactylotula altithermella (Walsingham, 1903). Moravia mer., Podyjí National Park, Hnanice (7161), 26.vii.2005, 1 ♂, 5.vi.2011, 1 ♂ (Fig. 21), J. Šumpich leg., det. et coll.; 23.vii.2007, 1 ♀, J. Sitek leg., det. et coll. (previously published as *Dactylotula* cf. *kinkerella* by Šumpich 2011).

Locally distributed in western, southern and central Europe (described from France and Spain). In Central Europe, very locally in Austria, Czech Republic (southern Moravia) and Hungary (Elsner et al. 1999, Szabóky 2003). The Moravian published records of *D. altithermella* from Hustopeče region in fact refer to *Dactylotula kinkerella* (Liška et al. 2000). Bionomy unknown, larvae probably on grasses. New species for the Czech Republic.

Dactylotula kinkerella (Snellen, 1876). Moravia mer.: Hustopeče, Klinky (7066), 9.v.1996, 1 ♂, 12.v.1998, 1 ♂, 1.v.1999, 1 ♂, 3 ♀♀, 12.v.1998 (Figs 22–23), 1 ♀, 30.iv.2000, 1 ♀; Morkůvky (7066), 2.v.1998, 1 ♀, all J. Liška leg. et det., coll. NMPC.

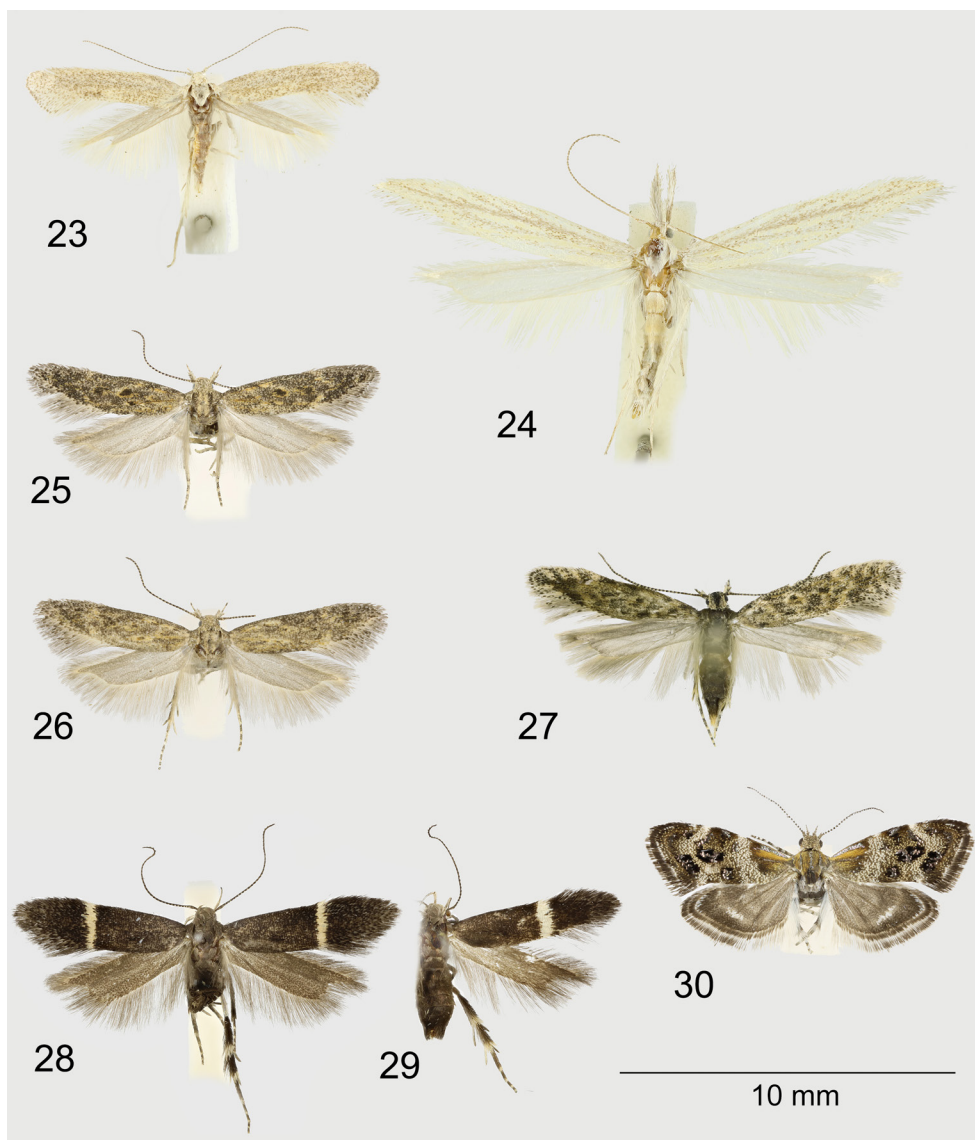
Described based on specimens from the territory of the Netherlands, and occurs mainly in coastal areas along the North and Baltic Seas (Northern Europe, the Netherlands, the Baltics). In Central Europe recorded in the Czech Republic, Germany and Poland (Elsner et al. 1999, Lepiforum 2021). The records from the Czech Republic (Hustopeče region) were originally published as *Dactylotula altithermella* (Liška et al. 2000). Records published as *Dactylotula* cf. *kinkerella* (Šumpich 2011) belong to *D. altithermella* actually (J. Liška and J. Šumpich revid.). The caterpillar develops in northern Europe on *Ammophila arenaria*. In southern Moravia, where this plant does not occur, the food plant must be another species of grass. New species for the Czech Republic.

Megacraspedus podolicus (Toll, 1942). Moravia mer.: Pouzdřany env. (7065), 10.vi.1993, 1 ♂ (Fig. 24), A. Laštůvka leg., J. Šumpich det., coll. NMPC (previously published as *M. alne-ariellus* (Chretien, 1907)); 14.vi.2007, 1 ♂, 6.vi.2008, 3 ♂♂, 11.vi.2010, 4 ♂♂, 29.v.2012, 2 ♂♂, all at light, all J. Sitek leg., det. et coll.

A little known species, hitherto recorded in Central Europe, Romania, Ukraine, Crimea and Russia (Southern Urals, Altai) (Huemer & Karsholt 2018). In Central Europe very local in Austria and Hungary (Huemer & Karsholt 2018). Bionomy unknown, larvae probably on grasses. New species for the Czech Republic.

Scrobipalpa arenbergeri Povolný, 1973. Bohemia bor., Mnichov (5548), Oblík Hill, 13.vii.1983, 1 ♂, G. Elsner leg., det. et coll. Moravia mer.: Podyjí National Park, Popice (7162), 23.vii.1984, 1 ♀, G. Elsner leg., det. et coll.; Podyjí National Park, Havraníky (7162), 21.vi.2017, 1 ♀, 16.vi.2020, 1 ♀ (Figs 25–26), 10.vii.2021, 2 ♂♂, 1 ♀ (+ 6 spec. observ.), J. Liška leg. et det., coll. NMPC.

A Palearctic species (Europe, Siberia), in Central Europe very rare in Austria (described from the vicinity of Neusiedlersee), Czech Republic, Hungary and Slovakia (Šumpich et al. 2022). The species is listed in the checklist of the Czech lepidopteran fauna, but no faunistic details were provided so far (Laštůvka & Liška 2011). Bionomy unknown. The first concrete faunistic data from the Czech Republic.



Figs 23–30. Voucher specimens of recorded species. 23. *Dactylotula kinkerella* (Snellen, 1876), Hustopeče, female. 24. *Megacraspedus podolicus* (Toll, 1942), Pouzdřany. 25–26: *Scrobipalpa arenbergeri* Povolný, 1973, Havraníky, males. 27. *Tuta absoluta* (Meyrick, 1917), Hradec Králové. 28–29: *Aproaerema cincelloides* (Nel et Varenne, 2012). 28. Církvice, male. 29. Jindřichov, female. 30. *Tebenna micalis* (Mann, 1857), Sedlec. Photographs by J. Šumpich. Obr. 23–30. Sbírkové doklady zaznamenaných druhů. 23. *Dactylotula kinkerella* (Snellen, 1876), Hustopeče, samice. 24. *Megacraspedus podolicus* (Toll, 1942), Pouzdřany. 25–26: *Scrobipalpa arenbergeri* Povolný, 1973, Havraníky, samci. 27. *Tuta absoluta* (Meyrick, 1917), Hradec Králové. 28–29: *Aproaerema cincelloides* (Nel et Varenne, 2012). 28. Církvice, samec. 29. Jindřichov, samice. 30. *Tebenna micalis* (Mann, 1857), Sedlec. Fotografie J. Šumpich.

Tuta absoluta (Meyrick, 1917). Bohemia or., Hradec Králové, Nový Hradec Králové (apartment interior) (5761), 2.ii.2019, 1 ♀ (Fig. 27), V. Hromádková leg., M. Mikát det. et coll., J. Šumpich revid.

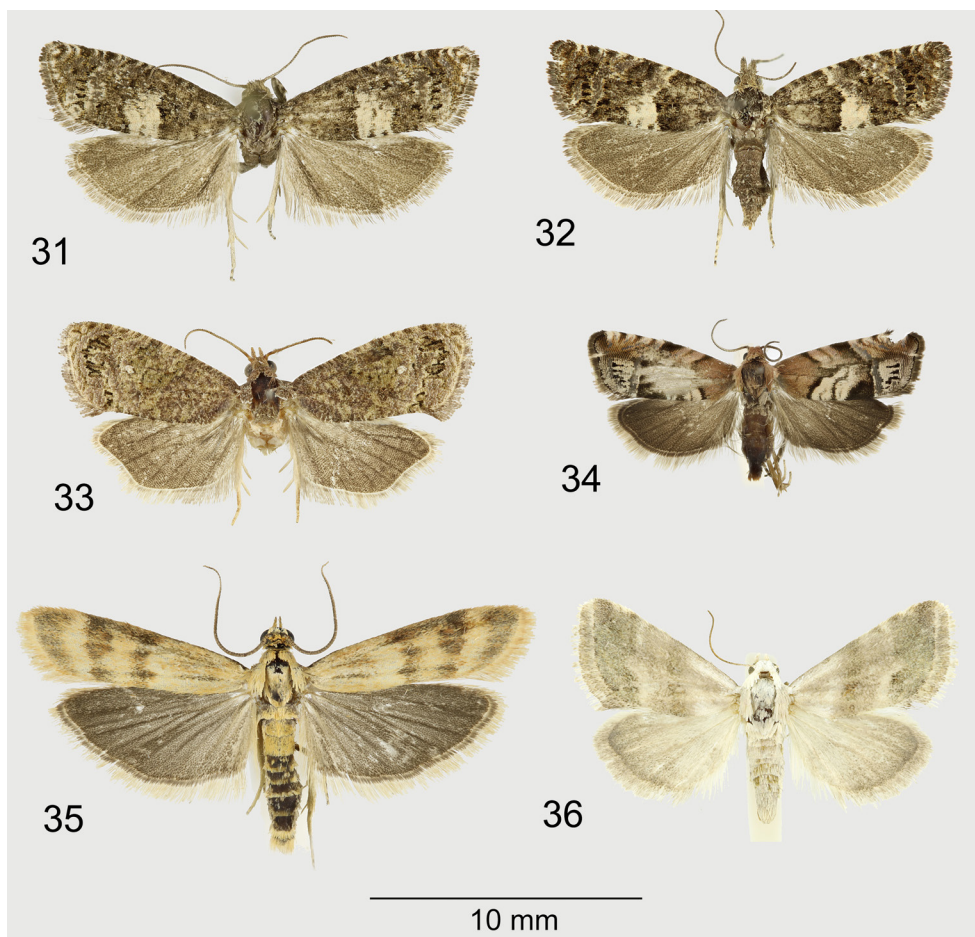
Tuta absoluta was probably introduced with fruit from South America to Europe (in 2006 at the latest); its spread in the Mediterranean area was extremely rapid, now it is widespread in Italy (first records in 2006), Sicily, Corsica, Spain (where it is already the most important pest on greenhouse tomatoes), France and the Netherlands, it has since spread across the whole of Europe and North Africa (Lepiforum 2021). In Central Europe it has already been recorded in all countries, in Slovenia in large numbers (J. Šumpich observ.). In the Czech Republic firstly recorded in Prostějov region in 2013, later also in Olomouc, Břeclav, Přerov and Kutná Hora regions, but in these cases without faunistic details (Březíková 2019). All these records were obtained in the agricultural settings, specifically in tomato and potato crops, and without any faunistic details. The caterpillar develops on *Solanum lycopersicum* and various other species of Solanaceae. The first record of this alien species in Bohemia.

Anacamptis temerella (Lienig et Zeller, 1846). Bohemia occ.: Slavkovský les Protected Landscape Area, Prameny env., Upolínová louka pod Křížky National Natural Monument (5942), 4.vi.2020, 1 ♀, ex larvae (reared from *Salix myrtilloides*), J. Michálek & N. Nováková leg. et coll., J. Šumpich det. (gen. prep. 202820); Český les Protected Landscape Area, Rozvadov env., Na požárech National Natural Monument (6341), 2.vi.2020, ex larvae (reared from *Salix repens*), J. Michálek & N. Nováková leg. et coll., J. Šumpich det. (gen. prep. 202821).

Transpalaeartic species (central and northern Europe, Russia as far as the Far East, Transcaucasia), in Central Europe rarely in the Czech Republic (Moravia), Germany, Poland (recently only in the Lublin province) and Slovakia (Elsner et al. 1999); the published record from Austria needs confirmation (Huemer 2013). In the Czech Republic, only one doubtful published record from the beginning of the 20th century from Nový Jičín in northern Moravia is so far known (Skala 1918). Caterpillar on *Salix* spp. (predominantly on *S. caprea*). The first reliable records from the Czech Republic, new species for Bohemia.

Aproaerema cinctelloides (Nel et Varenne, 2012). Bohemia bor., Církvice (5450), 6.vi.2003, 1 ♂ (gen. prep. J. Šumpich 21036) (Fig. 28), J. Šumpich leg., det. et coll. Bohemia occ.: Doupovské hory Mts., Jindřichov (5645), 10.vi.2014, 8 ♂♂, 1 ♀ (2 ♂♂, 1 ♀ gen. prep. J. Šumpich 21054, 21056, 21055) (Fig. 29); Doupovské hory Mts., Havráň (5545), 13.vi.2013, 1 ♂ (gen. prep. J. Šumpich 21053); Doupovské hory Mts., Dubina (5844), 5.vi.2015, 6 ♂♂ (1 ♂ gen. prep. J. Šumpich 21064); Doupovské hory Mts., Albeřice (5844), 2.vii.2015, 2 ♂♂ (1 ♂ gen. prep. J. Šumpich 21063), all J. Skyva leg. et coll., J. Šumpich det.

Recently described species from Corsica. Barcoding of specimens from different parts of Europe has shown a wider distribution of the species, namely in Germany (Bavaria), Lower Austria, Northern Macedonia and Greece (Segerer & Huemer 2020). Currently, its occurrence is also confirmed in Bulgaria, Slovakia and Slovenia (Tokár et al. 2021). The bionomy of the species is not yet known, development on leguminous plants (Fabaceae) can be expected. New species for the Czech Republic.



Figs 31–36. Voucher specimens of recorded species. 31–32: *Epiblema simploniana* (Duponchel, 1835), Krkonoše. 33. Male. 34. Female. 33. *Thaumatotibia leucotreta* (Meyrick, 1913), Dobroměřice. 34. *Cydia interscindana* (Möschler, 1866), Krňany. 35. *Homoeosoma sinuella* (Fabricius, 1794), Milovice. 36. *Eublemma minutata* (Fabricius, 1794), Žatec. Photographs by J. Šumpich.

Obr. 31–36. Sbírkové doklady zaznamenaných druhů. 31–32: *Epiblema simploniana* (Duponchel, 1835), Krkonoše. 33. Samec. 34. Samice. 33. *Thaumatotibia leucotreta* (Meyrick, 1913), Dobroměřice. 34. *Cydia interscindana* (Möschler, 1866), Krňany. 35. *Homoeosoma sinuella* (Fabricius, 1794), Milovice. 36. *Eublemma minutata* (Fabricius, 1794), Žatec. Fotografie J. Šumpich.

Choreutidae

Tebenna micalis (Mann, 1857). Moravia mer., Sedlec env., Slanisko u Nesytu National Nature Reserve (7262), 28.viii.2020, 1 ♂ (Fig. 30), 16.viii.2021, 1 ♂, both J. Liška leg. et det., coll. NMPC.

Almost cosmopolitan species, in Europe mainly in the Mediterranean area, in Western Europe also in the British Isles (Lepiforum 2021). In Central Europe, only Poland has no

records so far (Buzsko & Nowacki 2000). The larva is oligophagous on Asteraceae. New species for the Czech Republic.

Tortricidae

Eugnosta lathoniana (Hübner, 1800). Moravia mer., Podyjí National Park, Vranov nad Dyjí env., Feliciino údolí (valley), 25.vii.1994, 1 ♀, L. Maršík leg., det. et coll.

A Submediterranean species (southern-southeastern areas of Europe, Caucasus, Asia Minor, north-western Africa), in Central Europe from the Pannonian areas of Austria, Hungary and Slovakia (Razowski 2002). The single Moravian record corresponds with the species distribution in Pannonia, but its permanent presence in the territory of the Czech Republic should be confirmed by further records. The caterpillar's food plant is not yet reliably known, development on thistle roots (*Carduus*) is assumed. New species for the Czech Republic.

Pelochrista obscura Kuznetsov, 1978. Moravia mer., Bořetice near Hustopeče, Zázmoníky Nature Reserve (7067), 1.vii.2007, 1 ♂, L. Maršík leg. et coll., J. Šumpich det. (gen. prep. 18684).

Distribution insufficiently known. It is described from the Southern Urals area in the European parts of Kazakhstan and Russia, published records are available from central and south-eastern parts of Europe, but also reported from the territory of Portugal (Razowski 2003). In Central Europe reported from the Czech Republic, Hungary and Slovakia; so far only a few specimens have been found in the Czech Republic (central and northern Bohemia) (Vávra et al. 2001, Šumpich et al. 2013). Bionomy still unknown. New species for Moravia.

Epiblema simploniana (Duponchel, 1835). Bohemia or.: Krkonoše (Giant Mts.) (more specific locality and faunistic square not stated), 6.vi.1927, 1 ♀, 6.vi.1928, 3 ♂♂, 6.vi.1935, 2 ♂♂, 1 ♀, 12.vi.1935, 1 ♀, 24.vi.1937, 1 ♂ (Figs 31–32), all J. Soffner leg., J. Liška det., coll. NMPC; Krkonoše (Giant Mts.) (faunistic square not stated), vi.1940, 1 ♀, Dr. Pflieger leg., J. Liška det., coll. Moravian museum, Brno, Czech Republic.

A West Palearctic species (mountain areas of Europe, Scandinavia, from Spain to Mongolia), not recorded in the Balkans, the British Isles, the Mediterranean and the Baltics (Razowski 2003). In Central Europe known from all countries except Hungary and Slovakia, from Poland only historically (Buzsko & Nowacki 2000). Bohemian records of *Epiblema costipunctana* (Haworth, 1811) published by Sterneček & Zimmermann (1933) most probably refer to *E. simploniana*, although the occurrence of *E. costipunctana* in Bohemia cannot be excluded. Bionomy unknown. New species for the Czech Republic.

Thaumatotibia leucotreta (Meyrick, 1913). Bohemia bor., Louny distr., Dobroměřice env., Dobroměřická pískovna (5648), 6.vii.2017, 1 ♀ (Fig. 33), M. Žemlička leg. et coll., J. Liška det.

The species comes from Sub-Saharan Africa, and is now distributed in the whole of Africa, introduced to North America and Europe (Lepiforum 2021). It is a serious pest of various kinds of fruit worldwide, in various European countries (Denmark, Finland, Great Britain, the Netherlands, Sweden) in warm-temperature greenhouses, and in the southern European countries most probably in the field. In Italy, it was recorded for the first time

in a container of navel oranges from South Africa (Mazza et al. 2014). In Central Europe so far recorded only in Germany (Lepiforum 2021). The first record of this alien species in the Czech Republic.

Cydia interscindana (Möschler, 1866). Bohemia centr., Krňany (6152), 24.–26.vi.2019, 2 ♂♂, 1 ♀ (Fig. 34), P. Kabátek leg., J. Šumpich det. et coll.

Its occurrence was reported in France, Italy, Portugal and Spain (described from Andalusia), in the accordance with the occurrence of its only food plant mentioned in literature, namely *Juniperus oxycedrus* (Razowski 2003). It was also recently reported from other countries (Belgium, Great Britain), including in Central Europe (Austria, Germany, Slovakia and Switzerland) (Razowski 2003, Lepiforum 2021, Šumpich et al. 2022). In areas where *J. oxycedrus* does not grow, development in other *Juniperus* species can be expected. New species for the Czech Republic.

Pyralidae

Homoeosoma sinuella (Fabricius, 1794). Bohemia centr.: Milovice (5755), 9.viii.2019, 1 ♀, T. Jirgl & P. Krejčík leg., T. Jirgl det. et coll.; Milovice-Mladá, Pozorovatelna locality (5755), 3.vi.2019, 2 ♀♀, 14.vi.2019, 2 ♂♂, 21.viii.2020, 10–20 spec. observ. (Fig. 35); Spomyšl-Jeviněves (5652), 8.vi.2021, 4 spec. observ., Dlouhopolsko (5857), 11.viii.2021, 1 ♂, Neřevázka, Chlum u Nepřevázky Natural Monument (5655), 19.viii.2021, 1 spec. observ., all J. Liška leg. et det., coll. NMPC; Vonoklasy-Občina (5160), 11.viii.2019, 1 ♂, 22.vi.2020, 1 ♂, both J. Liška leg. et det., coll. NMPC. Bohemia bor., Litoměřice district, Píšťany near Žalhostice (5450), 17.vi.2021, M. Žemlička leg., det. et coll. Bohemia or.: Hradec Králové, Nový Hradec Králové (5761), intravilan of the house, 17.viii.2019, 1 spec. (photo-documented observation), V. Hromádková observ.; Hradec Králové, Na Plachtě Natural Monument (5861), 5.viii.2017, 1 ♂, 3 ♀♀, M. Mikát leg. et det., coll. M. Mikát et Museum of Eastern Bohemia in Hradec Králové, Czech Republic, 28.vii.2018, 1 spec., 28.viii.2019, 1 spec., all M. Mikát leg., det. et coll.; Hradec Králové, Na Plachtě 3 Natural Monument (5861), 20.vi.2019, 1 spec., 12.vi.2020, 1 spec., 17.vi.2020, 1 spec., all M. Mikát leg., det. et coll., 17.viii.2020, more spec., M. Mikát observ., 21.viii.2020, 1 spec., M. Mikát leg., det. et coll.; Branišov, V Hatích (6558), 16.vi.2020, 1 ♂, I. Dvořák leg., det. et coll.

A West Palearctic species, in Europe in the southern half of the continent. In Central Europe in Austria, Czech Republic, Hungary, Slovakia and Switzerland (Lepiforum 2021). In the Czech Republic widely distributed in Moravia, but from Bohemia only one older (dubious) record without any faunistic details was previously available (Roesler 1973). Caterpillar in the root of *Plantago* spp. The recent spread of the species in Bohemia is presented, and the first reliable records from Bohemia are given.

Nymphalidae

Boloria aquilonaris (Stichel, 1908). Moravia occ.: Jihlávka env., Rašeliniště Kaliště Nature Reserve (6757), 18.vii.2010, 1 spec., 19.vi.2014, 1 spec., 20.vi.2014, 3 spec., V. Křivan observ.; Jihlávka env., V Lisovech Nature Reserve (6757), 19.vi.2014, 31–50 spec., 25.vi.2015, 10–20 spec., 20.vi.2019, 12 spec., 26.vi.2020, 5 spec., 28.vi.2020, 3 spec., all V. Křivan observ.,

23.vi.2014, 21–30 spec., 4.vii.2016, 6 spec., all I. Dvořák observ. (5 spec. coll. I. Dvořák et J. Šumpich, Figs 37, 39), 27.vi.2020, 3 spec. (Fig. 38), Z. Laštůvka observ.

A Palearctic species, in Europe mainly in Scandinavia and Baltic countries, in other areas only locally distributed (eastern France, Belgium, the Netherlands), in Central Europe in all countries except Hungary and Slovenia (Macek et al. 2015). In the Czech Republic occurs in wet meadows mainly in southern Bohemia (Třeboň Region, Tábor Region, Šumava Mts., Novohradské hory Mts.), rarely also in Cheb Region (Český les and Slavkovský les Landscape Protection Areas) and in Krušné hory Mts. In the past it also occurred in Jizerské hory Mts. (Sterneck 1929), where it is now considered extinct (Pavličko 1996, Macek et al. 2015). The present records were near the historical Bohemian-Moravian border, and this locality is currently its easternmost point of occurrence in the Czech Republic (Kudrna 2019). The published record from Dářko peat bogs (Kudrna 1994, Beneš et al. 2002) actually refers to a Slovakian locality (O. Kudrna pers. comm., cf. Šumpich 2006). Larva is monophagous on *Oxyccoccus palustris*. New species for Moravia.

Erebidae

Eublemma minutata (Fabricius, 1794). Bohemia bor., Žatec env., near Ohře river (5647), 30.vii.2019, 1 ♂ (Fig. 36), J. Šumpich leg., det. et coll.

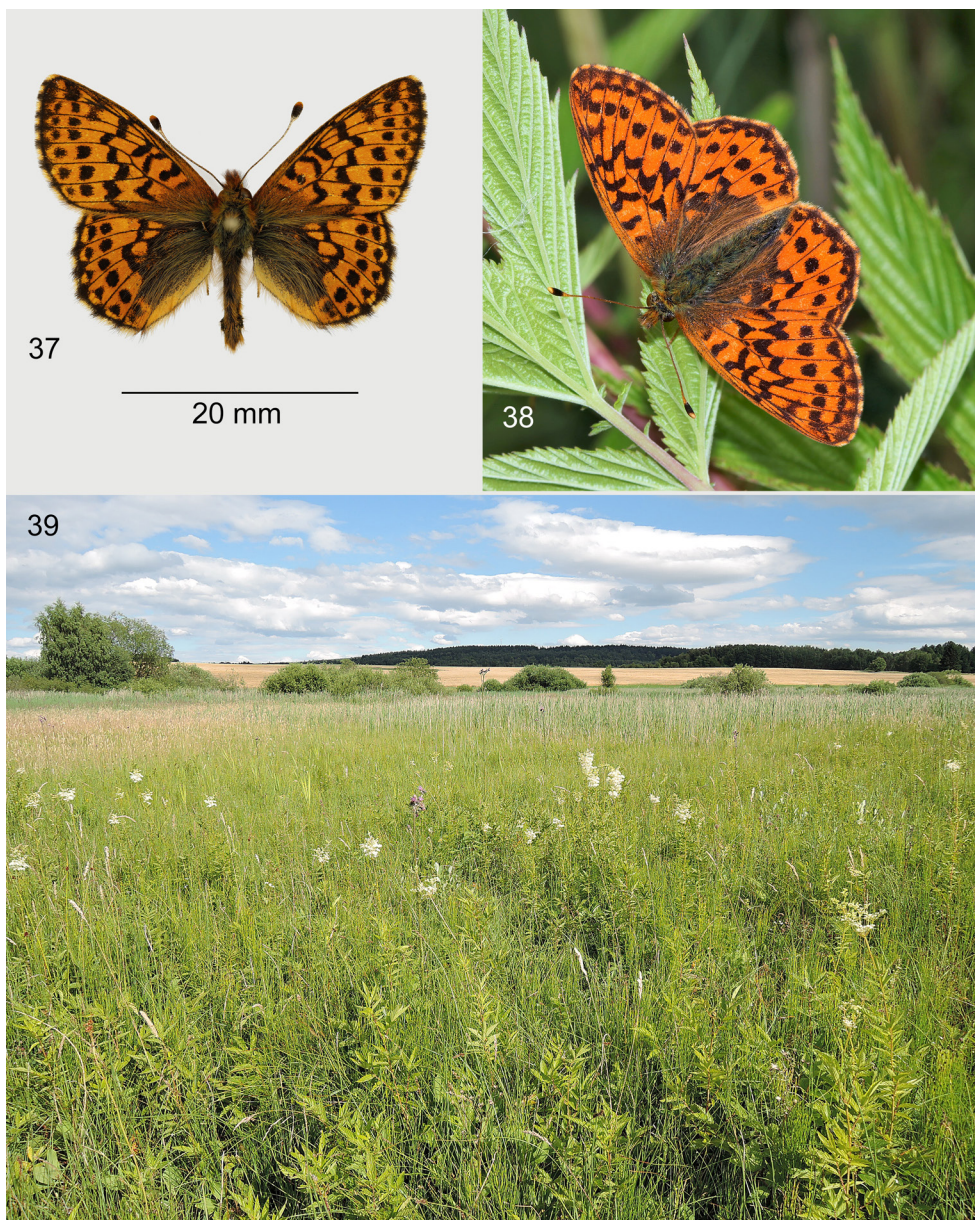
A West-Palearctic species, outside Europe it was also recorded in Turkey and central Asia (Fibiger et al. 2010). In the Czech Republic, an extremely local species, which inhabits only the warmest areas of southern Moravia, mainly in the Podyjí National Park (Šumpich 2011) and in the region of Hodonín and Bzenec (Králíček & Gottwald 1985). Only very old records were so far published from Bohemia (cf. Sterneck 1929). The species is associated with open xerotherm and sand habitats with the occurrence its only host plant, *Helichrysum arenarium*. Confirmed occurrence in Bohemia after more than 100 years.

Noctuidae

Acontia candefacta (Hübner, 1831). Bohemia centr., Poděbrady-Kluk, *Betula pendula* forest (5856), 30.viii.2019, 1 ♂, S. Marek leg. et coll., J. Šumpich det.

A Nearctic species, introduced in the 1960s near Krasnodar in southern Russia, and in recent years it has spread across Ukraine to Europe (Laštůvka 2019). At present it occurs in many parts of European Russia, in the Caucasus, Bulgaria, Hungary, Romania, Serbia, Slovakia and it was also recorded in the Czech Republic (Lepiforum 2021, Pastorális et al. 2018, Sitek & Ciprys 2020, Němý 2020). In the Czech Republic, several records were published from southern Moravia near Vracov and Břeclav (Sitek & Ciprys 2020, Němý 2020) and at the same time near Boskovice in the Dražanská vrchovina highland (Pavlovské mokřady Nature Reserve) (Laštůvka & Laštůvka 2019). Larvae develop on *Ambrosia artemisiifolia*. The first record of this alien species in Bohemia.

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Figs 37–39. *Boloria aquilonaris* (Stichel, 1908), V Lisovech. 37–38: Specimens. 39. Habitat. Photographs by J. Šumpich (37), Z. Laštůvka (38), I. Dvořák (39).

Obr. 37–39. *Boloria aquilonaris* (Stichel, 1908), V Lisovech. 33–37: Motýli. 38. Stanoviště. Fotografie J. Šumpich (36), Z. Laštůvka (38), I. Dvořák (39).

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