

Revised taxonomic check list of the Eurasian species of the subtribe Poliina (Noctuidae, Noctuinae, Hadenini)

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Abstract

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new combinations

lectotype designations

illustrations

The revised checklist of the subtribe Poliina Hampson, 1902 is presented; one new genus, *Multisigna* gen. n., three new subgenera (*Atropolia*, *Leuconephropolia* and *Protropolia* subgen. n.) and a new species (*Polia (Atropolia) posterodiluta* sp. n.) are described. The taxonomic position of the recently described subgenus *Metallopolia* is discussed. The subtribe Pachetrina Beck, 1996 is synonymised with Poliina; two genera (*Kollariana* Hacker, 1996 and *Spiramater* McCabe, 1980) are transferred to the subtribe Mamestrina Hampson, 1902. A number of lectotype designations and new combinations are given; the newly designated lectotypes and the genitalia of the disputed taxa are illustrated.

Introduction

The subtribe Poliina Hampson, 1902 was originally defined as “*Polia* complex” by McCabe (1980) based on external and genital characters of both sexes. However, in this review, some genera of Mamestrina Hampson, 1902 (in original form: Mamestrinae) were also included to this “complex”. Later, Poliina was shortly characterised and separated from the closely related subtribe Mamestrina by Beck (1996). Subsequently, in the volume 4 of the Noctuidae Europaea series (Hadeninae I.) Hacker et al. (2002)

re-defined the subtribe Poliina Beck, 1996 and also provided a short differential diagnosis of the subtribes Poliina and Mamestrina Beck, 1996. According to the re-description and interpretation, the subtribe consists of the following genera: *Polia* Ochsenheimer, 1816 (its synonyms: *Chera* Hübner, [1821]; *Polia* Boisduval, 1829; *Aplecta* Guenée, 1838; *Anartodes* Culot, 1915; *Bompolia* Beck, 1999; *Ripolia* Beck, 1999; *Antipolia* Beck, 1999), *Pachetra* Guenée, 1841, *Kollariana* Hacker, 1996, *Haderonia* Staudinger, 1896 (= *Lasiridia* Draudt, 1950), *Ctenoceratoda* Varga, 1992 and *Tricheurois* Hampson, 1905.

In the next step, Fibiger and Lafontaine (2004, 2005) reviewed the higher classification of the Noctuoidea, and proposed a new tribal (and partly subtribal) system for the Holarctic fauna. In these seminal papers the authors accepted the act of Hampson (1902) who distinguished the *Polia* generic complex under the name “*Polianae*” with the type genus *Polia*. Thus, the subtribe *Poliina* Beck, 1996 was synonymised by them with *Poliina* Hampson, 1902. However, the taxonomic position of the closely related, formerly monotypic genus *Pachetra* Guenée, 1841 and the subtribe *Pachetrina* Beck, 1996 has remained unchanged. The latter subtribe is synonymised here with *Poliina* in the taxonomic part of this paper (syn. n.).

The genera of *Poliina* are Holarctic (*Polia*) or only Eurasian with centre of diversity in the monsoonic mountainous areas of South-Eastern Asia (Himalayan – Sino-Tibetan faunal type). Twenty-six species of *Polia* are present in Eurasia and thirteen species in North America; from them only one is a Holarctic, circum-polar species (*P. richardsoni* (Curtis, 1835)). Further genera of the subtribe are exclusively Palaearctic. The most diverse genus is *Ctenoceratoda* with more than thirty, mostly Central Asiatic species. The members of this subtribe have a characteristic “ground plan” of genital structures (including some lock-and-key mechanisms, see Varga 1992; Varga and Ronkay 2013) with several shared apomorphies as the identical structure of ampulla-harpe complex, the regularly (*Polia*, *Haderonia*) asymmetrical saccular processes covered by specialised brushes, the long, tubular endophallus (vesica) without subbasal diverticulum and cornutus but with long medio-subterminal field of fasciculate cornuti (males), the globular corpus bursae and the tubular appendix bursae (females). Abdominal brush-organs of males are mostly present and the last abdominal segment of females often shows specific strongly sclerotised, often shield-shaped structures.

In this review, based on the presence of the T-shaped vesica and the subbasal diverticulum with cornutus, typifying numerous Mamestrina genera (Varga and Ronkay 1991), but also on several characters of the genital capsula (see below), which are categorically absent in *Poliina*, certain genera and species formerly associated with *Poliina* have been excluded from this subtribe. The genus *Kollariana* includes three large, externally confusingly *Polia*-like species, the genitalia of which demonstrate, however, their close relationship with the *Sideridis* clade of the subtribe Mamestrina Hampson, 1902. They do not have e.g. saccular processes and ampullae on the valvae, but an ear-shaped costal process near to the cucullus. They also have claw- or spine-like sclerotisation of carina; the vesica is T-shaped, with long subbasal diverticulum and acute cornutus. *Kollariana* species do not have in the female genitalia elongate tubular appendix bursae, as most genera of *Poliina*, but they have two complete and one shorter row of small, elliptical stigmata on the corpus bursae. This genus is transferred, therefore, into Mamestrina. It is worth to mention that there are some

additional large-sized, *Polia*-like species occurring in the mountains of the SE frontier of the Tibetan plateau (e.g. the taxa of the genus *Irene*, the two members of the newly described genus *Multisigna* (“*Polia*”) *costirufa* Draudt, 1950 and “*P.*” *hofer* (Saldaitis, Benedek & Behounek, 2016), and the still less investigated “*Hyssia*” *hadulina* Draudt, 1950, etc.) which all belong to Mamestrina based on the shared characters mentioned above (see: taxonomic part in details).

Materials and methods

Abbreviations

BMHN	The Natural History Museum London (formerly British Museum, Natural History)
EIHU	Entomological Institute, Hokkaido University, Sapporo
HNHM	Hungarian Natural History Museum, Budapest
MNHG	Museum of Natural History, Geneva
MNHN	Museum National d’Histoire Naturelle, Paris
MNB	Museum für Naturkunde, Berlin
NHMW	Naturhistorisches Museum, Vienna
NRS	Naturhistoriska Riksmuseet, Stockholm
SMND	Senckenberg Museum für Naturkunde, Dresden
SMNK	Staatliches Museum für Naturkunde, Karlsruhe
USNMW	Natural History Museum, Washington, United States
ZFMK	Zoologisches Forschungsmuseum Alexander Koenig, Bonn (AKM)
ZISP	Zoological Institute, Russian Academy of Sciences, St. Petersburg
ZMUH	Finnish Museum of Natural History, Helsinki
ZSM	Zoologische Staatssammlung, München

Taxonomic review of Eurasian *Poliina* genera and species

Poliina Hampson, 1902

Polianae Hampson, 1902, Annals of the South African Museum 2: 255. Type genus: *Polia* Ochsenheimer, 1816.

Remarks. The taxa are enumerated here in alphabetic sequence in the sake of simplicity. The taxonomic relationships and phylogenetic implications will be discussed in this and the forthcoming papers.

Genus *Ctenoceratoda* Varga, 1992

Ctenoceratoda Varga, 1992, Acta Zoologica Academiae Scientiarum Hungaricae 38(1-2): 95.

Type-species. *Haderonia sukharevae* Varga, 1974, by original designation.

***Ctenoceratoda aksakal* Varga & Gyulai, 1999**

Ctenoceratoda aksakal Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45 (2): 179, figs 11, 41, 57, 85. Type-locality: Tadzhikistan, E Pamir Mts, Sarykolskiy Mts, Dunkeldyky lake, 4100 m. Holotype: male, in coll. P. Gyulai (Miskolc).

***Ctenoceratoda anthracina* Varga & Gyulai, 1999**

Ctenoceratoda anthracina Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45 (2): 180, fig. 63, 86; gen. figs 12, 13, 31, 46, 63. Type-locality: Kirghisia, Naryn region, Maly Naryn, Orukhtau, 2700 m. Holotype: male, in coll. P. Gyulai (Miskolc).

***Ctenoceratoda argyrea* Varga, 1992**

Ctenoceratoda argyrea Varga, 1992, Acta Zoologica Academicae Scientiarum Hungaricae 38 (1-2): 98, pl. 2, figs 9-10, gen. figs 5-10, 16-17. Type-locality: Mongolia, Govi Altai aimak, Govi Altai Mts, 6 km S of Tögrög. Holotype: male, in coll. Z. Varga (Debrecen).

***Ctenoceratoda brassicina* (Draudt, 1934)**

Figs 1, 2, 49

Scotogramma brassicina Draudt, 1934, in A. Seitz, Die Groß-Schmetterlinge der Erde 3: 98, pl. 14, row c. Type-locality: [Russia or Kazakhstan] “Altai occ.”. Holotype: female, in coll. MNB.

***Ctenoceratoda contempta* (Püngeler, 1914)**

Figs 3, 4, 50

Hadula (Mamestra) contempta Püngeler, 1914, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 28: 39, pl. 2, fig. 14. Type-locality: [China, Xinjiang] “Ost-Turkestan, Aksu”, “910 R[ue]ckb[eil]”. The specimen was dissected by Boursin (slide No. MB 810). Lectotype: male, in coll. MNB.

***Ctenoceratoda gandhara* (Hacker & Varga, 1990)**

Haderonia gandhara Hacker & Varga, 1990, Esperiana 1: 340, pl. E, fig. 16. Type-locality: Pakistan, Karakoram Mts, Kunjerab pass, 3600 m. Holotype: male, in coll. L. Weigert (Griesbach im Rottal).

***Ctenoceratoda graeseri* (Püngeler, 1898)**

Figs 5, 6, 51

Haderonia tancrei var. *graeseri* Püngeler, 1898, Societas Entomologica 13: 58. Type-locality: [Kazakhstan or

China] Ili region (“Ili 1897 M Juli”). Lectotype: male, in coll. MNB.

Remarks. This taxon was repeatedly described by the same author one year later and first illustrated the species (Iris 12: 102; Plate 9, fig. 3).

***Ctenoceratoda gyulaii* Volynkin, Varga & Matov, 2012**

Ctenoceratoda gyulaii Volynkin, Varga & Matov, 2012, Proceedings of the Tigirek State Natural Reserve 5: 205, pl. 3, figs 5-6; pl. 15, figs 18-23; pl. 28, figs 3-4; pl. 33, fig. 3. Type-locality: Russia, Altai Republic, Kosh-Agach district, 10 km WSW of Tashanta village, Bolshoy Shibety valley, 2200 m, 49°40'N, 89°04'E. Holotype: male, in coll. ZISP.

***Ctenoceratoda juliannae* Varga, 1992**

Ctenoceratoda juliannae Varga, 1992, Acta Zoologica Academicae Scientiarum Hungaricae 38 (1-2): 99, pl. 3, fig. 19, gen. figs 33-36. Type-locality: Mongolia, Khovd aimak, Dzungar Govi, Bulgan sum (in the village). Holotype: male, in coll. Z. Varga (Debrecen).

***Ctenoceratoda khorgossi* (Alphéraky, 1882)**

Mamestra khorgossi Alphéraky, 1882, Horae Societatis Entomologicae Rossiae 17: 65, pl. 2, fig. 49. Type-locality: [China, Xinjiang] Kuldja district; Khorgoss. Syntypes: 2 males and 2 females, in coll. ZISP.

Synonymy. *Hadula corgossi* Hampson, 1905, Catalogue of the Lepidoptera Phalaenae in the British Museum 5: 244. An unjustified emendation of *Mamestra khorgossi* Alphéraky, 1882.

***Ctenoceratoda leucostigma* Gyulai & Varga, 2010**

Figs 17, 18

Ctenoceratoda leucostigma Gyulai & Varga, 2010, Folia Entomologica Hungarica 70: 182, figs 1-3, gen. figs 9-13. Type-locality: China, Qinghai [Kuku-Noor region], 20 km N of Da Qaidam city, 4,000 m. Holotype: male, in coll. P. Gyulai (Miskolc).

***Ctenoceratoda longicornis* (Graeser, 1892)**

Figs 7-10, 52, 53

Mamestra longicornis Graeser, 1892, Berliner Entomologische Zeitschrift 37: 306. Type-locality: [Kirghisia] Kisyl-Yart. Lectotype: male, here designated, in coll. MNB.

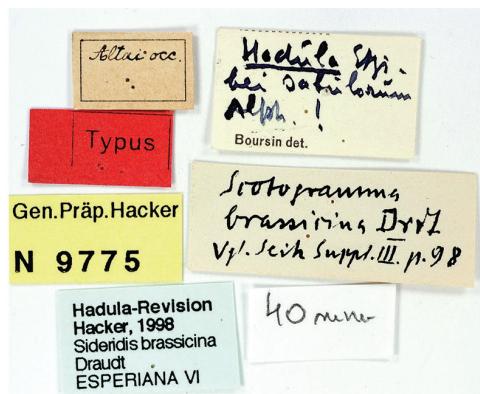
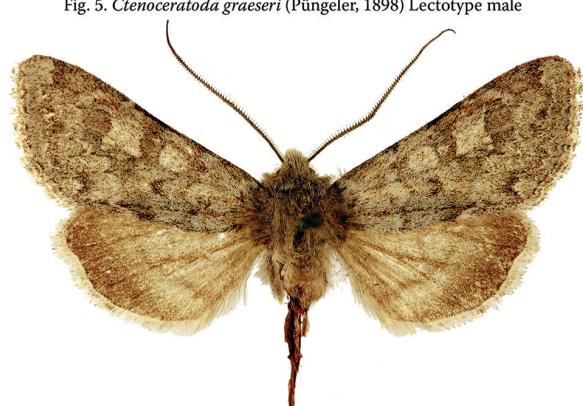
Fig. 1. *Ctenoceratoda brassicina* (Draudt, 1934) Holotype maleFig. 3. *Ctenoceratoda contempta* (Püngeler, 1914) Lectotype maleFig. 2. *Ctenoceratoda brassicina* (Draudt, 1934) Holotype male, labelsFig. 5. *Ctenoceratoda graeseri* (Püngeler, 1898) Lectotype maleFig. 4. *Ctenoceratoda contempta* (Püngeler, 1914) Lectotype male, labelsFig. 7. *Ctenoceratoda longicornis* (Graeser, 1892) Lectotype, maleFig. 5. *Ctenoceratoda graeseri* (Püngeler, 1898) Lectotype male, labels

Figure 1–8. 1. *Ctenoceratoda brassicina* (Draudt, 1934) Holotype male. 2. *Ctenoceratoda brassicina* (Draudt, 1934) Holotype male, labels. 3. *Ctenoceratoda contempta* (Püngeler, 1914) Lectotype male. 4. *Ctenoceratoda contempta* (Püngeler, 1914) Lectotype male, labels. 5. *Ctenoceratoda graeseri* (Püngeler, 1898) Lectotype male. 6. *Ctenoceratoda graeseri* (Püngeler, 1898) Lectotype male, labels. 7. *Ctenoceratoda longicornis* (Graeser, 1892) Lectotype, male. 8. *Ctenoceratoda longicornis* (Graeser, 1892) Lectotype male, labels.

Fig. 9. *Ctenoceratoda longicornis* (Graeser, 1892) Paralectotype maleFig. 11. *Ctenoceratoda lupa* (Christoph, 1893) Lectotype maleFig. 10. *Ctenoceratoda longicornis* (Graeser, 1892) Paralectotype male, labelsFig. 12. *Ctenoceratoda lupa* (Christoph, 1893) Lectotype male, labelsFig. 13. *Ctenoceratoda nefasta* (Püngeler, 1907) Lectotype maleFig. 14. *Ctenoceratoda nefasta* (Püngeler, 1907) Lectotype male, labelsFig. 15. *Ctenoceratoda optima* (Alphéraky, 1897) Lectotype male
(Photo A. Matov)Fig. 16. *Ctenoceratoda optima* (Alphéraky, 1897) Lectotype male, labels
(Photo A. Matov)

Figure 9–16. 9. *Ctenoceratoda longicornis* (Graeser, 1892) Paralectotype male. 10. *Ctenoceratoda longicornis* (Graeser, 1892) Paralectotype male, labels. 11. *Ctenoceratoda lupa* (Christoph, 1893) Lectotype male. 12. *Ctenoceratoda lupa* (Christoph, 1893) Lectotype male, labels. 13. *Ctenoceratoda nefasta* (Püngeler, 1907) Lectotype male. 14. *Ctenoceratoda nefasta* (Püngeler, 1907) Lectotype male, labels. 15. *Ctenoceratoda optima* (Alphéraky, 1897) Lectotype male. 16. *Ctenoceratoda optima* (Alphéraky, 1897) Lectotype male, labels.

Lectotype designation. Lectotype: male: “*Mamestra longicornis* Graeser”, “Asia centr.[alis] Kisyl-Yart Anf. [ang] Juli”. The lectotype specimen was dissected by Boursin (Slide No. MB 307); in coll. MNB.

Ctenoceratoda lukhtanovi Varga & Gyulai, 1999

Ctenoceratoda lukhtanovi Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45 (2): 172, figs 1-2, 23, 41, 50-52, 82. Type-locality: Tadzhikistan, Pamir Mts, Muzkol Mts, Ak-Baital Pass, 4200 m. Holotype: male, in coll. P. Gyulai (Miskolc).

Ctenoceratoda lupa (Christoph, 1893)

Figs 11, 12, 54

Mamestra lupa Christoph, 1893, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 6: 91. Type-locality: [Iran] Hyrcania, Shahkuh (“Schahkuh”, “Coll. Christoph [580]”, “Ex Coll. H.J. Elwes, 1920” “Joicey Bequest, Brit. Mus. 1934-120.”). Lectotype: male, in coll. BMNH.

Remarks. The type material has long been considered to be harboured in the collection of the ZISP. The male specimen from “Schahrud”, dissected by Rjabov (ZISP 7565) cannot be considered as an original type however, since the locality does not agree with the original description. The original specimens (two males, “Schahkuh, Hyrcaniae”) were most probably sold by Christoph and one of them was found in the collection of the NHM London, with the labels illustrated in the Fig. 12. This specimen has been designated as lectotype of *Mamestra lupa* (slide No. RL11753m) (Varga et al. 2017).

Ctenoceratoda naryna Varga & Gyulai, 1999

Ctenoceratoda naryna Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45 (2): 189, figs 15-16, gen. figs 33, 47, 66-67, 87. Type-locality: Kirghisia, Naryn region, Maly Naryn, Uzungyr, 2700 m. Holotype: male, in coll. P. Gyulai (Miskolc).

Ctenoceratoda nefasta (Püngeler, 1907)

Figs 13, 14, 55

Hadula nefasta Püngeler, 1907, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 19: 221, pl. 8, fig. 2. Type-locality: [China, Xinjiang] Lob-Noor. Lectotype: male, here designated; coll. MNB.

Lectotype designation. Lectotype: male, “nefasta Püngeler”, “Lob-Noor”, “Juni, R[ue]ckeb[eil]”. The specimen was dissected by Boursin (slide No. MB 309); coll. MNB.

Ctenoceratoda optima (Alphéraky, 1897)

Figs 15, 16, 56

Haderonia optima Alphéraky, 1897, in Romanoff: Mémoires sur les Lépidoptères 9: 236, pl. 12, fig. 7. Type-locality: [China] Oulan-boulak, Nan-chan. Lectotype: male, here designated, in coll. ZISP.

Lectotype designation. Lectotype: male, “Montes Humboldt Nan-Chiai”, “VI 1894, 10.000”, “optima Alph.” “Kol.[Iekciya] Vel.[ikogo] Kn.[yaza] Nikolaia Michailovicha” (with Cyrillic letters). The specimen was dissected by Matov (slide No. Matov 0148 ZISP; in coll. ZISP).

Ctenoceratoda oxyptera Varga, 1992

Ctenoceratoda oxyptera Varga, 1992, Acta Zoologica Academiae Scientiarum Hungaricae 38 (1-2): 99, pl. 3, figs 17-18, gen. figs 37-43. Type-locality: Mongolia, Govi Altai aimak, Govi Altai Mts, 6 km S of Tögrög. Holotype: male, in coll. Z. Varga (Debrecen).

Ctenoceratoda peregovitsi Varga & Gyulai, 1999

Ctenoceratoda peregovitsi Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45 (2): 174, figs 4-5, gen. figs 25-26, 55, 83. Type-locality: Mongolia, Ömnögovi aimak, Tost Mts, 42 km WSW Gurt, 2450 m, 43°11'11"N, 100°36'60"E. Holotype: male, in coll. HNHM.

Ctenoceratoda psychrogena Varga & Gyulai, 1999

Ctenoceratoda psychrogena Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45(2): 175, figs 6-8, gen. figs 27-29, 42-44, 58-62, 84. Type-locality: Tadzhikistan, Pamir Mts, Vakhanskiy Mts, 4200 m. Holotype: male, in coll. P. Gyulai (Miskolc).

Ctenoceratoda septemlacustris Gaal-Haszler, Lödl, Ronkay, Ronkay & Varga, 2012

Ctenoceratoda septemlacustris Gaal-Haszler, Lödl, Ronkay, Ronkay & Varga, 2012, Fibigeriana 1: 125, pl. 112, figs 19-20, gen. figs 12-13. Type-locality: Afghanistan, Koh-i-Baba Mts, Band-i-Amir, 3000 m. Holotype: male, in coll. NHMW.

Ctenoceratoda stenocera Varga & Gyulai, 2002

Ctenoceratoda stenocera Varga & Gyulai, 2002, Esperiana 9: 230, pl. 20, fig. 16. Type-locality: China, Kunlun Mts, 60 km NW of Xaidullah village, 4000–4500 m. Holotype: male, in coll. P. Gyulai (Miskolc).

***Ctenoceratoda sukharevae sukharevae* (Varga, 1974)**

Haderonia sukharevae Varga, 1974, Annales Historico-Naturales Musei Nationalis Hungarici 66: 301, pl. 7, fig. 7. Type-locality: Mongolia, Bayankhongor aimak, Zhinst Mts, 50 km E of Shinezhinst somon, 2000 m. Holotype: male, in coll. HNHM.

***Ctenoceratoda sukharevae excellens* (Varga, 1974)**

Haderonia sukharevae excellens Varga, 1974, Annales Historico-Naturales Musei Nationalis Hungarici 66: 302, pl. 1, figs 7-8. Type-locality: Mongolia, Khövsgöl aimak, Delger mörön river, 8 km N of Burenchaan somon, 1450 m. Holotype: male, in coll. HNHM.

***Ctenoceratoda tancrei* (Graeser, 1892)**

Figs 19, 20, 57

Mamestra tancrei Graeser, 1892, Berliner Entomologische Zeitschrift 37: 305. Type-locality: [Kirghisia] Alexander Mts. Lectotype: male, here designated; coll. MNB.

Lectotype designation. Lectotype: male, “tancrei Graeser Type”, “Alexander Gb. R[ue]ckb[eil] E. Juli”.

Remarks. The lectotype was not dissected by Boursin, since the end of the abdomen seems to be slightly damaged. The completely similar paralectotype specimen from the same locality was dissected by Varga (gen. slide VZ 9526).

***Ctenoceratoda thermolimna* (Boursin, 1964)**

Haderonia thermolimna Boursin, 1964, Zeitschrift der Wiener Entomologischen Gesellschaft 49: 174, pl. 22, figs 1, 4. Type-locality: Kirghisia, Issyk-Kul. Holotype: male, in coll. ZSM.

***Ctenoceratoda transalaica* Varga and Gyulai, 1999**

Ctenoceratoda transalaica Varga & Gyulai, 1999, Acta Zoologica Academiae Scientiarum Hungaricae 45(2): 189, figs 17, gen. figs 34, 48, 68-69, 88. Type-locality: Kirghisia, Transalai, Aram Kungei, 2800 m. Holotype: male, in coll. P. Gyulai (Miskolc).

***Ctenoceratoda turpis* (Staudinger, 1999)**

Figs 21, 22, 58

Phoebophilus turpis Staudinger, 1899, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 12: 341, pl. 7, fig. 8. Type-locality: [China,

Xinjiang] Korla. Lectotype: male, here designated, in coll. MNB.

Lectotype designation. Lectotype: male, „Korla”, „Ori-gin” (pink label); the specimen was dissected by Boursin (slide No. MB 298).

Remarks. The types are incorrectly cited by Poole as „2 females”, in the original description were mentioned 1 worn male and 2 fresh females.

***Ctenoceratoda weigerti* (Hacker & Varga, 1990)**

Haderonia weigerti Hacker & Varga, 1990, Esperiana 1: 340, pl. E, fig. 16. Type-locality: Pakistan, Karakoram Mts, Kunjerab pass, 3600 m. Holotype: male, in coll. L. Weigert (Griesbach im Rottal).

***Ctenoceratoda zetina zetina* (Staudinger, 1899)**

Hadena zeta var. *zetina* Staudinger, 1899, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 12: 342. Type-locality: [China, Tien Shan region] „Thian or”. Holotype: female, in coll. MNB.

Synonymy. *Mamestra (Hadula) impia* Püngeler, 1905, Societas Entomologica 19: 153. Type-locality: [China, Xinjiang] Aksu. Syntypes: 1 male and 1 female, in coll. MNB;

Mamestra desquamata Filipjev, 1931, Abhandlungen der Pamir-Expedition 1928, 8: 152, text fig. 2, pl. 3, fig. 3. Type-locality: [Tadzhikistan] Pamir, Khorog; [China, Xinjiang] Aksu; Kashgar; Dashi-Kulj. Syntypes: in coll. ZISP.

***Ctenoceratoda zetina rhodoptera* Varga, 1992**

Ctenoceratoda zetina rhodoptera Varga, 1992, Acta Zoologica Academiae Scientiarum Hungaricae 38(1-2): 100, pl. 1, fig. 7. Type-locality: Afghanistan central, Band-i-Amir, 3600 m. Holotype: male, in coll. NHMW.

The descriptions of the following four new species and a new subspecies have been recently published in a separate paper on the taxonomy of the genus *Ctenoceratoda* (Varga et al. 2017).

***Ctenoceratoda persephone* Varga, Ronkay & Ronkay, 2017**

Ctenoceratoda persephone Varga, Ronkay & Ronkay, 2017, Acta Zoologica Academiae Scientiarum Hungaricae 64 (1). Type-locality: Mongolia, Khovd aimak, 60 km E of Altay somon centre, 1600 m, 45°48'N, 92°50'E. Holotype: male, in coll. HNHM.

Fig. 17. *Ctenoceratoda leucostigma* Gyulai & Varga, 2010 Holotype male

Dr. P. Gyulai
HUNGARY
CHINA, QINGHAI
20 KM N of Da Qaidam
4000 m.;
20 - 23.7. 2004.
L. M. Kopp & S. Nykl

Ctenoceratoda
leucostigma ♂
sp.n. HT
No 1899 Gyulai

HOLOTYPE
Ctenoceratoda
leucostigma

Gyulai & Varga,
2010

43mm

Fig. 19. *Ctenoceratoda tancrei* (Graeser, 1892) Lectotype maleFig. 18. *Ctenoceratoda leucostigma* Gyulai & Varga, 2010 Holotype male

Asia centr.
Alexandergebirge
Enz. Guli

Type
Tancrei Graes.

42mm

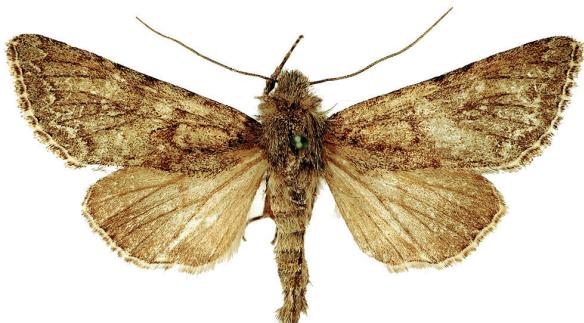
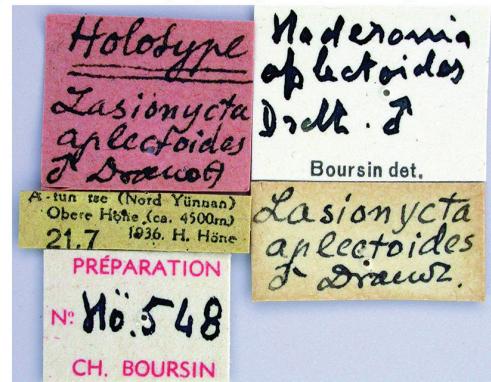
Fig. 20. *Ctenoceratoda tancrei* (Graeser, 1892) Lectotype male, labelsFig. 21. *Ctenoceratoda turpis* (Staudinger, 1900) Paralectotype femaleFig. 22. *Ctenoceratoda turpis* (Staudinger, 1900) Paralectotype female, labelsFig. 23. *Haderonia aplectoides* (Draudt, 1950) Lectotype maleFig. 24. *Haderonia aplectoides* (Draudt, 1950) Lectotype male, labels

Figure 17–24. **17.** *Ctenoceratoda leucostigma* Gyulai & Varga, 2010 Holotype male. **18.** *Ctenoceratoda leucostigma* Gyulai and Varga, 2010 Holotype male, labels. **19.** *Ctenoceratoda tancrei* (Graeser, 1892) Lectotype male. **20.** *Ctenoceratoda tancrei* (Graeser, 1892) Lectotype male, labels. **21.** *Ctenoceratoda turpis* (Staudinger, 1900) Paralectotype female. **22.** *Ctenoceratoda turpis* (Staudinger, 1900) Paralectotype female, labels. **23.** *Haderonia aplectoides* (Draudt, 1950) Lectotype male. **24.** *Haderonia aplectoides* (Draudt, 1950) Lectotype male, labels.

***Ctenoceratoda scotosparsa* Varga, Ronkay & Ronkay, 2017**

Ctenoceratoda scotosparsa Varga, Ronkay & Ronkay, 2017, Acta Zoologica Academiae Scientiarum Hungaricae 64 (1). Type-locality: Mongolia, Govi Altai aimak, Mongolian Altay Mts, Sutay uul, 16 km SE of Dzuyl, 46°11'N, 94°01'E; 2070 m. Holotype: male, in coll. P. Gyulai (Miskolc).

***Ctenoceratoda cyanochrea* Varga, Ronkay & Ronkay, 2017**

Ctenoceratoda cyanochrea Varga, Ronkay & Ronkay, 2017, Acta Zoologica Academiae Scientiarum Hungaricae 64 (1). Type-locality: Mongolia, Khovd aimak, Mongolian Altay Mts, 1430 m, Mönkh Khayrkhan uul, 41 km N of Bulgan, 46°28'N, 91°24'E. Holotype: male, in coll. G. Ronkay (Budapest).

***Ctenoceratoda mallopyga* Varga, Ronkay & Ronkay, 2017**

Ctenoceratoda mallopyga Varga, Ronkay & Ronkay, 2017, Acta Zoologica Academiae Scientiarum Hungaricae 64 (1). Type-locality: Pakistan, Karakoram Mts, Naltar valley, 2800 m, N36°09', E74°12'. Holotype: male, in coll. Z. Varga (Debrecen).

***Ctenoceratoda mallopyga dyschroa* Varga, Ronkay & Ronkay, 2017**

Ctenoceratoda mallopyga dyschroa Varga, Ronkay & Ronkay, 2017, Acta Zoologica Academiae Scientiarum Hungaricae 64 (1). Type-locality: India, Himachal Pradesh, Spiti, Spiti valley, 6 km SE Kaza, 4100 m. Holotype: male, in coll. G. Ronkay.

Genus *Haderonia* Staudinger, 1896

Haderonia Staudinger, 1896, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 8: 320. Type-species: *Haderonia subarschanica* Staudinger, 1896, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 8: 320, pl. 6, fig. 12, by monotypy; a junior synonym of *Mamestra* (*Dianthoezia*) *miserabilis* Alphéraky, 1892.

Synonymy. *Lasiridia* Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 39, plate II., fig. 9. Type-species: *Lasiridia iomelas* Draudt, 1950, by monotypy.

***Haderonia alpina* (Draudt, 1950)**

Lasiestra alpina Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 23, pl. 1, fig. 20. Type-locality: China, [Sichuan] "Batang, alpine Zone". Syntypes: both sexes, in coll. ZFMK Bonn.

Taxonomic notes. The figure of the genital slide (Plate XIII, Fig. 13) was changed in the original publication (showing the genitalia of a *Xestia* sp.!). Boursin (1964b) dissected and figured the specimen labelled by Draudt as holotype (Plate XIII, Fig. 53) and stated correctly its generic placement in *Haderonia*.

***Haderonia aplectoides* (Draudt, 1950)**

Figs 23, 24, 59

Lasionycta aplectoides Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 25, pl. 1, fig. 24. Type-locality: China, Prov. Yunnan, Li-kiang. Lectotype: male, here designated, in coll. ZFMK.

Lectotype designation. Lectotype: male, [China] "Prov. Nord-Yuennan, Li-kiang". The lectotype specimen was dissected by Boursin (slide No. Hö 613); it is deposited in the ZFMK.

Remarks. A specimen of this species from the same locality was labelled by Draudt as *Lasionycta bombycoides*. This taxon has never been published, however. The specimen was dissected by Boursin (Hö 612).

***Haderonia arschanica* (Alphéraky, 1882)**

Hadena arschanica Alphéraky, 1882, Horae Societatis Entomologicae Rossicae 17: 78, pl. 2, f. 45. Type-locality: [Xinjiang] Kuldja district, Archane. Lectotype: male, here designated, in coll. ZISP.

Lectotype designation. Lectotype: male, „Tien Chan, 13.VI.1879.”, „arschanica Alph. Original”, „Kol.[lekcija] vel.[ikogo] kn.[jaza] Nikolaya Michailovicha (in Cyrillic letters); coll. ZISP.

***Haderonia chinensis* (Draudt, 1950)**

Trichestra chinensis Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 19, pl. 1, f. 3-4. Type-locality: [Yunnan], Li-kiang; Atuntse; Mien-shan. Syntypes: numerous specimens of both sexes, in coll. ZFMK.

***Haderonia iomelas* (Draudt, 1950)**

Lasiridia iomelas Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 39, pl. 2, f. 19. Type-locality: [Sichuan] Batang. Syntypes: males, in coll. ZFMK.

***Haderonia lasiestrina* (Draudt, 1950)**

Figs 25, 26, 60

Polia lasiestrina Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 27, pl. 2, f. 1. Type-locality: [Sichuan] Batang. Holotype: male, in coll. ZFMK. Lectotype: male, here designated.

Lectotype designation. Lectotype: male, [China], "Li-kiang, Batang, alpine Zone, 5000 m". The lectotype specimen was dissected by Boursin (slide No. Hö 610), coll. ZFMK.

***Haderonia miserabilis* (Alphéraky, 1892)**

Mamestra (Dianthoecia) miserabilis Alphéraky, 1892, in Romanoff: Mémoires sur les Lépidoptères 6: 33. Type-locality: [China] „entre Tchatchakou et Tchangla, dans la province Séthchouén". Holotype: female, in coll. ZISP (slide No. ZIN 4367).

Synonymy. *Hadena subarschanica* Staudinger, 1895, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 8: 320, pl. 6, f. 12. Type-locality: [China] between Lob Noor and Kuku Noor. Holotype: male, in coll. MNB.

Haderonia subarschanica nepalensis Boursin, 1964, Veröffentlichungen der Zoologischen Staatssammlung München 8: 26, pl. 2, f. 41-42. Type-locality: Nepal, Mustangbhot, Gargompa. Holotype: male, in ZSM.

***Haderonia persimilis* (Draudt, 1950)**

Trichestra persimilis Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 20, pl. 1, f. 7-8. Type-locality: [Sichuan] Batang. Syntypes: both sexes, in coll. ZFMK.

Genus *Polia* Ochsenheimer, 1816

Polia Ochsenheimer, 1816, Die Schmetterlinge von Europa 4: 73. Type-species: *Phalaena nebulosa* Hufnagel, 1766, by subsequent designation by Curtis, 1829.

Synonymy. *Chera* Hübner, 1821, Verzeichniss bekannter Schmetterlinge: 211. Type-species: *Polia serratilinea* Ochsenheimer, 1816, by subsequent designation by Hampson, 1902;

Polia Boisduval, 1828, Europaeorum Lepidopterorum Index Methodicus: 73. Type-species: *Phalaena nebulosa* Hufnagel, 1766, by subsequent designation by Curtis, 1829;

Aplecta Guenée, 1838, Annales de la Société Entomologique de France 7: 217. Type-species: *Phalaena nebulosa* Hufnagel, 1766, by subsequent designation by Guenée, 1852;

Anartodes Culot, 1915, Noctuelles et Géometrées d'Europe. Première Partie Noctuelles 2: 125. Type-species: *Mamestra rangnowi* Püngeler, 1909, by monotypy;

Bompolia Beck, 1996, Neue entomologische Nachrichten 36: 73. Type-species: *Phalaena bombycina* Hufnagel, 1766, by original designation;

Ripolia Beck, 1996, Neue entomologische Nachrichten 36: 73. Type-species: *Hadena richardsoni* Curtis, 1834, by original designation;

Antipolia Beck, 1996, Neue entomologische Nachrichten 36: 73. Type-species: *Mamestra conspicua* Bang-Haas, 1912, by original designation.

Subgenus *Atropolia* subgen. n.

<http://zoobank.org/262A8F7C-9CC5-4A1B-903E-0B6490C1E15C>

Type-species. *Mamestra mortua* Staudinger, 1888, here designated.

Diagnosis. The two species of this subgenus are characterised by the most often unicolorous black or deep blackish-brown forewing ground colour and some unique structures of the male genitalia. The most conspicuous character of the male genitalia is the long, slightly falcate extension of the basal plate of the harpe-ampulla complex, superficially resembling the digitus of some not closely related groups. The saccular processes are relatively short and simple, slightly asymmetric with a brush of specialised setae on the right (on figures left) side. The vesica is helicoidal with a full coil; the distal section of the vesica is armed by a long stripe of fasciculate cornuti. In the female genitalia, the ductus bursae is strongly sclerotised and dorso-ventrally compressed, somewhat similar as in *Ctenoceratoda* species, however the appendix bursae is very different, relatively short, tubular.

Etymology. The name is the amalgamation of the names *Atropos* and *Polia*.

***Polia (Atropolia) mortua mortua* (Staudinger, 1888)**

Mamestra mortua Staudinger, 1888, Entomologische Zeitung. Entomologischen Vereine zu Stettin 49: 249. Type-locality: [Russia] Askold (Island). Holotype: female, in coll. MNB.

Synonymy. *Mamestra afra* Graeser, 1889, Berliner Entomologische Zeitschrift 32 (2): 326. Type-locality: [Russia] Amur region, Vladivostok. Holotype: female, in coll. MNB;

Polia persicariae minorita Bryk, 1949, Arkiv för Zoologi 41A (1): 73. Type-locality: North Korea, near Kyeongseong, Hamgyeong bugdo (Shuotsu). Holotype: male, in coll. NRS.

***Polia (Atropolia) mortua kala* (Swinhoe, 1900)**

Hadena kala Swinhoe, 1900, Catalogue of Eastern and Australian Lepidoptera Heterocera in the Oxford University Museum 2: 17. An objective replacement name of *Mamestra nigerrima* Warren, 1888 (primary homonymy with *Mamestra nigerrima* Guenée, 1854).

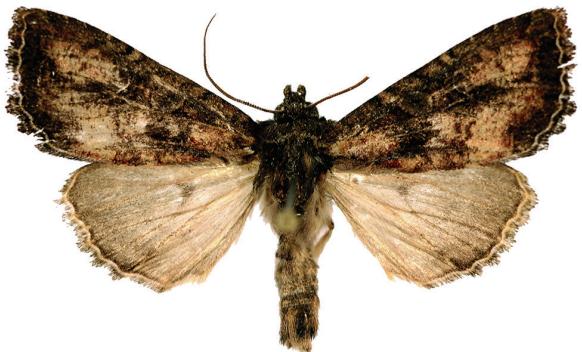
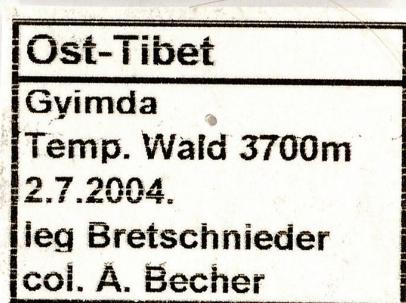
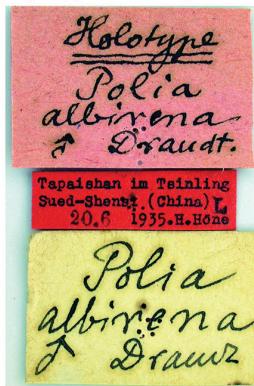
Fig. 25. *Haderonia lasiestrina* (Draudt, 1950) Lectotype maleFig. 26. *Haderonia lasiestrina* (Draudt, 1950) Lectotype male, labelsFig. 27. *Polia (Atropolia) mortua szetschwana* Draeseke, 1928
Lectotype maleFig. 28. *Polia (Atropolia) mortua szetschwana* Draeseke, 1928
Lectotype male, labelsFig. 29. *Polia (Atropolia) posterodiluta* sp. n. Holotype maleFig. 30. *Polia (Atropolia) posterodiluta* sp. n. Holotype male, labelsFig. 31. *Polia (Leuconephropolia) albirena* Draudt, 1950 Lectotype maleFig. 32. *Polia (Leuconephropolia) albirena* Draudt, 1950 Lectotype male, labels

Figure 25–32. **25.** *Haderonia lasiestrina* (Draudt, 1950) Lectotype male. **26.** *Haderonia lasiestrina* (Draudt, 1950) Lectotype male, labels. **27.** *Polia (Atropolia) mortua szetschwana* Draeseke, 1928 Lectotype male. **28.** *Polia (Atropolia) mortua szetschwana* Draeseke, 1928 Lectotype male, labels. **29.** *Polia (Atropolia) posterodiluta* sp. n. Holotype male. **30.** *Polia (Atropolia) posterodiluta* sp. n. Holotype male, labels. **31.** *Polia (Leuconephropolia) albirena* Draudt, 1950 Lectotype male. **32.** *Polia (Leuconephropolia) albirena* Draudt, 1950 Lectotype male, labels.

Synonymy. *Mamestra nigerrima* Warren, 1888, Proceedings of the Zoological Society of London 1888: 302. Type-locality: India, Himachal Pradesh, Thundiani. Syntypes: 2 males and 4 females. Preoccupied, a junior primary homonym of *Mamestra nigerrima* Guenée, 1852.

Polia (Atropolia) mortua szetschwana Draeseke, 1928, stat. rev., comb. n.

Figs 27, 28, 61

Polia szetschwana Draeseke, 1928, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 42: 301. Type-locality: [China] Sichuan, Sunpanting. Lectotype: male, here designated, in coll. SMND.

Lectotype designation. Lectotype: male, “*Polia szetschwana*” (sic!) “Szetschwan, Sunpanting” “Exp. Stötzner 1927 9” “*Polia mortua* Stgr. det. Boursin”. Two male and three female paralectotypes from the same locality (male gen. slide VZ Dresden 09).

Synonymy. *Polia adustaeoides* Draeseke, 1928, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 42: 302. Type-locality: [China], “Szechwan, Tatsien-lou Exp. Stötzner” “1927 9”, syn. n.

Taxonomic notes. The revision of the type series confirms the recognition of the subspecific rank of this south-western population, as well as the taxonomic identity of *szetschwana* and *adustaeoides*. This taxon inhabits the high mountains on the SE edge of the Tibet (Xizang) plateau.

Polia (Atropolia) mortua caeca Hreblay & Ronkay, 1997

Polia mortua caeca Hreblay & Ronkay, 1997, Acta Zoologica Academiae Scientiarum Hungaricae 43 (1): 28, figs 12–13, 132–133. Type-locality: Taiwan, Nantou County, Tayuling, 3000 m, 24°08'N, 121°16'E. Holotype: male, in coll. M. Hreblay (deposited in HNHM).

***Polia (Atropolia) posterodiluta* sp. n.**

<http://zoobank.org/BA96EDBF-AC47-49FE-81D1-CE9B3555625C>

Figs 29, 30, 62

Holotype. Male, China, “Ost-Tibet, Gyimda, 3700 m, „temp. Wald”, 2.VII.2004, leg. Bretschneider; slide No. RL8670m (coll. A. Becher).

Diagnosis. The new species is a sympatric sister taxon of the widespread and polytypical *Polia (Atropolia) mortua*, occurring together with the ssp. *szetschwana* at the SE frontier of the Tibetan plateau. The new species differs externally from all subspecies of *P. (A.) mortua* by its smaller size (wingspan 38 mm), intense pale ochreous-to ochreous-brownish suffusion in the inner parts of the forewing running from the basal area to the inner half of the marginal field (with some reddish hue only at the lower part of the basal area and along the subterminal line), the

narrower reniform stigma with fine whitish line at middle (while the regular white line along the outer edge of the stigma and the characteristic two white dots at lower edge are missing), and the diluted (ochreous-whitish) inner area of the hindwing with well-developed discal spot on the underside. The marginal area of the hindwing has rather pale greyish-brown suffusion, with small darker grey patches at tornal area, covering also the fringes. The sympatrically occurring populations of *P. (A.) mortua* are usually dimorphic, having either dark brown to blackish-brown forewings with only weak reddish-brownish hue or with intensely red-brownish suffusion (the form described as *adustaeoides*), but this reddish suffusion is less extensive than in *P. (A.) posterodiluta*, the reniform stigma is larger, with the typical whitish markings at outer edge, and the male hindwing is more evenly greyish-brown suffused, with much smaller discal spot. Female unknown.

The male genitalia are essentially similar to those of *P. (A.) mortua* but the sclerotised medial extension of valvae is less falcate, evenly broad, except the finely tapering and terminally pointed distal quarter. This process is medially narrower and distally dilated, apically rounded in all four subspecies of *P. (A.) mortua*. In addition, the clavi are broader and more evenly rounded, and the juxta is smaller and thinner than in different subspecies of *P. (A.) mortua*.

Distribution. SE Tibetan. The species is known from the type-locality only; the holotype specimen was collected in a high altitude forest region in the midsummer period.

Subgenus *Metallopolia* Varga, Ronkay & Ronkay, 2017

Metallopolia Varga, Ronkay & Ronkay, 2017, Journal of Asia-Pacific Entomology 21. Type-species: *Mamestra culta* Moore, 1881, Proceedings of the Zoological Society of London 1881: 347.

Taxonomic notes. The revision of the subgenus *Metallopolia* is published in a separate paper (Varga et al. 2017b). It contains five easily distinguishable species representing three main lineages, the *culta*-, the *subviolacea*- and the *kalikotei*-lineages. The shortened diagnosis of the subgenus is presented below; the detailed analysis of the clade is given in the above-mentioned publication.

Diagnosis. *Metallopolia* species are large, robust moths, resembling the larger south Siberian *Polia* species but have shorter abdomen bearing 3–4 prominent blackish tufts on the first abdominal segments dorsally. The most conspicuous external character of the members of this subgenus is the presence of optically structured “metallic” scales with „neon-greenish” colouration (see: Etymology) within or near to the maculation and the anal edge of the postmedial transversal line. The forewing ground colour is rather dark brown to blackish-brown with some purplish-violaceous hue and diffuse, smaller or larger reddish-brownish patches; the hindwings are also dark brown or grey-brown. The members of the subgenus

are externally often confusingly similar, the proper identification often requires the study of genitalia.

In the male genitalia, the saccular processes are slightly asymmetrical, extended, acute or obtuse, with strong setae terminally, in most species with characteristic brush of specialised setae on the right (in figures left) side. Vesica long, tubular, partly or entirely coiling, medial and distal sections armed by numerous small, spiniform cornuti arranged into a long and variably dense stripe. In the female genitalia, the ductus bursae is sclerotised, compressed dorso-ventrally; the appendix bursae is tubular, sausage-shaped, slightly retroflexed, bursa globular with longitudinal, extremely faint signa.

Etymology. The name refers to the scales with light greenish optical colouration and metallic shine on the fore wings as unique character within the genus *Polia*.

Polia (Metallopolia) culta (Moore, 1881)

Mamestra culta Moore, 1881, Proceedings of the Zoological Society of London 1881: 347. Type-locality: [India, Himachal Pradesh] Dalhousie N.W. Himalaya. Holotype: female, in coll. NHML. Gen. slide 4442.

Polia (Metallopolia) dysgnorima Varga, Ronkay & Ronkay, 2017, in press

Polia (Metallopolia) dysgnorima Varga, Ronkay & Ronkay, 2017, Journal of Asia-Pacific Entomology 21. Type-locality: China, Sichuan, Daxue Shan, Gongga Shan, NW Moxi, 3200 m, 101°58'E, 29°41'N. Holotype: male, in coll. Z. Varga.

Polia (Metallopolia) metagnorima Varga, Ronkay & Ronkay, 2017, in press

Polia (Metallopolia) metagnorima Varga, Ronkay & Ronkay, 2017, Journal of Asia-Pacific Entomology 21. Type-locality: China, Sichuan, Daxue Shan, Gongga Shan, NW Moxi, 2850 m, 101°58'E, 29°41'N. Holotype: male, in coll. Z. Varga.

Polia (Metallopolia) ignorata (Hreblay, 1996)

Haderonia ignorata Hreblay, 1996, Acta Zoologica Academiae Scientiarum Hungaricae 42 (1): 70, figs 5–7, gen. fig. 12. Type-locality: China, Sichuan, Putsu-fong. Holotype: male, in coll. BMNH.

Polia (Metallopolia) kalikotei (Varga, 1992)

Haderonia kalikotei Varga, 1992, Acta Zoologica Academiae Scientiarum Hungaricae 38: 97, pl. 1, fig. 1. Type-locality: “Nepal, Prov. 3 East, Junbesi, 2750 m”. Holotype: male, in coll. ZSM.

Polia (Metallopolia) subviolacea subviolacea (Leech, 1900)

Hadena culta var. *subviolacea* Leech, 1900, Transactions of the Entomological Society of London 1900: 55. Type-locality: [China, Sichuan] Omei Shan (Emei Shan). Holotype: male, in coll. BMNH.

Remarks. A *Metallopolia* specimen from China, North Yunnan, Likiang was selected by Draudt as a distinct taxon and labelled as *Lasiadena purpureonitens*. This taxon has never been published; the selected holotype specimen is conspecific with *P. (M.) subviolacea*.

Polia (Metallopolia) subviolacea kanchenjunga Varga, Ronkay & Ronkay, 2017

Polia (Metallopolia) subviolacea kanchenjunga Varga, Ronkay & Ronkay, 2017, Journal of Asia-Pacific Entomology 21. Type-locality: Nepal, Kanchenjunga Himal, Deorali Danda, Torontan, 3200 m. Holotype: male, in coll. G. Ronkay.

Subgenus *Leuconeephropolia* subgen. n.

<http://zoobank.org/CD44616F-690F-491F-A96F-A33062B3F0CA>

Type-species. *Polia albirena* Draudt, 1950, by monotypy.

Diagnosis. This isolated species is strikingly different from all other *Polia* species by its slenderer body, more elongate triangular and somewhat acute forewings, longer pectinated and relatively long antennae of males, by dark greyish-brown colouration of thorax and fore wings with some violaceous shine.

The male genitalia also differ conspicuously from those of all other known *Polia* species, the diagnostic features are as follows: the saccular processes are symmetrical, relatively short and densely covered by a “bush” of strong setae terminally, and the vesica is completely helicoid and recurved, bearing a large number of thin, spiniform cornuti and a small terminal diverticulum.

The female genitalia are also very specific: the sclerotisation of the antrum is weak, connected to ductus bursae with a slightly constricted membranous section (“neck”), the ductus bursae is flattened and more sclerotised, the corpus bursae is saccate, lacking signa, while the appendix bursae is broad and retroflexed.

Etymology. The name refers to the light reniform stigma of the type-species.

Polia (Leuconeephropolia) albirena Draudt, 1950

Figs 31, 32, 63

Polia albirena Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 84, pl. 6, fig. 5. Type-locality: China, Prov. Shaanxi, Tsinling Mts,

Tapaishan. Lectotype: male, here designated, in coll. ZFMK.

Lectotype designation. Lectotype: male, [China], “Shaanxi, Tapaishan in Tsinling Shan”, dissected by Z. Varga (Slide No. ZV 8946); coll. ZFMK.

Subgenus *Polia* Ochsenheimer, 1816

Polia Ochsenheimer, 1816, Die Schmetterlinge von Europa 4: 73. Type-species: *Phalaena nebulosa* Hufnagel, 1766, by subsequent designation by Curtis, 1829.

Polia (Polia) atrax atrax Draudt, 1950

Figs 33, 34, 64

Polia atrax Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 31, pl. 2, fig. 17. Type-locality: China, Prov. Yunnan, Atuntse. Lectotype: male, here designated, in coll. ZFMK.

Lectotype designation. Lectotype: male, [China], “Prov. Nord-Yuennan, A-tun-tse”, dissected by Varga (Slide ZV 8945); coll. ZFMK.

Polia (Polia) atrax vargai Gyulai & Saldaitis, 2017

Polia atrax vargai Gyulai & Saldaitis, 2017, Zootaxa 4311 (2): 296, figs 9, 10, 17. Type-locality: China, Prov. Gansu, Atuntse. Holotype: male, in coll. P. Gyulai (Miskolc).

Polia (Polia) bombycina (Hufnagel, 1766)

Phalaena bombycina Hufnagel, 1766, Berlinisches Magazin 3(4): 410. Type-locality: [Germany] vic. of Berlin. Types destroyed.

Synonymy. *Noctua advena* [Denis and Schiffermüller], 1775, Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend 1775: 77. Type-locality: [Austria]: Vienna region. Types destroyed;

Noctua nitens Haworth, 1809, Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Papulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis 2: 267. Type-locality: [England] Norfolk.

Polia (Polia) bombycina grisea (Butler, 1878)

Alysia grisea Butler, 1878, The Annals and Magazine of Natural History 5(1): 82. Type-locality: Japan, Yokohama. Holotype: female, in coll. BMNH.

Synonymy. *Mamestra advena* var. *adjuncta* Staudinger, 1888, Entomologische Zeitung, Entomologischen Vereine Stettin 49: 249. Type-locality: [Russia] Vladivostok; Sidemi (Bezverkhovo); Askold Island; Ussuri; Suifun (Razdolnaya river). Syntypes: in coll. MNB. Preoccupied, a junior primary homonym of *Mamestra adjuncta* Boisduval, 1852;

Mamestra tetrica Graeser, 1889, Berliner Entomologische Zeitschrift 32 (2): 325. Type-locality: [Russia] Amur region, Chabarofka (Khabarovsk). Holotype: female, in coll. MNB;

Mamestra advena var. *mongolica* Staudinger, 1896, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 9: 241. Type-locality: [Mongolia] Urga (Ulanbaatar). Syntypes: 3 specimens, in coll. MNB.

Parastichtis sordida var. *sachalinensis* Matsumura, 1931, 6000 Illustrated Insects of Japan-Empire. Sapporo 1931: 829. Type-locality: [Russia] Sakhalin. Type(s): in coll. EIHU;

Aplecta mongolica advenina Bryk, 1949, Arkiv för Zoologi 41A (1): 75. An unnecessary replacement name for *Mamestra advena* var. *adjuncta* Staudinger, 1888;

Aplecta mongolica chidisana Bryk, 1949, Arkiv för Zoologi 41(1): 829. Type-locality: North Korea, Chidisan. Holotype: female, in coll. NRS;

Aplecta mongolica koreagensa Bryk, 1949, Arkiv för Zoologi 41A(1): 75. Type-locality: North Korea, Hamgyeongbugdo (Shuotsu). Holotype: female, in coll. NRS.

Polia (Polia) bombycina psammochrea Varga, 1974

Polia bombycina psammochrea Varga, 1974, Annales Historico-Naturales Musei Nationalis Hungarici 66: 302, fig. 8. Type-locality: Mongolia, Govi Altai aimak, Khasagt Khajhran Mts, 20 km S of somon Zhargalan, 2400 m. Holotype: male, in coll. HNHM.

Polia (Polia) bombycina puengeleri Lehmann, 1998

Polia bombycina puengeleri Lehmann, 1998, Esperiana 6: 475. Type-locality: [Kirghisia] Asia Centralis, Alexander Mts. Holotype: male, in coll. MNB.

Polia (Polia) goliath (Oberthür, 1880)

Dichonia goliath Oberthür, 1880, Études d’Entomologie 5: 68, pl. 6, fig. 7. Type-locality: [Russia] Askold [Island]. Holotype: male, in coll. BMNH.

Polia (Polia) griseifusa Draudt, 1950

Figs 35, 36, 65

Polia griseifusa Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 30, pl. 2, fig. 14. Type-locality: China, Prov. Yunnan, Li-kiang;

Fig. 33. *Polia (Polia) atrax* Draudt, 1950 Lectotype maleFig. 33. *Polia (Polia) atrax* Draudt, 1950 Lectotype male, labelsFig. 35. *Polia (Polia) griseifusa* Draudt, 1950 Lectotype femaleFig. 36. *Polia (Polia) griseifusa* Draudt, 1950 Lectotype female, labelsFig. 37. *Polia (Polia) lama lama* (Staudinger, 1896) Holotype maleFig. 38. *Polia (Polia) lama lama* (Staudinger, 1896) Holotype male, labelsFig. 39. *Polia (Polia) lama enodata* (Bang-Haas, 1912) Lectotype maleFig. 40. *Polia (Polia) lama enodata* (Bang-Haas, 1912) Lectotype male, labels

Figure 33–40. 33. *Polia (Polia) atrax* Draudt, 1950 Lectotype male. 34. *Polia (Polia) atrax* Draudt, 1950 Lectotype male, labels. 35. *Polia (Polia) griseifusa* Draudt, 1950 Lectotype female. 36. *Polia (Polia) griseifusa* Draudt, 1950 Lectotype female, labels. 37. *Polia (Polia) lama lama* (Staudinger, 1896) Holotype male. 38. *Polia (Polia) lama lama* (Staudinger, 1896) Holotype male, labels. 39. *Polia (Polia) lama enodata* (Bang-Haas, 1912) Lectotype male. 40. *Polia (Polia) lama enodata* (Bang-Haas, 1912) Lectotype male, labels.

A-tun-tse; Batang. Lectotype, female, designated here, in coll. ZFMK.

Lectotype designation. Lectotype: female, “Li-kiang China, Nord-Yuennan 4.9.1935 H. Höne” (printed label), “Holotype Polia griseifusa Drdt.” (handwritten label on pink paper). Slide No. HM8343. The specimen is figured by Hacker (1990:Plate D, fig. 9.); coll. ZFMK.

Polia (Polia) hepatica (Clerck, 1759)

Phalaena hepatica Clerck, 1759, Icones Insectorum Rariorum cum Nominibus eorum Trivialibus, Locisque e C. Linnaei 1: pl. 8, fig. 3. Type-locality: no locality given.

Synonymy. *Phalaena trimaculosa* Esper, 1788, Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen 4: pl. 131, fig. 5. Type-locality: no locality given;

Phalaena tincta Brahm, 1791, Handbuch der Ökonomischen Insekten geschichte in Form eines Kalenders bearbeitet 2: 393. Type-locality: no locality given;

Noctua argentina Haworth, 1809, Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Pabulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis 2: 186. Type-locality: Great Britain;

Mamestra tincta var. *obscurata* Staudinger, 1897, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 10: 335. Type-locality: [Russia] Apfelgebirge (Yablonoviy range). Syntypes: 2 females, in coll. MNB.

Polia (Polia) lama lama (Staudinger, 1896)

Figs 37, 38, 66

Mamestra nebulosa var. *lama* Staudinger, 1896, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 9: 241. Type-locality: [Mongolia, Khangay Mts] Uliassutay. Holotype: male, in coll. MNB.

Synonymy. *Polia enodata expallidata* Varga, 1974, Annales Historico-Naturales Musei Nationalis Hungarici 66: 306, fig. 10. Type-locality: Mongolia, Bayan Ölgii aimak, Khovd river. Holotype: male, in coll. HNMH.

Polia (Polia) lama enodata (Bang-Haas, 1912)

Figs 39, 40, 67

Mamestra enodata Bang-Haas, 1912, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 26: 145, pl. 6, fig. 10. Type-locality: [Kazakhstan] Karagai-Tau. Lectotype: male, here designated, in coll. MNB.

Lectotype designation. Lectotype: male, „Karagai-Tau”, „Original” (pink label); the specimen was dissected by Boursin (slide No. MB 356); coll. MNB.

Polia (Polia) lamuta (Herz, 1903)

Anarta lamuta Herz, 1903, Annuaire du Musée Zoologique de l'Académie Imperiale des Sciences de St.-Pétersbourg 8: 82. Type-locality: [Russia] Uruata Camp place; W of Verkhoyansk. Syntypes: 1 male, 1 female, in coll. ZISP.

Synonymy. *Anarta richardsoni* var. *asiatica* Staudinger, 1901, in Staudinger and Rebel, Catalog der Lepidopteren des Palaeearctischen Faunengebietes 1901: 218. Type-locality: [Norway] Dovre. Syntypes: in coll. MNB. Preoccupied, a junior secondary homonym of *Polia asiatica* Alphéraky, 1887; syn. of *Bryoxena centralasiae* (Staudinger, 1882);

Mamestra rangnowi Püngeler, 1909, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 21(4): 288. Type-locality: [Sweden] Lulea Lappmark. Syntypes: in coll. MNB;

Anarta lamuta tunkinski O. Bang-Haas, 1927, Horae Macrolepidopterologiae regionis palaearcticae 1: 86, pl. 10, figs 27-28. Type-locality: [Russia] Irkutsk Pref., Tunkinskiy Mts, SW of Irkutsk, 2000 m. Holotype: male, in coll. MNB.

Polia (Polia) malchani (Draudt, 1934)

Aplecta malchani Draudt, 1934, in A. Seitz, Die Gross-Schmetterlinge der Erde 3: 108, pl. 14, row i. Type-locality: [Russia] Transbaikalia, Malchan Mt, “Borochojewa”, 800 m. Holotype: female, in coll. MNB.

Polia (Polia) nebulosa nebulosa (Hufnagel, 1766)

Phalaena nebulosa Hufnagel, 1766, Berlinisches Magazin 3(3): 298. Type-locality: Germany, Berlin district.

Synonymy. *Phalaena Noctua thapsi* Brahm, 1791, Handbuch der Ökonomischen Insekten geschichte in Form eines Kalenders bearbeitet 2: 135. Type-locality: no locality given;

Phalaena grandis Donovan, 1801, The Natural History of the British Insects 10: 51, pl. 345, fig. 1. Type-locality: England;

Noctua plebeja Hübner, 1803, Sammlung europäischer Schmetterlinge 4: pl. 16, fig. 78. Type-locality: Europe; nec *Phalaena plebeja* Linnaeus, 1761; Fauna Suecica 320; TL: Sweden, Uplandia

Polia (Polia) nebulosa askolda (Oberthür, 1880)

Aplecta nebulosa var. *askolda* Oberthür, 1880, Études d' Entomologie 5: 79. Type-locality: [Russia] Askold [Island]. Syntypes: 4 males and 1 female, in coll. BMNH.

***Polia (Polia) richardsoni* (Curtis, 1835)**

Hadena richardsoni Curtis, 1835, Appendix to John Ross Narrative of a Second Voyage 1835: 72, pl. A, fig. 11. Type-locality: [Canada] 15 miles from River Tatchick (Eskimo name), 200 miles S of Port Bowen, very near Comptroller's Island. Types: in coll. USNMW.

Synonymy. *Anarta algida* Lefebvre, 1836, Annales de la Société Entomologique de France 5: 396, pl. 10 fig. 5. Type-locality: "Laponie". Syntypes, in coll. MNHNP;

Anarta septentrionis Walker, 1857, List of the Specimens of Lepidopterous Insects in the Collection of the British Museum 11: 700. Type-locality: [Canada] Repulse Bay. Holotype: in coll. BMNH;

Mamestra feildeni McLachlan, 1878, Journal of the Linnean Society (Zoology) 14: 112. Type-locality: Canada Arctic Territories, Dobbin Bay. Holotype: female;

Anarta fumida Graeser, 1889, Berliner Entomologische Zeitschrift 32(2): 323. Type-locality: [Russia], Amur region, Amur region, Nicolajefsk (Nikolajevsk). Holotype: male, in coll. ZISP;

Anarta lanuginosa Smith, 1900, in: Dyar, Proceedings of the Washington Academy of Sciences 2: 493. Type-locality: USA, Alaska, Popof Island. Holotype: male, in coll. USNMW;

Anarta richardsoni var. *dovrensis* Staudinger, 1901, in Staudinger and Rebel, Catalog der Lepidopteren des Palaearctischen Faunengebietes 1901: 218. Type-locality: [Norway] Dovre. Syntypes: in coll. MNB;

Anarta squara Smith, 1908, Annals of the New York Academy of Sciences 18: 112. Type-locality: Greenland. Lectotype: male, in coll. AMNH;

Anarta magna Barnes and Benjamin, 1924, Entomological News 35: 117. Type-locality: USA, Colorado, Hall valley, Bullion peak. Holotype, female, in coll. USNMW;

Anarta richardsoni tamasi Benjamin, 1933, Pan-Pacific Entomologist 9: 58. Type-locality: [Canada] Labrador, Hopedale. Holotype: male, in coll. USNMW;

Aplecta richardsoni groenlandica Heydemann, 1944, Entomologische Zeitung, Entomologischen Vereine zu Stettin 105: 22, pl. 7, figs 5-6. Type-locality: East Greenland. Syntypes: in coll. MNB.

Taxonomic notes. This circumpolar Holarctic species shows intense subspeciation in both continents; the taxonomic status of the described taxa are to be clarified.

***Polia (Polia) serratilinea serratilinea* (Treitschke, 1825)**

Figs 41, 42

Mamestra serratilinea Treitschke, 1825, Die Schmetterlinge von Europa 5(2): 38. Type-locality: Vienna district. Lectotype designated here, male in coll. HNHM.

Lectotype designation. Lectotype: male, with the following labels: "Ochs. 961" (printed label with black margin),

"Hung. Nat. Hist. Mus. Coll. Lepidoptera, Collectio Ochsenheimer No. 975"; coll. HNHM.

Synonymy. *Mamestra serratilinea* Ochsenheimer, 1816, Die Schmetterlinge von Europe IV, p. 74. (nomen nudum);

Mamestra serratilinea var. *helvetica* Schawerda, 1925, Mitteilungen der Münchner Entomologischen Gesellschaft 15: 70, fig. 2. Type-locality: Switzerland, Zermatt. Type(s): in coll. LSNK;

Mamestra serratilinea var. *heinrichi* Schawerda, 1925, Mitteilungen der Münchner Entomologischen Gesellschaft 15: 70, fig. 2. Type-locality: France, Digne. Holotype: male, in coll. LSNK.

***Polia (Polia) serratilinea eremorealis* Varga, 1974**

Polia serratilinea eremorealis Varga, 1974, Annales historico-naturales Musei nationalis hungarici 66: 306, fig. 11. Type-locality: Mongolia, Khovd aimak, 5 km SW of Khovd (Kobdo), 1500 m. Holotype: male, in coll. HNHM.

***Polia (Polia) serratilinea kowatschevi* Drenovsky, 1931**

Polia serratilinea kowatschevi Drenovsky, 1931, Mitteilungen der Bulgarischen Entomologischen Gesellschaft in Sofia 6: 56. Type-locality: Makedonia, Ali Botush Mts. Holotype: male, in coll. NHM Sofia.

***Polia (Polia) serratilinea pinkeri* Varga, 1974**

Polia serratilinea pinkeri Varga, 1974, Annales historico-naturales Musei nationalis hungarici 66: 307, fig. 11. Type-locality: Turkey, Prov. Kayseri, ErciyasDagh, Develi, 1700 m. Holotype: male, in coll. ZSM.

***Polia (Polia) serratilinea spalax* (Alphéraky, 1887)**

Mamestra spalax Alphéraky, 1887, Entomologische Zeitung, Entomologischen Vereine zu Stettin 48: 168. Type-locality: [Kirghisia] Aram-Kungei. Lectotype: male, here designated, in coll. ZISP.

Lectotype designation. Lectotype: male, "Aram-Kungej" "Gr[oum].Gr[shimailo]." "Spalax Alph. Orig." (Coll. ZISP).

***Polia (Polia) serratilinea tenebricosa* Hacker & Weigert, 1990**

Polia serratilinea tenebricosa Hacker & Weigert, 1990, Esperiana 1: 339, pl. E, fig. 18, text fig. 57a. Type-locality: Pakistan, Himalaya Mts, Babusar Pass, 3200 m. Holotype: male, in coll. Weigert (Griesbach im Rottal).



Fig. 41. *Polia (Polia) serratilinea serratilinea* (Treitschke, 1825)
Lectotype male

Hung. Nat. Hist. Mus.
Coll Lepidoptera
Collectio
Ochsenheimer No. 975



Fig. 42. *Polia (Polia) serratilinea serratilinea* (Treitschke, 1825)
Lectotype male, labels



Fig. 43. *Polia (Polia) tiefi* Püngeler, 1914 Lectotype male



Fig. 44. *Polia (Polia) tiefi* Püngeler, 1914 Lectotype male, labels

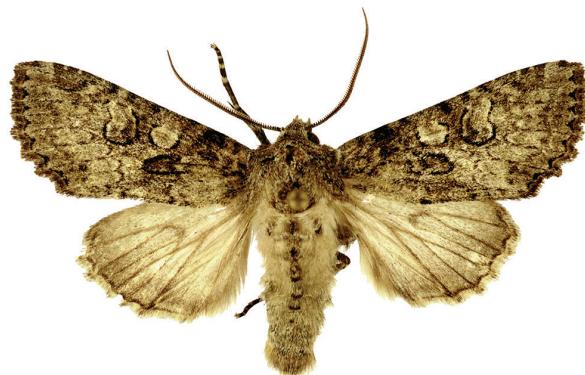


Fig. 45. *Pachetra cherrug* (Rákosy & Wieser, 1997) Paratype male

21-22.05.-1996
Greci, 250m
Mtii Măcin
Romania
leg. L.Rákosy

Polia cherrug
PARATYPUS ♂

Fig. 46. *Pachetra cherrug* (Rákosy & Wieser, 1997) Paratype male, labels



Fig. 47. *Multisigna costirufa* (Draudt, 1950) Holotype female



Fig. 48. *Multisigna costirufa* (Draudt, 1950) Holotype female, labels

Figure 41–48. 41. *Polia (Polia) serratilinea serratilinea* (Treitschke, 1825) Lectotype male. 42. *Polia (Polia) serratilinea serratilinea* (Treitschke, 1825) Lectotype male, labels. 43. *Polia (Polia) tiefi* Püngeler, 1914 Lectotype male. 44. *Polia (Polia) tiefi* Püngeler, 1914 Lectotype male, labels. 45. *Pachetra cherrug* (Rákosy & Wieser, 1997) Paratype male. 46. *Pachetra cherrug* (Rákosy & Wieser, 1997) Paratype male, labels. 47. *Multisigna costirufa* (Draudt, 1950) Holotype female. 48. *Multisigna costirufa* (Draudt, 1950) Holotype female, labels.

***Polia (Polia) subcontigua* (Eversmann, 1852), stat. rev., comb. n.**

Hadena subcontigua Eversmann, 1852, Bulletin de la Société Imperiale des Naturalistes de Moscou 25 (1): 155. Type-locality: [Russia, Orenburgskaya obl.] “Spask.” “Jul[y]” (handwritten labels). Holotype: female, in coll. ZISP.

Synonymy. *Hadena altaica* Lederer, 1853, Verhandlungen des Zoologisch-Botanischen Vereins in Wien 3: 370, pl. 2, fig. 6. Type-locality: [Russia or Kazakhstan] Altai Mts. Holotype: male, in coll. MNB; syn. n.

Mamestra monotona Bang-Haas, 1912, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 26: 145. Type-locality: [Russia] Sayan region. Syntypes: in coll. MNB.

Polia (Mamestra) praecontigua Turati, 1933, Bollettino della Società Entomologica Italiana 65: 18. Type-locality: [India/Pakistan] Baltistan, Biaho valley near Baltoro. Syntypes, in coll. Turati (if exist).

Taxonomic notes. Based on the type catalogue of the Lepidoptera collection of ZISP it became evident that *Hadena subcontigua* Eversmann represent the same species as *Hadena altaica* Lederer and at the same time also its westernmost occurrence. This species exist in most localities from the Tien-Shan Mts. to Central Mongolia and also Nepal in polymorphic, contrasting vs. concolorous forms. Therefore, *Mamestra monotona* Bang-Haas cannot be considered as own taxon. According to the description and photos, the taxon *Polia (Mamestra) praecontigua* Turati, 1933 also represents this species. The occurrence of *P. subcontigua* in the Karakoram and the Western Himalayan mountains was confirmed by the recent surveys, too.

***Polia (Polia) tiefi* Püngeler, 1914**

Figs 43, 44, 68, 69

Polia (Mamestra) tiefi Püngeler, 1914, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 28: 38, pl. 2, fig. 22. Type-locality: [Russia] Sayan Mts, Munko Sardyk. Lectotype: male, here designated, coll. MNB.

Lectotype designation. Lectotype male, Sayan Mts, Munko Sardyk; slide No. MB 417, coll. MNB.

Synonymy. *Aplecta schwartzae* Sheljuzhko, 1933, Zeitschrift des Österreichischen Entomologen Vereines 18: 70, pl. 13. Type-locality: Russia, Siberia, Yakutsk Province, Dzhugzhur Mts. Syntypes: in coll. ZIN.

***Polia (Polia) vespertilio* (Draudt, 1934)**

Aplecta vespertilio Draudt, 1934, in A. Seitz, Die Gross-Schmetterlinge der Erde 3: 109, pl. 14, row i. Type-locality: [Russia], Irkutsk, Tunkinski Mt. Lectotype: male, in coll. MNB.

Lectotype designation. Lectotype: male, Irkutsk, Tunkinski Mt., slide No. Varga MB 2-75V, coll. MNB.

***Polia (Polia) vesperugo* Eversmann, 1856**

Polia vesperugo Eversmann, 1856, Bulletin de la Société Impériale des Naturalistes de Moscou 29 (3): 48, pl. 2, fig. 6. Type-locality: [Russia] Transbaikalia, Irkutsk. Lectotype: female, here designated, in coll. ZISP.

Lectotype designation. Lectotype: female, “Irkutsk”, “vesperugo”, Gen. sl. 00908 Kuznetzov; coll. ZISP.

Synonymy. *Mamestra conspicua* Bang-Haas, 1912, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 26: 144, pl. 6, fig. 8. Type-locality: [Russia] Sayan region. Holotype: male, in coll. MNB; syn. n.

Remarks. The lectotype female specimen is illustrated by A. Matov on the homepage of the ZISP.

***Polia (Polia) vesperugo vasjurini* Sukhareva, 1976, stat. rev.**

Polia vasjurini Sukhareva, 1976, Proceedings of the Zoological Institute Academy of Sciences of USSR 64: 58, fig. 1. Type-locality: Russian Far East, Primorye territory, Partizansky district, Lysaya Benevskaya Mt. Holotype: male, in coll. ZISP.

***Polia (Polia) vesperugo sabmeana* Mikkola, 1980, stat. rev.**

Polia sabmeana Mikkola, 1980, Notulae Entomologicae 60: 217, figs 1, 3-4. Type-locality: Finland, Inari. Holotype: male, in coll. ZMUH.

Subgenus *Protopolia* subgen. n.

<http://zoobank.org/5387F65E-A106-4DFC-B524-1C09169C21FA>

Type-species. *Mamestra praecipua* Staudinger, 1895, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 8: 316.

Diagnosis. The three species belonging to this subgenus are large, robust moths with simple ochreous-brownish or purplish-blackish-brown (generally unicolorous but sometimes, individually, contrasting) colouration and regular pattern, somewhat resembling certain forms of *Apamea monoglypha* (Hufnagel, 1766).

In the male genitalia, the saccular processes are simple, short or acute, symmetrical, with prominent tuft of specialised setae on the right side. Vesica is tubular, relatively short and retroflexed, with only a short fascia of cornuti subterminally.

In the female genitalia, the appendix bursae is slightly prominent only, the corpus bursae has two short longitudinal signa.

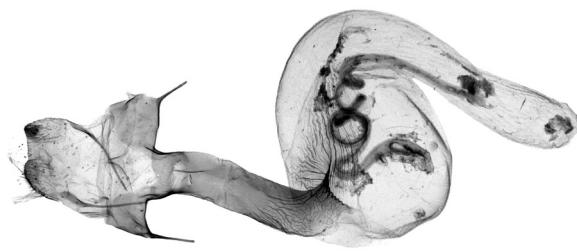
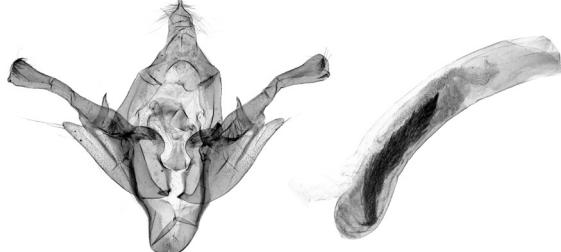
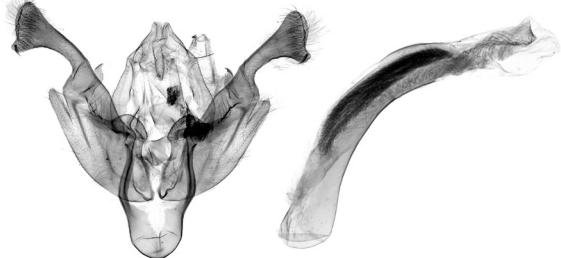
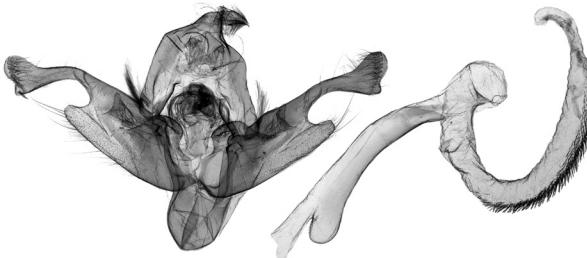
Fig. 49. *Ctenoceratoda brassicina* (Draudt, 1934) Holotype, Hacker9775Fig. 50. *Ctenoceratoda contempta* (Püngeler, 1914) Lectotype, Boursin MB310Fig. 51. *Ctenoceratoda graeseri* (Püngeler, 1898) Lectotype, GP8191Fig. 52. *Ctenoceratoda longicornis* (Graeser, 1892) Lectotype, Boursin MB307Fig. 53. *Ctenoceratoda longicornis* (Graeser, 1892) Paralectotype, RL11751Fig. 54. *Ctenoceratoda lupa* (Christoph, 1893) Lectotype, RL11753

Figure 49–51. 49. *Ctenoceratoda brassicina* (Draudt, 1934) Holotype female. 50. *Ctenoceratoda contempta* (Püngeler, 1914) Lectotype male. 51. *Ctenoceratoda graeseri* (Püngeler, 1898) Lectotype male.

Etymology. The name refers to the relative simplicity of colouration and configuration of male genitalia as opposed to the huge majority of *Polia* and Poliina, respectively.

Polia (Protopolia) minae Saldaitis, Benedek & Behounek, 2013

Polia minae Saldaitis, Benedek & Behounek, 2013, Zoo-taxa 3693(4): 594, figs 5-8, 13-16, 19-20. Type-locality: China, N. Sichuan, near Jiuzhaigou, 2100 m, 33°18,85'N, 103°55,5'E. Holotype: male, in coll. ZSM.

Polia (Protopolia) praecipua praecipua (Staudinger, 1895)

Mamestra praecipua Staudinger, 1895, Deutsche Entomologische Zeitschrift, Gesellschaft Iris zu Dresden 8: 316. Type-locality: [China, Xinjiang-Qinghai] between Lob-Noor and Kuku-Noor. Lectotype: male, designated here in MNB.

Lectotype designation. Lectotype: male, “Kuku-Noor 94 Rückb[ei]l.”, “Origin” (pink label), “Praecipua Stgr.” “Ex coll. 1/3 Staudinger”, slide No. GB 12024 (figured in Saldaitis et al. 2013), coll. MNB.

Figure 52–54. 52. *Ctenoceratoda longicornis* (Graeser, 1892) Lectotype male. 53. *Ctenoceratoda longicornis* (Graeser, 1892) Paralectotype male. 54. *Ctenoceratoda lupa* (Christoph, 1893) Lectotype male.

Polia (Protopolia) praecipua angusta (Hreblay & Ronkay, 1998)

Haderonia praecipua angusta Hreblay & Ronkay, 1998, in Haruta, T. (ed.) Tinea 15 (Supplement 1): 150, pl. 146, fig. 5. Type-locality: Nepal, Annapurna Himal, 11 km S of Jomsom, Noma pasture, 4000 m, 28°44,5'N, 83°48'E. Holotype: male, in coll. G. Ronkay (Budapest).

Polia (Protopolia) sublimis (Draudt, 1950)

Hadula sublimis Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 37. Type-locality: China, Prov. Yunnan, A-tun-tse; Batang. Lectotype: male, in coll. ZFMK.

Genus *Pachetra* Guenée, 1841

Pachetra Guenée, 1841, Annales de la Société Entomologique de France 10: 241. Type-species: *Noctua leucophaea* [Denis and Schiffermüller], 1775, by monotypy.

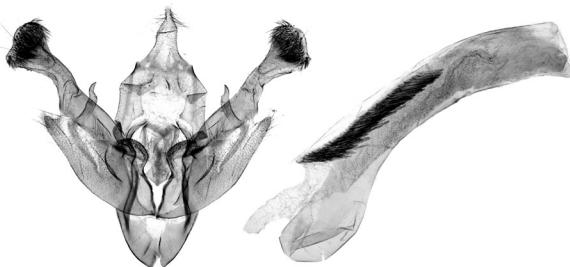
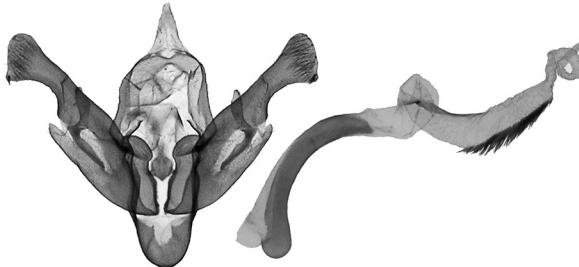
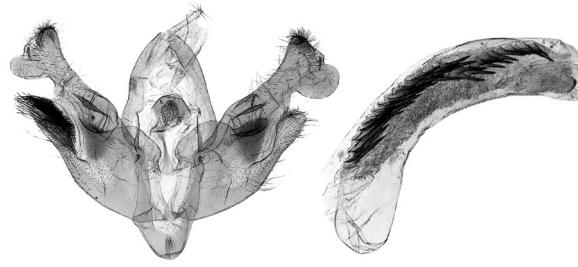
Fig. 55. *Ctenoceratoda nefasta* (Püngeler, 1907) Lectotype, Boursin MB309Fig. 58. *Ctenoceratoda turpis* (Staudinger, 1900) Lectotype, Boursin MB298Fig. 56. *Ctenoceratoda optima* (Alphéraky, 1897) Lectotype, Matov0148 (Photo A. Matov)Fig. 59. *Haderonia aplectoides* (Draudt, 1950) Paralectotype, Boursin H6612Fig. 57. *Ctenoceratoda tancrei* (Graeser, 1892) Paralectotype, VZ9526

Figure 55–57. **55.** *Ctenoceratoda nefasta* (Püngeler, 1907) Lectotype male. **56.** *Ctenoceratoda optima* (Alphéraky, 1897) Lectotype male. **57.** *Ctenoceratoda tancrei* (Graeser, 1892) Paralectotype male.

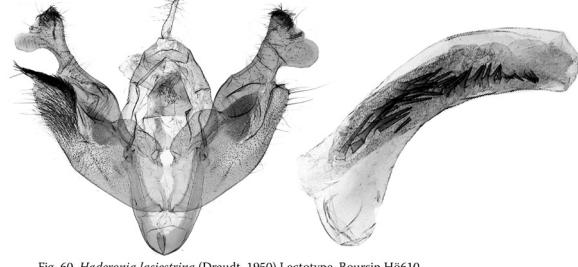
Fig. 60. *Haderonia lasiestrina* (Draudt, 1950) Lectotype, Boursin H6610

Figure 58–60. **58.** *Ctenoceratoda turpis* (Staudinger, 1900) Lectotype male. **59.** *Haderonia aplectoides* (Draudt, 1950) Paralectotype male. **60.** *Haderonia lasiestrina* (Draudt, 1950) Lectotype male.

Pachetra sagittigera (Hufnagel, 1766)

Phalaena sagittigera Hufnagel, 1766, Berlinisches Magazin 3(3): 410. Type-locality: Germany, Berlin district. Type(s) destroyed.

Synonymy. *Noctua leucophaea* [Denis & Schiffmüller], 1775, Ankündigung eines systematischen Werkes von den Schmetterlingen der Wiener Gegend 1775: 82. Type-locality: [Austria] Vienna district. Types destroyed;

Bombyx fulminea Fabricius, 1781, Species Insectorum Exhibentes Eorum Differentias Specificas, Synonyma Auctorum, Loca Natalia, Metamorphosis in Adiectis, Observationibus, Descriptionibus 2: 205. Type-locality: [Germany] Hamburg;

Bombyx vestigialis Esper, 1785, Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen 3: 270, pl. 53, fig. 5. Type-locality: [Germany] Leipzig;

Hadena bombycina Eversmann, 1847, Bulletin de la Société Impériale des Naturalistes de Moscou 20(3): 78, pl. 6, figs 1-2. Type-locality: [Russia] Urals. Syntypes: in coll. ZIN;

Mamestra leucophaea var. *incana* Millière, 1885, Il Naturalista Siciliano 4: 198. Type-locality: [Italy, Sicily] St. Martin, Berthemot;

Pachetra leucophaea brittanica Turner, 1933, Entomologist's Record and Journal of Variation 45: 282. Type-locality: "British examples". Syntypes: in coll. BMNH.

Pachetra sagittigera pyrenaica Oberthür, 1884, stat. rev.

Pachetra leucophaea var. *pyrenaica* Oberthür, 1884, Études d'Entomologie 8: 50. Type-locality: France, Pyrenees, Cauterets. Type(s): in coll. BMNH.

Pachetra sagittigera bombycina Eversmann, 1847

Hadena bombycina Eversmann, 1847, Bulletin de la Société Impériale des Naturalistes de Moscou 20(3): 78, pl. 6, figs 1-2. Type-locality: [Russia] Urals. Syntypes: in coll. ZIN.

Taxonomic note. The small, short-winged and contrasting *P. sagittigera* specimens from Mongolia were considered as belonging to this subspecies until yet (Sheljuzhko 1967). The question needs further survey.

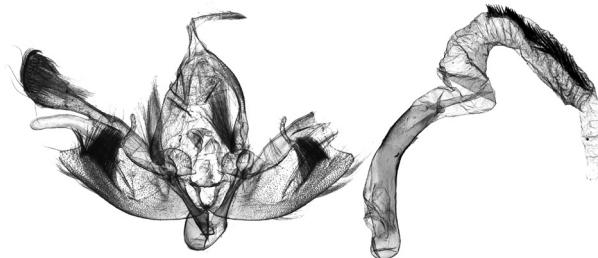
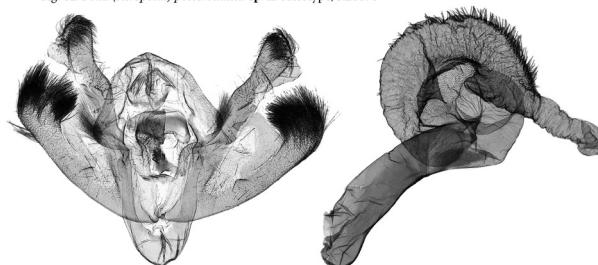
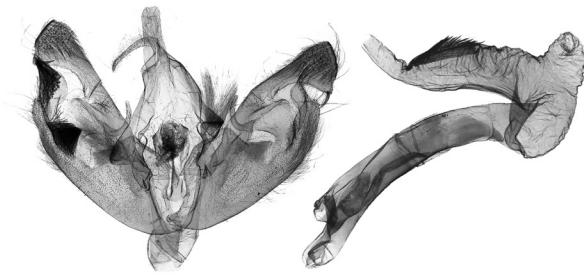
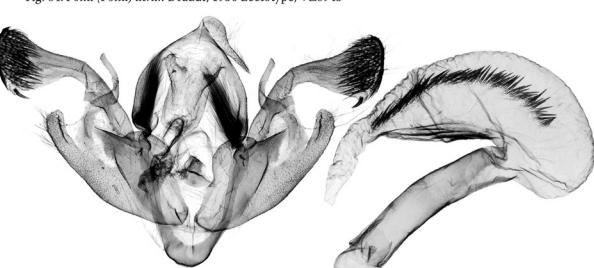
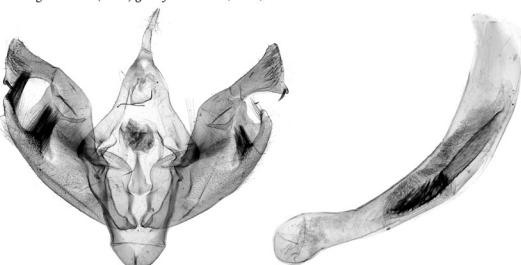
Fig. 61. *Polia (Atropolia) mortua szetschwana* Draeseke, 1928 Holotype, VZ Dresden09Fig. 62. *Polia (Atropolia) posterodiluta* sp. n. Holotype, RL8670Fig. 63. *Polia (Leuconephropolia) albirena* Draadt, 1950 Lectotype, VZ8946Fig. 64. *Polia (Polia) atrax* Draadt, 1950 Lectotype, VZ8945Fig. 65. *Polia (Polia) griseifusa* Draadt, 1950, VZ9523Fig. 66. *Polia (Polia) lama lama* (Staudinger, 1896) Holotype, VZ22-71

Figure 61–63. **61.** *Polia (Atropolia) mortua szetschwana* Draeseke, 1928 Lectotype male. **62.** *Polia (Atropolia) posterodiluta* sp. n. Holotype male. **63.** *Polia (Leuconephropolia) albirena* Draadt, 1950 Lectotype male.

Figure 64–66. **64.** *Polia (Polia) atrax* Draadt, 1950 Lectotype male. **65.** *Polia (Polia) griseifusa* Draadt, 1950. **66.** *Polia (Polia) lama lama* (Staudinger, 1896) Holotype male.

Pachetra cherrug (Rákosi & Wieser, 1997), comb. n.

Figs 45, 46, 70, 71

Polia cherrug Rákosi & Wieser, 1997, Linzer Biologische Beiträge 29: 1153. Type-locality: Romania, N Dobrogea, Macin Mts, Greci. Holotype: male, in coll. L. Rákosi (Cluj-Napoca).

Taxonomic notes. *P. cherrug* shows in the genitalia of both sexes a very close relationship with *P. sagittigera*. The shared characters are as follows: in male genitalia the similar and unusual shape of the cucullus, the very long tubular and completely helicoid vesica nearly completely covered by a long and broad stripe of dense spinulose structures; in female genitalia the long and broad, dorso-ventrally flattened ductus bursae, the similar shape of the appendix bursae and one long and one shorter stripe of sigma. Both species are also bionomically closely related, they have grass-feeding larvae in contrast to the dicot herbaceous and woody food plants of *Polia* spp. The distribution and certain taxonomic questions are discussed in detail by Dinca (2010).

Genus *Tricheurois* Hampson, 1905

Tricheurois Hampson, 1905, Annals and Magazine of Natural History 7(15): 451. Type-species: *Mamestra nigrocuprea* Moore, 1867, by original designation.

Synonymy. *Acanthopolia* Boursin, 1943, Zeitschrift der Wiener Entomologischen Gesellschaft 50: 339. Type-species: *Apamea cuprina* Moore, 1881, by original designation.

Tricheurois cuprina (Moore, 1881)

Apamea cuprina Moore, 1881, Proceedings of the Zoological Society of London 1881: 345, pl. 38, fig. 2. Type-locality: India, Sikkim. Holotype: male, in coll. MNB.

Tricheurois nigrocuprea (Moore, 1867)

Mamestra nigrocuprea Moore, 1867, Proceedings of the Zoological Society of London 1867: 52. Type-locality: [India or Bangladesh] Bengal. Lectotype: male, dissected by M. Hreblay (slide No. HM8376); in coll. BMNH.

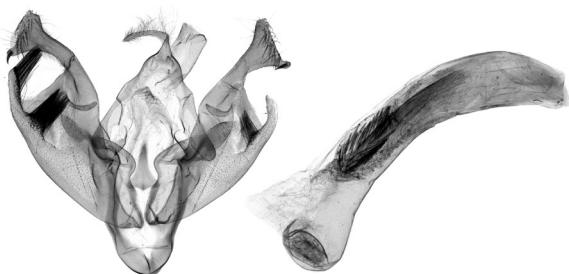
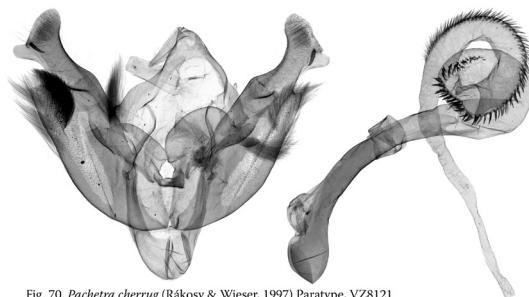
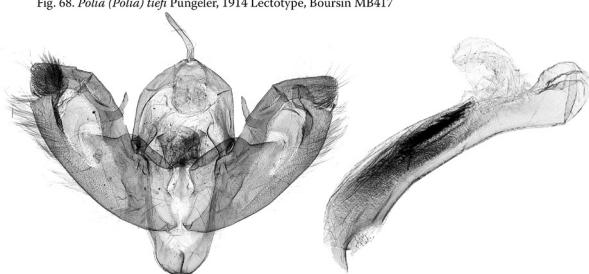
Fig. 67. *Polia (Polia) lama enodata* (Bang-Haas, 1912) Lectotype, Boursin MB356Fig. 70. *Pachetra cherrug* (Rákosi & Wieser, 1997) Paratype, VZ8121Fig. 68. *Polia (Polia) tiefi* Püngeler, 1914 Lectotype, Boursin MB417Fig. 71. *Pachetra cherrug* (Rákosi & Wieser, 1997) Paratype, VZ9596Fig. 69. *Polia (Polia) tiefi* Püngeler, 1914 Paralectotype, VZ22-73Fig. 72. *Multisigna costirufa* (Draudt, 1950) RL9711

Figure 67–71. 67. *Polia (Polia) lama enodata* (Bang-Haas, 1912) Lectotype male. 68. *Polia (Polia) tiefi* Püngeler, 1914 Lectotype male. 69. *Polia (Polia) tiefi* Püngeler, 1914 Paralectotype male.

Figure 70–72. 70. *Pachetra cherrug* (Rákosi & Wieser, 1997) Paratype male. 71. *Pachetra cherrug* (Rákosi & Wieser, 1997) Paratype female. 72. *Multisigna costirufa* (Draudt, 1950).

Tricheurois retrusa (Püngeler, 1906)

Polia (Mamestra) retrusa Püngeler, 1906, Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden 19: 91, pl. 7, fig. 13. Type-locality: [China, Qinghai] Tibet, Kuku-Noor. Holotype: male, in coll. MNB.

Tricheurois tamangi Hreblay & Plante, 1996

Tricheurois tamangi Hreblay & Plante, 1996, Lambillionea 96: 665, figs 11–12, 35–36. Type-locality: Nepal, Ganesh Himal, Khurpudanda Pass, 3600 m, 28°12'N, 85°13'E. Holotype: male, in coll. MNHG.

Tricheurois tibetica Boursin, 1965

Tricheurois tibetica Boursin, 1965, Zeitschrift der Wiener Entomologischen Gesellschaft 50: 119, pl. 14, fig. 1. Type-locality: India, Sikkim, Yatung (“Tibet, Yatung”), 4500 m. Holotype: male, in coll. SMNK.

Poliina incertae sedis

Polia (Mamestra) confusa Turati, 1933, Bollettino della Società Entomologica Italiana 65(1): 19. Type-locality: [China/India/Pakistan] valley of the Tarim; [Pakistan] Deosai Plains. Syntypes: 4 females, 2 males, in coll. Turati (if exist).

Genera and species excluded from Poliina

Genus *Kollariana* Hacker, 1996, stat. rev.

Kollariana Hacker, 1996, Esperiana 4: 386. Type-species: *Polia scotochlora* Kollar, 1849, by original designation.

Taxonomic notes. Despite of the “*Polia-like*” habitus the genital structures of both sexes clearly show that *Kollariana* belong to the “*Sideridis*” line of the subtribe Mamestrina (See also: Introduction). In the male genitalia, the genital capsule is very similar to that of certain large *Sideridis* species as e.g. *S. turbida* (Esper, 1790) or *S. egena* (Lederer, 1853). The diagnostic features are as follows: valva without saccular process and ampulla, but with ear-

shaped costal process near to cucullus; aedeagus with claw- or spine-shaped sclerotisation of carina; vesica T-shaped, with long subbasal diverticulum and acute cornutus. In the female genitalia there are two complete and one shorter row of small, elliptical stigmata on the corpus bursae; the ductus bursae is rather strongly sclerotised with lateral pouch corresponding to the sclerotised extension of carina.

***Kollariana albomixta* (Draudt, 1950), comb. n.**

Polia albomixta Draudt, 1950, Mitteilungen der Münchener Entomologischen Gesellschaft 40: 31, pl. 2, fig. 13. Type-locality: China, Prov. Yunnan, Li-kiang. Holotype: female, in coll. ZFMK.

***Kollariana scotochlora* (Kollar, 1844)**

Polia scotochlora Kollar, 1844, in Hügel, Kaschmir das Reich der Siek 4: 480. Type-locality: (India) Kashmir, (Mussorree) Massuri. Holotype: male, in coll. BMNH.

Synonymy. *Polia stevensii* Guenée, 1852, in Boisduval and Guenée, Histoire Naturelle des Insectes, Species général de Lépidoptères 6: 38. Type-locality: Central India. Holotype: male, in coll. BMNH.

***Kollariana similissima* Plante, 1982**

Polia similissima Plante, 1982, Bulletin de la Société Entomologique de France 87: 286, figs 1-2, 9-10. Type-locality: Type-locality: Nepal, Langtang Himal, Kyangin Gompa, 3900 m. Holotype: male, in coll. MNHG.

***Multisigna* gen. n.**

<http://zoobank.org/FAB6052C-C62C-42AF-80D1-9D4390212563>

Type-species. *Polia costirufa* Draudt, 1950, Mitteilungen der Münchener Entomologischen Gesellschaft 40: 28, pl. 2, fig. 9, here designated.

Diagnosis. The two species of this new genus show some external similarity with the larger *Polia* species (as e.g. *P. vesperugo*) but they also resemble the larger *Sideridis* species (as e.g. *S. egena*, *S. turbida*) but also *Apamea* species according the robust body, dark brownish-greyish colouration and pattern of fore wing with regular maculation and crenulate or zigzag-shaped crosslines. The most important differential characters are in the genitalia of both sexes. In male genitalia the saccular part of valvae is not extended, no any trend of asymmetrisation and/or presence of specialised saccular brushes can be observed. Free „clasper” of the harpe-ampulla complex – which is usually present in *Polia* – is reduced. Vesica is not elongate-tubular as in *Polia*, but it shows the modified form of the T-shaped vesica of the *Sideridis*-clade of the Mamestrina while it is more saccate with subbasal diverticulum

and the subterminal field of cornuti is transformed to a single huge cornutus, unusual for other related genera. The female genitalia are also strikingly different from *Polia* but also from the genera of the subtribe Mamestrina (e.g. *Sideridis*, *Conisania* which seem to be most closely related) by the presence of very numerous pearl-shaped signa and by the conical appendages of ductus bursae. Based on these characters we place this genus near to the also habitually similar genera *Kollariana* and *Irene*.

Etymology. The generic name refers to the most peculiar character of the female genitalia.

***Multisigna hofer* (Saldaitis, Benedek & Behounek, 2016), comb. n.**

Polia hofer Saldaitis, Benedek & Behounek, 2016, Zootaxa 4093(4): 577. Type-locality: China, Sichuan, 20 km N of Maoxian. Holotype: male, in coll. G. Behounek (later in ZSM).

***Multisigna costirufa* (Draudt, 1950), comb. n.**

Figs 47, 48, 72

Polia costirufa Draudt, 1950, Mitteilungen der Münchener Entomologischen Gesellschaft 40: 28, pl. 2, fig. 9. Type-locality: [China] Yunnan, Batang, Yangtze valley, 2800 m. Lectotype: female, here designated, in coll. ZFMK.

Lectotype designation. Lectotype: female, “Batang (Tibet), im Tal des Yangtze (ca 2800 m), 10.5.1936, H. Höne”, “Holotype *Polia costirufa* ♀ Draudt” (pinkish label), “*Polia costirufa* ♀ Draudt”, “*Polia costirufa* 4497”, “Gen. Prp. 4497 ♀ Holotypus, *Polia costirufa* (Dr. Drt.), CHINA/Tibet, Behounek det. 1990” (red bordered label); in coll. ZFMK.

Genus *Irene* Saldaitis & Benedek, 2017

Irene Saldaitis & Benedek, 2017, Zootaxa 4238(2): 275.

Type-species: *Irene litanga* Saldaitis & Benedek, 2017, by original designation.

***Irene litanga* Saldaitis & Benedek, 2017**

Irene litanga Saldaitis & Benedek, 2017, Zootaxa 4238(2): 276. Type-locality: China, Sichuan, near Litang. Holotype: male, in coll. G. Behounek (later ZSM).

Taxonomic notes. As it was stated correctly in the original description, this genus shows close relationship with *Hada* Billberg, 1820, especially to *Hada tenebra*, etc. The lateral “pouches” of ductus also show some similarity to *Kollariana* but the short, globular corpus bursae without

signa clearly shows that this genus is differentiated from the former genus.

Genus *Spiramater* McCabe, 1980, stat. n.

Spiramater McCabe, 1980, Bulletin of the New York State Museum 432: 10 (key), 31. Type-species: *Hadena lutra* Guenée, 1852, by original designation.

Taxonomic notes. This genus is not closely related with *Polia*. Recently (Lafontaine and Schmidt 2010, Zookeys 40: 90) *S. lutra* (Guenée, 1852) was associated with *Lacanobia* and *S. grandis* (Guenée, 1852) was introduced to this genus (*Lacanobia grandis*).

***Tycomarptes proximoides* (Wiltshire, 1982)**

Haderonia proximoides Wiltshire, 1982, Fauna of Saudi Arabia 4: 311, pl. 3 fig. 37. Type-locality: Saudi Arabia, Risayah. Holotype: male, in coll. BMNH.

Taxonomic notes. This curiously looking Arabian species was illustrated by Hacker (2006; Esperiana 12: 352; Pl. 9, fig. 8) as belonging to the genus *Tycomarptes* Fletcher, 1961, however, without argumentation.

***Conisania roseipicta* (Draudt, 1950)**

Polia roseipicta Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 29, pl. 2, fig. 10. Type-locality: [China] Yunnan, Atuntse. Holotype: male, in coll. ZFMK.

Taxonomic notes. The species was first proposed to transfer from *Polia* to the *Sideridis-Conisania* generic complex by Boursin (1966). Subsequently, Varga and Ronkay (1991) listed the species in the genus *Conisania* Hampson, 1905 in the general survey of the genus-group (p. 152; figs 98–99). The vesica of the holotype specimen has not been everted by Boursin; the recent investigations indicated the T-shaped vesica structure which is typical of certain species-groups of *Conisania*.

***Mythimna (Morphopoliana) yuennana* (Draudt, 1950)**

Polia yuennana Draudt, 1950, Mitteilungen der Münchner Entomologischen Gesellschaft 40: 27, pl. 2, fig. 6. Type-locality: [China] Yunnan, Atuntse. Syntypes: in coll. ZFMK.

Taxonomic notes. The species has long been misplaced although the male genitalia illustrated already by Draudt in the original description (Draudt 1950: Plate 13, fig. 15), versus its closest relative, *M. (M.) consanguis* (Guenée, 1852) (Plate 13, fig. 16). The subgenus *Morphopoliana* was erect-

ed by Hreblay and Legrain in 1996; *Polia yuennana* was transferred to *Mythimna (Morphopoliana)* in the 4th volume of the Noctuidae Europaea series (Hacker et al. 2002), using the World Checklist of M. Hreblay and A. Legrain.

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