

Commented checklist of European Gelechiidae (Lepidoptera)

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Abstract

The checklist of European Gelechiidae covers 865 species, belonging to 109 genera, with three species records which require confirmation. Further, it is the first checklist to include a complete coverage of proved synonyms of species and at generic level. The following taxonomic changes are introduced: *Pseudosphronia constanti* (Nel, 1998) **syn. nov.** of *Pseudosphronia exustellus* (Zeller, 1847), *Metzneria expositoi* Vives, 2001 **syn. nov.** of *Metzneria aestivella* (Zeller, 1839); *Sophronia ascalis* Gozmány, 1951 **syn. nov.** of *Sophronia grandii* Hering, 1933, *Aproaerema incognitana* (Gozmány, 1957) **comb. nov.**, *Aproaerema cinctelloides* (Nel & Varenne, 2012) **comb. nov.**, *Aproaerema azosterella* (Herrich-Schäffer, 1854) **comb. nov.**, *Aproaerema montanata* (Gozmány, 1957) **comb. nov.**, *Aproaerema cincticulella* (Bruand, 1851) **comb. nov.**, *Aproaerema buvati* (Nel, 1995) **comb. nov.**, *Aproaerema linella* (Chrétien, 1904) **comb. nov.**, *Aproaerema captivella* (Herrich-Schäffer, 1854) **comb. nov.**, *Aproaerema semicostella* (Staudinger, 1871) **comb. nov.**, *Aproaerema steppicola* (Junnilainen, 2010) **comb. nov.**, *Aproaerema cottienella* (Nel, 2012) **comb. nov.**, *Ptocheuusa cinerella* (Chrétien, 1908) **comb. nov.**, *Pragmatodes melagonella* (Constant, 1895) **comb. nov.**, *Pragmatodes albagonella* (Varenne & Nel, 2010) **comb. nov.**, *Pragmatodes parvulata* (Gozmány, 1953) **comb. nov.**, *Oxypteryx nigromaculella* (Millière, 1872) **comb. nov.**, *Oxypteryx wilkella* (Linnaeus, 1758) **comb. nov.**, *Oxypteryx ochricapilla* (Rebel, 1903) **comb. nov.**, *Oxypteryx superbella* (Zeller, 1839) **comb. nov.**, *Oxypteryx mirusella* (Huemer & Karsholt, 2013) **comb. nov.**, *Oxypteryx baldizzonei* (Karsholt & Huemer, 2013) **comb. nov.**, *Oxypteryx occidentella* (Huemer & Karsholt, 2011) **comb. nov.**, *Oxypteryx libertinella* (Zeller, 1872) **comb. nov.**, *Oxypteryx gemerensis* (Elsner, 2013) **comb. nov.**, *Oxypteryx deserta* (Piskunov, 1990) **comb. nov.**, *Oxypteryx unicolorella* (Duponchel, 1843) **comb. nov.**, *Oxypteryx nigritlella* (Zeller, 1847) **comb. nov.**, *Oxypteryx plumbella* (Heinemann, 1870) **comb. nov.**, *Oxypteryx isostacta* (Meyrick, 1926) **comb. nov.**, *Oxypteryx helotella* (Staudinger, 1859) **comb. nov.**, *Oxypteryx parabelotella* (Nel, 1995) **comb. nov.**, *Oxypteryx graecatella* (Šumpich & Skyva, 2012) **comb. nov.**; *Aproaerema genistae* (Walsingham, 1908) **comb. rev.**, *Aproaerema thaumalea* (Walsingham, 1905) **comb. rev.**;

Dichomeris neatodes Meyrick, 1923 **sp. rev.**; *Caryocolum horoscopa* (Meyrick, 1926) **stat. rev.**; *Ivanauskiella occitanica* (Nel & Varenne, 2013) **sp. rev.**; *Apodia martinii* Petry, 1911 **sp. rev.**; *Caulastrocecis cryptoxena* (Gozmány, 1952) **sp. rev.** Following Article 23.9.2 ICZN we propose *Caryocolum blandella* (Douglas, 1852) (*Gelechia*) **nom. protectum** and *Caryocolum signatella* (Eversmann, 1844) (*Lita*) **nom. oblitum**.

Keywords

Europe, species diversity, cryptic diversity, DNA barcoding, synonymy, new combination

Introduction

Lepidoptera, butterflies and moths, are among the best-known insects, and due to a long tradition of studying Lepidoptera in Europe our knowledge of European Lepidoptera is more comprehensive compared to other parts of the world. Even though Lepidoptera is a well-defined group they exhibit a huge diversity in size, colour and wing markings. Whereas everybody can recognize a butterfly the vast majority of Lepidoptera are small and often dull coloured insects. One such group is the family Gelechiidae. They have for a long time been rather neglected by most lepidopterists mainly due to their external similarity and lack of resources for their identification. Over the last couple of decades, the latter problem has partly been addressed, e.g., Elsner et al. (1999), Huemer and Karsholt (1999, 2010), and at the same time there has been an increasing research interest in the Gelechiidae, resulting in a number of smaller and larger taxonomic reviews and faunistic publications (see reference list) dealing with these moths. However, what was becoming increasingly a hindrance for ongoing research was the lack of an updated checklist of European Gelechiidae. In particular, when planning an extensive DNA barcoding project for the family (Huemer et al. 2020), this deficit became obvious and therefore the authors decided to compile such a checklist for this and future requirements.

A checklist is the most basic taxonomic work on a group of organisms. It can be alphabetical or systematic, viz. trying to reflect the current knowledge of the relationship of the included taxa. This checklist is in systematic order, and it moreover includes synonyms and annotations. Its aim is to present an updated overview of the Gelechiidae known from Europe. This is highly appropriate as nearly a quarter of the currently known species have been described since 1990 (Huemer et al. 2020).

This checklist of European Gelechiidae is the first one to include all known synonyms of genera and species of European Gelechiidae. It is mainly based on data published in Fauna Europaea (Karsholt 2004–2019) but supplemented with numerous published and unpublished additions and corrections from the last few years. It covers all currently accepted species known from the European fauna and their synonyms. Subspecies are not given separate entries, but listed among synonyms, though marked as subspecies. Subgenera are listed among generic synonyms. The considerable number of likely undescribed species (Huemer et al. 2020) are not included in the list.

Taxonomically critical genera and species, especially possible cases of cryptic diversity (Fig. 1) manifested by divergent DNA barcodes, are commented on in detail (see also Huemer et al. 2020).



Figure 1. Alpine species of *Sattleria* are a striking example of long underestimated species diversity (photograph Michel Billard).

Materials and methods

Geographic restriction

For the purpose of the present checklist we define Europe in a broad sense, which includes the Ural Mountains, Russian parts of the Caucasus, the ‘European’ part of Kazakhstan, the Mediterranean islands and the Macaronesian Islands (except Cape Verde) (Fig. 2).

The inclusion of the Russian parts of the Caucasus only added four species to the list (*Acompsia caucasella* Huemer & Karsholt, *Neofriseria caucasicella* Sattler, *Chionodes caucasiella* Huemer & Sattler and *Scrobipalpa caucasica* (Povolný)), which is surprising. One would expect a richer gelechiid fauna to occur in this vast and diverse mountain system. However, most likely the species inventory is simply underestimated as only few lepidopterists have done field research in this area so far.

Content and structure of the checklist

The checklist is restricted to described nominal taxa. Potentially undescribed species (Huemer et al. 2020) are not included. Species introduced from other parts of the World are only included if they are known to have been naturalized within the area described above. Doubtful, though possible, records of occurrence are considered in the checklist

and marked with an asterisk *, whereas confirmed incorrect records and doubtful species (*taxa incertae sedis*) are not listed. Names applied to misidentified taxa are listed only in cases where the incorrect taxonomy has been widely used or where the misidentification can easily cause misunderstandings. These are marked with *auct.* (= of authors).

Systematic arrangement

The higher classification follows the molecular study of Karsholt et al. (2013), whereas the listed order of genera and species is largely according to published revisions and data from Huemer et al. (2020).

Synonymy

Although our knowledge of European Gelechiidae has increased much over the last years, there are still available species-group names in the family which have not yet been associated with known species. Very few of these are likely to represent additional taxa, whereas most cases will be synonyms. Furthermore, several of the published synonyms need taxonomic re-assessment. We have not made special efforts to search for type specimens of such taxa for the purpose of the present checklist, and they should be considered in connection with taxonomic revisions within the Gelechiidae.

Gender agreement

Many species-group names of European Gelechiidae have been combined in different genera since they were first made available. Following article 31.2 of the International Code of Zoological Nomenclature (ICZN 1999) these names require gender agreement between specific and generic names. However, we follow the widely accepted proposals by Sommerer (2002) in Lepidoptera and keep the original spelling of species names to avoid unnecessary instability (van Nieukerken et al. 2019).

Molecular species delimitation

DNA barcodes have been sequenced for a significant number of the species included in the inventory (741 nominal species with sequences > 500 bp). These supported the compilation of the checklist and helped identify and fix yet unpublished synonyms and the systematic position of some species. Details to species and specimens are available on BOLD (Ratnasingham 2018) in the public dataset “Lepidoptera (Gelechiidae) of Europe” under the DOI: <https://doi.org/10.5883/DS-GELECHEU> (see also Huemer et al 2020).

We tested the congruence of morphologically based species determinations and COI sequence data with the Barcode Index Number (BIN), a methodology recently

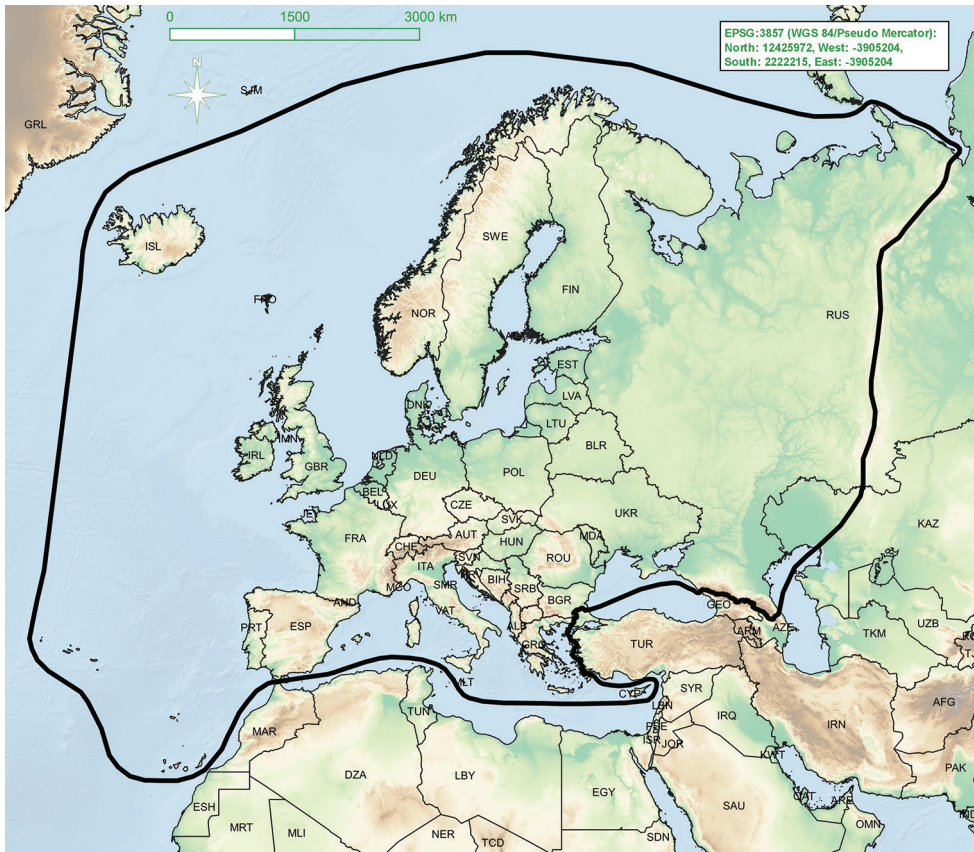


Figure 2. Geographical boundaries of research area. World boundaries: <https://www.arcgis.com/>; SRTM-Data: https://dds.cr.usgs.gov/srtm/version2_1/SRTM3/.

proposed by Ratnasingham and Hebert (2013). This system clusters sequences into Operational Taxonomic Units (OTUs) regardless of their previous taxonomic assignment. It is based on a two-stage algorithm that groups the sequences in a cluster and automatically assigns new sequences. All high-quality sequences > 500 bp are recorded independently of the project origin and assigned to a BIN. Though BINs reflect classical Linnean taxonomy to a high level they were not used uncontested (Huemer et al 2020). We found 114 morphologically delimited species with multiple BINs that are potential cases of cryptic diversity, particularly cases with BIN distances > 3%, and these are therefore discussed in the comments. However, there is clear evidence that no species delimiting threshold values exist in Lepidoptera (Kekkonen et al. 2015) and therefore all cases of barcode divergence require further and integrative analysis in the future. Such work was largely outside the scope of this paper which principally followed current taxonomy and only exceptionally considered obvious taxonomic issues. An in-depth taxonomical analysis will also be necessary for 65 clusters with a unique BIN which remained unidentified to species level from morphology and which are not considered in the checklist itself, and for 55 cases of BIN-sharing (see also Huemer et al. (2020)).

Table 1. Number of described species per tribe/subfamily.

Higher taxa	Species no.
Gelechiidae Stainton, 1854	865
Anacampsinae Bruand d'Uzelle, 1851	89
Anacampsini Bruand d'Uzelle, 1851	67
Chelariini Le Marchand, 1947	22
Dichomeridinae Hampson, 1918	47
Apatetrinae Le Marchand, 1947	29
Pexicopiini Hodges, 1986	6
Apatetrini Le Marchand, 1947	23
Thiotrichinae Karsholt, Mutanen, Lee & Kaila, 2013	5
Anomologinae Meyrick, 1926	253
Gelechiinae Stainton, 1854	445
Gelechiini Stainton, 1854	132
Gnorimoschemini Povolný, 1964	240
Litini Bruand d'Uzelle 1859	73

Results

Overview

The checklist covers 865 nominal species of European Gelechiidae belonging to 109 genera, including 3 species with doubtful records (*). The majority belong to Gelechiinae (445 spp.), followed by Anomologinae (253 spp.), Anacampsinae (89 spp.), Dichomeridinae (47 spp.), Apatetrinae (29 spp.), and Thiotrichinae (5 spp.) (Table 1).

Taxon excluded from the Gelechiidae

A single species originally described in the Gelechiidae is excluded from the family, viz. *Brachmia infuscatella* Rebel, 1940, and is transferred to Autostichidae without generic assignation.

Checklist

Numbers [1] – [202] refer to comments; * refers to doubtful records for the European fauna.

Gelechiidae Stainton, 1854

Anacampsinae Bruand d'Uzelle, 1851 [1]

Stomopteryginae Heslop, 1938, unavailable

Anacampsini Bruand d'Uzelle, 1851

***Stomopteryx* Heinemann, 1870 [2]**

Inotica Meyrick, 1913

- Acraeologa* Meyrick, 1921
Kabelia Turati, 1922, unavailable
Stomopteryx detersella (Zeller, 1847)
egenella (Herrich-Schäffer, 1851), unavailable
palermitella (La Harpe, 1860)
tenuisignella Turati, 1924
obliterella Turati, 1924, unavailable
Stomopteryx bolschewickiella (Caradja, 1920)
Stomopteryx nugatricella Rebel, 1893 [3]
Stomopteryx mongolica Piskunov, 1975 [3]
Stomopteryx lineolella (Eversmann, 1844) [3]
Stomopteryx basalis (Staudinger, 1876)
oxychalca (Meyrick, 1937)
Stomopteryx deverrae (Walsingham, 1905) [4]
Stomopteryx flavoclavella Zerny, 1935 [5]
Stomopteryx remissella (Zeller, 1847) [6]
vetustella (Herrich-Schäffer, 1854)
tripunctigerella (Bruand d'Uzelle, 1859)
submissella (Frey, 1880), homonym
rufobasella (Rebel, 1916)
yunusemrei Koçak, 1986
Stomopteryx spathulella Nel, Varenne & Labonne, 2019 [6]
Stomopteryx orthogonella (Staudinger, 1871)
Stomopteryx flavipalpella Jäckh, 1959 [7]
Stomopteryx hungaricella Gozmány, 1957
Stomopteryx lusitaniella Corley & Karsholt, 2014
Stomopteryx jeppeseni Karsholt & Šumpich, 2018
Stomopteryx alpinella Nel & Varenne, 2016
Stomopteryx schizogynae (Walsingham, 1908)

***Aproaerema* Durrant, 1897 [8]**

- Harpagus* Stephens, 1834, homonym
Untomia Busck, 1906
Schuetzeia Spuler, 1910
Syncopacma Meyrick, 1925
Lixodessa Gozmány, 1957
Aproaerema patruella (Mann, 1857)
fulvistillella (Rebel, 1891)
Aproaerema coronillella (Treitschke, 1833)
fournieri (Nel, 1998)
Aproaerema incognitana (Gozmány, 1957) **comb. nov.** [8]
Aproaerema sangiella (Stainton, 1863)
Aproaerema cinctella (Clerck, 1759) [9]

- vorticella* (Scopoli, 1763)
ligulella ([Denis & Schiffermüller], 1775)
vittata (Fourcroy & Geoffroy, 1785)
vittatella (Villers, 1789)
albistrigella (Stephens, 1834)
ussuriella (Caradja, 1920)
finlandica (Gozmány, 1957)
Aproaerema cinctelloides (Nel & Varenne, 2012) **comb. nov.** [8]
Aproaerema larseniella (Gozmány, 1957)
ligulella auct.
Aproaerema wormiella (Wolff, 1958) [8]
parawormiella (Nel & Varenne, 2016)
Aproaerema azosterella (Herrich-Schäffer, 1854) **comb. nov.** [8]
Aproaerema ochrofasciella (Toll, 1936)
Aproaerema taeniolella (Zeller, 1839)
sircomella (Stainton, 1854)
Aproaerema montanata (Gozmány, 1957) **comb. nov.** [8]
Aproaerema albifrontella (Heinemann, 1870)
ignobilella (Heinemann, 1870)
Aproaerema cincticulella (Bruand, 1851) **comb. nov.**
Aproaerema vinella Bankes, 1898
fasciata Bankes, 1898, unavailable
biformella Schütze, 1902
Aproaerema buvati (Nel, 1995) **comb. nov.** [8]
Aproaerema linella (Chrétien, 1904) **comb. nov.** [8, 10]
schoenmanni (Gozmány, 1957)
Aproaerema albipalpella (Herrich-Schäffer, 1854)
leucopalpella (Herrich-Schäffer, 1854), unavailable
ruptella (Constant, 1865)
Aproaerema suecicella (Wolff, 1958) [11]
Aproaerema captivella (Herrich-Schäffer, 1854) **comb. nov.** [8]
sarothamnella (Zeller, 1868)
Aproaerema polychromella (Rebel, 1902)
argyrolobiella Caradja, 1920, unavailable
faceta (Meyrick, 1914)
Aproaerema karvoneni (Hackman, 1950) [12]
Aproaerema semicostella (Staudinger, 1871) **comb. nov.** [8]
albicapitella (Bidzilya, 1996)
Aproaerema steppicolella (Junnilainen, 2010) **comb. nov.** [8]
Aproaerema cottiennella (Nel, 2012) **comb. nov.** [8]
Aproaerema genistae (Walsingham, 1908) **comb. rev.** [8]
Aproaerema thaumalea (Walsingham, 1905) **comb. rev.** [8]
Aproaerema anthyllidella (Hübner, 1813) [13]

caliginosella (Duponchel, 1843)
elachistella (Stainton, 1859), subspecies
psoralella (Millière, 1865)
lachtensis (Erschoff, 1877)
sparsiciliella (Barrett, 1891)
infestella (Rebel, 1896)
natruxella (Weber, 1945)
brundini (Benander, 1945)
alfalfella Amsel, 1958
aureliana Căpușe, 1964
Aproaerema lerauti Vives, 2001
Aproaerema mercedella Walsingham, 1908

***Iwaruna* Gozmány, 1957 [14]**

Iwaruna heringi Gozmány, 1957
Iwaruna biguttella (Duponchel, 1843)
Iwaruna klimeschi Wolff, 1958
Iwaruna robineaui Nel, 2008

***Anacamptis* Curtis, 1827**

Tachyptilia Heinemann, 1870
Agriastis Meyrick, 1914
Anacamptis populella (Clerck, 1759) [15]
tremella ([Denis & Schiffermüller], 1775)
boeberana (Fabricius, 1787)
populi (Haworth, 1828), emendation
laticinctella Stephens, 1834
tremulella Duponchel, 1839
atra (Strand, 1901), unavailable
lugens (Caradja, 1920)
sachalinensis (Matsumura, 1931)
fuscatella (Bentinck, 1934)
ambrownella (Meder, 1934)
ceballosi Agenjo, 1959
Anacamptis blattariella (Hübner, 1796) [15]
thapsiella (Hübner, 1796)
blattariae (Haworth, 1828), emendation
atrigriseella Bruand d'Uzelle, 1851
betulinella Vári, 1941
Anacamptis timidella (Wocke, 1887)
quercella (Chrétien, 1907)
disquei (Meess, 1907)
suberiella Caradja, 1920

- Anacampsis scintillella* (Fischer v. Röslerstamm, 1841) [16]
brunneella Herrich-Schäffer, 1854
contuberniella (Staudinger, 1859)
Anacampsis temerella (Lienig & Zeller, 1846)
pernigrella (Douglas, 1850)
Anacampsis trifoliella (Constant, 1890)
Anacampsis fuscella (Eversmann, 1844)
Anacampsis hirsutella (Constant, 1885)
Anacampsis obscurella ([Denis & Schiffermüller], 1775) [17]
subsequella (Hübner, 1796)
Anacampsis malella Amsel, 1959

Mesophleps Hübner, 1825 [18]

- Brachyacma* Meyrick, 1886
Lathontogenus Walsingham, 1897
Paraspistes Meyrick, 1905
Chretienia Spuler, 1910
Lipatia Busck, 1910
Stiphrostola Meyrick, 1923
Crossobela Meyrick, 1923
Xerometra Meyrick, 1925
Gnosimacha Meyrick, 1927
Bucolarcha Meyrick, 1929
Uncustriodonta Agenjo, 1952
Mesophleps corsicella (Herrich-Schäffer, 1856)
lala Agenjo, 1961
Mesophleps silacella (Hübner, 1796)
pyropella auct.
luteella (Hübner, 1896), unavailable
silacea (Haworth, 1828), emendation
apicellus Caradja, 1920
calaritanus Amsel, 1939
Mesophleps oxycedrella (Millière, 1871)
Mesophleps trinotella Herrich-Schäffer, 1856
aurantiella (Rebel, 1915)
subtilipennis (Turati, 1924)
Mesophleps ochracella (Turati, 1926)
orientella Nel & Nel, 2003
gallicella Varenne & Nel, 2011

Chelariini Le Marchand, 1947

- Hypatimini Kloet & Hincks, 1945, unavailable
Anarsiini Amsel, 1977

Nothris Hübner, 1825 [19]

- Nothris congressariella* (Bruand, 1858)
declaratella Staudinger, 1859
Nothris lemniscellus (Zeller, 1839)
Nothris gregersenii Karsholt & Šumpich, 2015 [20]
Nothris verbascella ([Denis & Schiffermüller], 1775)
discretella Rebel, 1889
clarella Amsel, 1935
Nothris sulcella Staudinger, 1879
magna Nel & Peslier, 2007
Nothris radiata (Staudinger, 1879) [21]
Nothris skyvai Karsholt & Šumpich, 2015

Neofaculta Gozmány, 1955

- Haplovalva* Janse, 1958
Neofaculta ericetella (Geyer, 1832) [22]
gallinella (Treitschke, 1833)
lanceolella (Stephens, 1834)
fuscella (Duponchel, 1844)
subatrella (Duponchel, 1845)
quinquemaculella (Bruand d'Uzelle, 1859)
orcella (Zerny, 1927), subspecies
atlanticella (Amsel, 1938), subspecies
tenalella (Amsel, 1938)
amseli (Dufrane, 1955)
pyrenemontana (Dufrane, 1955)
betulea auct.
Neofaculta infernella (Herrich-Schäffer, 1854)
infernalis, unavailable
Neofaculta taigana Ponomarenko, 1998 [23]

Hypatima Hübner, 1825

- Chelaria* Haworth, 1828
Tituacia Walker, 1864
Stomylia Snellen, 1878
Allocota Meyrick, 1904, homonym
Cymatomorpha Meyrick, 1904
Deuteroptila Meyrick, 1904
Semodictis Meyrick, 1909
Allocotaniana Strand, 1913
Episacta Turner, 1919
Hypatima rhomboidella (Linnaeus, 1758) [24]
conscriptella (Hübner, 1805)

hubnerella (Donovan, 1806), incorrect original spelling
huebnerella (Donovan, 1806), justified emendation
conscripta Haworth, 1828, emendation

Anarsia Zeller, 1839 [25]

Ananarsia Amsel, 1959
Anarsia lineatella Zeller, 1839
pullatella (Hübner, 1796), nomen oblitum
pruniella Clemens, 1860
heratella Amsel, 1967, subspecies
tauricella Amsel, 1967, subspecies
Anarsia innoxia Gregersen & Karsholt, 2017
Anarsia spartiella (Schrank, 1802)
robertsonella (Curtis, 1837)
genistae Stainton, 1854
genistella Doubleday, 1859, emendation
ragonotella Réal, 1994
krausei Réal, 1994
lhommella Réal, 1994
acutiloba Réal, 1994
pseudospartiella Réal, 1994
ungemachi Réal, 1994
Anarsia bilbainella (Rössler, 1877) [26]
burmanni Amsel, 1958
bizensis Réal, 1994
infundibulella Réal, 1994
ovilella Réal, 1994
Anarsia eleagnella Kuznetsov, 1957
Anarsia dejoannisi Réal, 1994
Anarsia leberonella Réal, 1994
Anarsia sibirica Park & Ponomarenko, 1996
Anarsia stepposella Ponomarenko, 2002
psammobia Falkovitsh & Bidzilya, 2003
Anarsia acaciae Walsingham, 1896
Anarsia balioneura Meyrick, 1921

Dichomeridinae Hampson, 1918

Brachminae Omelko, 1999
Dichomerinae, misspelling

Dichomeris Hübner, 1818 [27]

Elasmion Hübner, 1808, unavailable
Oxybelia Hübner, 1825

- Rhinosia* Treitschke, 1833
Gaesa Walker, 1864
Uliaria Dumont, 1921
Cymotricha Meyrick, 1923
Acanthophila Heinemann, 1870
Mimomeris Povolný, 1978
Dichomeris acuminatus (Staudinger, 1876)
ianthes (Meyrick, 1887)
rusticus (Walsingham, 1892)
lotellus (Constant, 1893)
amnoxanthus (Meyrick, 1904)
ochrophanes (Meyrick, 1907)
sublotellus (Caradja, 1920)
Dichomeris cisti (Staudinger, 1859)
meridionella (Walsingham, 1891)
Dichomeris limbipunctellus (Staudinger, 1859) [28]
millierellus Stainton, 1873
Dichomeris neatodes Meyrick, 1923 **sp. rev.** [28]
Dichomeris helianthemis (Walsingham, 1903)
Dichomeris castellana (Schmidt, 1941)
Dichomeris juniperella (Linnaeus, 1761) [29]
juniperi Haworth, 1828, emendation
Dichomeris marginella (Fabricius, 1781)
fimbriella (Thunberg, 1788)
clarella (Treitschke, 1833)
Dichomeris ustalella (Fabricius, 1794)
capucinella (Hübner, 1796)
cornutus (Fabricius, 1798)
ustulatus (Fabricius, 1798), emendation
burgundiellus (Bruand d'Uzelle, 1859)
Dichomeris derasella ([Denis & Schiffermüller], 1775)
fasciella (Hübner, 1796)
unguiculatus (Fabricius, 1798)
coreanus Matsumura, 1931
paranthes Meyrick, 1936
Dichomeris limosellus (Schläger, 1849)
deflectivellus (Reutti, 1853)
Dichomeris nitiellus (Costantini, 1923)
Dichomeris rasilella (Herrich-Schäffer, 1854) [30]
lacrimella (Caradja, 1920)
insulella (Dumont, 1921)
occidentella (Zerny, 1927), subspecies
Dichomeris barbella ([Denis & Schiffermüller], 1775)

Dichomeris alacella (Zeller, 1839)

Dichomeris latipennella (Rebel, 1937)

scotosiella (Hackman, 1945)

piceana (Šulcs, 1968)

steueri Povolný, 1978

***Anaspaltis* Meyrick, 1925**

Anaspaltis renigerellus (Zeller, 1839)

***Acompsia* Hübner, 1825 [31]**

Brachycrossata Heinemann, 1870

Telephila Meyrick, 1923

Acompsia cinerella (Clerck, 1759)

murinella (Scopoli, 1763)

ardeliella (Hübner, 1817)

cinerea (Haworth, 1828), emendation

spodiella (Treitschke, 1833)

Acompsia pyrenaella Huemer & Karsholt, 2002 [32]

Acompsia antirrhinella Millière, 1866 [33]

Acompsia baldizzonei Pinzari, Nel & Pinzari, 2016

Acompsia maculosella (Stainton, 1851) [34]

Acompsia dimorpha Petry, 1904

Acompsia subpunctella Svensson, 1966

Acompsia delmastroella Huemer, 1998

Acompsia muellerrutzi Wehrli, 1925

Acompsia caucasella Huemer & Karsholt, 2002

Acompsia minorella Rebel, 1899

Acompsia tripunctella ([Denis & Schiffermüller], 1775) [35]

Acompsia ponomarenkoae Huemer & Karsholt, 2002

Acompsia schmidtiellus (Heyden, 1848)

durdhamellus (Stainton, 1849)

quadrinella (Herrich-Schäffer, 1854)

***Brachmia* Hübner, 1825 [36]**

Claododes Heinemann, 1870, homonym

Eudodacles Snellen, 1889

Aulacomima Meyrick, 1904

Apethistis Meyrick, 1908

Brachmia dimidiella ([Denis & Schiffermüller], 1775) [37]

costiguttella (Lienig & Zeller, 1846)

kneri (Nowicki, 1864)

Brachmia blandella (Fabricius, 1798)

gerronella (Zeller, 1850)

Brachmia procursella Rebel, 1903
Brachmia inornatella (Douglas, 1850)

***Helcystogramma* Zeller, 1877**

Ceratophora Heinemann, 1870, homonym
Dectobathra Meyrick, 1904
Teuchophanes Meyrick, 1914
Schemataspis Meyrick, 1918
Parelectra Meyrick, 1925, homonym
Psamathoscopa Meyrick, 1937
Anathyrstis Meyrick, 1939
Parelectroides Clarke, 1952
Onebala auct.
Helcystogramma lineolella (Zeller, 1839)
Helcystogramma triannulella (Herrich-Schäffer, 1854)
sepiella (Stuedel, 1866)
cinerea (Caradja, 1931)
macroscopa (Meyrick, 1932)
Helcystogramma lutatella (Herrich-Schäffer, 1854)
Helcystogramma rufescens (Haworth, 1828)
simplella (Eversmann, 1844)
diaphanella (Lienig & Zeller, 1846)
isabella (Stainton, 1849)
rufescentella (Doubleday, 1859), emendation
Helcystogramma albinervis (Gerasimov, 1929)
Helcystogramma arulensis (Rebel, 1929)
Helcystogramma klimeschi Ponomarenko & Huemer, 2001
Helcystogramma flavescens Junnilainen, 2010
Helcystogramma convolvuli (Walsingham, 1908)
chrypsilychna (Meyrick, 1914)
dryadopa (Meyrick, 1918)
effera (Meyrick, 1918)
emigrans (Meyrick, 1921)
Helcystogramma lamprostoma (Zeller, 1847) [38]
scutata (Meyrick, 1894)

***Pseudosphronia* Corley, 2001 [39]**

Pseudosphronia exustellus (Zeller, 1847)
catharurga Meyrick, 1923
parahumerella Amsel, 1935
buvati Nel, 1998
constanti Nel, 1998, **syn. nov.**
Pseudosphronia cosmella (Constant, 1885)

Apatetrinae Le Marchand, 1947

Chrysoesthiinae Paclt, 1947, unavailable

Pexicopiini Hodges, 1986***Harpagidia* Ragonot, 1895**

Glaphyrerga Meyrick, 1925

Harpagidia magnetella (Staudinger, 1871)

pallidibasella Ragonot, 1895

melitophanes (Meyrick, 1931)

***Pectinophora* Busck, 1917**

Pectinophora gossypiella (Saunders, 1844)

***Pexicopia* Common, 1958**

Pexicopia malvella (Hübner, 1805) [40]

lutarea (Haworth, 1828), unavailable

umbrella auct.

***Platyedra* Meyrick, 1895**

Aratrognaethosia Gozmány, 1968, unavailable

Platyedra subcinerea (Haworth, 1828)

vilella (Zeller, 1847)

parviocellatella (Bruand d'Uzelle, 1851)

bathrosticta (Meyrick, 1937)

***Sitotroga* Heinemann, 1870**

Nesolechia Meyrick, 1921

Syngenomictis Meyrick, 1927

Sitotroga psacasta Meyrick, 1908

celyphodes (Meyrick, 1909)

nea Walsingham, 1920

Sitotroga cerealella (Olivier, 1789)

hordei (Kirby, 1815)

arctella (Walker, 1864)

melanarthra (Lower, 1900)

palearis (Meyrick, 1913)

aenictopa (Meyrick, 1927)

ochrescens (Meyrick, 1938)

asemodes (Meyrick, 1938)

Apatetrini Le Marchand, 1947 [41]

Dactylotula* Cockerell, 1888Dactylota* Snellen, 1876, homonym*Didactylota* Walsingham, 1892*Rotundivalva* Janse, 1951*Dactylotula altithermella* (Walsingham, 1903)*Dactylotula kinkerella* (Snellen, 1876) [42]***Apatetris* Staudinger, 1879 [43]***Apatetris agenjo* Gozmány, 1954*Apatetris mediterranea* Nel & Varenne, 2012 [44]***Catatinagma* Rebel, 1903***Catatinagma trivittellum* Rebel, 1903 [45]*Catatinagma kraterella* Junnilainen & Nupponen, 2010 [46]***Coloptilia* Fletcher, 1940***Colopteryx* Hofmann, 1898, homonym*Coloptilia conchylidella* (Hofmann, 1898)***Chrysoesthia* Hübner, 1825 [47]***Microsetia* Stephens, 1829*Chrysia* Bruand d'Uzelle, 1851*Nomia* Clemens, 1860, homonym*Chrysopora* Clemens, 1860*Nannodia* Heinemann, 1870*Anaphaula* Walsingham, 1904*Chrysoesthia drurella* (Fabricius, 1775) [48]*myllerella* (Fabricius, 1794)*zinckenella* (Hübner, 1813)*druryella* (Zeller, 1851), emendation*hermannella* auct.*Chrysoesthia eppelsheimi* (Staudinger, 1885)*Chrysoesthia verrucosa* Tokár, 1999*Chrysoesthia sexguttella* (Thunberg, 1794)*auropunctella* (Thunberg, 1794)*aurofasciella* (Stephens, 1834)*naeviferella* (Duponchel, 1843)*stipella* auct.*Chrysoesthia halimionella* Bidzilya & Budashkin, 2015*Chrysoesthia atriplicella* (Amsel, 1939) [49]*Chrysoesthia gaditella* (Staudinger, 1859) [49]*Chrysoesthia aletris* (Walsingham, 1919) [49]

Chrysoesthia boseae (Walsingham, 1908)

Chrysoesthia falkovitshi Lvovsky & Piskunov, 1989

Chrysoesthia hispanica Karsholt & Vives, 2014

***Metanarsia* Staudinger, 1871**

Calyptrotis Meyrick, 1891

Epipararsia Rebel, 1914

Parametanarsia Gerasimov, 1930

Metanarsia modesta Staudinger, 1871 [50]

kurdistanella Amsel, 1959, subspecies

Metanarsia onzella Christoph, 1887

Metanarsia guberlica Nupponen, 2010

Metanarsia incertella (Herrich-Schäffer, 1861)

longivitella (Rebel, 1914)

halmyropis (Meyrick, 1926)

ramiferella (Lucas, 1940)

***Oecocecis* Guenée, 1870**

Oecocecis guyonella Guenée, 1870 [51]

Thiotrichinae Karsholt, Mutanen, Lee & Kaila, 2013 [52]

Palumbinae Chapman, 1902, *nomen nudum*

***Thiotricha* Meyrick, 1886**

Reuttia Hofmann, 1898

Mystax Caradja, 1920, homonym

Thiotricha majorella Rebel, 1910

Thiotricha subocellea (Stephens, 1834)

internella (Lienig & Zeller, 1846)

dissonella (Herrich-Schäffer, 1854)

subocellella (Doubleday, 1859), emendation

Thiotricha colella (Constant, 1885)

Thiotricha wollastoni (Walsingham, 1884)

***Palumbina* Rondani, 1876**

Thyrsostoma Meyrick, 1907

Palumbina guerinii (Stainton, 1858)

terebintella Rondani, 1876

pistaciae (Anagnostopoulos, 1935)

Anomologinae Meyrick, 1926

Aristoteliinae Le Marchand, 1947

Metzneriini Piskunov, 1975

Isophrictini Povolný, 1979

***Bryotropha* Heinemann, 1870 [53]**

Mniophaga Pierce & Daltry, 1938

Adelphotropha Gozmány, 1955

Bryotropha sabulosella (Rebel, 1905)

Bryotropha domestica (Haworth, 1828)

domesticella (Doubleday, 1859), emendation

punctata (Staudinger, 1876)

salmonis (Walsingham, 1908)

algoricella Chrétien, 1917

Bryotropha vundermublli Nel & Brusseau, 2003

Bryotropha rossica Anikin & Piskunov, 1996

tachengensis Li & Zheng, 1997

Bryotropha azovica Bidzilia, 1997

Bryotropha arabica Amsel, 1952

Bryotropha patockai Elsner & Karsholt, 2003

Bryotropha purpurella (Zetterstedt, 1839)

flavipalpella (Nylander, 1848)

Bryotropha tachyptilella (Rebel, 1916)

Bryotropha italica Karsholt & Rutten, 2005

Bryotropha politella (Stainton, 1851)

exploitella (Doubleday, 1859)

Bryotropha aliterrella (Rebel, 1935)

Bryotropha nupponeni Karsholt & Rutten, 2005

Bryotropha satschkovi Anikin & Piskunov, 2018

Bryotropha terrella ([Denis & Schiffermüller], 1775) [54]

inulella (Hübner, 1805)

pauperella (Hübner, 1825)

latella (Herrich-Schäffer, 1854)

lutescens (Constant, 1865)

suspectella (Heinemann, 1870)

alpicolella Heinemann, 1870

tenebrosella (Teich, 1886)

sardoterrella Schawerda, 1936

quignoni Dufrane, 1938, unavailable

joannisi Dufrane, 1938, unavailable

rufa Dufrane, 1938, unavailable

ochrea Dufrane, 1938, unavailable

Bryotropha sattleri Nel, 2003

Bryotropha desertella (Douglas, 1850) [55]

decrepidella (Herrich-Schäffer, 1854)

glabrella Heinemann, 1870

- Bryotropha wolschrijni* Karsholt & Rutten, 2005
Bryotropha heckfordi Karsholt & Rutten, 2005
Bryotropha figulella (Staudinger, 1859)
 capnella (Constant, 1865)
 cinnamomea Turati, 1934
Bryotropha plantariella (Tengström, 1848)
 cinerosella (Tengström, 1848)
 serrulatella (Tengström, 1848)
 brevipalpella Rebel, 1893
Bryotropha galbanella (Zeller, 1839)
 angustella (Heinemann, 1870)
 ilmatariella (Hoffmann, 1893)
 griseella (Caradja, 1920)
 haareki (Strand, 1920)
 fusconigratella (Palm, 1947)
Bryotropha boreella (Douglas, 1851)
Bryotropha sutteri Karsholt & Rutten, 2005
Bryotropha gallurella Amsel, 1952
Bryotropha hendrikseni Karsholt & Rutten, 2005
Bryotropha pallorella Amsel, 1952
 mulinoides Amsel, 1952
 zannonicola Hartig, 1953
Bryotropha hulli Karsholt & Rutten, 2005 [56]
Bryotropha plebejella (Zeller, 1847)
 imperitella (Staudinger, 1859)
 ancillula (Walsingham, 1908)
 inexpectella Nel, 1999
Bryotropha dryadella (Zeller, 1850)
 saralella Amsel, 1952
Bryotropha basaltinella (Zeller, 1839)
Bryotropha affinis (Haworth, 1828) [57]
 tegulella (Herrich-Schäffer, 1854)
 tectella (Herrich-Schäffer, 1854)
 affinella (Doubleday, 1859), emendation
 affinitella (Bruand d'Uzelle, 1859), emendation
Bryotropha umbrosella (Zeller, 1839) [58]
 mundella (Douglas, 1850)
 portlandicella (Richardson, 1890)
 fulvipalpella Joannis, 1908
 anacampsoidella (Hering, 1924)
 oppositella auct.
Bryotropha similis (Stainton, 1854)

thuleella (Zeller, 1857)
similella (Doubleday, 1859), emendation
pullifimbriella (Clemens, 1863)
confinis (Stainton, 1871)
obscurecinerea (Nolcken, 1871)
stolidella (Morris, 1872)
fuliginosella (Snellen, 1882)
tahavusella (Forbes, 1922)
clandestina (Meyrick, 1923)
dufraneella (Joannis, 1928)
novisimilis Li & Zheng, 1997
Bryotropha senectella (Zeller, 1839)
ciliatella (Herrich-Schäffer, 1854)
obscurella Heinemann, 1870
minorella Heinemann, 1870
phoebusella Millière, 1876
larseni Strand, 1927

***Epidola* Staudinger, 1859 [59]**

Epidola stigma Staudinger, 1859
Epidola barcinonella Millière, 1867
Epidola semitica Amsel, 1942 [60]
Epidola nuraghella Hartig, 1939
Epidola melitensis Amsel, 1955

***Aristotelia* Hübner, 1825 [61]**

Ergatis Heinemann, 1870, homonym
Eucatoptus Walsingham, 1897
Aristotelia decurtella (Hübner, 1813) [62]
turbatella (Treitschke, 1835)
amoenella (Joannis, 1891)
Aristotelia decoratella (Staudinger, 1879)
Aristotelia leonhardi Krone, 1907
Aristotelia ericinella (Zeller, 1839) [63]
silendrella Caradja, 1920, unavailable
Aristotelia subdecurtella (Stainton, 1859) [64]
Aristotelia subericinella (Duponchel, 1843) [65]
prohaskaella (Rebel, 1907)
Aristotelia billii Varenne & Nel, 2013 [66]
Aristotelia montarcella Schmidt, 1941
Aristotelia heliacella (Herrich-Schäffer, 1854)
rogenhoferi (Staudinger, 1872)

- Aristotelia pancaliella* (Staudinger, 1871)
Aristotelia baltica Šulcs & Šulcs, 1983
coeruleopictella auct.
Aristotelia brizella (Treitschke, 1833)
Aristotelia brizelloidea Amsel, 1935
Aristotelia confusella Bidzilya & Budashkin, 2015
Aristotelia staticella Millière, 1876
Aristotelia mirandella Chrétien, 1908
Aristotelia frankeniae Walsingham, 1898
Aristotelia calastomella (Christoph, 1873)
Aristotelia mirabilis (Christoph, 1888)

***Caulastrocecis* Chrétien, 1931 [67]**

- Caulastrocecis pudicellus* (Mann, 1861)
apicella (Caradja, 1920)
Caulastrocecis gypsella (Constant, 1893)
Caulastrocecis furfurella (Staudinger, 1871) [68]
Caulastrocecis cryptoxena (Gozmány, 1952) **sp. rev.** [68]
Caulastrocecis perexigella Junnilainen, 2010
Caulastrocecis interstratella (Christoph, 1873)
salinatrix (Meyrick, 1926)

***Paranarsia* Ragonot, 1895 [69]**

- Paranarsia joannisiella* Ragonot, 1895

***Megacraspedus* Zeller, 1839 [70]**

- Chilopselaphus* Mann, 1867
Chilopsephalus Rebel, 1901, misspelling
Toxoceras Chrétien, 1915, homonym
Toxidoceras Chrétien, 1923
Nevadia Caradja, 1920, homonym
Cauloecista Dumont, 1928
Reichardtiella Filipjev, 1931
Vadenia Caradja, 1933
Megacraspedus lanceolellus (Zeller, 1850) [71]
subdolellus Staudinger, 1859
hessleriellus Rössler, 1868
tutti Walsingham, 1897
grossisquammellus Chrétien, 1925
Megacraspedus bengtssoni Huemer & Karsholt, 2018
Megacraspedus junnilaineni Huemer & Karsholt, 2018
Megacraspedus uzunsyrtus Bidzilya & Budashkin, 2015
Megacraspedus similellus Huemer & Karsholt, 2018

- Megacraspedus tokari* Huemer & Karsholt, 2018
Megacraspedus dolosellus (Zeller, 1839) [72]
 separatellus (Fischer von Röslerstamm, 1843)
 incertellus Rebel, 1930
Megacraspedus neli Huemer & Karsholt, 2018
Megacraspedus faunierensis Huemer & Karsholt, 2018
Megacraspedus gredosensis Huemer & Karsholt, 2018
Megacraspedus cuencellus Caradja, 1920
Megacraspedus bidentatus Huemer & Karsholt, 2018
Megacraspedus fuscus Huemer & Karsholt, 2018
Megacraspedus trineae Huemer & Karsholt, 2018
Megacraspedus tristictus Walsingham, 1910
Megacraspedus alfacarellus Wehrli, 1926
Megacraspedus pusillus Walsingham, 1903
Megacraspedus skoui Huemer & Karsholt, 2018
Megacraspedus spinophallus Huemer & Karsholt, 2018 [73]
Megacraspedus occidentellus Huemer & Karsholt, 2018
Megacraspedus granadensis Huemer & Karsholt, 2018
Megacraspedus heckfordi Huemer & Karsholt, 2018
Megacraspedus tenuiuncus Huemer & Karsholt, 2018
Megacraspedus lativalvellus Amsel, 1954
Megacraspedus dejectella (Staudinger, 1859)
Megacraspedus devorator Huemer & Karsholt, 2018
Megacraspedus binotella (Duponchel, 1843) [74]
Megacraspedus brachypteris Huemer & Karsholt, 2018 [75]
Megacraspedus barcodiellus Huemer & Karsholt, 2018
Megacraspedus bilineatella Huemer & Karsholt, 1996
Megacraspedus andreneli Varenne & Nel, 2014 [76]
Megacraspedus sumpichi Huemer & Karsholt, 2018
Megacraspedus gallicus Huemer & Karsholt, 2018
Megacraspedus ribbeella (Caradja, 1920)
Megacraspedus numidellus (Chrétien, 1915)
 mareotidellus Turati, 1924,
Megacraspedus albovenata Junnilainen, 2010
Megacraspedus longipalpella Junnilainen, 2010
Megacraspedus niphorrhoea (Meyrick, 1926)
Megacraspedus fallax (Mann, 1867)
Megacraspedus balneariellus (Chrétien, 1907)
Megacraspedus podolicus (Toll, 1942)
Megacraspedus knudlarseni Huemer & Karsholt, 2018
Megacraspedus imparcellus (Fischer v. Röslerstamm, 1843) [77]
 litovalvellus Junnilainen, 2010
Megacraspedus multispinella Junnilainen & Nupponen, 2010

Megacraspedus cerussatellus Rebel, 1930
Megacraspedus attritellus Staudinger, 1871
Megacraspedus lagopellus (Herrich-Schäffer, 1860)
Megacraspedus argyroneurellus Staudinger, 1871
Megacraspedus ibericus Huemer & Karsholt, 2018
Megacraspedus squalida Meyrick, 1926
 escalerellus Schmidt, 1941
Megacraspedus pentheres Walsingham, 1920
Megacraspedus teriolensis Huemer & Karsholt, 2018 [78]
Megacraspedus korabicus Huemer & Karsholt, 2018
Megacraspedus quadristictus Lhomme, 1946
Megacraspedus eburnellus Huemer & Karsholt, 2001
Megacraspedus skulei Huemer & Karsholt, 2018
Megacraspedus peyerimhoffi Le Cerf, 1925
Megacraspedus peslieri Huemer & Karsholt, 2018

***Dirhinosia* Rebel, 1905 [79]**

Dirhinosia cervinella (Eversmann, 1844)
 trifasciella Rebel, 1905
Dirhinosia arnoldiella (Rebel, 1905)
Dirhinosia interposita Bidzilya & Budashkin, 2015

***Psamathocrita* Meyrick, 1925 [80]**

Psamathocrita osseella (Stainton, 1860)
Psamathocrita argentella Pierce & Metcalfe, 1942
Psamathocrita dalmatinella Huemer & Tokár, 2000

***Chimericorsa* Varenne, Huemer & Nel, 2017**

Chimericorsa nioloensis Varenne, Huemer & Nel, 2017

***Spiniphallellus* Bidzilya & Karsholt, 2008**

Spiniphallellus desertus Bidzilya & Karsholt, 2008
Spiniphallellus chrysotosella Junnilainen, 2016

***Deltophora* Janse, 1950**

Deltophora maculata (Staudinger, 1879)
Deltophora stictella (Rebel, 1927)
Deltophora gielisia Hull, 1995

***Ivanauskiella* Ivinskis & Piskunov, 1980 [81]**

Spatuncusella Nel & Varenne, 2013
Ivanauskiella psamathias (Meyrick, 1891)
 turkmenica auct.
Ivanauskiella occitanica (Nel & Varenne, 2013) **sp. rev.** [82]

Ptocheuusa* Heinemann, 1870 [83]Syneunetis* Wallengren, 1881*Ptocheuusa paupella* (Zeller, 1847) [84]*inulella* (Curtis, 1850)*melanolepidella* (Heydenreich, 1851)*perniveella* (Bruand d'Uzelle, 1859)*Ptocheuusa inopella* (Zeller, 1839) [85]*amesella* Chrétien, 1908*Ptocheuusa abnormella* (Herrich-Schäffer, 1854)*Ptocheuusa minimella* (Rebel, 1936)*Ptocheuusa asterisci* (Walsingham, 1903)*Ptocheuusa scholastica* (Walsingham, 1903)*Ptocheuusa guimarensis* (Walsingham, 1908)*Ptocheuusa sublutella* Christoph, 1873*Ptocheuusa cinerella* (Chrétien, 1908) **comb. nov.** [86]***Gladivalva* Sattler, 1960***Gladivalva rumicivorella* (Millière, 1881)*Gladivalva aizpuruai* Vives, 1990*Gladivalva badidorsella* (Rebel, 1935)***Ornativulva* Gozmány, 1955***Pelostola* Janse, 1960*Ornativulva heluanensis* (Debski, 1913)*frankeniivorella* (Chrétien, 1917)*oasicolella* (Turati, 1924)*siculella* (Mariani, 1937)*Ornativulva ornatella* Sattler, 1967*Ornativulva tamariciella* (Zeller, 1850)*Ornativulva pseudotamariciella* Sattler, 1967*Ornativulva antipyraxis* (Meyrick, 1925)*Ornativulva plutelliformis* (Staudinger, 1859)*olbiaella* (Millière, 1861)*siewersiellus* (Christoph, 1867)*sinuatella* (Walsingham, 1904)*Ornativulva sieversi* (Staudinger, 1871)*Ornativulva mixolitha* (Meyrick, 1918)*bipunctella* (Sattler, 1967), subspecies***Atremaea* Staudinger, 1871***Calamotypa* Meyrick, 1926*Atremaea lonchoptera* Staudinger, 1871*exstans* (Meyrick, 1926)

Amblypalpis* Ragonot, 1886 [87]Amblypalpis olivierella* Ragonot, 1887***Parapodia* Joannis, 1912 [88]***Cecidonostola* Amsel, 1958*Parapodia sinaica* (Frauenfeld, 1860)*tamaricicola* Joannis, 1912*tamariciella* (Amsel, 1958)***Isophrictis* Meyrick, 1917 [89]***Isophrictis robinella* (Chrétien, 1907)*microlina* Meyrick, 1935*Isophrictis meridianella* (Herrich-Schäffer, 1854)*Isophrictis constantina* (Baker, 1888)*Isophrictis cerdanica* Nel, 1995*Isophrictis lineatellus* (Zeller, 1850)*albilineella* (Bruand d'Uzelle, 1859)*Isophrictis kefersteiniellus* (Zeller, 1850) [90]*senicula* (Meyrick, 1913)*Isophrictis striatella* ([Denis & Schiffermüller], 1775)*tanacetella* (Schrank, 1802)*substriatella* (Caradja, 1920), subspecies*Isophrictis corsicella* Amsel, 1936*Isophrictis invisella* (Constant, 1885)*Isophrictis anthemidella* (Wocke, 1871) [91]*Isophrictis impugnata* Gozmány, 1957***Pyncostola* Meyrick, 1917***Pyncostola bohemiella* (Nickerl, 1864)*tunesiella* (Chrétien, 1915)*jablonkayi* (Gozmány, 1954)***Metzneria* Zeller, 1839 [92]***Cleodora* Stephens, 1834, homonym*Parasia* Duponchel, 1846*Archimetzneria* Amsel, 1936*Metzneria paucipunctella* (Zeller, 1839)*zimmermanni* Hering, 1940*confusalis* Lucas, 1956*luqueti* Nel, 1995*Metzneria tenuiella* (Mann, 1864)*seminivora* (Walsingham, 1903)*infelix* Walsingham, 1908

- insignificans* Walsingham, 1908
Metzneria neuropterella (Zeller, 1839)
neuropterella (Duponchel, 1843) [93]
gigantella Krulikowsky, 1909, unavailable
Metzneria aestivella (Zeller, 1839) [94]
carlinella (Stainton, 1851)
selaginella (Mann, 1855)
torridella (Mann, 1859)
dichroa Walsingham, 1908, subspecies.
expositoi Vives, 2001, **syn. nov.**
Metzneria lappella (Linnaeus, 1758)
Metzneria castiliella (Möschler, 1866)
eatoni Walsingham, 1899
Metzneria littorella (Douglas, 1850)
quinquepunctella (Herrich-Schäffer, 1854)
Metzneria riadella Englert, 1974
Metzneria diffusella Englert, 1974
Metzneria fulva Labonne, Huemer, Thibault & Nel, 2019 [95]
Metzneria torosulella (Rebel, 1893) [95]
monochroa Walsingham, 1908
ignota Turati, 1922
Metzneria ehikeella Gozmány, 1954 [96]
Metzneria metzneriella (Stainton, 1851) [97]
falcatella (Bruand d'Uzelle, 1859)
Metzneria hilarella Caradja, 1920
Metzneria staebelinella Englert, 1974
Metzneria artificella (Herrich-Schäffer, 1861) [98]
litigiosella (Millière, 1879)
pannonicella Rebel, 1915
Metzneria agraphella (Ragonot, 1895)
incognita Walsingham, 1904
Metzneria aprilella (Herrich-Schäffer, 1854) [99]
igneella (Tengström, 1859)
sanguinolentella Joannis, 1910
Metzneria subflavella Englert, 1974 [100]
Metzneria filia Piskunov, 1979
Metzneria intestinella (Mann, 1864)
Metzneria santolinella (Amsel, 1936)
consimilella Hackman, 1946
Metzneria tristella Rebel, 1901
Metzneria campicolella (Mann, 1857) [101]
varennei Nel, 1997

Apodia* Heinemann, 1870Apodia bifractella* (Duponchel, 1843)*inulella* (Vallot, 1829), homonym*Apodia martinii* Petry, 1911 **sp. rev.** [102]***Pragmatodes* Walsingham, 1908 [103]***Pragmatodes fruticosella* Walsingham, 1908*Pragmatodes melagonella* (Constant, 1895) **comb. nov.** [103, 104]*Pragmatodes albagonella* (Varenne & Nel, 2010) **comb. nov.** [103]*Pragmatodes cyrneogonella* (Nel & Varenne, 2012) **comb. nov.** [103]*Pragmatodes parvulata* (Gozmány, 1953) **comb. nov.** [103]*mediterranea* (Nel & Luquet, 1997)***Argolamprotes* Benander, 1945***Argolamprotes micella* ([Denis & Schiffermüller], 1775)*asterella* (Treitschke, 1833)***Monochroa* Heinemann, 1870 [105]***Paltodora* Meyrick, 1894*Catabrachmia* Rebel, 1909*Monochroa rumicetella* (Hofmann, 1868) [106]*acutanglella* (Heinemann, 1870)*leptotechna* (Meyrick, 1937)*Monochroa rebeli* (Hering, 1927)*Monochroa sepicolella* (Herrich-Schäffer, 1854) [107]*Monochroa rectificiella* (Fuchs, 1902) [107]*Monochroa tenebrella* (Hübner, 1817) [108]*fuscocuprea* (Haworth, 1828)*subcuprella* (Stephens, 1834)*tenebrosella* (Zeller, 1839)*parvella* (Heydenreich, 1851)*fuscocuprella* Doubleday, 1859, emendation*buffonella* (Millière, 1876)*Monochroa scutatella* (Müller-Rutz, 1920)*Monochroa dellabeffai* (Rebel, 1932)*Monochroa servella* (Zeller, 1839) [109]*farinosae* (Stainton, 1867)*Monochroa conspersella* (Herrich-Schäffer, 1854)*questionella* (Herrich-Schäffer, 1854)*morosa* (Mühlig, 1864)*Monochroa tetragonella* (Stainton, 1885)*gudmanni* (Larsen, 1927)*Monochroa elongella* (Heinemann, 1870)

- micrometra* (Meyrick, 1935)
Monochroa inflexella Svensson, 1992
Monochroa sperata Huemer & Karsholt, 2010
Monochroa lutulentella (Zeller, 1839)
brunickii (Rebel, 1913)
Monochroa aenigma Anikin & Piskunov, 2018
Monochroa saltenella (Benander, 1928)
Monochroa palustrellus (Douglas, 1850)
rozsikella (Rebel, 1909)
Monochroa divisella (Douglas, 1850)
csornensis Rebel, 1909
lepidolampra (Gozmány, 1952)
zarichella Piskunov, 1975
Monochroa lucidella (Stephens, 1834) [110]
scordiscella (Rebel, 1904)
unipunctella (Amsel, 1935)
immaculatella Huemer, 1996, subspecies
Monochroa simplicella (Lienig & Zeller, 1846)
impella (Piskunov, 1975)
Monochroa moyses Uffen, 1991
Monochroa arundinetella (Boyd, 1857) [111]
Monochroa suffusella (Douglas, 1850) [111]
oblitella (Doubleday, 1859)
peterseni (Teich, 1901)
Monochroa cytisella (Curtis, 1837)
fuscipennis (Humphreys & Westwood, 1845)
walkeriella (Douglas, 1850)
coenulentella (Herrich-Schäffer, 1854)
clinosema (Meyrick, 1935)
griseocapitella (Bentinck, 1949), unavailable
Monochroa ferrea (Frey, 1870)
latiuscula (Heinemann, 1870)
alfkeni (Amsel, 1938)
servella auct.
Monochroa nomadella (Zeller, 1868) [112]
Monochroa bronzella Karsholt, Nel, Fournier, Varenne & Huemer, 2013
Monochroa hornigi (Staudinger, 1883)
leptocrossa (Meyrick, 1926)
nordmanella Bruun, 1958
Monochroa niphognatha (Gozmány, 1953)

Oxypteryx Rebel, 1911 [113]

- Eulamprotes* Bradley, 1971

Lamprotes Heinemann, 1870, homonym

Argyritis Heinemann, 1870, homonym

Siderea Omelko, 1999

Oxypteryx nigromaculella (Millière, 1872) **comb. nov.** [113, 114]

punctatella (Staudinger, 1879)

morphochroma (Walsingham, 1900)

jactatrix (Meyrick, 1926)

angustipennis (Rebel, 1931)

craterotya (Meyrick, 1939)

donskoffi (Nel & Luquet, 1997)

Oxypteryx wilkella (Linnaeus, 1758) **comb. nov.** [113, 115]

merianella (Linnaeus, 1758)

germarella (Geyer, 1832)

pictella (Zeller, 1839)

tarquiniella (Stainton, 1862)

Oxypteryx ochricapilla (Rebel, 1903) **comb. nov.** [113]

Oxypteryx superbella (Zeller, 1839) **comb. nov.** [113]

Oxypteryx mirusella (Huemer & Karsholt, 2013) **comb. nov.** [113]

Oxypteryx baldizzonei (Karsholt & Huemer, 2013) **comb. nov.** [113, 116]

Oxypteryx occidentella (Huemer & Karsholt, 2011) **comb. nov.** [113]

Oxypteryx libertinella (Zeller, 1872) **comb. nov.** [113, 117]

Oxypteryx gemerensis (Elsner, 2013) **comb. nov.** [113]

Oxypteryx deserta (Piskunov, 1990) **comb. nov.** [113]

Oxypteryx unicolorella (Duponchel, 1843) **comb. nov.** [113]

lucentella (Peyerimhoff, 1870)

Oxypteryx atrella ([Denis & Schiffermüller], 1775)

quadripunctella (Fabricius, 1781)

umbripherella (Herrich-Schäffer, 1854)

aurimaculella (Höfner, 1897)

ornata (Dufrane, 1942), unavailable

Oxypteryx nigritella (Zeller, 1847) **comb. nov.** [113]

Oxypteryx immaculatella (Douglas, 1850)

phaeella (Heckford & Langmaid, 1988)

Oxypteryx plumbella (Heinemann, 1870) **comb. nov.** [113]

Oxypteryx isostacta (Meyrick, 1926) **comb. nov.** [113]

Oxypteryx helotella (Staudinger, 1859) **comb. nov.** [113]

damonella (Millière, 1876)

algeriella (Baker, 1888)

doliodes (Meyrick, 1891)

striatopunctella (Rebel, 1891)

levisella (Chrétien, 1922)

Oxypteryx parahelotella (Nel, 1995) **comb. nov.** [113]

Oxypteryx graecatella (Šumpich & Skyva, 2012) **comb. nov.** [113]

Gelechiinae Stainton, 1954**Gelechiini Stainton, 1954*****Xystophora* Wocke, 1876***Doryphora* Heinemann, 1870, homonym*Doryphorella* Cockerell, 1888*Xystophora carchariella* (Zeller, 1839)*Xystophora pulveratella* (Herrich-Schäffer, 1854)*intaminatella* (Stainton, 1860)*stuedeliella* (Frey, 1880)***Athrips* Billberg, 1820 [118]***Rhynchopacha* Staudinger, 1871*Epithectis* Meyrick, 1895*Leobatus* Walsingham, 1904*Ziminiola* Gerasimov, 1930*Cremona* Busck, 1934*Athrips spiraeae* (Staudinger, 1871)*Athrips pruinosa* (Lienig & Zeller, 1846)*Athrips rancidella* (Herrich-Schäffer, 1854) [119]*triatomaea* (Mühlig, 1864)*vepretella* (Zeller, 1870)*superfetella* (Peyerimhoff, 1877)*cotoneastri* (Busck, 1934)*haifella* Amsel, 1935*cerasivorella* (Kuznetsov, 1960)*Athrips thymifoliella* (Constant, 1893)*Athrips amoenella* (Frey, 1882) [120]*allgunnensis* Svensson, 1993, unavailable*Athrips nigricostella* (Duponchel, 1842)*Athrips tetrapunctella* (Thunberg, 1794)*lathyri* (Stainton, 1865)*lathyrella* (Doubleday, 1866), emendation*Athrips mouffetella* (Linnaeus, 1758)*pedisequella* ([Denis & Schiffermüller], 1775)*punctifera* (Haworth, 1828)*Athrips asarinella* (Chrétien, 1930)*Athrips medjella* (Chrétien, 1900)*Athrips patockai* (Povolný, 1979)*Athrips polymaculella* Park, 1991*Athrips stepposa* Bidzilya, 2005*Athrips aquila* Junnilainen, 2010*Athrips bidzilyai* Junnilainen, 2010*Athrips fagoniae* (Walsingham, 1904)

Neofriseria Sattler, 1960

- Neofriseria peliella* (Treitschke, 1835) [121]
senecionella (Bruand d'Uzelle, 1859)
Neofriseria singula (Staudinger, 1876)
suppeliella (Walsingham, 1896)
amaurella (Rebel, 1927), homonym
ifranella (Lucas, 1956)
hispanicella (Amsel, 1953)
Neofriseria pseudoterrella (Rebel, 1928)
Neofriseria baungaardiella Huemer & Karsholt, 1999
Neofriseria hitadoella Karsholt & Vives, 2014 [122]
Neofriseria kuznetzovae Bidzilya, 2002 [123]
Neofriseria caucasicella Sattler, 1960
Neofriseria mongolinella Piskunov, 1987

Prolita Leraut, 1993

- Lita* Treitschke, 1833, homonym
Prolita sexpunctella (Fabricius, 1794)
virgella (Thunberg, 1794)
longicornis (Curtis, 1827)
longicornella (Doubleday, 1859), emendation
histrionella (Geyer, 1832)
zebrella (Treitschke, 1833)
alpicolo (Frey, 1867)
alternatella (Kearfott, 1908)
melanica (Strand, 1920), unavailable
petulans (Braun, 1925)
Prolita solutella (Zeller, 1839)
fumosella (Douglas, 1852)
cornubiae (Boyd, 1858)
pribitzeri (Rebel, 1889)
nigrobipunctatella (Lucas, 1932)

Sophronia Hübner, 1825 [124]

- Sophronia semicostella* (Hübner, 1813) [125]
marginella (Thunberg, 1794), homonym
Sophronia gelidella Nordman, 1941
Sophronia consanguinella Herrich-Schäffer, 1854 [126]
marginella Toll, 1936
Sophronia illustrella (Hübner, 1796)
Sophronia grandii Hering, 1933 [127]
ascalis Gozmány, 1951, **syn. nov.**
Sophronia chilonella (Treitschke, 1833) [128]

Sophronia finitimella Rebel, 1905
Sophronia acaudella Rebel, 1903
Sophronia curonella Standfuss, 1884
Sophronia humerella ([Denis & Schiffermüller], 1775)
Sophronia sicariellus (Zeller, 1839) [129]
Sophronia santolinæ Staudinger, 1863

***Mirificarma* Gozmány, 1955 [130]**

Helina Guenée, 1849, homonym
Mirificarma rhodoptera (Mann, 1866)
Mirificarma minimella Huemer & Karsholt, 2001
Mirificarma denotata Pitkin, 1984
Mirificarma maculatella (Hübner, 1796)
Mirificarma aflavella (Amsel, 1935)
Mirificarma flavella (Duponchel, 1844)
segetella (Zeller, 1847)
Mirificarma eburnella ([Denis & Schiffermüller], 1775)
formosella (Hübner, 1796), homonym
flammella (Hübner, 1825)
rufeoformosella (Bruand d'Uzelle, 1859)
Mirificarma fasciata Pitkin, 1984
Mirificarma lentiginosella (Zeller, 1839) [131]
Mirificarma pederskouii Huemer & Karsholt, 1999
Mirificarma cytisella (Treitschke, 1833) [132]
roseella (Hauder, 1918), unavailable
leonella Amsel, 1959, subspecies
Mirificarma monticolella (Rebel, 1931) [133]
Mirificarma interrupta (Curtis, 1827)
interruptella (Hübner, 1793), homonym
Mirificarma burdonella (Rebel, 1930) [134]
Mirificarma cabezella (Chrétien, 1925)
Mirificarma ulicinella (Staudinger, 1859) [135]
Mirificarma mulinella (Zeller, 1839)
caminariella (Fuchs, 1902)
nigraesilvae (Amsel, 1950)

***Aroga* Busck, 1914**

Aroga velocella (Zeller, 1839) [136]
affiniella (Zetterstedt, 1839)
tesserella (Zetterstedt, 1839)
brunnea (Schöyen, 1882)
aterrimella (Rebel, 1889)
peperistis (Meyrick, 1926)

rupicolella (Müller-Rutz, 1934)
Aroga flavicomella (Zeller, 1839) [137]
aureodorsella (Bruand d'Uzelle, 1859)
Aroga eatoni Corley & Goodey, 2014
Aroga pascuicola (Staudinger, 1871)
eremella (Chrétien, 1915)
Aroga aristotelis (Millière, 1876)
astragali (Staudinger, 1879)
fulminella (Millière, 1882)
lacertella (Walsingham, 1904)
aplasticella (Rebel, 1913), unavailable
hyrcanella (Toll, 1948)
Aroga corsa Varenne & Nel, 2019
Aroga temporariella Sattler, 1960
Aroga balcanicola Huemer & Karsholt, 1999

***Filatima* Busck, 1939**

Filatima angustipennis Sattler, 1961
albicosta auct.
Filatima pallipalpella (Snellen, 1884)
Filatima spurcella (Duponchel, 1843)
fuscantella (Heinemann, 1870)
Filatima transsilvanella Kovács & Kovács, 2002
Filatima algarbiella Corley, 2014
Filatima tephritidella (Duponchel, 1844)
tephritidella (Herrich-Schäffer, 1854)
Filatima textorella (Chrétien, 1908)
Filatima djakovica Anikin & Piskunov, 1996
Filatima incomptella (Herrich-Schäffer, 1854)
turbidella (Nolcken, 1871)
Filatima ukrainica Piskunov, 1971
Filatima zagulajevi Anikin & Piskunov, 1996

***Chionodes* Hübner, 1825 [138]**

Chionodes lugubrella (Fabricius, 1794)
luctificella (Hübner, 1813)
lunatella (Zetterstedt, 1839)
Chionodes tragicella (Heyden, 1865)
libidinosa (Staudinger, 1871)
Chionodes soella Huemer & Sattler, 1995
Chionodes luctuella (Hübner, 1793) [139]
sauteriella (Zeller, 1868)
Chionodes aprilella Huemer & Sattler, 1995

- Chionodes violacea* (Tengström, 1848)
Chionodes mongolica Piskunov, 1979
 ukrainica Piskunov, 1979
Chionodes holosericella (Herrich-Schäffer, 1854)
 cognatella (Heinemann, 1870)
 norvegiae (Strand, 1903)
 dovrella (Grønlien, 1925)
 meesi (Barca, 1932)
 danieli (Osthelder, 1951)
Chionodes praeclarella (Herrich-Schäffer, 1854)
 pergrandella (Rebel, 1917)
 colorella (Caradja, 1920), unavailable
 decolorella auct.
Chionodes caucasicella Huemer & Sattler, 1995
Chionodes nubilella (Zetterstedt, 1839)
 tarandella (Wocke, 1864)
Chionodes continuella (Zeller, 1839)
 brumella (Clemens, 1864)
 trimaculella (Packard, 1867)
 albomaculella (Chambers, 1875)
Chionodes perpetuella (Herrich-Schäffer, 1854)
Chionodes apolectella (Walsingham, 1900)
Chionodes distinctella (Zeller, 1839)
 striolatella (Heinemann, 1870)
 tristella (Teich, 1889)
 indistinctella (Rebel, 1901)
 latiorella (Amsel, 1939)
 unicolor (Toll, 1948)
 deserticola Piskunov, 1979
Chionodes hayreddini Koçak, 1986
 ochripalpella (Frey, 1880), homonym
Chionodes hinnella (Rebel, 1935)
Chionodes bastuliella (Rebel, 1931)
Chionodes electella (Zeller, 1839)
Chionodes viduella (Fabricius, 1794)
 leucomella (Quenzel, 1802)
 luctiferella (Herrich-Schäffer, 1856)
 labradoriella (Clemens, 1863)
Chionodes nebulosella (Heinemann, 1870)
Chionodes fumatella (Douglas, 1850) [140]
 celerella (Stainton, 1851)
 oppletella (Herrich-Schäffer, 1854)
 reuttiella (Heinemann, 1870)

nigricans (Heinemann, 1870)
syrticola (Staudinger, 1871)
brunnea (Teich, 1901), homonym
carpella Piskunov, 1971

Chionodes ignorantella (Herrich-Schäffer, 1854)
ochrisignella (Nolcken, 1871)

***Gelechia* Hübner, 1825 [141]**

Guenea Bruand d'Uzelle, 1851
Cirrha Chambers, 1872
Oeseis Chambers, 1875
Mesogelechia Omelko, 1986

Gelechia rhombella ([Denis & Schiffermüller], 1775)
rhombea (Haworth, 1828), emendation
axilella (Thunberg, 1794)

Gelechia scotinella Herrich-Schäffer, 1854
conspurcatella Heinemann, 1870
confusella Heinemann, 1870
kiesenwetteri Heuäcker, 1873
lakatensis Rebel, 1904
baueri (Rebel, 1917)

Gelechia senticetella (Staudinger, 1859) [142]
limitanella Rebel, 1904
nigrostriella (Zerny, 1936)

Gelechia obscuripennis (Frey, 1880) [143]
melanotica (Burmman, 1950), unavailable
albicans (Burmman, 1950), unavailable

Gelechia sabinellus (Zeller, 1839)
hoffmanniella (Strand, 1902)
corsella (Rebel, 1930)
kalevalella (Kanerva, 1936)

Gelechia atlanticella (Amsel, 1955)

Gelechia nervosella (Zerny, 1927)
thuriferella (Cleu, 1936)

Gelechia sororculella (Hübner, 1817)

Gelechia jakovlevi Krulikovsky, 1905
nigrovittata Schantz, 1971

Gelechia muscosella Zeller, 1839
griseella Caradja, 1920

Gelechia cuneatella Douglas, 1852

Gelechia aspoecki Huemer, 1992

Gelechia asinella (Hübner, 1796)
aurorella Frey, 1882

- Gelechia hippophaella* (Schrank, 1802)
basalis Stainton, 1854
acupediella Frey, 1870
Gelechia basipunctella Herrich-Schäffer, 1854
basiguttella Heinemann, 1870
albicans Heinemann, 1870
Gelechia nigra (Haworth, 1828)
cautella Zeller, 1839
Gelechia turpella ([Denis & Schiffermüller], 1775)
populella (Hübner, 1796)
nebulea (Haworth, 1828), unavailable
pinguinella (Treitschke, 1832)
kochiella (Herrich-Schäffer, 1854)
Gelechia rhombelliformis Staudinger, 1871
Gelechia sirotina Omelko, 1986
Gelechia sestertiella Herrich-Schäffer, 1854
Gelechia mediterranea Huemer, 1991
Gelechia dujardini Huemer, 1991

***Psoricoptera* Stainton, 1854**

- Psoricoptera speciosella* Teich, 1893
Psoricoptera gibbosella (Zeller, 1839)
triorthias (Meyrick, 1935)
lepigreella (Lucas, 1938)

***Agnippe* Chambers, 1872 [144]**

- Evippe* Chambers, 1873
Phaetusa Chambers, 1875, homonym
Tholerostola Meyrick, 1917
Agnippe echinuloides Bidzilya & Li, 2010
Agnippe lunaki (Rebel, 1941)
penicillata (Amsel, 1961)
Agnippe pseudolella (Christoph, 1888)
cephalella (Caradja, 1920)

***Holcophora* Staudinger, 1871 [145]**

- Aponoaea* Walsingham, 1905
Holcophora statices Staudinger, 1871
Holcophora inderskella (Caradja, 1920) [146]
Holcophora obtusipalpis (Walsingham, 1905)
cinerellus (Turati, 1930)

***Gnorimoschemini* Povolný, 1964**

Gnorimoschema Busck, 1900*Lerupsia* Riedl, 1965*Neoschema* Povolný, 1967*Gnorimoschema soffneri* (Riedl, 1965)*antiquum* Povolný, 1966*Gnorimoschema herbichii* (Nowicki, 1864) [147]*pusillella* (Rebel, 1893)*tengstroemiella* (Joannis, 1910)*pazsiczkyi* (Rebel, 1913)*parentesella* (Toll, 1936)*tengstroemi* (Hackman, 1946)*mongoliae* Povolný, 1973, subspecies*kamchaticum* Povolný, 1977, subspecies*Gnorimoschema bodillum* Karsholt & Nielsen, 1974*Gnorimoschema nupponeni* Huemer & Karsholt, 2010*Gnorimoschema robustella* (Staudinger, 1871)*syrphetopa* (Meryick, 1926)*Gnorimoschema steueri* Povolný, 1975*Gnorimoschema epithymella* (Staudinger, 1859)*brunneomaculella* (Hackman, 1946), subspecies*boernerii* (Amsel, 1952), subspecies*kirgismicum* Povolný, 1994, subspecies*Gnorimoschema nordlandicolella* (Strand, 1902)*cyceonodes* (Meyrick, 1924)*eucausta* (Meyrick, 1929)*fennicella* (Hackman, 1946)*Gnorimoschema nilsi* Huemer, 1996*Gnorimoschema valesiella* (Staudinger, 1877)*diabolicella* (Hering, 1924)*charcoti* (Meyrick, 1934)*hackmani* (Schantz, 1952)*Gnorimoschema strelieciella* (Herrich-Schäffer, 1854)*Gnorimoschema hoefneri* (Rebel, 1909)**Scrobipalopsis Povolný, 1967***Scrobipalopsis petasitis* (Pfaffenzeller, 1867)*petasitella* (Staudinger, 1867)*petasitae* (Heinemann, 1870), emendation**Tecia Povolný, 1973***Tecia solanivora* (Povolný, 1973)**Scrobipalpa Janse, 1951 [148]***Ilseopsis* Povolný, 1965

- Euscrobipalpa* Povolný, 1967
Ergasiola Povolný, 1967
**Scrobipalpa aptatella* (Walker, 1864) [149]
 heliopa (Lower, 1900)
Scrobipalpa kasyi Povolný, 1968
Scrobipalpa notata (Povolný, 2001)
Scrobipalpa acuminatella (Sircom, 1850)
 pulliginella (Sircom, 1850)
 cirsiella (Stainton, 1851)
 porcella (Heinemann, 1870)
 ingloriella (Heinemann, 1870)
 gracilella (Stainton, 1871)
Scrobipalpa skulei Huemer & Karsholt, 2010
Scrobipalpa hungariae (Staudinger, 1871)
Scrobipalpa adaptata (Povolný, 2001)
Scrobipalpa brahmiella (Heyden, 1862)
Scrobipalpa vasconiella (Rössler, 1877)
 drahomirae Povolný, 1966
Scrobipalpa dorsolutea Huemer & Karsholt, 2010
Scrobipalpa amseli Povolný, 1966 [150]
Scrobipalpa hyssopi Nel, 2003 [150]
Scrobipalpa montanella (Chrétien, 1910)
Scrobipalpa corleyi Huemer & Karsholt, 2010
Scrobipalpa chrysanthemella (Hofmann, 1867)
 opificella (Mann, 1878)
Scrobipalpa proclivella (Fuchs, 1886)
 rancidella auct.
Scrobipalpa frugifera Povolný, 1969
 hypothetica Povolný, 1973
Scrobipalpa oleksiyella Huemer & Karsholt, 2010
Scrobipalpa smithi Povolný & Bradley, 1964
Scrobipalpa occulta (Povolný, 2002)
 sibirica Bidzilya, 2009
Scrobipalpa grisea Povolný, 1969
 uralensis Povolný, 1973, unavailable
Scrobipalpa usingeri Povolný, 1969
Scrobipalpa clintoni Povolný, 1968
 linella Piskunov, 1975
 deleta Povolný, 1981
Scrobipalpa reiprichi Povolný, 1984 [151]
Scrobipalpa obsoletella (Fischer v. Röslerstamm, 1841)
 miscitatella (Clarke, 1932)
 bipunctella (Hartig, 1941)
 calaritanella (Amsel, 1952)

- hospes* Povolný, 1964
Scrobipalpa feralella (Zeller, 1872)
 rebeliella (Hauder, 1917)
Scrobipalpa halonella (Herrich-Schäffer, 1854)
Scrobipalpa perinii (Klimesch, 1951)
Scrobipalpa phagnalella (Constant, 1895)
 staeheleinella (Caradja, 1920), unavailable
Scrobipalpa tokari Huemer & Karsholt, 2010
Scrobipalpa karadaghi (Povolný, 2001)
Scrobipalpa heimi Huemer & Karsholt, 2010
Scrobipalpa acuta (Povolný, 2001)
Scrobipalpa soffneri Povolný, 1964
Scrobipalpa jariorum Huemer & Karsholt, 2010
Scrobipalpa murinella (Duponchel, 1843)
 culminicolella (Staudinger, 1871)
 excelsa (Frey, 1880)
Scrobipalpa wiltshirei Povolný, 1966
 obrteliana Povolný, 1971, subspecies
Scrobipalpa caucasica (Povolný, 2001) [152]
 bezengensis (Povolný, 2001)
Scrobipalpa pauperella (Heinemann, 1870) [153]
 klimeschi Povolný, 1967
Scrobipalpa spumata (Povolný, 2001)
Scrobipalpa arenbergeri Povolný, 1973
Scrobipalpa mercantourica Varenne & Nel, 2018 [154]
Scrobipalpa nana Povolný, 1973
 caroxyli (Falkovitsh & Bidzilya, 2006), subspecies
Scrobipalpa heretica Povolný, 1973
 submagnificella Povolný, 1977
Scrobipalpa bigoti Povolný, 1973
 tunesica Povolný, 1979, subspecies
Scrobipalpa dorsoflava (Povolný, 1996)
Scrobipalpa magnificella Povolný, 1967
Scrobipalpa abstrusa Huemer & Karsholt, 2010
Scrobipalpa superstes Povolný, 1977
Scrobipalpa remota Povolný, 1972
Scrobipalpa plesiopicta Povolný, 1969
Scrobipalpa bradleyi Povolný, 1971
 glaserorum Povolný, 1977
 meyricki auct.
Scrobipalpa selectella (Caradja, 1920)
 fraterna Povolný, 1969
Scrobipalpa alterna (Falkovitsh & Bidzilya, 2006) [155]

- Scrobipalpa lutea* Povolný, 1977 [155]
Scrobipalpa griseoflava Bidzilya & Budashkin, 2011
Scrobipalpa niveifacies Povolný, 1977
 milleri Povolný, 1977
Scrobipalpa indignella (Staudinger, 1879)
 pseudobsoletellum (Povolný & Gregor, 1955)
 hyoscyamivora (Gerasimov, 1940)
 grossa Povolný, 1966
Scrobipalpa punctata (Povolný, 1996)
Scrobipalpa lagodes (Meyrick, 1926)
 **Scrobipalpa deluccae* Povolný, 1966
Scrobipalpa atriplicella (Fischer von Röslerstamm, 1841)
 atrella (Thunberg, 1788), homonym
 detersella (Clemens, 1860), homonym
 infumatella (Fuchs, 1901)
 brackenridgiella (Busck, 1903)
 chenopodiella (Busck, 1916)
 arogantella Povolný, 1967
 altajica Povolný, 1969
Scrobipalpa suaedella (Richardson, 1893)
 flavidorsella (Amsel, 1952)
 hartigi Povolný, 1977
Scrobipalpa solitaria Povolný, 1969
 **Scrobipalpa dagmaris* Povolný, 1987
 rezniki Piskunov, 1990
 turkmenica Piskunov, 1990
Scrobipalpa suasella (Constant, 1895)
Scrobipalpa hendrikseni Huemer & Karsholt, 2010
Scrobipalpa halimifolia Bidzilya & Budashkin, 2011
Scrobipalpa traganella (Chrétien, 1915)
Scrobipalpa bazae Povolný, 1977
Scrobipalpa artemisiella (Treitschke, 1833) [156]
 ancillella (Bruand d'Uzelle, 1851)
 paniculatella (Novickij, 1924)
 mongolensis Povolný, 1969
 oreocygniella (Petry, 1904), subspecies
 syriaca Povolný, 1967, subspecies
Scrobipalpa stangei (Hering, 1889) [156]
 saltenella (Meess, 1910)
Scrobipalpa suaedivorella (Chrétien, 1915)
 detersipunctella (Toll, 1947)
Scrobipalpa bryophiloides Povolný, 1966 [157]
Scrobipalpa algeriensis Povolný & Bradley, 1964

- Scrobipalpa deutschi* Huemer & Karsholt, 2010
Scrobipalpa disjectella (Staudinger, 1859)
Scrobipalpa fontanensis Varenne & Nel, 2017
Scrobipalpa mixta Huemer & Karsholt, 2010
Scrobipalpa achtubica Anikin & Piskunov, 2018
Scrobipalpa rebeli (Priessecker, 1914)
 fuscella (Klimesch, 1938)
 japonica Povolný, 1977
Scrobipalpa gallicella (Constant, 1885)
Scrobipalpa ustulatella (Staudinger, 1871)
Scrobipalpa postulatella Huemer & Karsholt, 2010
Scrobipalpa filia Povolný, 1969
Scrobipalpa nitentella (Fuchs, 1902)
 seminella (Pierce & Metcalfe, 1935)
Scrobipalpa costella (Humphreys & Westwood, 1845)
 costimaculella (Bruand d'Uzelle, 1859)
Scrobipalpa hyoscyamella (Stainton, 1869)
Scrobipalpa portosanctana (Stainton, 1859)
 eremaula (Meyrick, 1891)
 lyciella (Walsingham, 1900)
 desertella (Rebel, 1901)
 bertramella (Lucas, 1940)
 leroyella (Lucas 1950)
 reisseri (Povolný & Gregor, 1955)
 philolycii (Hering, 1957)
 gallincolella auct.
Scrobipalpa vicaria (Meyrick, 1921)
 tineiformis Povolný, 1967
Scrobipalpa ocellatella (Boyd, 1858) [158]
 ocellatella (Stainton, 1859), homonym
 submissella (Stainton, 1859)
 horticolella (Rössler, 1866)
 clarella (Caradja, 1920)
 obscurior (Rebel, 1927)
 orientale (Gregor & Povolný, 1954)
 portosanctana auct.
Scrobipalpa pulchra Povolný, 1967
Scrobipalpa gecko (Walsingham, 1911)
Scrobipalpa hannemanni Povolný, 1966
 furva Povolný, 1969, subspecies
 gamanthi (Falkovitsh & Bidzilya, 2006), subspecies
Scrobipalpa erichi Povolný, 1964
Scrobipalpa divisella (Rebel, 1936)

- Scrobipalpa voltinella* (Chrétien, 1898)
Scrobipalpa corsicamontes Varenne & Nel, 2013
Scrobipalpa suaedicola (Mabille, 1906)
suaedicola (Amsel, 1939), homonym
mabillei Povolný, 1971
Scrobipalpa monochromella (Constant, 1895)
Scrobipalpa samadensis (Pfaffenzeller, 1870)
plantaginella (Stainton, 1883)
brunhildae (Schawerda, 1921)
zimmermanni (Zimmermann, 1923), unavailable
mariae (Zimmermann, 1926)
testacella (Rebel, 1935)
echo (Meyrick, 1937)
Scrobipalpa salinella (Zeller, 1847) [159]
omachella auct.
zernyella (Rebel, 1918)
corsicanum (Gregor & Povolný, 1954)
ignotum (Gregor & Povolný, 1954)
trebujenae Povolný, 1977
Scrobipalpa spergulariella (Chrétien, 1910) [159]
Scrobipalpa salicorniae (Hering, 1889) [159]
caliacrae (Caradja, 1932)
Scrobipalpa halimioniella Huemer & Karsholt, 2010
Scrobipalpa thymelaeae (Amsel, 1939)
Scrobipalpa halymella (Millière, 1864) [160]
Scrobipalpa camphorosmella Nel, 1999
Scrobipalpa stabilis Povolný, 1977 [160]
Scrobipalpa instabilella (Douglas, 1846)
lagunella (Chrétien, 1910)
strobilacella (Caradja, 1920), unavailable
salsolella (Amsel, 1935)
halymiphaga (Amsel, 1952)
Scrobipalpa peterseni (Povolný, 1965)
Scrobipalpa ergasima (Meyrick, 1916)
hyoscyamella (Rebel, 1912), homonym
mignatella (Caradja, 1920), unavailable
intestinalis (Meyrick, 1921)
mirabile (Gregor & Povolný, 1955)
pervada (Clarke, 1962)

***Turcopalpa* Povolný, 1973**

Turcopalpa glaseri Povolný, 1973

Scrobipalpula* Povolný, 1964 [161]Scrobipalpula psilella* (Herrich-Schäffer, 1854)*nocturnella* (Staudinger, 1859)*pallidella* (Heinemann, 1870)*killiasii* (Frey, 1880)*astericolellum* (Hering, 1957), unavailable*asiatica* Povolný, 1968, subspecies*Scrobipalpula ramosella* (Müller-Rutz, 1934)*Scrobipalpula seniorum* Povolný, 2000*ptarmicae* (Hering, 1957), unavailable*compositella* (Povolný, 1964), unavailable*Scrobipalpula diffluella* (Frey, 1870)*cacuminum* (Frey, 1870)*diffluella* (Heinemann, 1870)*bellidistri* (Klimesch, 1951)*uniflorellum* (Hering, 1957), unavailable*Scrobipalpula tussilaginis* (Stainton, 1867)*tussilaginnella* (Heinemann, 1870)*retusella* (Rebel, 1891)***Phthorimaea* Meyrick, 1902***Phthorimaea operculella* (Zeller, 1873)*terrella* (Walker, 1864)*solanella* (Boisduval, 1874)*tabacella* (Ragonot, 1879)*sedata* (Butler, 1880)*argentinae* Povolný, 1989*piscipellis* auct.*epicentra* auct.***Tuta* Kieffer & Jørgensen, 1910***Tuta absoluta* (Meyrick, 1917)***Keiferia* Busck, 1939 [162]***Keiferia lycopersicella* (Walsingham, 1897)***Ephysteris* Meyrick, 1908***Microcraspedus* Janse, 1958*Opacopsis* Povolný, 1964*Echinoglossa* Clarke, 1965*Ephysteris promptella* (Staudinger, 1859) [163]*despectella* (Walker, 1863)*petiginella* (Mann, 1867)

- parvula* (Staudinger, 1879)
cacomicra (Walsingham, 1908)
chersaea Meyrick, 1908
oschophora (Meyrick, 1910)
crystallista (Meyrick, 1911)
dispensata (Meyrick, 1921)
fanatica (Meyrick, 1921)
xanthorhabda (Gozmány, 1951)
australiae Povolný, 1977
Ephysteris tenuisaccus Nupponen, 2010
Ephysteris deserticolella (Staudinger, 1871)
albocapitella (Rebel, 1928)
buvati (Povolný, 1992)
Ephysteris insulella (Heinemann, 1870)
insularis (Staudinger, 1871)
praticolella (Christoph, 1872), subspecies
gallica (Povolný, 1992)
Ephysteris brachyptera Karsholt & Sattler, 1998
Ephysteris diminutella (Zeller, 1847) [164]
lunaki (Hartig, 1941)
treskensis Povolný, 1964
hispanica Povolný, 1981
foulonsensis Povolný, 1981
Ephysteris inustella (Zeller, 1839) [165]
delminiella (Rebel, 1904)
gredosensis (Rebel, 1935), subspecies
Ephysteris olympica Povolný, 1968
monticola Povolný, 1981
Ephysteris iberica Povolný, 1977

***Ochrodia* Povolný, 1966 [166]**

- Ochrodia subdiminutella* (Stainton, 1867)
jamaicensis (Walsingham, 1897)
bucolica (Meyrick, 1904)
zygophyllella (Rebel, 1912)
ericnista (Meyrick, 1914)
ferritincta (Turner, 1919), subspecies
ochrodeta (Meyrick, 1923)
extorris (Meyrick, 1923)
crocoleuca (Meyrick, 1923)
unitella (Turati, 1930)
tribulivora (Dumont, 1931)
pulverea (Janse, 1950)

turgida (Janse, 1951)
pentamacula (Janse, 1958)
infallax (Gozmány, 1960)
tractatum (Gozmány, 1960)

***Vladimirea* Povolný, 1967**

Distinxia Povolný, 1967
Vladimirea glebicolorella (Erschoff, 1874)
submaculata Povolný, 1967

***Microlechia* Turati, 1924**

Hedma Dumont, 1932
Megalocypha Janse, 1960
Microlechia rhamnifoliae (Amsel & Hering, 1931)
rhamnifoliae (Amsel, 1935)
Microlechia chretieni Turati, 1924
microcasis (Meyrick, 1929)
micradelpha (Walsingham, 1900), homonym
hyoscyamella (Amsel & Hering, 1931), homonym
abzacella (Dumont, 1932)
hyoscyami (Amsel, 1935)
polioptera (Janse, 1960)
aellographa (Janse, 1960)
Microlechia klimeschi (Povolný, 1972)
Microlechia karsholti (Nupponen, 2010)

***Cosmardia* Povolný, 1965**

Cosmardia moritzella (Treitschke, 1835)
morizella (Geyer, 1836)
roseella (Zetterstedt, 1839)

***Lutilabria* Povolný, 1965 [167]**

Lutilabria lutilabrella (Mann, 1857)
robustella (Rebel, 1910)
olympica Huemer, 1993, subspecies
Lutilabria volgensis Anikin & Piskunov, 1996
Lutilabria prolata Junnilainen & Nupponen, 2010

***Klimeschiopsis* Povolný, 1967**

Klimeschiopsis kiningerella (Duponchel, 1843) [168]
atralbella (Palm, 1947)
Klimeschiopsis discontinuella (Rebel, 1899)
Klimeschiopsis maritimaealpina Nel & Varenne, 2011

Klimeschiopsis terroris (Hartig, 1938)

***Caryocolum* Gregor & Povolný, 1954 [169]**

Caryocolum fischerella (Treitschke, 1833)

Caryocolum tischeriella (Zeller, 1839) [170]

Caryocolum alsinella (Zeller, 1868) [171]

albifrontella (Heinemann, 1870)

tristella (Heinemann, 1870)

semidecandriella (Tutt, 1887)

semidecandrella (Threlfall & Stainton, 1887)

Caryocolum viscariella (Stainton, 1855)

crepusculella (Teich, 1889)

Caryocolum albifaciella (Heinemann, 1870)

behenella (Constant, 1890)

Caryocolum vicinella (Douglas, 1851) [172]

inflatella (Chrétien, 1901)

albescens (Bankes, 1909), unavailable

suffusa (Bankes, 1909), unavailable

Caryocolum bosalella (Rebel, 1936)

Caryocolum sciurella (Walsingham, 1908)

rubidella (Chrétien, 1908)

Caryocolum amaurella (Hering, 1924) [173]

viscariae (Schütze, 1926)

Caryocolum crypticum Huemer, Karsholt & Mutanen, 2014

Caryocolum tredosella Nel & Requena, 2017

Caryocolum oculatella (Thomann, 1930)

ochraceella (Thomann, 1929), homonym

Caryocolum leucofasciatum Huemer, 1989

Caryocolum petryi (Hofmann, 1899)

rougemonti (Rebel, 1907)

repentella (Chrétien, 1908)

benanderi (Hering, 1933)

Caryocolum baischi Huemer & Karsholt, 2010

Caryocolum repentis Huemer & Luquet, 1992

repentella auct.

Caryocolum siculum Bella, 2008

Caryocolum inflativorella (Klimesch, 1938)

xuthella (Rebel, 1941)

census (Gozmány, 1954)

Caryocolum saginella (Zeller, 1868) [174]

coussonella (Chrétien, 1908)

Caryocolum cauligenella (Schmid, 1863) [175]

Caryocolum trauniella (Zeller, 1868)

- Caryocolum peregrinella* (Herrich-Schäffer, 1854) [176]
melantypella (Mann, 1877)
Caryocolum delphinatella (Constant, 1890)
fiorii (Klimesch, 1953)
Caryocolum provinciella (Stainton, 1869)
Caryocolum mucronatella (Chrétien, 1900)
poschiavensis (Rebel, 1936)
Caryocolum leucomelanella (Zeller, 1839) [177]
gypsophilae (Stainton, 1869)
Caryocolum mazeli Huemer & Nel, 2005
Caryocolum leucothoracellum (Klimesch, 1953)
Caryocolum schleichi (Christoph, 1872) [178]
syriacum Povolný, 1977
dianthella (Chrétien, 1925), subspecies
hackeri Derra, 1985
improvisella (Rebel, 1936), subspecies
Caryocolum arenariella (Benander, 1937) [178]
Caryocolum marmorea (Haworth, 1828) [179]
manniella (Zeller, 1839)
marmorella (Doubleday, 1859), emendation
pulchra (Wollaston, 1858), subspecies
mediocorsa Varenne & Nel, 2013, subspecies
marmoreum auct.
Caryocolum pullatella (Tengström, 1848) [180]
pulla (Tengström, 1848)
subtractella (Walker, 1864)
livoniella (Teich, 1898)
agricolaris (Meyrick, 1933)
Caryocolum stramentella (Rebel, 1935)
emarginatum Huemer, 1988
Caryocolum hispanicum Huemer, 1988
Caryocolum confluens Huemer, 1988
Caryocolum srnkai Huemer & Karsholt, 2011
Caryocolum gallagenellum Huemer, 1989
Caryocolum fraternella (Douglas, 1851)
intermediella (Hodgkinson, 1897)
Caryocolum klosi (Rebel, 1917) [181]
Caryocolum interalbicella (Herrich-Schäffer, 1854)
quadrella (Fabricius, 1794), homonym
Caryocolum laceratella (Zeller, 1868)
thurneri (Pinker, 1953)
Caryocolum dauphini Grange & Nel, 2012
Caryocolum blandella (Douglas, 1852) **nom. protectum** [182]
signatella (Eversmann, 1844) **nom. oblitum**

- maculea* (Haworth, 1828), (*nec* Fabricius, 1794), emendation, misident.
Caryocolum blandelloides Karsholt, 1981
Caryocolum horoscopa (Meyrick, 1926) **stat. rev.** [183]
Caryocolum jaspidella (Chrétien, 1908)
Caryocolum proxima (Haworth, 1828)
 maculiferella (Douglas, 1851)
 maculivicinella (Bruand d'Uzelle, 1859)
 horticolla (Peyerimhoff, 1871)
 proximum auct.
Caryocolum blandulella (Tutt, 1887)
Caryocolum arenbergeri Huemer, 1989
Caryocolum tricolorella (Haworth, 1812)
 contigua (Haworth, 1828)
 acernella (Herrich-Schäffer, 1854)
Caryocolum fibigerium Huemer, 1988 [184]
Caryocolum junctella (Douglas, 1851) [185]
 aganocarpa (Meyrick, 1935)
Caryocolum cassella (Walker, 1864)
 melanotephrella (Erschoff, 1877)
 albifasciella (Toll, 1936)
 subvicinella (Hackman, 1946)
 falellum Piskunov, 1975
Caryocolum moehringiae (Klimesch, 1954)
Caryocolum petrophila (Preissecker, 1914)
 kemnerella (Palm, 1947)
Caryocolum huebneri (Haworth, 1828)
 hubnerella (Doubleday, 1866)
 knaggsiella (Stainton, 1866)
Caryocolum kroesmanniella (Herrich-Schäffer, 1854)
 huebneri auct.

***Tila* Povolný, 1965**

- Tila capsophilella* (Chrétien, 1900)

***Pogochaetia* Staudinger, 1879**

- Pogonochaetia* Rye, 1881
Chaetopogon Rye, 1881
Pogochaetia solitaria Staudinger, 1879
 ocymoidella (Walsingham, 1900), subspecies
 cabreretsi Povolný, 1981

***Agonochaetia* Povolný, 1967**

- Sautereopsis* Povolný, 1965
Agonochaetia terrestrella (Zeller, 1872) [186]

muestairella (Müller-Rutz, 1922)

Agonochaetia intermedia Sattler, 1968

Agonochaetia quartana Povolný, 1990

***Canarischema* Karsholt, 2017**

Canarischema fuerteventura Karsholt, 2017

***Sattleria* Povolný, 1965 [187]**

Sattleria melaleucella (Constant, 1865) [188]

mariae (Frey, 1867), unavailable

fusca (Burmman, 1954)

Sattleria arcuata Pitkin & Sattler, 1991

Sattleria pyrenaica (Petry, 1904) [189]

Sattleria taurandi Nel & Varenne, 2019

Sattleria karsholti Huemer & Hebert, 2011

Sattleria cottiella Huemer & Hebert, 2011

Sattleria marguareisi Huemer & Sattler, 1992

Sattleria izoardi Huemer & Sattler, 1992

Sattleria graiaaeella Huemer & Hebert, 2011

Sattleria dolomitica Huemer, 2014

Sattleria basistrigella Huemer, 1997

Sattleria triglavica Povolný, 1987

Sattleria basistrigella Huemer, 1997

basistrigella (Müller-Rutz, 1934), unavailable

Sattleria dinarica Huemer, 2014

Sattleria haemusi Huemer, 2014

Sattleria dzieduszyckii (Nowicki, 1864)

tatrica (Gregor & Povolný, 1955)

Sattleria angustispina Pitkin & Sattler, 1991

Sattleria breviramus Pitkin & Sattler, 1991

Sattleria sophiae Timossi, 2014

Sattleria styriaca Pitkin & Sattler, 1991

***Litini Bruand d’Uzelle* 1859 [190]**

Teleiodini Piskunov, 1973

Exoteleiiini Omelko, 1999

***Schneidereria* Weber, 1957**

Schneidereria pistaciella Weber, 1957 [191]

***Teleiodes* Sattler, 1960**

Dubitationis Omelko & Omelko, 1998

Teleia Heinemann, 1870, homonym

Teleiodes vulgella ([Denis & Schiffermüller], 1775) [191]

- aspera* (Haworth, 1828)
Teleiodes italica Huemer, 1992 [192]
gallica Huemer, 1992
Teleiodes brevisalva Huemer, 1992 [192]
Teleiodes wague (Nowicki, 1860)
marsata Piskunov, 1973
Teleiodes saltuum (Zeller, 1878) [193]
nigristrigella (Wocke, 1898)
Teleiodes kaitilai Junnilainen, 2010 [193]
Teleiodes luculella (Hübner, 1813) [194]
subrosea (Haworth, 1828)
Teleiodes flavimaculella (Herrich-Schäffer, 1854) [195]
rufipunctella (Steudel, 1882)
dealbella (Klemensiewicz, 1902), unavailable
herrichi (Dufrane, 1955), unavailable
Teleiodes albidorsella Huemer & Karsholt, 1999
Teleiodes albiluculella Huemer & Karsholt, 2001

***Neotelphusa* Janse, 1958**

- Neotelphusa sequax* (Haworth, 1828)
apicistrigella (Duponchel, 1843)
sequaxella (Bruand d'Uzelle, 1859)
sequacella (Doubleday, 1859), emendation
Neotelphusa huemeri (Nel, 1998)
pseudocisti Leraut, 1997, unavailable
Neotelphusa traugotti (Huemer & Karsholt, 2001)
Neotelphusa cisti (Stainton, 1869)

***Carpatolechia* Căpușe, 1964**

- Vicina* Omelko, 1999
Carpatolechia decorella (Haworth, 1812)
humeralis (Zeller, 1839)
lylrella (Humphreys & Westwood, 1845)
incretella (Duponchel, 1845)
humeraella (Bruand d'Uzelle, 1851), emendation
marmoripennella (Bruand d'Uzelle, 1851)
pisticella (Nowicki, 1860)
scabra (Staudinger, 1870)
erschoffi (Frey, 1880)
subericolella (Caradja, 1920), unavailable
buckwelli (Lucas, 1956)
dumitrescui Căpușe, 1964
Carpatolechia aenigma (Sattler, 1983)
Carpatolechia fugitivella (Zeller, 1839)

- vovkella* (Piskunov, 1973)
melanella (Romaniszyn, 1933), unavailable
Carpatolechia fugacella (Zeller, 1839)
nigrofasciella (Bruand d'Uzelle, 1851)
Carpatolechia minor (Kasy, 1978)
Carpatolechia filipjevi (Lvovsky & Piskunov, 1993)
Carpatolechia alburnella (Zeller, 1839)
seniculella (Eversmann, 1844)
radiella (Krulikowsky, 1909), unavailable
Carpatolechia notatella (Hübner, 1813)
euratella (Herrich-Schäffer, 1854)
oskella (Piskunov, 1973)
Carpatolechia proximella (Hübner, 1796)
peritella (Constant, 1885)
ochraceella (Romaniszyn, 1933), unavailable
Carpatolechia intermediella Huemer & Karsholt, 1999
Carpatolechia epomidella (Tengström, 1869)

***Pseudotelphusa* Janse, 1958**

- Sattleria* Căpușe, 1968, homonym
Klaussattleria Căpușe, 1968
Pseudotelphusa scalella (Scopoli, 1763) [196]
aleella (Fabricius, 1794)
bicolorella (Treitschke, 1832)
Pseudotelphusa istrella (Mann, 1866)
decuriella (Mann, 1872)
trifasciella (Rebel, 1916)
Pseudotelphusa occidentella Huemer & Karsholt, 1999
Pseudotelphusa paripunctella (Thunberg, 1794)
tigratella (Costa, 1834)
triparella (Zeller, 1839)
trijugella (Erschoff, 1877)
sultanella (Caradja, 1920)
griseella (Preissecker, 1931), unavailable
myricae (Gilles, 1936), unavailable
pseudowagae (Svensson, 1993), unavailable
Pseudotelphusa tessella (Linnaeus, 1758)
albinigrella ([Denis & Schiffermüller], 1775)
sturmella (Hübner, 1825)
berberidella (Hübner, 1825)
funestella (Geyer, 1832)
alboquadrella (Bruand d'Uzelle, 1859)

***Istrianis* Meyrick, 1918**

- Pseudoteleia* Amsel, 1935
Istrianis myricariella (Frey, 1870)
Istrianis arenicolella (Caradja, 1920)
amilcarella (Lucas, 1933)
Istrianis pseudomyricariella Bidzilya & Karsholt, 2015
Istrianis nilsoni Bidzilya & Karsholt, 2015
Istrianis brucinella (Mann, 1872)
Istrianis femoralis (Staudinger, 1876)
comendonella (Staudinger, 1879)
gravosensis (Rebel, 1937)
angustipennis (Rebel, 1941)
funebrella (Rebel, 1941)
squamodorella auct.
Istrianis piskunovi Bidzilya & Karsholt, 2015

***Streyella* Janse, 1958**

- Streyella canariensis* (Walsingham, 1908)
Streyella anguinella (Herrich-Schäffer, 1861)
ostentella (Zerny, 1934)

***Teleiopsis* Sattler, 1960**

- Teleiopsis terebinthinella* (Herrich-Schäffer, 1856)
Teleiopsis latisacculus Pitkin, 1988
Teleiopsis diffinis (Haworth, 1828) [197]
dissimilella (Treitschke, 1833)
scabidella (Zeller, 1839)
friesella (Zetterstedt, 1839)
diffinella (Doubleday, 1859), emendation
groenliensis (Strand, 1920), unavailable
Teleiopsis lunariella (Walsingham, 1908)
Teleiopsis bagriotella (Duponchel, 1840) [197]
elatella (Herrich-Schäffer, 1854)
Teleiopsis laetitiae Schmid, 2011 [197]
Teleiopsis lindae Schmid, 2011
Teleiopsis albifemorella (Hofmann, 1867) [197]
Teleiopsis paulheberti Huemer & Mutanen, 2012 [197]
Teleiopsis rosalbella (Fologne, 1862) [197]

***Xenolechia* Meyrick, 1895 [198]**

- Xenolechia aethiops* (Humphreys & Westwood, 1845)
aterrima (Edleston, 1844)

aethiopella (Doubleday, 1859), emendation

squamulella (Peyerimhoff, 1871)

tristis (Staudinger, 1879)

Xenolechia lindae Huemer & Karsholt, 1999

Xenolechia pseudovulgella Huemer & Karsholt, 1999

Altenia Sattler, 1960

Altenia perspersella (Wocke, 1862)

empetrella (Karvonen, 1932)

Altenia scriptella (Hübner, 1796) [199]

Altenia elsneriella Huemer & Karsholt, 1999

Altenia mersinella (Staudinger, 1879)

melanostictella (Ragonot, 1895)

sagittella (Caradja, 1920)

praedicta (Meyrick, 1923)

tribolopsis (Meyrick, 1927)

Altenia wagneriella (Rebel, 1926)

danilevskyi (Piskunov, 1973)

Altenia modesta (Danilevsky, 1955)

Recurvaria Haworth, 1828

Lita Kollar, 1832

Telea Stephens, 1834, homonym

Aphanaula Meyrick, 1895

Hinnebergia Spuler, 1910

Recurvaria nanella ([Denis & Schiffermüller], 1775)

pumilella ([Denis & Schiffermüller], 1775)

nana Haworth, 1828, emendation

crataegella Busck, 1903

unicolor Rebel, 1927

pruniella auct.

Recurvaria leucatella (Clerck, 1759)

leucatea Haworth, 1828, emendation

albocingulella (Duponchel, 1839)

Recurvaria thomeriella (Chrétien, 1901)

Recurvaria costimaculella Huemer & Karsholt, 2001

Coleotechnites Chambers, 1880

Evagora Clemens, 1860, homonym

Eidothea Chambers, 1873 (emendation and homonym)

Eucordylea Dietz, 1900

Pulicalvaria Freeman, 1963

Coleotechnites piceaella (Kearfott, 1903)

nigra (Kearfott, 1903), homonym

obscura (Kearfott, 1907)

***Exoteleia* Wallengren, 1881**

Paralechia Busck, 1903

Heringia Spuler, 1910, homonym

Heringiola Strand, 1917

Exoteleia dodecella (Linnaeus, 1758) [200]

duodecimcristata (Retzius, 1783), unavailable

punctulata (Fourcroy, 1785)

dodecea (Haworth, 1828), emendation

annulicornis (Stephens, 1834)

favillaticella (Zeller, 1839)

reussiella (Ratzeburg, 1840)

Exoteleia succinctella (Zeller, 1872)

oribatella (Rebel, 1918)

***Stenolechia* Meyrick, 1894**

Poecilia Heinemann, 1870, homonym

Gibbosa Omelko, 1988

Stenolechia gemmella (Linnaeus, 1758)

nivella (Fabricius, 1794)

nivea (Haworth, 1828), emendation

lepidella (Zeller, 1839)

nigrovittella (Duponchel, 1839)

***Parastenolechia* Kanazawa, 1985**

Origo Omelko, 1988

Tutor Omelko, 1988

Laris Omelko, 1988

Parastenolechia nigrinotella (Zeller, 1847)

nigralbella (Herrich-Schäffer, 1854), unavailable

***Stenolechiodes* Elsner, 1996**

Stenolechiodes pseudogemmellus Elsner, 1996

Stenolechiodes macrolepiellus Huemer & Karsholt, 1999

***Parachronistis* Meyrick, 1925**

Cochlevalva Omelko, 1986

Dentivalva Omelko, 1986

Parachronistis albiceps (Zeller, 1839) [201]

albicipitella (Herrich-Schäffer, 1854), emendation

albicapitella (Doubleday, 1859), emendation

***Schistophila* Chrétien, 1899**

Schistophila laurocistella Chrétien, 1899
striatana (Lucas, 1937)

Unplaced genus

“*Telphusa*” *cistiflorella* (Constant, 1890) [202]

Comments on the checklist

Approximately 200 comments on systematic problems, taxonomic changes and particularly potential cryptic diversity, are mainly derived from molecular data and are cross-referenced in the checklist: [1] – [202].

- [1] Anacampsidae Bruand d’Uzelle, 1851 has priority over Gelechiidae Stainton 1854. The former name has hardly been used (Sattler 1973) and the use of the older synonym would threaten stability. Following Art. 23.9.3 (ICZN) the case should therefore be referred to the Commission for a ruling under the plenary power. The year of description of Anacampsidae is according to Viette (1977).
- [2] *Stomopteryx*. This genus is in need of a taxonomic revision and includes several probable cases of cryptic diversity, and equally probably cases of over-splitting.
- [3] *Stomopteryx nugatricella* / *S. mongolica* / *S. lineolella*. The taxonomy of these species is unresolved and should be checked in upcoming revisionary work. Junnilainen et al. (2010) separated *S. mongolica* and *S. lineolella* on morphological differences they observed in male genitalia but at the same time stated that European specimens of *S. mongolica* differ from typical Mongolian vouchers (Note: They did not compare *S. mongolica* from southern Russia with the externally similar *S. nugatricella* from Spain). DNA barcodes do not support species status of all these taxa which cluster with very low divergences in the same BIN. We therefore believe that taxonomic over-splitting cannot be excluded and would be a reasonable explanation for the current species concept, although barcode sharing between some taxa cannot be excluded.
- [4] *Stomopteryx deverrae*. We have barcoded only North African specimens so far, including a syntype from Algeria, and the material from Spain should be sequenced in future to prove the occurrence in Europe.
- [5] *Stomopteryx flavoclavella*. European samples from Spain slightly differ from a sequenced syntype from Morocco and cluster in a separate BIN. The suspected conspecificity will be addressed in an upcoming revision.
- [6] *Stomopteryx remissella*. This species represents an unresolved species complex. DNA barcodes show an extraordinarily high and largely geographic variation, reflected by eight different BINs and differences in phenotype. The recently described *Stomopteryx spathulella* (Nel et al. 2019) probably belongs to one of

- the BINs summarized for *S. remissella*. However, the whole complex requires thorough revisionary work and a re-evaluation of available names.
- [7] *Stomopteryx flavipalpella*. A genetically variable species which clusters into three BINs without obvious geographic variation.
- [8] *Aproaerema*. Recently Aarvik et al. (2017) synonymized the widely accepted and diverse genus *Syncopacma* with *Aproaerema*, resulting in numerous nomenclatural changes. We here propose the following new or revised combinations: *Aproaerema incognitana* (Gozmány, 1957) comb. nov., *Aproaerema cinctelloides* (Nel & Varenne, 2012) comb. nov., *Aproaerema wormiella* (Wolff, 1958) comb. nov., *Aproaerema azosterella* (Herrich-Schäffer, 1854) comb. nov., *Aproaerema montanata* (Gozmány, 1957) comb. nov., *Aproaerema cincticullella* (Bruand, 1851) comb. nov., *Aproaerema buvati* (Nel, 1995) comb. nov., *Aproaerema linella* (Chrétien, 1904) comb. nov., *Aproaerema captivella* (Herrich-Schäffer, 1854) comb. nov., *Aproaerema semicostella* (Staudinger, 1871) comb. nov., *Aproaerema steppicola* (Junnilainen, 2010) comb. nov., *Aproaerema cottiella* (Nel, 2012) comb. nov., *Aproaerema genistae* (Walsingham, 1908) comb. rev., *Aproaerema thaumalea* (Walsingham, 1905) comb. rev. The genus *Aproaerema* includes several yet unresolved DNA barcode clusters which may partly reflect cryptic diversity and therefore requires revisionary work.
- [9] *Aproaerema cinctella*. This species clusters into two weakly separated DNA barcode clusters with max. distance of 1.86%, probably reflecting intraspecific variation.
- [10] *Aproaerema linella*. A unicolorous, dissected male from Montenegro largely corresponds with the lectotype figured by Nel et al. (1996) in the male genitalia. However, the original description of *A. linella* as well as bred samples from the type area characterize *S. linella* as a species with a distinct yellow-orange subterminal fascia or costal and tornal spots and a further yellow spot in the middle of the forewing. A female from northern Italy clustering in a separate BIN matches these phenotypical characters better and also largely agrees in the genitalia. However, in the absence of molecular data from the type-locality, identification of both specimens remains uncertain and we only tentatively assign the name *A. linella* to the former specimen and leave the latter as an unidentified cluster.
- [11] *Aproaerema succicella*. Two strongly divergent BINs (4.33% min. distance) show a geographic pattern and need to be tested for potential cryptic diversity.
- [12] *Aproaerema karvoneni*. Three weakly separated BINs (1.61% min. distance) partially show geographic (probably intraspecific) variation.
- [13] *Aproaerema anthyllidella*. The moderate DNA barcode variation with three BINs may reflect cryptic diversity, as e.g., suspected for the current synonym *A. natrixella* (Schmid pers. comm.) and some of the other five current synonyms, but has to be carefully checked with an integrative taxonomic approach.
- [14] *Iwaruna*. Species in this genus share their BINs and partially overlap in DNA barcodes (*I. biguttella* and *I. klimeschi*) but differ in morphology. DNA barcodes of *I. heringi*, a species requiring taxonomic re-assessment, are unknown.

- [15] *Anacampsis populella* / *A. blattariella*. A population from western Austria (Vorarlberg) shares its BIN with a unique specimen of *A. populella* from Finland though matching *A. blattariella* in morphology. This is most likely a case of a so far unrecognized introgression in these two species, though the weakly deviating DNA barcode may require further studies. All other sequenced specimens of both species group in separate BINs.
- [16] *Anacampsis scintillella*. Two specimens from Spain cluster in a separate BIN.
- [17] *Anacampsis obscurella*. Our limited data indicates geographically separated species with three BINs but requires additional revisionary work.
- [18] *Mesophleps*. The genus was recently revised by Li and Sattler (2012). Two strongly deviating DNA barcode clusters (and BINs) from Spain and Greece probably represent undescribed species.
- [19] *Nothris*. The sequence of species follows the revision by Karsholt and Šumpich (2015).
- [20] *Nothris gregersenii*. A specimen from Sweden clusters into a unique BIN (3.83% min. distance, but probably representing only an intraspecific split).
- [21] *Nothris radiata*. The yet unpublished occurrence in Europe is based on a DNA barcoded specimen from Macedonia (Šumpich in prep.).
- [22] *Neofaculta ericetella*. This species shows high intraspecific DNA barcode variation and clusters into three BINs without geographic variation.
- [23] *Neofaculta taigana*. The occurrence of this Asian species in Europe will be dealt with separately by Aarvik, Berggren, Karsholt and Mutanen.
- [24] *Hypatima rhomboidella*. Genetically variable species clustering into three BINs without geographic variation.
- [25] *Anarsia*. The genus requires revisionary work and probably includes two undescribed species from Greece and Cyprus respectively.
- [26] *Anarsia bilbainella*. A unique sequence from the type-area in Spain clusters into a separate BIN (1.26% min. distance).
- [27] *Dichomeris*. As currently understood, *Dichomeris* is the largest genus within the Gelechiidae. Ponomarenko (2009) lists 582 species (+ some species placed in *Acanthophila* and *Uliaria*). Due to the high external diversity, many genera were erected, especially for tropical species. Ponomarenko (2009) and Vives Moreno (2014) listed more than 80 synonyms of *Dichomeris*. Here we only consider genera relevant for the European fauna. The genus includes one probably undescribed species from Spain.
- [28] *Dichomeris limbipunctellus* / *D. neatodes*. These two taxa, which have been regarded as conspecific, differ in phenotypy, show a different distribution pattern in the eastern (*D. neatodes*) and western Mediterranean (*D. limbipunctellus*), and cluster into two BINs. We accordingly list them as separate species and reinstate *D. neatodes* sp. rev. as a valid species.
- [29] *Dichomeris juniperella*. The species splits into two strongly divergent BINs (5.26% min. distance), one widespread, and the other restricted to the southern Alps, reflecting possible cryptic diversity.

- [30] *Dichomeris rasilella*. A single DNA barcode from Russia is highly divergent from other samples and clusters into a separate BIN (6.26% min. distance).
- [31] *Acompsia*. The sequence of species follows the revision by Huemer and Karsholt (2002).
- [32] *Acompsia pyrenaeella*. The species clusters into three BINs, one shared with phenotypically compared specimens of *A. tripunctella* and *A. antirrhinella*, indicating occasional introgression.
- [33] *Acompsia antirrhinella*. Despite diagnostic morphological characters, this species shares the only known BIN with two genetically variable species, *A. pyrenaeella* and *A. tripunctella*. See also comments under these species.
- [34] *Acompsia maculosella*. Sequences of specimens from the southern Alps group into a separate BIN and are also separated by reduced forewing markings, but agree in genitalia morphology and are therefore tentatively considered as *A. maculosella*. [
- [35] *Acompsia tripunctella*. A genetically highly variable species, which clusters into seven BINs, possibly reflecting cryptic diversity requiring revisionary work. One BIN is shared with *A. pyrenaeella* and *A. antirrhinella*. See also comments under these species.
- [36] *Brachmia*. A species from Greece (Crete) is probably undescribed (Berggren in prep.).
- [37] *Brachmia dimidiella*. A genetically variable species clustering into three different BINs.
- [38] *Helcystogramma lamprostoma*. Male and female genitalia match *Helcystogramma* Zeller, 1877 and the species was placed in this genus in recent papers (Agassiz and Bidzilya 2016, Bidzilya et al. 2019, Karsholt and Huemer 2017). The DNA barcode indicates the species as sister-group of the other European *Helcystogramma*.
- [39] *Pseudosophronia*. The identity of the three currently listed European species is somewhat doubtful and requires further analysis. Corley (2001) gives a clear indication that alleged diagnostic characters for *P. constanti* described by Nel (1998) in fact fall within the intraspecific variation of *S. exustellus*. Furthermore, a successfully sequenced specimen from the type-area of *P. constanti* fully agrees with *P. exustellus* from France and Spain. We therefore formally synonymize *P. constanti* with *P. exustellus* (syn. nov.).
- [40] *Pexicopia malvella*. The species splits into two BINs (4.33% min. distance) without geographic distinction and requires further analysis. The geographic variation in the forewing colour and pattern between specimens from Central Europe and South Europe is not reflected in the DNA barcode.
- [41] Apatetrini. Genera and species of this tribe are in need of revision. Several of the included taxa do not cluster together in a barcode-based NJ tree and Apatetrini sensu auct. is likely not a monophylum.
- [42] *Dactylotula kinkerella*. The species splits into two divergent clusters representing two BINs (4.49% min. distance).

- [43] *Apatetris*. The two species listed here, *A. agenjoi* and *A. mediterranella*, are based on morphology not strictly congeneric with the type of the genus (*A. mirabella* Staudinger, 1879 from Turkey) and probably also not with each other, but are left here pending forthcoming revisionary work. Similarly, two yet unidentified species which are probably undescribed are not closely related and only tentatively assigned to *Apatetris*.
- [44] *Apatetris mediterranella*. The species clusters into two geographically separate BINs (3.05% min. distance) and requires further revision.
- [45] *Catatinagma trivittellum*. The species splits into two geographically separate and strongly divergent clusters, representing two BINs (5.11% min. distance). These should be tested for potential cryptic diversity with further sampling and a comprehensive morphological analysis.
- [46] *Catatinagma kraterella*. The species does not cluster close to the type of the genus (*C. trivittellum*), instead appears closer to *Apatetris mediterranella*. It is, however, left in *Catatinagma* pending discovery of the unknown female and forthcoming revisionary work.
- [47] *Chrysoesthia*. This genus lacks generic revision. Three yet unassigned, but sequenced species, may partly belong to the insufficiently revised taxa of the European fauna.
- [48] *Chrysoesthia drurella*. This species splits into two strongly divergent BINs (3.69% min. distance) which partly overlap geographically and require careful re-assessment.
- [49] *Chrysoesthia atriplicella* | *C. gaditella* | *C. alettris*. Morphological revisionary work and additional DNA barcoding efforts are required to determine if these three names represent one or more species. *C. halymella* (Amsel, 1935) also belongs to this complex (Bidzilya et al. 2019).
- [50] *Metanarsia modesta*. The species splits into two BINs, one only known from extra-European Armenia.
- [51] *Oecocecis guyonella*. We were able to dissect both sexes from specimens provided by Christian Gibeaux. The female genitalia are rather similar to *Metanarsia*, but the male genitalia are strongly different. Therefore, and in the absence of molecular data, the systematic position is tentative and requires further revisionary work.
- [52] For a discussion of the validity of Palumbininae, see Ponomarenko (2005, 2008b) and Karsholt et al. (2013).
- [53] *Bryotropha*. The sequence of species follows the revision by Karsholt and Ruten (2005). We did not obtain DNA barcodes from the taxa listed in that publication as ‘*Bryotropha* species A’ and ‘*Bryotropha* species B’.
- [54] *Bryotropha terrella*. Two deviating DNA barcodes from Austria group into a separate BIN (2.94% min. distance) and the corresponding specimens require careful re-evaluation.
- [55] *Bryotropha desertella*. A genetically variable species clustering into three BINs without geographical structure.

- [56] *Bryotropha hulli*. The species clusters into two BINs without geographical separation.
- [57] *Bryotropha affinis*. This species shares its BIN with one BIN of *B. umbrosella*.
- [58] *Bryotropha umbrosella*. The species clusters into two BINs, one shared with *B. affinis*, which differs in phenotype and genitalia morphology (Karsholt and Rutten 2005).
- [59] *Epidola*. Unrevised genus. The identity of *Epidola grisea*, described from a single male without an abdomen and collected in Sardinia (Amsel 1942) remains obscure and needs further revisionary work. We therefore do not include it in the current checklist of European Gelechiidae.
- [60] *Epidola semitica*. This species was described from a single male from Israel, but according to recently collected material it also occurs in Greece (new record for Europe, for detailed data see dataset in BOLD).
- [61] *Aristotelia*. This genus is in strong need of a generic revision and includes several probably undescribed species.
- [62] *Aristotelia decurtella*. This species genetically clusters into two BINs (2.25% min. distance) which are in need of morphological revision.
- [63] *Aristotelia ericinella*. Specimens from Sardinia cluster separately into a different BIN (2.73% min. distance) and are considered as a separate species.
- [64] *Aristotelia subdecurtella*. Two barcode clusters, grouping into different BINs that overlap in distribution.
- [65] *Aristotelia subericinella*. The species identity is based on barcoded material from the type area (eastern Austria). Several additional clusters formerly identified as *A. subericinella* probably include cryptic diversity and are in strong need of taxonomic revision. These clusters are considered as unidentified taxa in our analysis.
- [66] *Aristotelia billii*. DNA barcodes of this species are based upon the successfully sequenced holotype and prove a wide distribution from the Mediterranean to Kirgizia.
- [67] *Caulastrocecis*. The genus is in need of revision.
- [68] *Caulastrocecis furfurella* / *C. cryptoxena*. The former was considered as a senior synonym of *C. cryptoxena* but both are clearly divergent in DNA barcodes and represent different species (Bidzilya and Karsholt in prep.). We therefore reinstate *C. cryptoxena* sp. rev. as a valid species.
- [69] *Paranarsia*. The systematic position of this genus is not fully resolved. The genitalia somewhat resemble those of *Caulastrocecis* but DNA barcodes are distant. Here we follow Elsner et al. (1999) in placing these two genera next to each other.
- [70] *Megacraspedus*. This genus was recently revised with 27 newly described species from Europe (Huemer and Karsholt 2018). The authors recognized extraordinary intraspecific DNA barcode variation within several species, some of which might include additional cryptic diversity.
- [71] *Megacraspedus lanceolellus*. Genetically extremely variable species, which clusters into 19 BINs of mainly geographic variation, with an intraspecific DNA barcode variation of 12.5% (Huemer and Karsholt 2018).

- [72] *Megacraspedus dolosellus*. Genetically extremely variable species, which clusters into 23 BINs of mainly geographic variation, with an intraspecific DNA barcode variation of 13.8% (Huemer and Karsholt 2018).
- [73] *Megacraspedus spinophallus*. Two barcode clusters, representing separate BINs with records from nearby localities.
- [74] *Megacraspedus binotella*. Genetically variable species, which clusters into three BINs without clear geographic separation.
- [75] *Megacraspedus brachypterus*. Genetically variable species, which clusters into four BINs without clear geographic separation.
- [76] *Megacraspedus andreneli*. Two barcode clusters, representing separate BINs with records from nearby localities.
- [77] *Megacraspedus imparcellus*. Genetically variable species, which clusters into three BINs with probable geographic separation.
- [78] *Megacraspedus teriolensis*. Genetically variable species, which clusters into two geographically distinct BINs.
- [79] *Dirrhinosia*. Species in this genus partly share DNA barcodes (*D. cervinella* and *D. interposita*) but differ in morphology (Bidzilya and Budashkin 2015).
- [80] *Psamathocrita*. The genus is in need of revision. A probably undescribed species has been studied by Tokár and Junnilainen (in litt.) and Barton (in litt.).
- [81] *Ivanauskiella*. This small genus seems to be more diverse than hitherto recognized, reflected an unidentified species from Russia and Spain. Some of the species are found in association with *Limonium* which is a likely host plant of the larvae (OK unpublished). *Spatuncusella* Nel & Varenne, 2013 was recently synonymized with *Ivanauskiella* (Nel and Varenne 2017a).
- [82] *Ivanauskiella occitanica*. This species was synonymized with *I. psamathias* by Nel and Varenne (2017a). However, it clearly differs in DNA barcodes and furthermore the forewing pattern and male genitalia figures in the original description show diagnostic characters which support a separate species. We therefore reinstate *I. occitanica* sp. rev. as a valid species.
- [83] *Ptocheuusa*. The genus is in strong need of revision. Barcoding efforts for several validly described species failed to produce any sequences.
- [84] *Ptocheuusa paupella*. The species clusters into three separate BINs without geographic separation.
- [85] *Ptocheuusa inopella*. Two barcode clusters from Spain and Sweden represent three separate BINs and need to be re-examined.
- [86] *Ptocheuusa cinerella*. We transfer *Recurvaria cinerella* Chrétien from Gelechiinae: Litini to Anomologinae as *Ptocheuusa cinerella* (Chrétien, 1908) comb. nov. The male genitalia are similar overall to other species of *Ptocheuusa* and seem sufficient for this new combination despite the lack of molecular data.
- [87] *Amblypalpis*. The systematic position of this genus needs re-evaluation. It was recently published as new to Europe (Vives Moreno 2019).
- [88] *Parapodia*. Material from the western and eastern Mediterranean cluster into two strongly divergent BINs (5.43% min. distance). Although an initial mor-

- phological examination of females reveals no obvious diagnostic characters, these clusters should be tested for potential cryptic diversity by examining additional material and a widened morphological approach.
- [89] *Isophrictis*. Unrevised genus, which includes cases of unresolved and apparently intraspecific DNA barcode divergence and probably some undescribed species, misidentified records or unrecognized synonymies for the European fauna. So far only six out of the twelve species in the checklist have been successfully barcoded.
- [90] *Isophrictis kefersteiniellus*. Genetically highly variable species, which clusters into four BINs. A thorough evaluation of this problem is necessary.
- [91] *Isophrictis anthemidella*. Genetically variable species, which clusters into three BINs. A thorough evaluation of this problem is necessary.
- [92] *Metzneria*. The classic generic revision by Englert (1974) is out of date and several probably undescribed species or cases of distinct (though unresolved) splits in DNA barcodes urgently require a new revisionary work.
- [93] *Metzneria neuropterella*. The species clusters into two BINs (2.89% min. distance) without geographic separation.
- [94] *Metzneria aestivella*. The DNA barcode of a paratype of *Metzneria expositoi* Vives, 2001 from Spain fully agrees with that of *M. aestivella*. Also, the genitalia morphology of the two taxa is virtually identical, and we therefore consider *M. expositoi* to be a synonym of *M. aestivella* (syn. nov.).
- [95] *Metzneria fulva* / *Metzneria torosulella*. Despite distinct diagnostic characters in phenotypic appearance and in the male genitalia, both species share barcodes.
- [96] *Metzneria ehikeella*. The species clusters into two BINs (2.91% min. distance) without geographic separation.
- [97] *Metzneria metzneriella*. This genetically variable species splits into four partly sympatric DNA barcode clusters, representing four BINs. A careful morphological examination of the problem is advisable.
- [98] *Metzneria artificella*. Two weakly separated barcode clusters, representing geographically distinct BINs (1.46% min. distance), need to be re-examined.
- [99] *Metzneria aprilella*. The species splits into three geographically separated DNA barcode clusters, representing three BINs. This possible case of cryptic diversity requires careful morphological re-examination.
- [100] *Metzneria subflavella*. Two DNA barcodes referring to specimens from Spain and France respectively are strongly divergent and are considered separate species. These results are supported by genitalia morphology, with the Spanish specimen likely representing an undescribed species.
- [101] *Metzneria campicolella*. *Metzneria varennei* Nel, 1997 was recently shown to be a synonym of *M. campicolella* (Nel and Varenne 2017b). The generic placement of this species is tentative.
- [102] *Apodia martinii*. DNA barcodes of this species and *A. bifractella* with separate BINs (6.58% min. distance) fully support the species status for this long-disputed taxon. We therefore reinstate *A. martinii* sp. rev. as a valid species. Dif-

ferences from *A. bifractella* in morphology, biology and distribution still need to be studied in detail.

- [103] *Pragmatodes*. This genus, which has until now been placed in Gelechiini, has always been considered monotypic and endemic to the Canary Islands. However, a group of closely related species placed under *Monochroa*, i.e., *Pragmatodes melagonella* (Constant, 1895) comb. nov., *Pragmatodes albagonella* (Varenne & Nel, 2010) comb. nov., *Pragmatodes cyrneogonella* (Nel & Varenne, 2012) comb. nov. and *Pragmatodes parvulata* (Gozmány, 1953) comb. nov., have similar genitalia which do not fit well with *Monochroa*, and their DNA barcodes cluster separately from that genus. Moreover, the known larvae of the above-mentioned species, as well as the type species of the genus (*P. fruticosella*) all feed on plants in the family Rubiaceae, an unusual feeding substrate for Gelechiidae. The genus includes additional, probably undescribed, species from South-East Europe and the Middle East.
- [104] *Pragmatodes melagonella*. Specimens initially identified as this species from France and Bulgaria differ in the DNA barcode and also morphology and are considered as separate species. The type locality of *P. melagonella* is in France.
- [105] *Monochroa*. This genus is in strong need of a generic revision and includes several probably undescribed species.
- [106] *Monochroa rumicetella*. Two weakly separated BINs (2.12% min. distance) without geographic separation most probably reflect intraspecific variation.
- [107] *Monochroa sepicolella* / *M. rectifasciella*. Elsner et al. (1999) had previously discussed a two-species hypothesis which is now fully supported by two strongly divergent DNA barcode clusters representing two BINs (6.7% min. distance). *M. sepicolella* occurs in North and Central Europe, whereas the name *Monochroa rectifasciella* (Fuchs, 1902) is currently used for the species with a more southern distribution (e.g., Pastorális et al. 2013). However, this problem is in need of a thorough revisionary work taking into account all available names for both species.
- [108] *Monochroa tenebrella*. Two weakly separated BINs (1.12% min. distance) without geographic separation most probably reflect intraspecific variation.
- [109] *Monochroa servella*. Two BINs (2.89% min. distance) without geographic separation most probably reflect intraspecific variation.
- [110] *Monochroa lucidella*. Despite a low intraspecific divergence, this species may include cryptic diversity as indicated by the morphologically and genetically (only short sequences available) weakly deviating subspecies *immaculatella* from Northern Italy.
- [111] *Monochroa arundinetella* / *M. suffusella*. These two morphologically separate species represent one of the few cases of barcode sharing among European Gelechiidae. The author and year of description of *M. arundinetella* follow Sattler (2009).
- [112] *Monochroa nomadella*. This genetically highly variable species clusters in four different and geographically separate BINs and is in strong need of revisionary

work. Junnilainen et al. (2010) recognized differences in the female genitalia between specimens collected in the Ural Mountains, Central Europe, and those figured by Elsner et al. (1999). They speculated that either material from Czechia was misidentified or that it could point to cryptic diversity. Unlike the few known females from Central Europe, specimens from South Russia are slightly brachypterous which might be a further indication of a potential species complex.

- [113] *Oxypteryx. Eulamprotes* Bradley, 1971 with the type species *E. atrella* is shown to be a synonym of *Oxypteryx* Rebel, 1911 (Bidzilya et al. 2019), resulting in a number of new nomenclatural changes. We here propose the following new combinations: *Oxypteryx nigromaculella* (Millière, 1872) comb. nov., *Oxypteryx wilkella* (Linnaeus, 1758) comb. nov., *Oxypteryx ochricapilla* (Rebel, 1903) comb. nov., *Oxypteryx superbella* (Zeller, 1839) comb. nov., *Oxypteryx mirusella* Huemer & Karsholt, 2013 comb. nov., *Oxypteryx occidentella* Huemer & Karsholt, 2011 comb. nov., *Oxypteryx libertinella* (Zeller, 1872) comb. nov., *Oxypteryx baldizzonei* Karsholt & Huemer, 2013 comb. nov., *Oxypteryx gemerensis* Elsner, 2013 comb. nov., *Oxypteryx deserta* (Piskunov, 1990) comb. nov., *Oxypteryx unicolorella* (Duponchel, 1843) comb. nov., *Oxypteryx nigritel-la* (Zeller, 1847) comb. nov., *Oxypteryx plumbella* (Heinemann, 1870) comb. nov., *Oxypteryx isostacta* (Meyrick, 1926) comb. nov., *Oxypteryx helotella* (Staudinger, 1859) comb. nov., *Oxypteryx parahelotella* Nel, 1995 comb. nov., *Oxypteryx graecatella* Šumpich & Skyva, 2012 comb. nov. Despite this new taxonomic approach, the genus is in strong need of revision. DNA barcodes separate into three clades seemingly supported by some morphological characters. For example, species formerly considered to be in the *E. wilkella*-group and characterized by the blackish ground colour of the forewings with silvery or whitish markings, form a separate clade. Further, the genus has an extraordinary intraspecific barcode variation with 18 sequenced species belonging to 27 BINs, with at least three yet unidentified species.
- [114] *Oxypteryx nigromaculella*. A specimen from Greece clusters into a separate BIN and may represent a different species.
- [115] *Oxypteryx wilkella*. Two specimens from Italy and Hungary respectively are strongly divergent from the large bulk of *E. wilkella* DNA barcodes and cluster into a separate BIN. The taxonomic status of this cluster requires careful evaluation.
- [116] *Oxypteryx baldizzonei*. Two strongly divergent DNA barcode clusters, representing three BINs, have been considered as intraspecific variation by Huemer et al. (2013).
- [117] *Oxypteryx libertinella*. The geographic variation of DNA barcode clusters in this genetically highly variable species with eight BINs has been discussed by Huemer et al. (2013). Currently this variation is considered as an intraspecific divergence.
- [118] *Athrips*. The sequence of species follows the generic revision by Bidzilya (2005).

- [119] *Athrips rancidella*. A specimen from Greece clusters separately into a second BIN (2.86% min. distance) and is in need of taxonomic re-evaluation.
- [120] *Athrips amoenella*. A genetically highly variable species, which clusters into five BINs.
- [121] *Neofriseria peliella*. Two weakly separated BINs (1.44% min. distance) without clear geographical separation most probably reflect intraspecific variation.
- [122] *Neofriseria hitadoella*. A strongly divergent BIN from France with 3.85% min. distance to *N. hitadoella* from Morocco is considered as a probable cryptic species, but the problem needs to be carefully revised.
- [123] *Neofriseria kuznetzovae*. This species was listed by Piskunov (1987) and partially by Huemer and Karsholt (1999) under the name of *N. caucasicella* Sattler, 1960. The latter occurs only in the Caucasus and has not been found elsewhere in Europe.
- [124] *Sophronia*. Unrevised genus with some doubtful taxa lacking DNA barcodes.
- [125] *Sophronia semicostella*. Two DNA barcode clusters, grouped into two BINs, show no clear geographic separation.
- [126] *Sophronia consanguinella*. *S. marginella* was recently shown to be a junior synonym of this species (Šumpich et al. 2019).
- [127] *Sophronia grandii*. The DNA barcode of a paratype of *Sophronia ascalis* Gozmány, 1951 fully agrees with that of *S. grandii*. The two taxa are virtually identical, and we therefore consider *S. ascalis* to be a synonym of *S. grandii* (syn. nov.).
- [128] *Sophronia chilonella*. A single DNA barcode from Bulgaria of a specimen similar to *S. chilonella* strongly deviates and may represent the taxonomically disputed and unrevised *S. acaudella*.
- [129] *Sophronia sicariellus*. A single DNA barcode sequence of 504bp from Germany strongly deviates, although it may represent intraspecific variation.
- [130] *Mirificarma*. Several species show a high genetic variation which could indicate cryptic diversity. Therefore, despite available taxonomic revisions by Pitkin (1984) and Huemer and Karsholt (1999), a re-evaluation of morphology seems advisable in some species.
- [131] *Mirificarma lentiginosella*. Two DNA barcode clusters, which separate into two BINs (1.7% min. distance) without geographic separation.
- [132] *Mirificarma cytisella*. A genetically variable species, separated into four BINs without geographic separation.
- [133] *Mirificarma monticolella*. Two DNA barcode clusters from Italy and Bulgaria are highly divergent and separate into two BINs (4.49% min. distance).
- [134] *Mirificarma burdonella*. Two DNA barcodes from France show a deep split into two BINs (5.78% min. distance) and require taxonomic re-evaluation.
- [135] *Mirificarma ulicinella*. Two DNA barcode clusters from France and Portugal are highly divergent and separate into two BINs (3.37% min. distance).
- [136] *Aroga velocella*. The species splits into three BINs, which show no clear geographic separation. The attribution of authorship follows Joannis (1922).

- [137] *Aroga flavicomella*. A genetically variable species, which splits into four BINs.
- [138] *Chionodes*. The sequence of species follows the revision by Huemer and Sattler (1995).
- [139] *Chionodes luctuella*. DNA barcodes from central and northern Europe cluster into separate BINs (1.87% min. distance) which are currently not confirmed by morphology.
- [140] *Chionodes fumatella*. DNA barcodes from central and northern Europe cluster into three geographically partially separated BINs and need taxonomic re-assessment.
- [141] *Gelechia*. This genus includes at least one additional and probably undescribed species.
- [142] *Gelechia senticetella*. DNA barcodes cluster into two geographically separate BINs with min. distances > 2% to the Nearest Neighbour, and need taxonomic re-assessment.
- [143] *Gelechia obscuripennis*. This disputed taxon has recently been re-considered to be a separate species based on molecular data, morphology and biology (Huemer 2019).
- [144] *Agnippe*. The genus (as *Evippe* Chambers, 1873) has traditionally been placed in the Litini. DNA barcodes of two species are not supportive of the systematic position of the genus in that tribe. We therefore follow Bidzilya and Li (2010) and Metz et al. (2019) in placing *Agnippe* as an isolated genus within the Gelechiini.
- [145] *Holcophora*. The genera *Holcophora* and *Aponoaea* have been synonymized recently by Adamski and Sattler (2019), based on some similarities of the type-species. However, the systematic position within the Gelechiidae remains uncertain for the time being.
- [146] *Holcophora inderskella*. The species was included in *Holcophora* by Adamski and Sattler (2019). It was described from Lake Indersky in Western Kazakhstan and is here attached to the European fauna despite a distance of ca. 10 km from the type-locality to the widely accepted natural border of the Continent, the Ural River.
- [147] *Gnorimoschema herbichii*. Northern European populations of this species cluster into two BINs.
- [148] *Scrobipalpa*. This extraordinary diverse genus still requires some taxonomic re-assessment, reflected by several yet unidentified barcode clusters which at least partly belong to undescribed species.
- [149] *Scrobipalpa aptatella*. Records from Europe (France, Italy, former Yugoslavia) are unconfirmed (Huemer and Karsholt 2010).
- [150] *Scrobipalpa amseli* / *S. hyssopi*. Both species clusters into the same BIN but differ in morphology of the male genitalia (Huemer and Karsholt 2010). Additional material should be checked to confirm if the holotype of *S. hyssopi* represents a specimen of *S. amseli* with deformed genitalia.
- [151] *Scrobipalpa reiprichi*. Two geographically separate barcodes BINs (2.57% min distance) may reflect cryptic diversity, with altogether four potential species from preliminary morphological analysis (Wiesmair et al. 2018).

- [152] *Scrobipalpa caucasica*. Only known from the Caucasus. *S. benzengensis* (Povonný, 2001) is a junior synonym (Huemer and Karsholt 2010).
- [153] *Scrobipalpa pauperella*. Some externally different specimens from northern Italy are slightly divergent in their DNA barcodes and may belong to a separate species.
- [154] *Scrobipalpa mercantourica*. This species clusters together with *Scrobipalpa arenbergeri* but according to the original description differs in morphology. A taxonomic re-assessment seems advisable to fix the status of the taxon.
- [155] *Scrobipalpa alterna* / *S. lutea*. Both species share barcodes and are virtually indistinguishable in genitalia characters, although the ground colour of the forewings is usually distinct with rare intermediates. A re-assessment of this group is in preparation (Bidzilya in litt.).
- [156] *Scrobipalpa artemisiella* / *Scrobipalpa stangei*. These two species are clearly separated by their biology and female genitalia morphology, but share one barcode BIN. A second BIN of *S. artemisiella* based on a single sequence most probably reflects intraspecific variation.
- [157] *Scrobipalpa bryophiloides*. A genetically variable species which clusters into two separate BINs and requires further evaluation.
- [158] *Scrobipalpa ocellatella*. DNA barcodes of this species clusters into two weakly separated BINs (1.44% min distance), most probably reflecting intraspecific variation.
- [159] *Scrobipalpa salinella* / *S. salicorniae* / *S. spergulariella*. Although these species show diagnostic morphology (Huemer and Karsholt 2010) and (two) unique DNA barcode haplotypes, they cluster into the same BIN. The third species, viz. *S. spergulariella*, has not yet been barcoded.
- [160] *Scrobipalpa halymella* / *S. stabilis*. Both species cluster into the same BIN but differ weakly in morphology (Huemer and Karsholt 2010).
- [161] *Scrobipalpula*. All five successfully sequenced species share BINs, but still show species-specific DNA barcode haplotypes.
- [162] *Keiferia lycopersicella*. An American species introduced to Europe in 2008 which apparently has not established permanent populations (Huemer and Karsholt 2010).
- [163] *Ephysteris promptella*. A genetically highly variable species clustering into four BINs. A taxonomic re-evaluation of this problem is necessary.
- [164] *Ephysteris diminutella*. Two strongly divergent and geographically separate DNA barcode clusters reflected by two BINs (5.94% min. distance) require taxonomic revision.
- [165] *Ephysteris inustella*. The year of description follows Sattler (2011). The different interpretation by Huemer & Karsholt (2019) with *inustella* originally published in synonymy and only made available in 1847 is contradicted by the Code, Article 11.6.1. “However, if such a name published as a junior synonym had been treated before 1961 as an available name and either adopted as the name of a taxon or treated as a senior homonym, it is made available thereby but dates from its first publication as a synonym.”
- [166] *Ochrodia*. An unidentified species from Greece (Crete) clusters with specimens from Saudia Arabia. The genus is in need of revision.

- [167] *Lutilabria lutilabrella*. DNA barcodes from Slovenia and Slovakia cluster into separate BINs (3.41% min. distance) and need revisionary work.
- [168] *Klimeschiopsis kiningrella*. Specimens from northern Italy cluster into a BIN separate from all other samples from various parts of Europe.
- [169] *Caryocolum*. Despite extensive past revisionary work on this genus, it still includes a remarkable amount of unresolved taxonomic problems with several potential cryptic species.
- [170] *Caryocolum tischeriella*. DNA barcodes cluster into three BINs without geographic separation.
- [171] *Caryocolum alsinella*. A genetically highly variable species with strongly divergent DNA barcode clusters separated into three BINs. A thorough taxonomic re-assessment seems necessary.
- [172] *Caryocolum vicinella*. DNA barcodes cluster into four BINs. A thorough taxonomic re-assessment seems necessary.
- [173] *Carayocolum amaurella*. This genetically highly variable species clusters into five BINs, but alleged cryptic diversity is not supported by morphology (Huemer et al. 2014).
- [174] *Caryocolum saginella*. DNA barcode sequences with two BINs (5.46% min. distance). clearly support the existence of a separate species in the SW-Alps (Huemer in prep.).
- [175] *Caryocolum cauligenella*. A single specimen from Spain strongly deviates in DNA barcode with a separate BIN and *C. saginella* instead of *C. cauligenella* as Nearest Neighbor (5.46% min. distance). However, the specimen clearly matches the latter in phenotype and needs taxonomic re-assessment.
- [176] *Caryocolum peregrinella*. This species splits into three highly divergent allopatric clusters which most probably represent different species (Huemer in prep.). One of the major problems in resolving the taxonomic mismatches is the status of the holotype of *C. peregrinella*, a female without an abdomen and unknown type-locality, stated as Europe (Huemer 1988).
- [177] *Caryocolum leucomelanella*. Two DNA barcode clusters with separate BINs (2.73% min. distance) show no geographic pattern.
- [178] *Caryocolum schleichi* / *C. arenariella*. Initially described as different species, the largely allopatric taxa of this group have been merged into a single species by Huemer (1988). However, all these taxa are separated phenotypically and by characters in the male genitalia. As a consequence, Aarvik et al. (2017) give species status to the northern European population and re-introduced it as *C. arenariella*. Following an initial genetic analysis of the group (Huemer et al. 2014) this taxonomic change seems well supported, however, *C. schleichi* as currently understood includes several separate species. The problem is presently under revision (Huemer in prep.).
- [179] *Caryocolum marmorea* spp. *mediocorsa* agrees in DNA barcode with the nomenclotypical subspecies.
- [180] *Caryocolum pullatella*. This species shows an extraordinary genetic variation across its holarctic range (Mutanen et al. 2012) and is in strong need of taxo-

- onomic re-assessment. In Europe two geographically separated DNA barcode clusters with separate BINs are present.
- [181] *Caryocolum klosi*. A single DNA barcode from the French Pyrenees is highly divergent with a separate BIN (4.17% min. distance) and may represent a different species.
- [182] *Caryocolum blandella*. *Lita signatella* was described from an unstated number of specimens from Kazan in Russia (“provincia Casanensi”) (Eversmann 1844). The short description is insufficient for identifying the species. The type series in the Zoological Institute in St. Petersburg is apparently mixed. During earlier visits Klaus Sattler (in litt.) and OK examined alleged syntypes of *L. signatella* incorporated under that name and which proved conspecific with *Carpatolechchia proximella* (Hübner), and thus *L. signatella* was formally synonymized with that species in the Russian checklist (Ponomarenko 2008). However, only a single specimen of *L. signatella* was mentioned in an earlier work on the collection of Eversmann (Bremer 1870) and this specimen was recently designated as the lectotype (Sinev et al. 2017). It is conspecific with *Caryocolum blandella* (Douglas) which thereby became a junior synonym of *L. signatella*. Whereas the name *Caryocolum blandella* has been universally in use for a widespread European species since Kloet and Hincks (1972), *Lita signatella* has to our knowledge not been used as a valid name since 1899, and it is not listed in the main catalogues of the Gelechiidae (Rebel 1901, Meyrick 1925, Gaede 1937). According to Articles 23.9.1 and 23.9.2 of the International Code of Zoological Nomenclature (ICZN 1999), we therefore declare the name *Caryocolum blandella* Douglas, 1852 to be a nomen protectum, and the name *Lita signatella* Eversmann, 1844, which has not been used as a valid name after 1899, to be a nomen oblitum. Supplementary material 1 lists 35 references by more than ten different authors that have used *C. blandella* (or its alternative spelling *C. blandellum*) in the last 50 years (ICZN article 23.9.1.2). The name is moreover used in several other published works and on numerous internet sites.
- [183] *Caryocolum horoscopa*. Initially described as a species, this taxon was recently considered to be a subspecies of *Caryocolum blandella* (Huemer and Karsholt 2010). However, in addition to diagnostic morphology, DNA barcodes also clearly support a separate species status for this taxon, and we therefore reinstate *C. horoscopa* stat. rev.
- [184] *Caryocolum fibigerium*. Huemer et al. (2014) had indicated likely taxonomical problems in this group highlighted by three DNA barcode clusters on the Iberian, Italian and Balkan peninsulas. These genetic splits are also supported by morphological traits and probably reflect three different species (Huemer in prep.).
- [185] *Caryocolum junctella*. Two barcode clusters with separate BINs show no clear geographic separation.
- [186] *Agonochaetia terrestrella*. Specimens from Switzerland and Romania cluster into a separate BIN, but are considered as conspecific (Huemer and Karsholt 2010).
- [187] *Sattleria*. The sequence of species follows Huemer and Timossi (2014).

- [188] *Sattleria melaleucella*. The species shares BINs with one cluster of the morphologically different *S. pyrenaica*, indicating occasional introgression.
- [189] *Sattleria pyrenaica*. A genetically variable species with five different BINs, one shared with *Sattleria melaleucella*. The species requires taxonomic re-assessment.
- [190] Litini. Ponomarenko (2005, 2008) showed that Teleiodini is a junior synonym of Litini, described as Litidae by Bruand d'Uzelle (1859).
- [191] *Schneidereria pistaciella* Weber, 1957. The systematic placement of this genus and species follows Huemer and Karsholt (2001).
- [192] *Teleiodes vulgella* | *T. italica* | *T. brevivalva*. These three species differ strongly in the male genitalia but share DNA barcodes.
- [193] *Teleiodes saltuum* | *T. kaitilai*. Both species are closely related, mainly differing in the structures of the female genitalia. In DNA barcodes *T. saltuum* clusters into two BINs and *T. kaitilai* in a separate BIN.
- [194] *Teleiodes luculella*. A genetically variable species, which clusters into three BINs. A thorough evaluation of this problem is necessary.
- [195] *Teleiodes flavimaculella*. A genetically highly variable species, which clusters into three BINs. A re-evaluation of this problem is necessary.
- [196] *Pseudotelphusa tessella*. Two weakly separated BINs (1.61% min. distance) without clear geographic separation are considered as intraspecific variation.
- [197] *Teleiopsis diffinis* | *T. bagriotella* | *T. albifemorella* | *T. paulheberti* | *T. rosabella*. These closely related species differ in morphology whereas barcodes give a more complex pattern. Genetic differences are generally weak with partial BIN sharing (i.e., *T. rosabella* | *T. albifemorella*) and/or likely introgression in some taxa, while high intraspecific variation - with two BINs in three species - indicates possible further cryptic diversity.
- [198] *Xenolechia*. Species in this genus share DNA barcodes but differ in morphology (Huemer and Karsholt 1999).
- [199] *Altenia scriptella*. Two BINs without clear geographic separation are considered as intraspecific variation.
- [200] *Exoteleia dodecella*. The taxonomy of dark specimens in this group, mainly observed in Central Europe, is disputed, though usually these are considered as infrasubspecific variation (Huemer and Karsholt 1999). We were able to sequence large series of specimens across Europe and discovered that DNA barcodes of normal and dark specimens are usually separated by a low but constant barcode gap of about 1%. These results, in combination with differences in adult morphology, clearly indicate presence of two separate species. Revisionary work is currently under preparation (Huemer et al. in prep.).
- [201] *Parachronistis albiceps*. Genetically variable species, which clusters into four BINs without clear geographic separation.
- [202] "*Telphusa*". The placement of *cistiflorella* Constant, 1890 in the genus *Telphusa* follows Sattler (1985), who pointed out that this placement should be regarded as tentative. The DNA barcode of *T. cistiflorella* clusters among genera placed in the Gelechiini, and the male genitalia are overall similar to those of *Mirificarma*, although they have no filament.

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Supplementary material I

Selected references that have used the name *Caryocolum blandella* in the last 50 years

Authors: Peter Huemer, Ole Karsholt

Data type: references

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