

# New records of Lepidoptera from the Iberian Peninsula from 2017 and 2018 (Insecta: Lepidoptera)

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## Abstract

New records of Nepticulidae, Gracillariidae, Roeslerstammiidae, Plutellidae, Argyresthiidae, Oecophoridae, Coleophoridae, Momphidae, Brachodidae, Erebidae, and Noctuidae for Spain and Portugal are presented. *Stigmella nylandriella* (Tengström, 1848), *Ectoedemia argyroepeza* (Zeller, 1839), *E. spinosella* (Joannis, 1908), *Phyllonorycter sorbi* (Freyer, 1855), *Roeslerstammia exlebella* (Fabricius, 1787), *Rhigognostis senilella* (Zetterstedt, 1839), *Argyresthia aurulentella* Stainton, 1849, *A. thuriferana* (Gibeaux, 1992), *A. buvati* Gibeaux, 1992, *A. reticulata* Staudinger, 1877, *A. submontana* Frey, 1870, *Batia internella* Jäckh, 1972, *Coleophora gryphiennella* (Hübner, 1796), and *Mompha raschkiella* (Zeller, 1839) are new for Spain, *Chelis maculosa* (Gerning, 1780) and *Helotropha leucostigma* (Hübner, 1808) are new for Portugal. *Stigmella nylandriella*, *Ectoedemia argyroepeza*, *E. spinosella*, *Rhigognostis senilella*, *Argyresthia aurulentella*, *A. thuriferana*, *A. buvati*, *A. reticulata*, *A. submontana*, *Batia internella*, and *Mompha raschkiella* are new for the Iberian Peninsula. New province records are given of 54 species (57 new province records in all).

KEY WORDS: Insecta, Lepidoptera, Nepticulidae, Gracillariidae, Roeslerstammiidae, Plutellidae, Argyresthiidae, Oecophoridae, Coleophoridae, Momphidae, Brachodidae, Erebidae, Noctuidae, new records, Iberian Peninsula.

## Nuevos registros de Lepidoptera en la Península Ibérica del 2017 y 2018 (Insecta: Lepidoptera)

## Resumen

Se mencionan nuevos registros de Nepticulidae, Gracillariidae, Roeslerstammiidae, Plutellidae, Argyresthiidae, Oecophoridae, Coleophoridae, Momphidae, Brachodidae, Erebidae y Noctuidae para España y Portugal. *Stigmella nylandriella* (Tengström, 1848), *Ectoedemia argyroepeza* (Zeller, 1839), *E. spinosella* (Joannis, 1908), *Phyllonorycter sorbi* (Freyer, 1855), *Roeslerstammia exlebella* (Fabricius, 1787), *Rhigognostis senilella* (Zetterstedt, 1839), *Argyresthia aurulentella* Stainton, 1849, *A. thuriferana* (Gibeaux, 1992), *A. buvati* Gibeaux, 1992, *A. reticulata* Staudinger, 1877, *A. submontana* Frey, 1870, *Batia internella* Jäckh, 1972, *Coleophora gryphiennella* (Hübner, 1796) y *Mompha raschkiella* (Zeller, 1839) son nuevas para España, *Chelis maculosa* (Gerning, 1780) y *Helotropha leucostigma* (Hübner, 1808) son nuevas para Portugal. *Stigmella nylandriella*, *Ectoedemia argyroepeza*, *E. spinosella*, *Rhigognostis senilella*, *Argyresthia aurulentella*, *A. thuriferana*, *A. buvati*, *A. reticulata*, *A. submontana*, *Batia internella* y *Mompha raschkiella* son nuevas en la Península Ibérica. Nuevas citas provinciales para 54 especies (57 nuevas citas provinciales en total).

PALABRAS CLAVE: Insecta, Lepidoptera, Nepticulidae, Gracillariidae, Roeslerstammiidae, Plutellidae, Argyresthiidae, Oecophoridae, Coleophoridae, Momphidae, Brachodidae, Erebidae, Noctuidae, nuevos registros, Península Ibérica.

## Introduction

The ongoing research on Lepidoptera of the Iberian Peninsula performed by the authors brought some interesting results in 2017 and 2018. The important records are presented in this contribution,

supplementing the publications by VAN NIEUKERKEN *et al.* (2004, 2010), LAŠTUVKA & LAŠTUVKA (2006, 2007, 2009, 2011, 2014a, b, c, 2015, 2017), LAŠTUVKA *et al.* (2000), CORLEY *et al.* (2006, 2007, 2009, 2012a, b, 2013, 2016, 2018), CORLEY (2014, 2015a), including summarizing works by VIVES MORENO (1994, 2014) and CORLEY (2015b). The discovery of 11 species new for the Iberian Peninsula, 14 species new for Spain, 2 for Portugal and 54 species new for individual provinces are given here.

## Material and methods

The presented records are the results of the authors' (AL & ZL) two three weeks long visits to the Iberian Peninsula from 10th to 30th June 2017 and from 9th to 30th June 2018. Attention was paid only to northern regions of Spain from Gerona to Asturias and to Trás-os-Montes in Portugal. The moths were mostly collected at light (UV lamp 125 W, fluorescent tubes 8 and 20 W). Some species (specimens) were beaten from their host plants by day, adults of some species were collected on flowers or in stands of host plants, and empty mines or mines with larvae were found in some mining species. The determination was performed by the authors. The mining and other small moths are deposited in the collection of the first, material of Sesiidae in the collection of the second author. Therefore, collectors and the collection are not repeated for the individual species.

## New Iberian or country records

### NEPTICULIDAE

#### *Stigmella nylandriella* (Tengström, 1848)

ES: Lérida, Valle de Arán, Tredós, 1 ♀, 14-VI-2017.

Species with European distribution, known predominantly from central and northern parts of Europe, occurrence data are missing from the Balkans and some Mediterranean islands (VAN NIEUKERKEN, 2013). Larvae mine on *Sorbus aucuparia* (*Sorbus domestica* and *Malus*) (e.g. LAŠTUVKA & LAŠTUVKA, 1997). **New species for Spain and the Iberian Peninsula** (Fig. 1, 14).

#### *Ectoedemia argyroepeza* (Zeller, 1839)

ES: Lérida, Valle de Arán, Tredós, 1 ♂, 14-VI-2017.

Euro-siberian species, known throughout Europe, with exception of Mediterranean islands (VAN NIEUKERKEN, 2013). Larvae mine on *Populus tremula* (e.g. LAŠTUVKA & LAŠTUVKA, 1997). **New species for Spain and the Iberian Peninsula** (Fig. 2, 15).

#### *Ectoedemia spinosella* (Joannis, 1908)

ES: Soria, Aldehuela de Calatañazor, 1 ♂, 23-VI-2017.

Predominantly central and southern European species, unknown from Scandinavia (VAN NIEUKERKEN, 2013). Larvae mine on various *Prunus* species (e.g. LAŠTUVKA & LAŠTUVKA, 1997). **New species for Spain and the Iberian Peninsula** (Fig. 3, 16).

### GRACILLARIIDAE

#### *Phyllonorycter sorbi* (Freyer, 1855)

ES: Huesca, Benasque-Cerler, 4 ♂♂, 3 ♀♀, 16-VI-2017, 2 ♂♂, 24-VI-2017; Lérida, Valle de Arán, Tredós, 4 ♂♂, 14-VI-2017.

Western Palearctic (up to Central Asiatic) species, distributed throughout Europe, with exception of southern parts of the Balkans and Mediterranean islands. In the Iberian Peninsula recorded in Portugal: Trás-os-Montes and Beira Alta (CORLEY, 2015b). Larvae usually mine on *Sorbus aucuparia*, but also other *Sorbus* species, *Cotoneaster*, *Crataegus*, *Malus*, *Mespilus*, *Prunus padus*, and

*Pyrus* are occasional or regular host plants (DE PRINS & DE PRINS, 2018). **New species for Spain** (Fig. 4, 17).

#### ROESLERSTAMMIIDAE

*Roeslerstammia erxlebella* (Fabricius, 1787)

ES: Huesca, Espés, 1 ♀, 25-VI-2017.

Eurosiberian species, in Europe distributed in western, central and eastern parts, up to southern Scandinavia in the north (KARSHOLT, 2013). In the Iberian Peninsula recorded in Portugal: Minho by CORLEY *et al.* (2012b). Larvae usually develop on *Tilia*, but *Betula* is also mentioned as a host plant (e.g. AGASSIZ, 1996). **New species for Spain** (Fig. 5).

#### PLUTELLIDAE

*Rhigognostis senilella* (Zetterstedt, 1839)

ES: Huesca, Benasque-Cerler, 1 ♂, 21-VI-2018.

Eurosiberian species, in Europe more common in central and northern parts, in southern regions mostly in mountains (AGASSIZ, 2013). Larvae develop on some Brassicaceae. BARANIAK (2016) considers *R. senilella* and *R. marmorosella* to be two distinct species, the first of them occurring in Greenland and Iceland, and the second one is broadly distributed. In such case, the Spanish record would belong to *R. marmorosella*. But AARVIK *et al.* (2017) do not confirm this view with regard to the barcoding results and the genitalia morphology. **New species for Spain and the Iberian Peninsula** (Fig. 6, 18).

#### ARGYRESTHIIDAE

*Argyresthia aurulentella* Stainton, 1849

ES: Lérida, San Lorenzo de Morunys, Enciens, 1 ♀, 25-VI-2018; beaten from bushes of *Juniperus oxycedrus*.

Species distributed in northern, western and central Europe, also known from some southern European countries (AGASSIZ, 2013). Larvae mine the needles of *Juniperus*, the bionomics are described by FRIESE (1969). **New species for Spain and the Iberian Peninsula** (Fig. 7, 23).

*Argyresthia thuriferana* (Gibeaux, 1992)

ES: Soria, Aldehuela de Calatañazor, 3 ♂♂, 1 ♀, 18-VI-2017, 1 ♂, 23-VI-2017, 5 ♀♀, 15-VI-2018, 2 ♂♂, 4 ♀, 19-VI-2018; collected at light or beaten from bushes of *Juniperus thurifera*.

Species described from southern France (Hautes-Alpes) (GIBEAUX, 1992) and still only known from there (AGASSIZ, 2013). Larvae probably mine the shoots of *Juniperus thurifera*. **New species for Spain and the Iberian Peninsula** (Fig. 8, 19, 24).

*Argyresthia buvati* Gibeaux, 1992

ES: Soria, Aldehuela de Calatañazor, 1 ♀, 15-VI-2018, 1 ♀, 19-VI-2018; collected at light in the bushes of *Juniperus thurifera*.

Species described from southern France (Hautes-Alpes) (GIBEAUX, 1992) and still only known from there (AGASSIZ, 2013), similarly to the previous species. Larvae develop on *Juniperus*, probably on non-prickly species. *Argyresthia buvati* is very close (conspecific?) to the eastern Mediterranean-SW Asiatic *Argyresthia impura* (Staudinger, 1879). **New species for Spain and the Iberian Peninsula** (Fig. 9, 25).

*Argyresthia reticulata* Staudinger, 1877

ES: Soria, Aldehuela de Calatañazor, 1 ♀, 18-VI-2017, 8 ♂♂, 12 ♀♀, 15-VI-2018, 5 ♂♂, 1 ♀, 19-VI-2018; collected at light or beaten from bushes of *Juniperus thurifera*.

Species with insufficiently known distribution, recorded in the Netherlands, Belgium, France, Switzerland and one specimen also from the Czech Republic (AGASSIZ, 2013). Larvae mine young shoots and needles of *Juniperus* spp., apparently both prickly and non-prickly species. **New species for Spain and the Iberian Peninsula** (Fig. 10, 20, 26).

*Argyresthia submontana* Frey, 1870

ES: Huesca, Espés, 1 ♀, 25-VI-2017.

European species, so far known from some northern, western and central European countries (AGASSIZ, 2013). Larvae live in the buds and shoots of *Amelanchier* and *Sorbus aria* (FREY, 1870), *Sorbus torminalis* and *Cotoneaster* are also given as host plants (LEPIFORUM, 2018). The adults are very similar to *A. sorbiella*, but their forewings are nearly white and the markings are less distinct. **New species for Spain and the Iberian Peninsula** (Fig. 11, 27).

## OECOPHORIDAE

*Batia internella* Jäckh, 1972

ES: Soria, Aldehuela de Calatañazor, 1 ♂, 1 ♀, 23-VI-2017.

Western Palearctic species, distributed throughout Europe (LVOVSKY, 2013), very similar to *Batia lunaris* (Haworth, 1828). Larvae develop in dead tissues (wood) of shrubs and trees. **New species for Spain and the Iberian Peninsula** (Fig. 12, 21).

## COLEOPHORIDAE

*Coleophora gryphipennella* (Hübner, 1796)

ES: Lérida, Valle de Arán, Tredós, larvae on *Rosa* sp., 14-VI-2017.

Eurosiberian species, distributed throughout Europe (VAN DER WOLF & BALDIZZONE, 2013). In the Iberian Peninsula recorded in Portugal: Trás-os-Montes (CORLEY *et al.*, 2007). Larvae mine on *Rosa* and *Rubus* spp. (EMMET *et al.*, 1996). **New species for Spain**.

## MOMPHIDAE

*Mompha raschkiella* (Zeller, 1839)

ES: Gerona, Campredón, Valter 2000, 1 ♂, 27-VI-2018.

Transpaleartic species, widely distributed in Europe with exception of some Balkan countries and Mediterranean islands (KOSTER & SINEV, 2013). Larvae mine on *Epilobium angustifolium* and *E. hirsutum* (KOSTER & SINEV, 2003). **New species for Spain and the Iberian Peninsula** (Fig. 13, 22).

## EREBIDAE

*Chelis maculosa* (Gerning, 1780)

PT: Trás-os-Montes, Bemposta, 1 ♂, 16-VI-2018.

Transpaleartic species, locally distributed in central and southern parts of Europe (PRZYBYLOWICZ *et al.*, 2013), also recorded in northern regions of the Iberian Peninsula to Galicia (MACIA *et al.*, 2013). Its occurrence in Portugal is undocumented (CORLEY, 2015b). **New species for Portugal**.

## NOCTUIDAE

*Helotropha leucostigma* (Hübner, [1808])

PT: Trás-os-Montes, Bemposta, 1 ex. observed, 19-VI-2017.

Eurosiberian species, distributed throughout northern and central areas of Europe, including the NE part of the Iberian Peninsula (ZILLI *et al.*, 2005). Larvae develop on some hygrophilous plants, e.g.

*Carex*, *Juncus*, *Scirpus*, *Sparganium*, and *Iris pseudacorus*. The specimen was observed at light near the hygrophilous herbal stands of the river Douro which corresponds to its ecological requirements.

**New species for Portugal.**

### New province records

#### NEPTICULIDAE

The faunistic data on the following Nepticulidae are summarized by VAN NIEUKERKEN *et al.* (2004), supplemented by LAŠTUVKA & LAŠTUVKA (2008, 2009, 2011, 2014a, b, 2015, 2017), and VAN NIEUKERKEN *et al.* (2010). Only records of species with less than four province records are individually commented.

*Stigmella lapponica* (Wocke, 1862)

ES: Lérida, Valle de Arán, Tredós, 1 ♂, 14-VI-2017.

*Stigmella luteella* (Stainton, 1857)

ES: Gerona, Rocabruna, 1 ♂, 11-VI-2017; Huesca, Espés, 1 ♂, 15-VI-2017.

*Stigmella thuringiaca* (Petry, 1904)

ES: Soria, Aldehuela de Calatañazor, 2 ♂♂, 19-VI-2018.

*Stigmella assimilella* (Zeller, 1848)

ES: Lérida, Valle de Arán, Tredós, 2 ♂♂, 14-VI-2017.

Species with trophic relation to *Populus alba* and *P. tremula*, known from the provinces of Málaga and Salamanca (VAN NIEUKERKEN *et al.*, 2004); third Spanish record.

*Stigmella plagicolella* (Stainton, 1854)

ES: Lérida, Sarroca de Bellera, mines on *Prunus spinosa*, 26-VI-2017.

*Stigmella perpygmaeella* (Doubleday, 1859)

ES: Huesca, Saravillo, 1 ♀, 17-VI-2017.

*Stigmella basiguttella* (Heinemann, 1862)

ES: Lérida, Xerallo, 2 ♂♂, 1 ♀, 24-VI-2018.

*Stigmella roborella* (Johansson, 1971)

ES: Gerona, Rocabruna, 2 ♂♂, 1 ♀, 11-VI-2017.

*Glaucolepis thymi* (Szöcs, 1965)

ES: Huesca, Espés, 2 ♂♂, 15-VI-2017; Lérida, San Lorenzo de Morunys, 1 ♂, 27-VI-2017; Soria, Aldehuela de Calatañazor, 5 ♂♂, 1 ♀, 19-VI-2018.

*Glaucolepis montana* (Laštůvka, Laštůvka & Van Nieukerken, 2007)

ES: Soria, Aldehuela de Calatañazor, 1 ♂, 19-VI-2018.

*Trifurcula subnitidella* (Duponchel, 1843)

ES: Huesca, Espés, 1 ♂, 15-VI-2017.

*Trifurcula silviae* Van Nieukerken, 1990

ES: Huesca, Candasnos, 1 ♂, 12-VI-2018; Lérida, Xerallo, 1 ♂, 24-VI-2018.

*Trifurcula immundella* (Zeller, 1839)

ES: Huesca, Benasque-Cerler, 1 ♂, 24-VI-2017.

*Bohemannia pulverosella* (Stainton, 1849)

ES: Lérida, Sarroca de Bellera, mines on *Malus*, 26-VI-2017.

Known only from the province of Gerona (LAŠTUVKA & LAŠTUVKA, 2008); second Spanish record.

*Zimmermannia hispanica* (Van Nieukerken, 1985)

ES: Huesca, Candasnos, 2 ♂♂, 12-VI-2018; PT: Trás-os-Montes, Bemposta, 2 ♂♂, 16-VI-2018.

*Ectoedemia intimella* (Zeller, 1848)

ES: Huesca, Chía, 1 ♀, 20-VI-2018.

Known so far from the province of Zaragoza (LAŠTUVKA & LAŠTUVKA, 2008); second Spanish record.

*Ectoedemia caradjai* (Groschke, 1944)

ES: Lérida, San Lorenzo de Morunys, 1 ♂, 27-VI-2017.

*Ectoedemia ilicis* (Mendes, 1910)

ES: Soria, Aldehuela de Calatañazor, 3 ♂♂, 15-VI-2018.

*Ectoedemia erythrogenella* (Joannis, 1908)

ES: Huesca, Chía, 1 ♂, 20-VI-2018.

*Ectoedemia occultella* (Linnaeus, 1767)

ES: Gerona, Campredón, Valter 2000, 1 ♀, 27-VI-2018.

Species with trophic relation to *Betula* spp., known from the province of Orense (LAŠTUVKA & LAŠTUVKA, 2017); second Spanish record.

## INCURVARIIDAE

*Incurvaria vetulella* (Zetterstedt, 1839)

ES: Huesca, Benasque-Cerler, 1 ♂, 24-VI-2017.

Species known only from Asturias (LAŠTUVKA & LAŠTUVKA, 2017); second Spanish record.

*Phylloporia bistrigella* (Haworth, 1828)

ES: Huesca, Chía, 1 ♀, 20-VI-2018; Lérida, Valle de Arán, Tredós, 1 ♂, 14-VI-2017.

Species recorded only in the province of Lugo (LAŠTUVKA & LAŠTUVKA, 2017); second and third Spanish records.

## GRACILLARIIDAE

The faunistic data and remarks on the following Gracillariidae known in more than three provinces are given by VIVES MORENO (1994) and LAŠTUVKA & LAŠTUVKA (2006, 2007, 2009, 2011, 2014a, b, 2015, 2017).

*Caloptilia roscipennella* (Hübner, 1796)

ES: Huesca, Saravillo, 1 ♂, 17-VI-2017.

*Povolnya leucapennella* (Stephens, 1835)

ES: Lérida, Port del Comte, 1 ♂, 13-VI-2017.

*Callisto denticulella* (Thunberg, 1794)

ES: Huesca, Espés, 1 ♂, 15-VI-2017.

*Parornix betulae* (Stainton, 1854)

ES: Lérida, Valle de Arán, Tredós, 1 ♂, 14-VI-2017.

Third Spanish record, species so far known from the provinces of Orense and Zamora (LAŠTUVKA & LAŠTUVKA, 2014a, 2015).

*Parornix scoticella* (Stainton, 1850)

ES: Lérida, Valle de Arán, Tredós, 2 ♂♂, 14-VI-2017.

*Parornix tenella* (Rebel, 1919)

ES: Teruel, Montalbán, 2 ♂♂, 13-VI-2018.

Species recorded in Andalusia by VIVES MORENO (1994); second Spanish record.

*Phyllonorycter cerasinella* (Reutti, 1852)

ES: León, Viadangos de Arbas, 1 ♂, 22-VI-2017.

*Phyllonorycter haasi* (Rebel, 1900)

ES: Gerona, Camprodón, Valter 2000, 1 ♂, 27-VI-2018.

*Phyllonorycter floridæ* Laštůvka & Laštůvka, 2012

ES: Oviedo, Alto de la Farrapona, 1 ♀, 21-VI-2017.

*Phyllonorycter hispanicus* Laštůvka & Laštůvka, 2014

ES: Oviedo, Alto de la Farrapona, 3 ♂♂, 1 ♀, 21-VI-2017.

*Phyllonorycter staintoniella* (Nicelli, 1853)

ES: Huesca, Benasque-Cerler, 1 ♂, 1 ♀, 24-VI-2017.

*Phyllonorycter ulmifoliella* (Hübner, [1817])

ES: Oviedo, El Puerto de Leitariegos, mines on *Betula* sp., 21-VI-2017.

*Phyllonorycter cerasicolella* (Herrich-Schäffer, 1855)

ES: Lérida, Sarroca de Bellera, mines on *Prunus mahaleb*, 26-VI-2017.

## YPONOMEUTIDAE

*Niphonympha dealbatella* (Zeller, 1847)

ES: León, San Cristobal de Valdueza, 2 ♂♂, 20-VI-2017.

Species known only from the province of Ávila (VIVES MORENO & GASTÓN, 2017); second Spanish record.

## ARGYRESTHIIDAE

*Argyresthia arceuthina* Zeller, 1839

ES: Huesca, Chía, 1 ♂, 20-VI-2018.

*Argyresthia praecocella* Zeller, 1839

ES: Gerona, Camprodón, Valter 2000, 1 ♂, 27-VI-2018; Queralbs, 1 ♂, 1 ♀, 13-VI-2017; Rocabruna, 1 ♂, 10-VI-2018; Huesca, Benasque-Cerler, 1 ♂, 7 ♀♀, 21-VI-2018; Lérida, Port del Comte, 3 ♀♀, 13-VI-2017, 1 ♂, 25-VI-2018.

*Argyresthia kulfani* Bengtsson & Johansson, 2012

ES: Lérida, Valle de Arán, Tredós, 1 ♂, 14-VI-2017.

Second Spanish record from the same province (cf. LAŠTUVKA & LAŠTUVKA, 2015).

*Argyresthia trifasciata* Staudinger, 1871

ES: Soria, Aldehuela de Calatañazor, 2 ♂♂, 1 ♀, beaten from *Juniperus thurifera*, 15-VI-2018.

The larva predominantly develops in the shoots of non-prickly *Juniperus* species, e.g. on *Juniperus sabina*, *J. virginiana* or *J. chinensis* in ornamental greenery, and it is known as invasive species in many parts of Europe. The geographical origin of this species is not well known, the Iberian Peninsula is one of the options, where the autochthonous species *Juniperus thurifera*, *J. phoenicea* and *J. sabina* could be the original hosts.

*Argyresthia fundella* (Fischer von Röslerstamm, 1835)

ES: Huesca, Saravillo, 1 ♀, 17-VI-2017; Lérida, Valle de Arán, Tredós, 1 ♂, 14-VI-2017.

The larva mines needles of *Abies* spp. For the first time given from the province of Lérida by LAŠTUVKA & LAŠTUVKA (2015); second and third Spanish records.

PLUTELLIDAE

*Rhigognostis annulatella* (Curtis, 1832)

ES: León, Viadangos de Arbas, 1 ♂, 22-VI-2017.

*Rhigognostis incarnatella* (Steudel, 1873)

ES: León, Viadangos de Arbas, 1 ♀, 22-VI-2017; Lérida, Valle de Arán, Tredós, 1 ♀, 14-VI-2017.

Both relatively sparsely recorded species of higher cooler locations, with trophic relation to some Brassicaceae (e.g. AGASSIZ, 1996).

LYONETIIDAE

*Lyonetia prunifoliella* (Hübner, 1796)

ES: Huesca, Espés, 1 ♂, 15-VI-2017.

Species so far known from the province of Barcelona (LAŠTUVKA & LAŠTUVKA, 2015); second Spanish record.

HELIODINIDAE

*Heliodines roesella* (Linnaeus, 1758)

ES: Asturias, Alto de la Farrapona, 3 ♂♂, 5 ♀♀, 18-VI-2018; Lérida, Valle de Arán, Tredós, 2 ♂♂, 1 ♀, 22-VI-2018; Huesca, Benasque-Cerler, 1 ♂, 26-VI-2016; always many other specimens observed around the host plant *Chenopodium bonus-henricus*.

SESIIDAE

The faunistic data are summarized and remarks on biology and distribution on the following Sesiidae are given by LAŠTUVKA *et al.* (2000) and LAŠTUVKA & LAŠTUVKA (2014c), with additions in LAŠTUVKA & LAŠTUVKA (2015, 2017).

*Paranthrene insolita polonica* Schnaider, 1839

ES: Huesca, Espés, 1 ♂, 15-VI-2017.

*Synanthedon scoliaeformis* (Borkhausen, 1789)

ES: Lérida, Valle de Arán, Tredós, exit holes in *Betula* sp., 14-VI-2017.

*Synanthedon cephiformis* Ochsenheimer, 1808

ES: Lérida, Valle de Arán, Es Bordes, exit holes in *Abies alba*, 15-VI-2017.

Second Spanish record from the same province (cf. LAŠTUVKA & LAŠTUVKA, 2015).

*Chamaesphecia mysiniformis* (Boisduval, 1840)

ES: Gerona, Sant Juan de las Abadesas, 1 ♂, 27-VI-2017; Soria, Aldehuela de Calatañazor, 1 ♂, 18-VI-2017.

*Chamaesphecia ramburi* (Staudinger, 1866)

ES: Soria, Aldehuela de Calatañazor, 4 ♂♂, 18-VI-2017, about 50 ex. observ., 23-VI-2017.

*Chamaesphecia euceraeformis* (Ochsenheimer, 1816)

ES: Gerona, San Juan de las Abadesas, 2 ♂♂, 2 ♀♀, 28-VI-2017, San Pablo de Segurés, 1 ♂, 1 ♀, 28-VI-2017.

Additonal records of this species from the province of Gerona (cf. LAŠTUVKA *et al.*, 2000, CERVELLÓ, 2001).

*Chamaesphecia empiformis* (Esper, 1783)

ES: Huesca, Chía, larvae in the roots of *Euphorbia cyparissias*, 17-VI-2017, 1 ♂, 1 ♀, ex larva VII-2017.

The westernmost record of this species; so far known from the northern parts of the provinces Barcelona, Gerona, Lérida, and Huesca (c.f. GAVALDÁ, 1988, LAŠTUVKA *et al.*, 2000, LAŠTUVKA & LAŠTUVKA, 2017).

## BRACHODIDAE

*Brachodes funebris* (Feisthamel, 1833)

PT: Trás-os-Montes, Bemposta, 1 ♂, 16-VI-2018.

Species actually recorded in Alto Alentejo (CORLEY *et al.*, 2016) and Algarve (CORLEY *et al.*, 2018); third Portuguese record.

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## BIBLIOGRAPHY

AARVIK, L., BENGTSSON, B. Å., ELVEN, H., IVINSKIS, P., JÜRIVETE, U., KARSHOLT, O., MUTANEN, M. & SAVENKOV, N., 2017.– Nordic-Baltic checklist of Lepidoptera.– *Norwegian Journal of Entomology*, Supplement, 3: 1-236.

- AGASSIZ, D. J. L., 1996.– Yponomeutidae, Roeslerstammiidae, pp. 39-114.– In A. M. EMMET (ed.). *The moths and butterflies of Great Britain and Ireland*: 452 pp. Harley Books, Colchester.
- AGASSIZ, D., 2013.– Fauna Europaea: Argyresthiidae, Plutellidae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06. Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- BARANIAK, E., 2016.– *Rhigognostis senilella* (Zetterstedt, 1839) and *R. marmorosella* (Wocke, 1849): two valid species distinguishable in genitalia (Lepidoptera, Plutellidae).– *Zootaxa*, **4084**(3): 348-360.
- CERVELLÓ, A., 2001.– Noves dades sobre *Chamaesphecia euceraiformis* (Ochsenheimer, 1816) a Catalunya (Lepidoptera: Sesiidae).– *Butlletí de la Societat Catalana de Lepidopterologia*, **86**: 5-6.
- CORLEY, M., 2014.– Five new species of Microlepidoptera from Portugal.– *Entomologist's Record and Journal of Variation*, **126**: 229-243.
- CORLEY, M. F. V., 2015a.– The Lepidoptera collections of deceased Portuguese lepidopterists. II.– *Entomologist's Gazette*, **66**: 25-49.
- CORLEY, M. F. V., 2015b.– *Lepidoptera of continental Portugal. A fully revised list*: 282 pp. Martin Corley, Faringdon.
- CORLEY, M. F. V., CARDOSO, J. P., DALE, M. J., MARABUTO, E., MARAVALHAS, E. & PIRES, P., 2012a.– New and interesting Portuguese Lepidoptera records from 2010 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **40**(157): 5-21.
- CORLEY, M. F. V., MARABUTO, E., MARAVALHAS, E., PIRES, P. & CARDOSO, J. P., 2009.– New and interesting Portuguese Lepidoptera records from 2008 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **37**(148): 463-484.
- CORLEY, M. F. V., MARABUTO, E. & PIRES, P., 2007.– New Lepidoptera for the fauna of Portugal (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **35**(139): 321-334.
- CORLEY, M. F. V., MARAVALHAS, E. & PASSOS DE CARVALHO, J., 2006.– Miscellaneous additions to the Lepidoptera of Portugal (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **34**(136): 407-427.
- CORLEY, M. F. V., MERCKX, T., CARDOSO, J. P., DALE, M. J., MARABUTO, E., MARAVALHAS, E. & PIRES, P., 2012b.– New and interesting Portuguese Lepidoptera records from 2011 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **40**(160): 489-511.
- CORLEY, M. F. V., MERCKX, T., MARABUTO, E. M., ARNSCHEID, W. & MARAVALHAS, E., 2013.– New and interesting Portuguese Lepidoptera records from 2012 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **41**(164): 449-477.
- CORLEY, M. F. V., ROSETE, J., GONÇALVES, A. R., NUNES, J., PIRES, P. & MARABUTO, E., 2016.– New and interesting Portuguese Lepidoptera records from 2015 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **44**(176): 615-643.
- CORLEY, M. F. V., ROSETE, J., GONÇALVES, A. R., MATA, V. & NUNES, J. & PIRES, P., 2018.– New and interesting Portuguese Lepidoptera records from 2016 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **46**(181): 33-56.
- DE PRINS, J. & DE PRINS, W., 2018.– *Global taxonomic database of Gracillariidae (Lepidoptera)*. Available from <http://www.gracillariidae.net> (accessed 20 October 2018).
- EMMET, A. M., LANGMAID, J. R., BLAND, K. P., CORLEY, M. F. V. & RAZOWSKI, J., 1996.– Coleophoridae, pp. 126-338.– In A. M. EMMET. *The moths and butterflies of Great Britain and Ireland*: 452 pp. Harley Books, Colchester.
- FRIESE, G., 1969.– Beiträge zur Insekten-Fauna der DDR: Lepidoptera-Argyresthiidae.– *Beiträge zur Entomologie*, **19**: 693-752.
- FREY, H., 1870.– Ein Beitrag zur Kenntniss der Microlepidopteren.– *Mittheilungen der Schweizerischen entomologischen Gesellschaft*, **3**(5): 244-256, (6): 277-296.
- GAVALDÁ, A., 1988.– Aportació a l'estudi dels Sesiidae Boisduval, 1828 de Catalunya.– *Treballs de la Societat Catalana de Lepidopterologia*, **8**: 11-35.
- GIBEAUX, C. A., 1992.– Description de deux Argyresthiinae nouveaux (Lep. Yponomeutidae).– *Entomologica Gallica*, **3**(4): 189-192.
- KALLIES, A., 2013.– Fauna Europaea: Brachodidae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06, Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- KARSHOLT, O., 2013.– Fauna Europaea: Roeslerstammiidae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN

- (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06. Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- KOSTER, J. C. & SINEV, S. YU., 2003.– Momphidae, Batrachedridae, Stathmopodidae, Agonoxenidae, Cosmopterigidae, Chrysopeleiiidae.– In P. HUEMER, O. KARSHOLT & L. LYNEBORG (eds). *Microlepidoptera of Europe*, **5**: 387 pp. Apollo Books, Stenstrup.
- KOSTER, J. C. & SINEV, S. Yu., 2013.– Fauna Europaea: Momphidae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06. Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- LAŠTUVKA, A. & LAŠTUVKA, Z., 1997.– *Nepticulidae Mitteleuropas. Ein illustrierter Begleiter (Lepidoptera)*: 229 pp. Konvoj, Brno.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2006.– The European *Phyllonorycter* species feeding on the plants of the tribe Genistae (Fabaceae), with descriptions of twelve new species (Lepidoptera: Gracillariidae).– *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, **54**(5): 65-84.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2007.– Southern European *Phyllonorycter* species mining *Quercus*, with two new species (Lepidoptera: Gracillariidae).– *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, **55**(1): 95-110.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2008.– Seven Nepticulidae new to the Iberian Peninsula and several new province records (Lepidoptera: Nepticulidae).– *SHILAP Revista de lepidopterología*, **36**(144): 457-464.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2009.– New records of mining Lepidoptera from the Iberian Peninsula (Lepidoptera: Nepticulidae, Opostegidae, Bucculatrigidae, Gracillariidae).– *SHILAP Revista de lepidopterología*, **37**(148): 485-494.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2011.– New records of Nepticulidae and Gracillariidae from the Iberian Peninsula (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **39**(156): 379-387.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2014a.– New records of mining moths from the Iberian Peninsula (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **42**(165): 121-133.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2014b.– New records of mining moths from the Iberian Peninsula from 2014 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **42**(168): 633-647.
- LAŠTUVKA, Z. & LAŠTUVKA, A., 2014c.– Sesiidae of the Iberian Peninsula, new records and distributional analysis (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **42**(168): 559-580.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2015.– New records of Lepidoptera from the Iberian Peninsula for 2015 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **43**(172): 633-644.
- LAŠTUVKA, A. & LAŠTUVKA, Z., 2017.– New records of Lepidoptera from the Iberian Peninsula from 2016 (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **45**(178): 283-297.
- LAŠTUVKA, Z., BLÄSIUS, R., BARTSCH, D., BETTAG, E., BLUM, E., LAŠTUVKA, A., LINGENHÖLE, A., PETERSEN, M., RIEFENSTAHL, H. & ŠPATENKA, K., 2000.– Zur Kenntnis der Glasflügler Spaniens (Lepidoptera: Sesiidae).– *SHILAP Revista de lepidopterología*, **28**(110): 227-237.
- LEPIFORUM, 2018.– Bestimmung von Schmetterlingen (Lepidoptera) und ihren Präimaginalstadien. *Bestimmungshilfe für die in Europa nachgewiesenen Schmetterlingsarten*. Available from <http://www.lepiforum.de/> (accessed 20 October 2018).
- LVOVSKY, A., 2013.– Fauna Europaea: Oecophoridae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06. Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- MACIÀ, R., GASTÓN, F. J., REDONDO, V. & YLLA, J., 2013.– El género *Chelis* Rambur, [1866] en la Península Ibérica (Lepidoptera: Erebidae, Arctiinae).– *Boletín de la Sociedad Entomológica Aragonesa*, **52**: 121-136.
- NIEUKERKEN, E. J. VAN, 2013.– Fauna Europaea: Nepticulidae, Adelidae, Incurvariidae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06. Available <http://www.faunaeur.org/> (accessed 20 October 2018).
- NIEUKERKEN, E. J. VAN, LAŠTUVKA, A. & LAŠTUVKA, Z., 2004.– Annotated catalogue of the Nepticulidae and Opostegidae of the Iberian Peninsula (Lepidoptera: Nepticuloidea).– *SHILAP Revista de lepidopterología*, **32**(127): 211-260.
- NIEUKERKEN, E. J. VAN, LAŠTUVKA, A. & LAŠTUVKA, Z., 2010.– Western Palaearctic *Ectoedemia* (*Zimmermannia*) Hering and *Ectoedemia* Busck s. str. (Lepidoptera, Nepticulidae): five new species and new data on distribution, hostplants and recognition.– *ZooKeys*, **32**: 1-82.
- PRZYBYLOWICZ, L., FIBIGER, M. & SKULE, B., 2013.– Fauna Europaea: Arctiinae.– In O. KARSHOLT & E.

- J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06.  
Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- VIVES MORENO, A., 1994.– *Catálogo sistemático y sinónímico de los lepidópteros de la Península Ibérica y Baleares (Insecta: Lepidoptera) (Segunda Parte)*: 775 pp. Secretaría General Técnica, Ministerio de Agricultura, Pesca y Alimentación, Madrid.
- VIVES MORENO, A., 2014.– *Catálogo sistemático y sinónímico de los Lepidoptera de la Península Ibérica, de Ceuta, de Melilla y de las islas Azores, Baleares, Canarias, Madeira y Salvajes (Insecta: Lepidoptera)*: 1184 pp. Suplemento de SHILAP Revista de lepidopterología, Improitalia, Madrid.
- VIVES MORENO, A. & GASTÓN, J., 2017.– Contribución al conocimiento de los Microlepidoptera de España, con la descripción de una especie nueva (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **45**(178): 317-342.
- WOLF, H. VAN DER & BALDIZZONE, G., 2013.– Fauna Europaea: Coleophoridae.– In O. KARSHOLT & E. J. VAN NIEUKERKEN (eds). *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea, Version 2017.06.  
Available from <http://www.faunaeur.org/> (accessed 20 October 2018).
- ZILLI, A., RONKAY, L. & FIBIGER, M., 2005.– Apameini. *Noctuidae Europaeae*, **8**: 323 pp. Entomological Press, Sorø.

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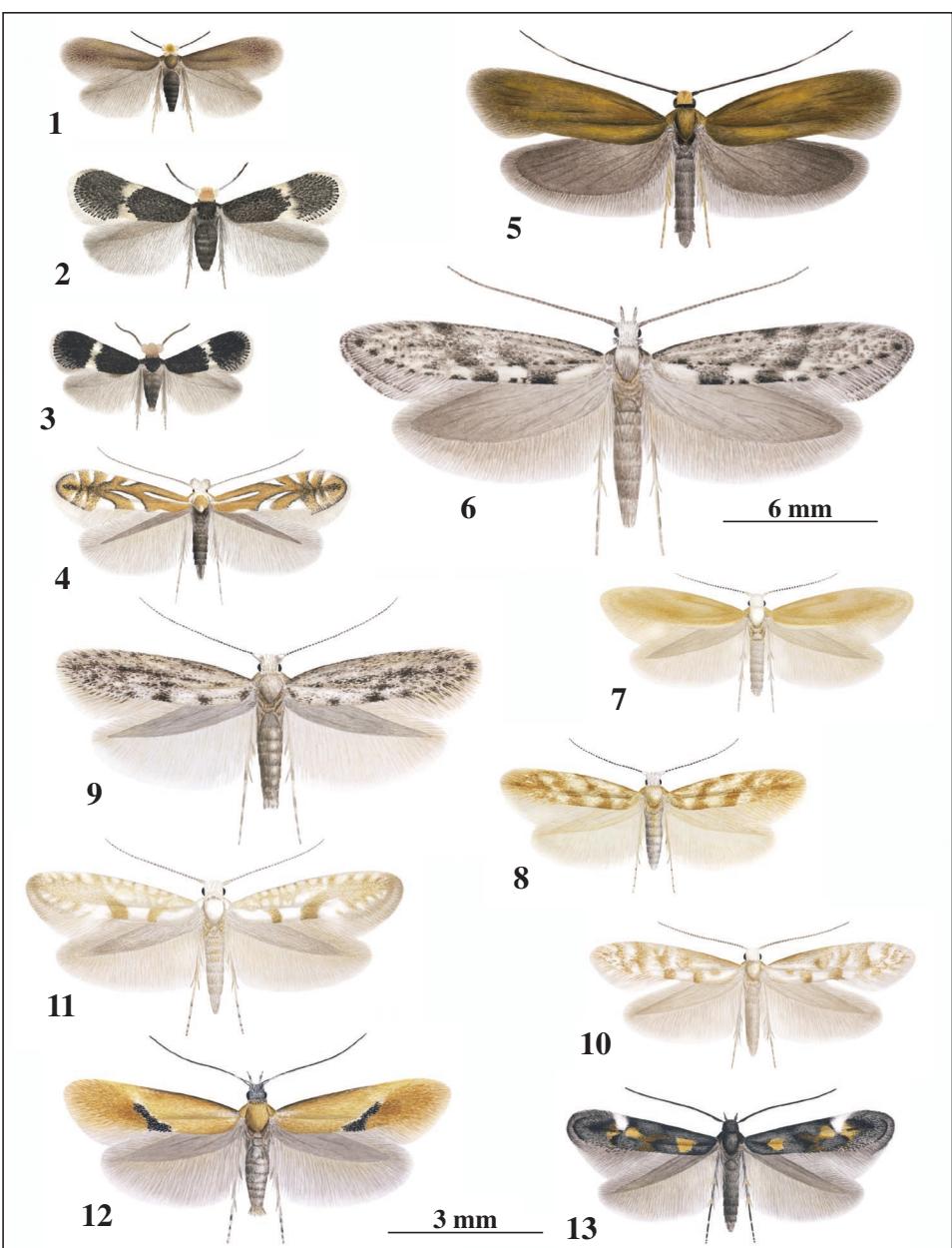
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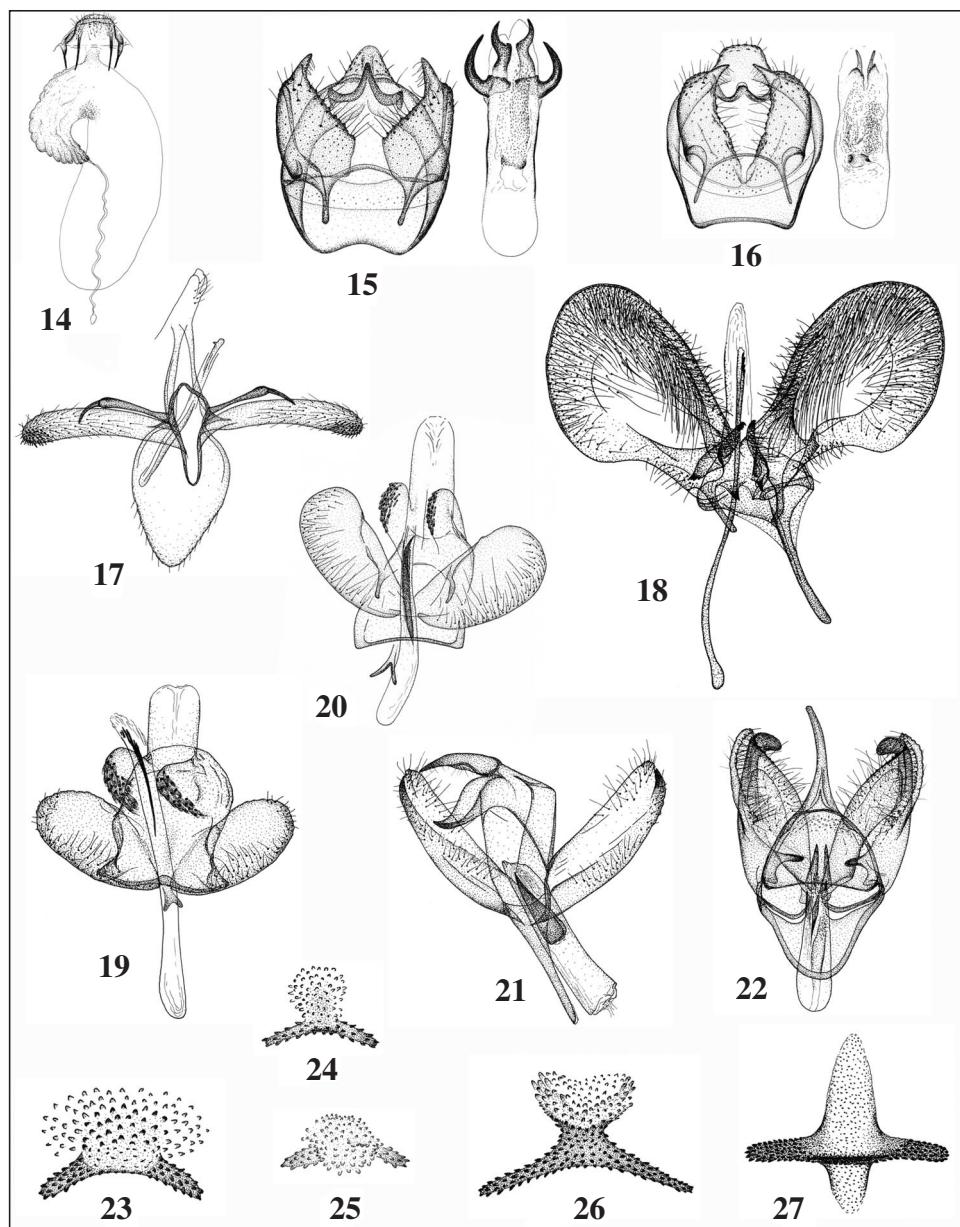
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**Figs. 1-13.-** 1. *Stigmella nylandriella* (Tgstr.). 2. *Ectoedemia argyroepeza* (Z.). 3. *E. spinosella* (Joann.). 4. *Phyllonorycter sorbi* (Frr.). 5. *Roeslerstamnia erxlebella* (F.). 6. *Rhigognostis senilella* (Zett.). 7. *Argyresthia aurulentella* Stainton. 8. *A. thuriferana* Gbx. 9. *A. buvati* Gbx. 10. *A. reticulata* Stgr. 11. *A. submontana* Frey. 12. *Batia internella* Jackh. 13. *Mompha raschkiella* (Z.).



Figs. 14-27.— Male (15-22) and female (14) genitalia. 14. *Stigmella nylandriella* (Tgstr.). 15. *Ectoedemia argyroepeza* (Z.). 16. *E. spinosella* (Joann.). 17. *Phyllonorycter sorbi* (Frr.). 18. *Rhigoognostis senilella* (Zett.). 19. *A. thuriferana* Gbx. 20. *A. reticulata* Stgr. 21. *Batia internella* Jäckh. 22. *Mompha raschkiella* (Z.). 23-25. Signum of the female genitalia. 23. *Argyresthia aurulentella* Stainton. 24. *A. thuriferana* Gbx. 25. *A. buvati* Gbx. 26. *A. reticulata* Stgr. 27. *A. submontana* Frey.