

New and interesting Portuguese Lepidoptera records from 2021 (Insecta: Lepidoptera)

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Abstract

13 species are added to the Portuguese Lepidoptera fauna, of which three are new for the Iberian Peninsula, and two species deleted, mainly as a result of fieldwork undertaken by the authors and others in 2021. In addition, second and third records for the country, new province records and new host-plant data for a number of species are included. A summary of recent papers affecting the Portuguese fauna is included.

Keywords: Insecta, Lepidoptera, distribution, Portugal.

Novos e interessantes registos portugueses de Lepidoptera em 2021 (Insecta: Lepidoptera)

Resumo

Como resultado do trabalho de campo desenvolvido pelos autores e outros, principalmente no ano de 2021, são adicionadas 13 espécies de Lepidoptera à fauna de Portugal, das quais três são novas para a Península Ibérica, e duas são retiradas. Adicionalmente, são apresentados segundos e terceiros registos de espécies previamente conhecidas, bem como novas plantas alimentícias para algumas espécies. É apresentado um sumário dos mais recentes trabalhos relevantes para a fauna portuguesa.

Palavras-chave: Insecta, Lepidoptera, distribuição geográfica, Portugal.

Nuevas e interesantes citas portuguesas de Lepidoptera en 2021 (Insecta: Lepidoptera)

Resumen

Con el trabajo de campo efectuado por los autores y otros, principalmente durante el año de 2021, se añaden 13 especies de Lepidoptera a la fauna de Portugal, tres de las cuales nuevas para la Península Ibérica, y se elimina dos especies. Adicionalmente, se muestran segundos y terceros registros de especies ya conocidas, así como nuevas plantas nutricias de algunas otras especies. Finalmente, se presenta un resumen de los trabajos más recientes que son relevantes para la fauna portuguesa.

Palabras clave: Insecta, Lepidoptera, distribución geográfica, Portugal.

Introduction

This paper is the sixteenth in the series of annual summaries of new knowledge of Portuguese

Lepidoptera. It gives records of species of Lepidoptera added to the Portuguese fauna in 2021 and some unpublished earlier records, together with new province records not included in the checklist (Corley, 2015). Additional data include new data on larval host-plants within the country and second and third records of species for the country, which are only indicated when they are not in new provinces. Papers published in 2021 and part of 2022 that relate to the Portuguese Lepidoptera fauna are listed and briefly summarised. Finally, an Appendix lists the new species for Portugal separately, with numbers indicating their position in the checklist; new genera for Portugal have author and year of publication given.

13 species new for Portugal are listed below, of which three are new for the Iberian Peninsula. Two species are removed from the Portuguese list. One of the new species listed here (*Conistra alicia*) was previously listed for Portugal, but the record was rejected in Corley (2015), as being erroneous, see below.

In Corley et al. (2020) the number of Lepidoptera species recognised from Portugal was 2743. With the current paper this total has risen to 2754.

Material and Methods

Most species were captured at light. For specimens not taken at light, the means of capture is given. Specimens are retained in the collections of the original recorders, unless otherwise stated. However, a few records are based only on photographic evidence. Original photos of all species new for Portugal but without a voucher specimen are provided in this paper (Figures 1, 2, 5, 7, 8).

The order and nomenclature of families and species follows the Portuguese list (Corley, 2015). The nomenclature of plant names follows the EURO+MED PLANT-BASE.

The entry for species new for Portugal concludes with a summary of the known European distribution, and available information on the larval host-plant, given in square brackets if the information comes from outside Portugal.

Localities with UTM squares and altitude: (Municipality in brackets)

Abiúl (Pombal)	NE3913	180 m
Aguas do Marão, Ansiães (Amarante)	NF9070	880 m
Alcaria, Rocha da Pena (Loulé)	NB8222	230 m
Aldeia Nova, Avintes (Vila Nova de Gaia)	NF3749	70 m
Alfambras (Aljezur)	NB1724	75 m
Amoreira, Rego Travesso (Óbidos)	MD8255	50 m
Ansião, 2 km E. of,	NE5019	250 m
Aveção do Cabo, Campeã (Vila Real)	NF9372	800 m
Castelo dos Mouros (Sintra)	MC6694	350 m
Corredoura, São Pedro, Serra da Pevide (Porto de Mós)	ND1383	200 m
Corticeiro de Cima (Cantanhede)	NE2875	55 m
Cruzinha, Mexilhoeira Grande (Portimão)	NB3411	20 m
Furadouro (Condeixa-a-Nova)	NE4335	250 m
Glória (Estremoz)	PC2595	350 m
Grada, Barcouço (Mealhada)	NE4481	60 m
Lama Grande, Serra de Montezinho (Bragança)	PG8346	1390 m
Louredo (Póvoa de Lanhoso)	NG5900	260 m
Louriçal (Pombal)	NE2228	40 m
Manteigas, S.W. of,	PE2270	1000 m
Meia Praia (Lagos)	NB3108	3 m
Montezinho (Bragança)	PG8545	1005 m
Palácio de Sintra (Sintra)	MC6694	240 m

Pampilhosa de Botão (Mealhada)	NE4964	90 m
Parque Biológico de Gaia (Vila Nova de Gaia)	NF3650	110 m
Pinhel	PE6316	540 m
Pó (Bombarral)	MD8151	50 m
Poço (Condeixa-a-Nova)	NE4406	220 m
Ponte do Rio Maceira, Serra do Gerês (Terras de Bouro)	NG7127	650 m
Portela de Famalicão (Guarda)	PE3879	890 m
Praia das Bicas (Sesimbra)	MC8357	60 m
Praia do Osso da Baleia, Carriço (Pombal)	NE0728	10 m
Praia do Samouco (Marinha Grande)	NE0007	6 m
Quinta das Flores, Estoi (Faro)	NB9807	160 m
Quinta de Marim (Olhão)	PA0599	13 m
Quintarrei (Valongo)	NF5900	166 m
Ribeiro de Guilharde, 2 km S.E. of Meixedo (Bragança)	PG8634	605 m
Sagres, road to Cabo de São Vicente (Vila do Bispo)	NA0298	50 m
Senande, Aguiar da Sousa (Paredes)	NF4751	100 m
Torre, zone adjacent to, (Seia)	PE1666	1800 m
Vairão (Vila do Conde)	NF2775	95 m
Valarinho, Louriçal (Pombal)	NE2230	35 m
Vale de Figueiredo (Bombarral)	MD8051	80 m
Vendas Novas da Tôr (Loulé)	NB8618	260 m
Vila Velha de Ródão	PD1289	100 m

Recorders and determiners:

Carlos Almeida	Edmundo Jesus
Giorgio Baldizzone	Ole Karsholt
Paula Banza	João Nunes
Miguel Berkemeier	Patrícia Garcia Pereira
Rudolf Bryner	Carla Rosete
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Sónia Ferreira	João Tomás
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Christopher Fraser-Jenkins	Thijs Valkenburg
Jorge Pereira Gomes	Christof Zeller-Lukashort
Ana Rita Gonçalves	Alberto Zilli
Martin Honey	

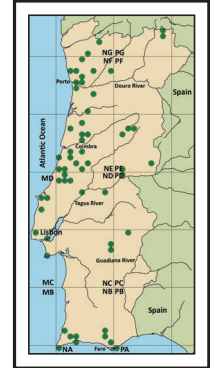
Abbreviations and symbols

coll.	collection
comm	communicated by
conf.	confirmed by
det.	determined by
gen. det.	confirmed by genitalia dissection
pers. comm.	personal communication
ZMUC	University of Copenhagen Zoological Museum, Copenhagen, Denmark

- * New for Portugal, i.e., not listed for Portugal in Corley (2015).
** New for the Iberian Peninsula.

Provinces:

AAL	Alto Alentejo
ALG	Algarve
BA	Beira Alta
BB	Beira Baixa
BAL	Baixo Alentejo
BL	Beira Litoral
DL	Douro Litoral
E	Estremadura
M	Minho
R	Ribatejo
TM	Trás-os-Montes



List of families and species

MICROPTERIGIDAE

Micropterix granatensis Heath, 1981

Third Portuguese record. ALG: Alcaria, Rocha da Pena, by day, 8-IV-2013, Bryner, det. Zeller-Lukashort.

NEPTICULIDAE

Stigmella basiguttella (Heinemann, 1862)

BL: Ansião, 5-VII-2016, Rosete, det. Corley.

Stigmella samiatella (Zeller, 1839)

BL: Ansião, 9-VII-2021, Rosete.

Stigmella eberhardi (Johansson, 1971)

BL: Furadouro, 7-IX-2015, Rosete, Jesus, I. Ferreira and Gonçalves, conf. Corley.

Zimmermannia liguricella (Klimesch, 1953)

E: Praia do Samouco, 16-VII-2021, Rosete, conf. Corley.

PSYCHIDAE

Delete *Ptilocephala melanura* (Bourgogne, 1954). Considered to be at best a subspecies of *P. colossa* (Bang-Haas, 1907) but almost certainly just infraspecific variation (Arnscheid & Weidlich, 2017).

TINEIDAE

Infurcitinea karadaghica Zagulajev, 1979

E: Praia do Samouco, 16-VII-2021, Rosete, conf. Corley.

Reisserita flavofimbriella (Chrétien, 1925)

BL: Ansião, 9-VII-2021, Rosete; BA: Portela de Famalicão, 1-VIII-2021, Rosete.

** *Teichobia filicivora* (Meyrick, 1937)

E: Palácio de Sintra, larvae on *Polypodium cambricum* L., 2020, Fraser-Jenkins; larvae were subsequently found at Sintra by Fraser-Jenkins on *Polystichum setiferum* (Forsk.) Woynt, *Asplenium hemionitis* L. and *Polypodium interjectum* Shivas; adult on ferns, Castelo dos Mouros, Sintra, 1-XI-2021, van Dort, conf. Corley (Figure 1). Britain, Ireland and Madeira.

BUCCULATRICIDAE

** *Bucculatrix cristatella* (Zeller, 1839)

BL: Abiúl, 15-VII-2020, Rosete, det. Dale. Most of Europe from France, northern Italy and Romania northwards. [*Achillea millefolium* L.].

GRACILLARIIDAE

Phyllonorycter barbarella (Rebel, 1901)

BL: Ansião, 3-V-2013, Rosete.

Phyllonorycter cerasicolella (Herrich-Schäffer, 1855)

BA: Portela de Famalicão, 1-VIII-2021, Rosete, conf. Corley.

Phyllonorycter ulicicolella (Stainton, 1851)

BL: Ansião, 5-VII-2016, Rosete, conf. Corley.

YPONOMEUTIDAE

* *Pseudoswammerdamia combinella* (Hübner, 1786)

BL: Pampilhosa de Botão, 3-III-2021, Jesus, det. Nunes (Figure 2). Nearly all Europe, absent from most Baltic countries and southern Balkan peninsula. [*Prunus spinosa* L.].

YPSOLOPHIDAE

Ypsolopha ustella (Clerck, 1759)

E: Praia do Samouco, 16-VII-2021, Rosete.

AUTOSTICHIDAE

Symmocoides ferreirae Gozmány, 2008

BL: Ansião, 10-VI-2017, Rosete, conf. Corley.

OECOPHORIDAE

Metalampra italica Baldizzone, 1977

Second Portuguese record. DL: Aldeia Nova, Avintes, 27-VII-2021, Teixeira, det. Nunes.

Dasycera oliiviella (Fabricius, 1794)

ALG: Alfambras, 20-V-2018, Valadares.

DEPRESSARIIDAE

Agonopterix rutana (Fabricius, 1794)

E: Vale de Figueiredo, 11-VI-2021, H. Cardoso.

COSMOPTERIGIDAE

* *Cosmopterix coryphaea* Walsingham, 1907

ALG: Quinta de Marim, 10-V-2021, Valkenburg, gen. det. Nunes (Figure 3). Southernmost parts of Europe from Spain to Greece, Croatia, Canary Islands. [*Phragmites australis* (Cav.) Steud.].

GELECHIIDAE

Mesophleps trinotella Herrich-Schäffer, 1856

E: Pó, 3-IV-2021, H. Cardoso.

Anarsia spartiella (Schrank, 1802)

E: Pó, 5-VII-2021, H. Cardoso, conf. Corley.

Chrysoesthia sexguttella (Thunberg, 1794)

E: Amoreira, 11-III-2021, H. Cardoso.

* *Aroga temporariella* Sattler, 1960

BL: Poço, 7-IV-2017, Rosete, det. Corley. France, Spain. Host-plant unknown.

ELACHISTIDAE

** *Elachista pullicomella* Zeller, 1839

BA: Above Manteigas, by day, 12-VI-1986, Karsholt (ZMUC). Most of Europe, absent from British Isles, Mediterranean Islands, Spain, Greece. [Various Poaceae].

COLEOPHORIDAE

Coleophora albella (Thunberg, 1788)

BL: Ansião, 26-V-2017, Rosete, det. Corley.

* *Coleophora zernyi* Toll, 1944

ALG: Vendas Novas da Tôr, 6–14-IV-2013, Bryner, det. Stübner. Spain, Sardinia, Corsica. Host-plant unknown.

Coleophora discordella Zeller, 1849

DL: Quintarrei, case on *Lotus corniculatus* L., 25-I-2021, Nunes.

Coleophora helichrysiella Krone, 1909

E: Praia do Samouco, 16-VII-2021, Rosete, det. Corley.

Coleophora albilineella Toll, 1960

Third (and earliest) Portuguese record. BA: Torre, 1600-1950 m, 10-11-VII-1986, Karsholt, det. Baldizzone (ZMUC).

Coleophora ribasella Baldizzone, 1982

E: Praia do Samouco, empty cases on *Artemisia campestris maritima* (DC) Arcang., 9-VII-2021, Rosete.

SCYTHRIDIDAE

Scythris cistorum (Millière, 1876)

E: Corredoura, São Pedro, 29-IX-2014, Rosete, det. Corley.

Scythris sinensis (Felder & Rogenhofer, 1875)

Second Portuguese record. M: Adults on *Chenopodium* L. by day, Louredo, 20-IX-2021, Nunes.

* *Scythris pulicella* (Staudinger, 1859)

ALG: Sagres, road to Cabo de São Vicente, by day, 12-IV-2013, Bryner. Spain. Host-plant unknown.

PTEROPHORIDAE

Pterophorus pentadactyla (Linnaeus, 1758)

BL: Corticeiro de Cima, 26-VIII-2021, C. Rosete, in coll. J. Rosete.

Gypsochares bigoti Gibbeaux & Nel, 1989

E: Praia do Samouco, 16-VII-2021, Rosete.

TORTRICIDAE

Clepsis consimilana (Hübner, 1817)

Since the description of *Clepsis razowskii* Gastón, Vives & Revilla, 2017 (synonym of *C. eatoniana* (Ragonot, 1881)) we have examined genitalia of a substantial number of specimens of the *C. consimilana* aggregate, although not from every province. From this it is evident that nearly all records of *C. consimilana* from Portugal belong to *C. eatoniana*, with confirmed records from ALG, AAL, R, E, BL, DL and TM. *C. consimilana* sensu stricto appears to be restricted to north-west Portugal. We only have the following records: DL: Vairão, 29-V-2004, Corley; Senande, 7-V-2021, Nunes and S. Ferreira; M: Ponte Rio Maceira, 15-VI-2010, Corley.

Cochylidia rupicola (Curtis, 1834)

BL: Grada, Barcouço, 5-X-2021, L. Silva, conf. Corley.

* *Ancylis unculana* (Haworth, 1811)

TM: Ribeiro de Guilharde, Meixedo, 30-VII-2021, C. Silva, Jesus and Teixeira (Figure 5). Almost all Europe except southern Balkan countries. [*Rhamnus* L., *Frangula* Mill.].

Rhyacionia pinivorana (Lienig & Zeller, 1846)

DL: Águas do Marão, Ansiães, 9-VI-2021, Jesus and C. Silva.

Selania leptastriana (Curtis, 1831)

BL: Praia do Osso da Baleia, Carriço, on *Brassica tournefortii* Gouan by day, 23-XII-2021, Rosete.

COSSIDAE

Cossus cossus (Linnaeus, 1758)

BL: Ansião, 9-VII-2021, Rosete.

Stygia australis Latreille, 1803

ALG: Pair in copula found by day, Meia Praia, 12-VI-2021, I. Soares, det. H. Cardoso.

NYMPHALIDAE

Charaxes jasius (Linnaeus, 1767)

ALG: Female ovipositing on *Osyris lanceolata* Hochst. & Steud., Quinta das Flores, 6-XI-2013, egg eclosion 25-XI-2013, larva until 24-II-2014, Fonseca.

PYRALIDAE

Aglossa caprealis (Hübner, 1809)

BL: Louriçal, 30-VI-2020, Rosete.

Hypotia corticalis (Denis & Schiffermüller, 1775)

E: Praia das Bicas, 24-VIII-2021, Almeida, det. Valadares.

* *Merulempista turturella* (Zeller, 1848)

ALG: Quinta de Marim, 10-VIII-2021, Valkenburg and Tomás, gen. det. Nunes (Figure 6). Spain, France, Italy, Mallorca. [*Tamarix*].

Acrobasis marmorea (Haworth, 1811)

BL: Abiúl, 2-VII-2021, Rosete, gen. det.

Phycitodes albatella (Ragonot, 1887)

E: Praia do Samouco, 16-VII-2021, Rosete, gen. det.

CRAMBIDAE

Anania hortulata (Linnaeus, 1758)

Third Portuguese record. TM: Aveção do Cabo, 2-VII-2021, Fernandes.

Arnia nervosalis Guenée, 1849

E: Praia das Bicas, 24-VIII-2021, Almeida, det. Valadares.

Catoptria lythargyrella (Hübner, 1796)

Second Portuguese record. TM: Lama Grande, 16-VIII-2021, Nunes and Jesus.

GEOMETRIDAE

* *Idaea alicantaria* (Reisser, 1963)

ALG: Quinta de Marim, 25-VI-2021, Valkenburg and Tomás, conf. Nunes (Figure 7). Spain, Ibiza. Host-plant unknown.

Larentia clavaria (Haworth, 1809)

BA: Pinhel, 14-XI-2021, Valadares.

Chesias legatella (Denis & Schiffermüller, 1775)

E: Praia do Samouco, 28-XI-2014, Rosete.

Neognopharmia stevenaria (Boisduval, 1840)

AAL: Glória, 12-V-2021, H. Cardoso.

Agriopis bajaran (Denis & Schiffermüller, 1775)

ALG: Cruzinha, 13-I-2011, Banza.

NOTODONTIDAE

Pheosia tremula (Clerck, 1759)

DL: Parque Biológico de Gaia, 6-V-2021, Gomes.

EREBIDAE

Orgyia trigotephras Boisduval, 1829

BA: Pinhel, 29-VI-2020, Valadares.

Setina cantabrica (de Freina & Witt, 1985)

First record of 21st century. TM: Lama Grande, 29-VII-2021, Jesus, C. Silva and Teixeira.

Autophila dilucida (Hübner, 1803)

BB: Vila Velha de Ródão, 26-VI-2019, Berkemeier, comm. Garcia Pereira, conf. Corley. Not recorded since 1967.

NOCTUIDAE

Acronicta leporina (Linnaeus, 1758)

BL: Valarinho, Louriçal, 18-VIII-2018, Rosete.

* *Apamea furva* (Denis & Schiffermüller, 1775)

TM: Montesinho, 1-VII-2021, Valadares, conf. Corley (Figure 8). Nearly all European countries; Sardinia, absent from other Mediterranean islands. [Poaceae].

Oligia latruncula (Denis & Schiffermüller, 1775)

DL: Senande, 7-V-2021, Nunes and S. Ferreira (gen. det.).

* *Conistra alicia* Lajonquière, 1939

Reinstate this as a Portuguese species, see below under *C. haleae*. *C. alicia* is known from BAL, AAL, BL, DL and TM (Corley, 2015; Marabuto, 2018; Corley et al. 2020). To these a recent record from Algarve can be added: ALG: Alfambras, 6-I-2022, Valadares, det. H. Cardoso and Corley. Spain, France.

Delete *Conistra haleae* Fibiger & Top-Jensen, 2010

We have re-examined nearly all Portuguese specimens previously identified as *C. haleae* and additional specimens collected recently and conclude that they do not have all the characters given for *C. haleae* in the original description of that species. It is our view that they lie within the variation of *C. alicia*, which should therefore be reinstated as a Portuguese species.

Xestia sexstrigata (Haworth, 1809)

Second Portuguese record. TM: Lama Grande, 16-VIII-2021, Nunes and Jesus.

Recent literature

Aarvik et al. (2021) make a number of taxonomic changes which are relevant to the Portuguese list. They point out that Brown et al. (2020) had overlooked *Longicornutia* Razowski, 1960 as the available genus for *Cochylis epilinana*, which they considered not to be congeneric with other *Cochylis* sensu stricto species.

They consider that the transfer of *Tuta absoluta* to genus *Phthorimaea* was premature based on the

evidence provided by Corro Cheng & Metz (2021) and that it should remain in genus *Tuta* until a really thorough taxonomic revision of Gnorimoschemini on a global scale renders change necessary.

They give *Colias croceus* (Geoffroy, 1785) as the correct citation for this species.

The correct year of publication of *Fissipunctia* Beck is 1992.

Corley et al. (2021) add 13 species to the Portuguese list and delete three.

Gastón & Huemer (2022) describe a new species, *Metzneria leae* from Spain. Portuguese records are not considered, but Algarve records of *M. subflavella* Englert, 1974 (Corley, 2005) belong to the new species, which feeds in seed-heads of *Klasea baetica* (DC.) Holub in Portugal. There is one more Portuguese record: Vale Santo, Vila do Bispo, Algarve, 15-V-2019, Nunes, C. Silva and Jesus (Figure 4). *M. subflavella* should be deleted from the Portuguese list.

Huemer (2021) describes *Metzneria neli* sp. n. from France and Spain, closely related to *M. tristella* Rebel, 1901. He did not examine Portuguese specimens. We can confirm that material named *tristella* from Algarve and Baixo Alentejo belongs to *M. neli*. Probably all Portuguese specimens belong to the new species, but although this has not been confirmed, it is appropriate to delete *M. tristella* from the Portuguese list. In France *M. neli* feeds on the seeds of *Cheirolophus intybaea* (Lam.) Dostál. In Algarve it feeds on seeds of *Cheirolophus sempervirens* Pomel. Records of *M. tristella* from Estremadura, Beira Litoral and Beira Baixa remain unconfirmed.

Huemer (2022) has revised the *Caryocolum tricolorella* complex, describing new species from Italy and the Balkans. He suggests that there are uncertainties regarding the Portuguese records of *C. tricolorella* and *C. fibigerium*. His doubts arise from not including Portuguese material in his study. We have re-examined our Portuguese material and there is no reason to doubt the identifications.

Nunes (2021) listed Lepidoptera recorded from Valongo municipality in Douro Litoral but did not indicate those species that were new for that province. These are *Parectopa ononidis* (Zeller, 1839), *Euspilapteryx auroguttella* Stephens, 1835, *Ocnerostoma friesei* Svensson 1966, *Odites kollarella* (Costa, 1832), *Monochroa hornigi* (Staudinger, 1883), *Acleris hyemana* (Haworth, 1811), *Pyralis lienigialis* (Zeller, 1843), *Apomyelois ceratoniae* (Zeller, 1839), *Eupithecia nanata* (Hübner, 1813), *Eublemma purpurina* (Denis & Schiffermüller, 1775), *Minucia lunaris* (Denis & Schiffermüller, 1775) and *Lithophane semibrunnea* (Haworth, 1809).

Nunes (2022) listed Lepidoptera recorded from Mata de Vilar in Lousada municipality in Douro Litoral. He indicates 19 new species for Douro Litoral: *Monopis obviella* (Denis & Schiffermüller, 1775), *Coleophora albella* (Thunberg, 1788), *Paramesia alhamana* (Schmidt, 1933), *Aleimma loeflingiana* (Linnaeus, 1758), *Epinotia festivana* (Hübner, 1799), *Eucosma conterminana* (Guenée, 1845), *Pseudococcyx tessulatana* (Staudinger, 1871), *Pammene splendidulana* (Guenée, 1845), *Brachodes gaditana* (Rambur, 1866), *Elegia atrifasciella* Ragonot, 1887, *Elegia similella* (Zincken, 1818), *Acrobasis fallouella* (Ragonot, 1871), *Eupithecia laquaearia* Herrich-Schäffer, 1848, *Eilema uniola* (Rambur, 1866), *Conistra erythrocephala* (Denis & Schiffermüller, 1775), *Cosmia trapezina* (Linnaeus, 1758), *Trigonophora jodea* (Herrich-Schäffer, 1850), *Egira conspicillaris* (Linnaeus, 1758) and *Noctua tirrenica* Biebinger, Speidel & Hanigk, 1983, the third record of *Metalampra italica* Baldizzone, 1977 for Portugal and a new record for *Eotaleporia lusitaniella* (Amsel, 1955). Two more new species for DL province were recorded but not highlighted in this work. These are *Helcystogramma lutatella* (Herrich-Schäffer, 1854) and *Eudemis profundana* (Denis & Schiffermüller, 1775).

Nunes et al. (2022) include 45 new province records for 40 species, but they are not highlighted in the database, so we list them here: AAL: *Coscinia chrysocephala* (Hübner, 1804) and *Clytie illunaris* (Hübner, 1813); ALG: *Idaea fuscovenosa* (Goeze, 1781), *Idaea rhodogrammaria* (Püngeler, 1913), *Perizoma flavofasciata* (Thunberg, 1792), *Lenisa geminipuncta* (Haworth, 1809), *Lithophane ornitopus* (Hufnagel, 1766) and *Griposia aprilina* (Linnaeus, 1758); BB: *Idaea sardoniana* (Homberg, 1912), *Coscinia chrysocephala* (Hübner, 1804) and *Tathorhynchus exsiccata* (Lederer, 1855); BL: *Triodia sylvina* (Linnaeus, 1761), *Nebula ibericata* (Staudinger, 1871), *Chesias rufata* (Fabricius, 1775), *Coscinia chrysocephala* (Hübner, 1804), *Eilema marcida* (Mann, 1859), *Cucullia calendulae* Treitschke, 1835, *Luperina dumerilii* (Duponchel, 1826), *Hadena bicruris* (Hufnagel, 1766) and *Agrotis lata* Treitschke, 1835; DL: *Acasis viretata* (Hübner, 1799), *Raphia hybris* (Hübner, 1813),

Coenobia rufa (Haworth, 1809) and *Agrochola haematidea* (Duponchel, 1827); E: *Ennomos alniaria* (Linnaeus, 1758), *Thalera fimbrialis* (Scopoli, 1763), *Phalera bucephala* (Linnaeus, 1758), *Caradrina proxima* Rambur, 1837, *Agrochola blidaensis* (Stertz, 1915), *Agrochola haematidea* (Duponchel, 1827) and *Mythimna languida* (Walker, 1858); M: *Scopula minorata* (Boisduval, 1833), *Cucullia calendulae* Treitschke, 1835, *Lithophane semibrunnea* (Haworth, 1809) and *Nola confusalis* (Herrich-Schäffer, 1847); R: *Phyllodesma suberifolia* (Duponchel, 1842), *Idaea mustelata* (Gumpenberg, 1892), *Idaea infirmaria* (Rambur, 1833), *Cyclophora porata* (Linnaeus, 1767), *Catarhoe basochesiata* (Duponchel, 1831), *Epirrhoe alternata* (Müller, 1764), *Eupithecia pantellata* Millière, 1875, *Abraxas pantaria* (Linnaeus, 1767), *Orthosia gothica* (Linnaeus, 1758) and *Mythimna languida* (Walker, 1858). This publication consists of a dataset including the 2021 results from the moth recording scheme (Rede de Estações de Borboletas Nocturnas) that started in Portugal in the same year.

Ronkay et al. (2017) have revised *Agrochola*, splitting it into a number of genera, as follows:

Agrochola Hübner, 1821
lychnidis (Denis & Schiffermüller, 1775)
orejoni Agenjo, 1951
Anchoscelis Guenée, 1839 (*Omphaloscelis* Hampson, 1906)
lunosa (Haworth, 1809)
meridionalis (Staudinger, 1971)
helvola (Linnaeus, 1758)
Leptologia L. B. Prout, 1901
lota (Clerck, 1759)
blidaensis (Stertz, 1915)
macilenta (Hübner, 1809)
Haemachola Beck, 1991
haematidea (Duponchel, 1827)
Sunira Franclemont, 1950
circellaris (Hufnagel, 1766)

In our view some of these genera are not homogeneous, and in the long-term further genera are likely to be proposed to accommodate species such as *helvola* and *lota* which do not rest comfortably with their proposed congeners. There seems to be no good reason why the newly recognised genera should not be treated as subgenera. At this time, we shall retain all the species in *Agrochola*. If, at some time in the future, a wide consensus emerges demanding the adoption of these genera, then we will reconsider the problem. Retaining all the species in *Agrochola* has the considerable advantage of maintaining stability of the nomenclature, to the benefit of the great majority of lepidopterists. An added argument for this conservative approach is that changes at generic level are frequently reversed by another author a few years later. There are two such examples below (*Protodeltote pygarga* and *Callistege mi*).

Schmidt et al. (2018) return *Deltote pygarga* (Hufnagel, 1766) to genus *Protodeltote* Ueda, 1984

Sinev et al. (2017) synonymise *Holcopogon bubulcellus* (Staudinger, 1859) with *H. adsecllella* (Eversmann, 1844).

Vargas-Rodríguez et al. (2020) place *Nyctobrya muralis* in genus *Bryopsis* Boursin, 1970.

Wang & Li (2020) raise *Peleopodinae* to family status (*Peleopodidae*), with *Carcina* the only Portuguese genus included. They also raise *Ethmiinae* to family status (*Ethmiidae*).

Zahiri et al. (2012) return *Euclidia mi* (Clerck, 1759) to genus *Callistege* Hübner, 1823.

Appendix: Changes to the Portuguese fauna list

Species added to the Portuguese fauna listed in this and other papers are summarised here, each with a number indicating their placement in the checklist (Corley, 2015). New genera for the Portuguese fauna show the author and year of publication of the genus.

Name changes resulting from changes at genus level or to new synonymy are given, with each

species retaining its list number. In a case where a new name is provided for a previously misidentified species, the new species retains the number of the misidentified species. Thus, *Metzneria neli* Huemer, 2021 replaces *Metzneria tristella* Rebel, 1901, which was previously misidentified, but the species retains the number 0608 in the checklist.

- 0133 *Ptilocephala colossa* (Bang-Haas, 1907) (*P. melanura* (Bourgogne, 1954))
Tineidae subfamily **Teichobiinae**
Teichobia Herrich-Schäffer, 1853
0205.1 *Teichobia filicivora* (Meyrick, 1937)
0215.1 *Bucculatrix cristatella* (Zeller, 1839)
Pseudoswammerdamia Friese, 1960
0313.1 *Pseudoswammerdamia combinella* (Hübner, 1786)
0373 *Holcopogon adseclella* (Eversmann, 1844) (*Holcopogon bubulcellus* (Staudinger, 1859))
[0480] ETHMIIDAE
[0488] PELEPODIDAE (CARCINIDAE)
0497.1 *Cosmopterix coryphaea* Walsingham, 1907
0606 *Metzneria leae* Gastón & Huemer, 2022 (*M. subflavella* auct. nec Englert, 1974)
0608 *Metzneria neli* Huemer, 2021 (*M. tristella* auct. nec Rebel, 1901)
0643.1 *Aroga temporariella* Sattler, 1960
0674 *Tuta absoluta* (Meyrick, 1917) (*Phthorimaea absoluta* (Meyrick, 1917))
0722.2 *Elachista pullicomella* Zeller, 1839
0751.1 *Coleophora zernyi* Toll, 1944
0887.1 *Scythris pulicella* (Staudinger, 1859)
Longicornutia Razowski, 1960
1086 *Longicornutia epilinana* (Duponchel, 1842)
1125.1 *Ancylis unculana* (Haworth, 1811)
1302 *Colias croceus* (Geoffroy, 1785)
1469.1 *Merulempista turturella* (Zeller, 1848)
1751.1 *Idaea alicantaria* (Reisser, 1963)
Callistege Hübner, 1823
2202 *Callistege mi* (Clerck, 1759) (*Euclidia mi* (Clerck, 1759))
Protodeltote Ueda, 1984
2225 *Protodeltote pygarga* (Hufnagel, 1766) (*Deltote pygarga* (Hufnagel, 1766))
Bryopsis Boursin, 1970
2302 *Bryopsis muralis* (Forster, 1771) (*Nyctobrya muralis* (Forster, 1771))
2356.1 *Apamea furva* (Denis & Schiffermüller, 1775)
2396 *Conistra alicia* Lajonquière, 1939 (*C. haleae* auct. nec Fibiger & Top-Jensen, 2010)
[2419] *Fissipunctia* Beck, 1992.

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Figures 1-8. 1. *Teichobia filicivora* (Meyrick, 1937), Sintra (B. van Dort). 2. *Pseudoswammerdamia combinella* (Hübner, 1786), Pampilhosa de Botão (E. Jesus). 3. *Cosmopterix coryphaea* Walsingham, 1907, Quinta de Marim, Olhão (T. Valkenburg). 4. *Metzneria leae* Gastón & Huemer, Vale Santo, Vila do Bispo (J. Nunes). 5. *Ancylis unculana* (Haworth, 1811), Meixedo (E. Jesus). 6. *Merulempista turturella* (Zeller, 1848), Quinta de Marim, Olhão (T. Valkenburg). 7. *Idaea alicantaria* (Reisser, 1963), Quinta de Marim, Olhão (T. Valkenburg). 8. *Apamea furva* (Denis & Schiffermüller, 1775), Montesinho (A. Valadares).