

New and interesting Portuguese Lepidoptera records from 2018 (Insecta: Lepidoptera)

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Abstract

14 species are added to the Portuguese Lepidoptera fauna and three species deleted, mainly as a result of fieldwork undertaken by the authors and others in 2018. In addition, second and third records for the country, new province records and new food-plant data for a number of species are included. A summary of recent papers affecting the Portuguese fauna is included.

KEY WORDS: Insecta, Lepidoptera, distribution, Portugal.

Novos e interessantes registos portugueses de Lepidoptera em 2018 (Insecta: Lepidoptera)

Resumo

Como resultado do trabalho de campo desenvolvido pelos autores e outros, principalmente no ano de 2018, são adicionadas 14 espécies de Lepidoptera à fauna de Portugal e três 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, Portugal.

Nuevas e interesantes citas portuguesas de Lepidoptera en 2018 (Insecta: Lepidoptera)

Resumen

Con el trabajo de campo efectuado por los autores y otros, principalmente durante el año de 2018, se añaden 14 especies de Lepidoptera a la fauna de Portugal y se eliminan tres 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, Portugal.

Introduction

This paper is the thirteenth 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 2018, together with new province records not included in the checklist (CORLEY, 2015). Additional data includes

new data on larval food-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 2018 and part of 2019 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.

14 species new for Portugal are listed below, of which 2 are new for the Iberian Peninsula. Three species are removed from the Portuguese list. A few of the new species listed here have been previously listed for Portugal, but the records were rejected in CORLEY (2015), as being erroneous or unsubstantiated.

In CORLEY *et al.* (2018) the number of Lepidoptera species recognised from Portugal was 2689. With the current paper and other papers mentioned herein, this total has risen to 2709.

Material and Methods

Most species were captured at light in traps of various kinds, or over or beside a white sheet. 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.

The order and nomenclature of families and species has been revised in accordance with the new Portuguese list (CORLEY, 2015). The nomenclature of plant names follows the EURO+MED PLANT-BASE where possible.

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

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

Algueirão-Mem Martins (Sintra)	MC7095	180 m
Almada	MC8682	20 m
Almansil (Loulé)	NB8605	65 m
Almograve, 2 km S. of, (Odemira)	NB1764	55 m
Alportel, 2 km N. of (São Brás de Alportel)	NB9517	350 m
Ansião, 2 km E. of,	NE5019	250 m
Areia (Vila do Conde)	NF2375	30 m
Bajouca, Gemunde (Maia)	NF3069	85 m
Barragem de Bemposta (Mogadouro)	QF1175	400 m
Boliqueime (Loulé)	NB7510	70 m
Bombarral	MD8646	50 m
Bombeira da Guadiana (Mértola)	PB1864	25 m
Buracas de Casmilo (Penela)	NE4333	300 m
Canidelo, near Malta (Vila do Conde)	NF2974	110 m
Carrapateira (Vila do Bispo)	NB0806	25 m
Carvalho, Ribalonga (Alijó)	PF2678	700 m
Casais do Porto, Louriçal (Pombal)	NE2229	20 m
Castelo de Juromelo, Rabaçal (Penela)	NE4828	250 m
Chão de Couce (Ansião)	NE5218	270 m
Chão do Ulmeiro, Serra de Sicó (Pombal)	NE3717	350m
Colado, 2 km SW of Soeira (Vinhais)	PG7134	680 m
Convento da Arrábida (Setúbal)	NC0058	240 m
Costa da Cabrita, Castro Laboreiro (Melgaço)	NG7055	1100 m

Couce (Valongo)	NF4356	50 m
Covão do Boi, Serra da Estrela (Manteigas)	PE1864	1850 m
Cruzinha, Mexilhoeira Grande (Portimão)	NB3411	20 m
Faia Brava (south end) (Figueira de Castelo Rodrigo)	PF6030	450 m
Frecha de Mizarela (Vale de Cambra)	NF6023	700 m
Fonte da Benémola, Querença (Loulé)	NB8818	140 m
Fonte de Marcos, Rosmaninhal (Idanha-a-Nova)	PD6495	230 m
França, 5 km west of, (Bragança)	PG8441	750 m
Freixiel (Vila Flor)	PF4876	400 m
Ilha da Murraceira (Figueira da Foz)	NE1542	3 m
Lagoa de São José, Mata do Urso, Cariço (Pombal)	NE1128	45 m
Maçores (Torre de Moncorvo)	PF6855	600 m
Mansores (Arouca)	NF5331	370 m
Mértola, 1 km S. of,	PB1765	50 m
Minas de Santo Adrião (Vimioso)	QG1000	560 m
Mindelo (Vila do Conde)	NF2274	5 m
Moinho do Caniço, Ponte de Castrelos (Bragança)	PG7534	600 m
Moinhos de Paneiro (Santiago de Cacém)	NB2795	210 m
Monchique, turning to Alferce	NB3929	470 m
Mosteiro de São João de Arga (Caminha)	NG2232	440 m
Pampilhosa de Botão (Mealhada)	NE4964	90 m
Parâmio (Vinhais)	PG7740	860 m
Parque Biológico de Gaia (Vila Nova de Gaia)	NF3650	110 m
Poço do Inferno, Serra da Estrela (Manteigas)	PE2570	1100 m
Ponte de Jugais, Lapa dos Dinheiros (Seia)	PE1071	750 m
Praia Verde (Castro Marim)	PB3515	7 m
Quinta da Lousa (Valongo)	NF4163	220 m
Quinta do Canal, Bizarreiro (Figueira da Foz)	NE1639	3 m
Quinta do Chegão, R. Agueda (Figueira de Castelo Rodrigo)	PF7541	135 m
Sapais de Castro Marim (Castro Marim)	PB3921	4 m
Sargaçal (Lagos)	NB2711	30 m
Segura, Praia fluvial (Idanha-a-Nova)	PE7310	180 m
Serra da Nogueira (Bragança)	PG7724	1125 m
Serra de Valverde, R. Tua (Mirandela)	PF5183	200 m
Sombra, Telões (Vila Pouca de Aguiar)	PF0689	1115 m
Teixoeiras, W. of Algodres (Figueira de Castelo Rodrigo)	PF6136	470 m
Valarinho, Louriçal (Pombal)	NE2230	35 m
Vale Andinho, S. of Poço do Inferno (Manteigas)	PE2569	1260 m
Vale do Lameirão (Vila Velha de Rodão)	PD1289	80 m
Vale Santo (Vila do Bispo)	NB0402	80 m
Vallone das Furnas, Salgueiros (Vinhais)	PG6341	930 m
Valongo	NF4159	200 m
Vila Nova de Foz Côa	PF5650	405 m
Vila Nova de Milfontes (Odemira)	NB1975	30 m
Vilarinho, Macieira de Maia (Vila do Conde)	NF2676	55 m

The map below shows the 10x10 km UTM grid squares from which records cited in this paper were made.

Recorders

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Abbreviations and symbols

coll. collection
comm. communicated by
conf. confirmed by
det. determined by
NHMUK Natural History Museum, London
* New for Portugal, i.e. not listed for Portugal in CORLEY (2015).
** New for the Iberian Peninsula.

Provinces:

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



List of families and species

NEPTICULIDAE

Stigmella rhamnella (Herrich-Schäffer, 1860)

TM: Carvalho, leafmines on *Frangula alnus* Mill., 28-IX-2018, Corley.

Stigmella aurella (Fabricius, 1775)

DL: Valongo, reared from leafmines on *Rubus fruticosus* L., 13-VI-2018, Nunes.

Trifurcula bupleurella (Chrétien, 1907)

E: Convento da Arrábida, leafmine on *Bupleurum fruticosum* L., 9-X-2018, Corley.

Ectoedemia ilicis (Mendes, 1910)

DL: Valongo, leafmine on *Quercus suber* L., 7-I-2018, Nunes, reared adult det. Corley.

ERIOCOTTIDAE

Delete *Eriocottis andalusiella* Rebel, 1901

All Portuguese records belong to *E. hispanica*. The first record (MONTEIRO & CARVALHO, 1984) predates the description of *E. hispanica*. Subsequent records were assumed to be *E. andalusiella* after comparison with material in NHMUK, which had evidently not been curated following the description of *E. hispanica*. There is currently no evidence supporting the occurrence of *E. andalusiella* in Portugal.

* *Eriocottis hispanica* Zagulajev, 1988

For records and distribution of this species see under *E. andalusiella* in CORLEY (2015). Spain. Larva unknown.

TINEIDAE

Infurcitinea corleyi Gaedike, 2011

DL: Couce, 19-VIII-2018, Nunes and Silva, det. Corley.

Neurothaumasia ragusaella (Wocke, 1889)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Monopis nigricantella (Millière, 1872)

M: Mosteiro de São João de Arga, 26-X-2018, Nunes, Silva and Jesus.

GRACILLARIIDAE

Phyllonorycter mespilella (Hübner, 1805)

BL: Casais do Porto, reared from *Cydonia oblonga* Miller, 23-II-2018, Rosete, det. Corley.

YPONOMEUTIDAE

Zelleria oleastrella (Millière, 1864)

E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Paraswammerdamia albicapitella (Scharfenberg, 1805)

DL: Quinta da Lousa, 18-VIII-2018, Nunes.

AUTOSTICHIDAE

Oegoconia novimundi (Busck, 1915)

ALG: Alportel, 5-X-2018, Corley and Ferreira.

Symmoca uniformella Rebel, 1900

BB: Segura, 13-V-2018, Corley and Ferreira.

Symmocoides oxybiella (Millière, 1872)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira; E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Symmocoides don (Gozmány, 1963)

BL: Ansião, 13-VII-2018, Rosete.

Orpecovalva burmanni (Gozmány, 1962)

DL: Valongo, 19-VIII-2018, Nunes, det. Corley.

LECITHOCERIDAE

Eurodachtha siculella (Wocke, 1889)

ALG: Sapais de Castro Marim, 2-X-2018, Corley and Ferreira.

OECOPHORIDAE

Endrosis sarcitrella (Linnaeus, 1758)

DL: Bajouca, in house, 3-V-2018, Silva.

Kasyniana griseosericeella (Rebel, 1902)

BL: Frecha de Mizarela, 11-V-2018, Corley.

Epicallima formosella (Denis & Schiffermüller, 1775)

BL: Ansião, 13-VII-2018, Rosete.

DEPRESSARIIDAE

Agonopterix rotundella (Douglas, 1846)

E: Almada, 2-II-2018, Nunes, det. Corley; BA: Quinta do Chegão, larva on *Daucus crinitus* Desf., 16-V-2018, Corley.

Agonopterix vendettella (Chrétien, 1908)

E: Almada, larva on *Smyrnium olusatrum* L., 2-II-2018, Nunes, det. Corley.

Agonopterix fruticosella (Walsingham, 1903)

E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Agonopterix thapsiella (Zeller, 1847)

E: Algueirão, in cave, 8-IX-2018, Costa det. Corley.

Depressaria douglasella Stainton, 1849

BA: Covão do Boi, 1-VIII-2018, Rosete, det. Corley.

Depressaria badiella (Hübner, 1796)

E: : Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Depressaria veneficella Zeller, 1847

BA: Quinta do Chegão, larva on *Thapsia maxima* Mill., 16-V-2018, Corley.

COSMOPTERIGIDAE

Eteobalea beata (Walsingham, 1907)

ALG: Carrapateira, 8-X-2018, Corley, Ferreira and Valadares.

GELECHIIDAE

Syncopacma larseniella Gozmány, 1957

BL: Valarinho, 18-VIII-2018, Rosete, det. Corley.

Syncopacma azosterella (Herrich-Schäffer, 1854)

ALG: Monchique, turning to Alferce, 7-X-2018, Corley and Ferreira.

Syncopacma albipalpella (Herrich-Schäffer, 1854)

M: Costa da Cabrita, 28-VII-2011, Corley.

Anacampsis timidella (Wocke, 1887)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Nothris congressariella (Bruand, 1858)

M: Mosteiro de São João de Arga, 26-X-2018, Nunes, Silva and Jesus.

Apatetris agenjo Gozmány, 1954

BB: Fonte de Marcos, 14-V-2018, Corley, Ferreira and Mateus.

Epidola stigma Staudinger, 1859

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Pectinophora gossypiella (Saunders, 1844)

Third record. ALG: Praia Verde, 3-X-2018, Corley and Ferreira.

Chrysoesthia sexguttella (Thunberg, 1794)

DL: Canidelo, leafmines on *Chenopodium* sp., 23-V-2018, Corley.

Bryotropha plebejella (Zeller, 1847)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Megacraspedus subdolellus Staudinger, 1859

Delete. According to HUEMER & KARSHOLT (2018) this is a synonym of *M. lanceolellus* (Zeller, 1850). At least the majority of Portuguese records referred to in CORLEY (2015) belong to *Megacraspedus trineae* Huemer & Karsholt, 2018.

Megacraspedus binotella (Duponchel, 1843)

Delete. According to HUEMER & KARSHOLT (2018) this species is not present in the Iberian Peninsula. At least the majority of Portuguese records referred to in CORLEY (2015) belong to *Megacraspedus ibericus* Huemer & Karsholt, 2018.

Megacraspedus quadristictus Lhomme, 1946

BL: Buracas de Casmilo, 4-IX-2015, Rosete, det. Corley.

* *Pyncostola bohemiella* (Nickerl, 1864)

BL: Chão de Couce, 8-VII-2015, Rosete, det. Corley. Southern Europe and parts of central Europe north to Czech Republic, absent from several countries and all Mediterranean islands. [*Achillea millefolium* L.].

Mirificarma mulinella (Zeller, 1839)

BL: Lagoa de São José, 29-IX-2018, Corley, Rosete and Ferreira.

Filatima algarbiella Corley, 2014

BB: Segura, 13-V-2018, Corley, Ferreira and Mateus.

* *Scrobipalpa suaedicola* (Mabille, 1906)

ALG: Sapais de Castro Marim, 2-X-2018, Corley and Ferreira. Spain, France. [*Suaeda vera* Forsk. ex J. F. Gemel.].

Caryocolum provinciella (Stainton, 1869)

BL: Lagoa de São José, 23-VI-2018, Rosete.

Teleiodes luculella (Hübner, 1813)

BAL: Moinhos de Paneiro, 13-V-2017, Grundy, Marabuto, Nunes, Silva and Jesus.

Carpatolechia decorella (Haworth, 1812)

E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Schistophila laurocistella Chrétien, 1899

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira; BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Telphusa cistiflorella (Constant, 1890)

E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

ELACHISTIDAE

Perittia piperatella (Staudinger, 1859)

TM: França, 19-V-2018, Corley, Ferreira and Mateus.

Elachista gormella Nielsen & Traugott-Olsen, 1987

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Elachista fuscibasella Chrétien, 1915

BL: Lagoa de São José, 23-VI-2018, Rosete, det. Corley.

Haplochrois buvati (Baldizzone, 1985)

BB: Segura, 30-IX-2018, Corley and Ferreira.

COLEOPHORIDAE

Coleophora lutarea (Haworth, 1828)

Third record. TM: Vallone das Furnas, flying over *Stellaria holostea* L., 18-V-2018, Corley.

Coleophora alcyonipennella (Kollar, 1832)

DL: Mindelo, 12-VII-2018, Nunes, Silva and Jesus, det. Corley.

Coleophora calycotomella Stainton, 1869

BL: Lagoa de São José, 23-VI-2018, Rosete.

Coleophora helianthemella Millière, 1870

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Coleophora albicosta (Haworth, 1828)

TM: França, 19-V-2018, Corley, Ferreira and Mateus.

Coleophora brunneosignata Toll, 1944

DL: Valongo, 20-IV-2018, Nunes, det. Corley.

** *Coleophora adpersella* Benander, 1939

BL: Quinta do Canal, 22-VII-2017, Corley and Rosete; Ilha da Murraceira, 24-VII-2018, Rosete, det. Corley. Nearly all Europe, but not recorded from a few countries, including Spain. [*Atriplex* sp., *Chenopodium* sp., *Suaeda maritima* (L.) Dumort.].

Coleophora scabrida Toll, 1959

BL: Lagoa de São José, 23-VI-2018, Rosete, det. Corley.

Coleophora granulata Zeller, 1849

DL: Mindelo, 4-VIII-2018, Nunes, Silva and Jesus, det. Corley.

Coleophora albilineella Toll, 1960

TM: Serra de Valverde, 21-V-2018, Corley, Ferreira and Mata.

SCYTHRIDIDAE

Scythris ventosella Chrétien, 1907

Second record. BA: Faia Brava reserve (south end), 2-VI-2018, Nunes, Silva and Jesus, det. Corley (fig. 1).

PTEROPHORIDAE

Amblyptilia acanthadactyla (Hübner, 1813)

DL: Quinta da Lousa, 18-VIII-2018, Nunes.

Merrifieldia leucodactyla (Denis & Schiffermüller, 1775)

BB: Fonte de Marcos, 14-V-2018, Corley, Ferreira and Mateus; BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

* *Emmelina argoteles* (Meyrick, 1922)

BL: Valarinho, Lourçal, 18-VIII-2018, Rosete, det. Corley. Western Europe from Spain and England, east to Slovakia and Hungary, also in Bulgaria. [*Calystegia sepium* (L.) R. Br.].

TORTRICIDAE

Philedonides seeboldiana (Rössler, 1877)

TM: Sombra, 28-IV-2018, Lemos, comm. Nunes, det. Corley.

Clepsis razowskii (Gastón, Vives & Revilla, 2017)

ALG: Praia Verde, 3-X-2018, Corley and Ferreira; BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira; E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata; BL: Chão do Ulmeiro, 12-IV-2018, Rosete, det. Corley; BB: Segura, 30-IX-2018, Corley and Ferreira; BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus; TM: Serra de Valverde, 21-V-2018, Corley, Ferreira and Mata.

Cnephasia alfacarana Razowski, 1958

TM: Vila Nova de Foz Côa, 16-V-2018, Corley, Ferreira and Mateus.

Cnephasia longana (Haworth, 1811)

BB: Segura, 13-V-2018, Corley, Ferreira and Mateus.

Acleris schalleriana (Linnaeus, 1761)

BA: Ponte de Jugais, larval spinings on *Viburnum tinus* L., 15-V-2018, Corley.

Cochylimorpha elongana (Fischer von Röslerstamm, 1839)

BL: Lagoa de São José, 23-VI-2018, Rosete, det. Corley.

Aethes languidana (Mann, 1855)

BL: Lagoa de São José, 23-VI-2018, Rosete.

Cochylidia heydeniana (Herrich-Schäffer, 1851)

DL: Valongo, 19-VIII-2018, Nunes, det. Corley.

Hedya nubiferana (Haworth, 1811)

BL: Chão do Ulmeiro, 12-IV-2018, Rosete.

Lobesia indusiana (Zeller, 1847)

Third record. ALG: Sapais de Castro Marim, 2-X-2018, Corley and Ferreira.

Epinotia immundana (Fischer von Röslerstamm, 1839)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Eucosma cana (Haworth, 1811)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Eucosma albidulana (Herrich-Schäffer, 1851)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

* *Gypsonoma imparana* Müller-Rurz, 1914

BL: Valarinho, Lourçal, 18-VIII-2018, Rosete, det. Corley. Western Europe from Spain and Italy north to Germany. [*Salix viminalis* L.].

Cydia adenocarpis (Ragonot, 1875)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

* *Pammene giganteana* (Peyerimhoff, 1863)

DL: Parque Biológico de Gaia, 7-IV-2018, Nunes, det. Corley (fig. 2). Middle latitudes of Europe, but absent in the south-east and absent from Mediterranean islands. [Larva lives as an inquiline in galls on *Quercus* sp.].

Pammene gallicolana (Lienig & Zeller, 1846)

BA: Teixoeiras, 30-VI-2018, Nunes, Silva and Jesus, det. Corley.

** *Pammene agnotana* Rebel, 1914

TM: Carvalho, 20-V-2018, Corley, Ferreira and Mateus. From Switzerland to Romania and north to England and Sweden. [Larva under bark of *Crataegus* sp.].

* *Pammene spiniana* (Duponchel, 1843)

TM: Minas de Santo Adrião, larva on *Crataegus* sp., 20-V-2018, Nunes, adult emerged 15-VIII-

2018 (fig. 3). Widespread in Europe but absent from the south-east and Mediterranean islands. [*Prunus spinosa* L., *Crataegus* sp., *Sorbus* sp., *Cydonia* sp. and *Viburnum* sp.].

BRACHODIDAE

Brachodes funebris (Feisthamel, 1833)

TM: Barragem da Bemposta, 16-VI-2018, Laštůvka and Laštůvka (LAŠTŮVKA & LAŠTŮVKA, 2019).

COSSIDAE

Cossus cossus (Linnaeus, 1758)

BB: Fonte de Marcos, 14-V-2018, Corley, Ferreira and Mateus.

ZYGAENIDAE

Zygaena rhadamanthus (Esper, 1789)

TM: Colado, 20-V-2018, Ferreira, det. Corley.

PYRALIDAE

Sciota rhenella (Zincken, 1818)

Second record. TM: Serra de Valverde, 21-V-2018, Corley, Ferreira and Mateus.

Epischmia illotella Zeller, 1839

BB: Segura, 30-IX-2018, Corley and Ferreira.

Psorosa mediterranea Amsel, 1953

BB; Segura, 30-IX-2018, Corley and Ferreira; BA: Teixoeiras, 15-IX-2018, Nunes, Silva and Jesus, det. Corley.

* *Psorosa ferrugatella* (Turati, 1924)

ALG: Sapais de Castro Marim, 2-X-2018, Corley and Ferreira, conf. Slamka. Spain, Sardinia. Larva unknown.

Phycitodes bentinckella (Pierce, 1937)

BA: Poço do Inferno, 24-VII-2017, not *Phycitodes maritima* (Tengström, 1848) as given in CORLEY *et al.* (2018).

Phycitodes lacteella (Rothschild, 1915)

ALG: Alportel, 5-X-2018, Corley and Ferreira.

Phycitodes saxicola (Vaughan, 1870)

BB: Vale do Lameirão, 5-IX-2018, Nunes, Silva and Jesus, det. Corley.

Ephestia parasitella Staudinger, 1859

ALG: Fonte de Benémola, 4-X-2018, Corley and Ferreira.

CRAMBIDAE

Loxostege sticticalis (Linnaeus, 1761)

DL: Mindelo, 1-IX-2018, Nunes, Silva and Jesus.

* *Udea prunalis* (Denis & Schiffermüller, 1775)

TM: Serra da Nogueira, 13-VIII-2016, Nunes, Silva and Marabuto. Almost all Europe, absent from Mediterranean islands. [Polyphagous on trees, shrubs and herbs].

Patania crocealis (Duponchel, 1834)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Duponchelia fovealis Zeller, 1847

DL: Mindelo, 4-VIII-2018, Nunes, Silva and Jesus.

Metasia suppannalis (Hübner, 1823)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Metasia cuencalis Ragonot, 1894

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Cydalima perspectalis (Walker, 1859)

DL: Quinta da Lousa, 18-VIII-2018, Nunes.

Evergestis dumerlei Leraut, 2003

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Eudonia lineola (Curtis, 1827)

DL: Mindelo, 4-VIII-2018, Nunes, Silva and Jesus.

Euchromius vinculellus (Zeller, 1847)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

* *Agriphila argentistrigellus* (Ragonot, 1888)

ALG: Sapais de Castro Marim, 2-X-2018, Corley and Ferreira. Spain, Sicily. Larva unknown.

Agriphila cyrenaicellus (Ragonot, 1887)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Agriphila tersellus (Lederer, 1855)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Catoptria staudingeri (Zeller, 1863)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Ancylolomia palpella (Denis & Schiffermüller, 1775)

Second locality. ALG: Fonte da Benémola, 4-X-2018, Corley and Ferreira.

Parapoinx stratiotata (Linnaeus, 1758)

BB: Segura, 30-IX-2018, Corley and Ferreira.

LASIOCAMPIDAE

* *Phyllodesma ilicifolia* (Linnaeus, 1758)

BA: Ponte de Jugais, 14-V-2018, Corley and Ferreira. Most European countries, but rare in south and probably extinct in England. [Larva polyphagous on shrubs and trees].

SPHINGIDAE

Hyles euphorbiae (Linnaeus, 1758)

ALG: Praia Verde, 3-X-2018, Corley and Ferreira.

GEOMETRIDAE

Idaea efflorata Zeller, 1849

BL: Pampilhosa, 1-VIII-2018, Jesus.

Idaea attenuaria (Rambur, 1833)

ALG: Almansil, 7-V-2018, Jacinto, det. Corley.

Idaea cervantaria (Millière, 1869)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Epirrita dilutata (Denis & Schiffermüller, 1775)

E: Bombarral, 8-I-2018, Costa.

* *Philereme vetulata* (Denis & Schiffermüller, 1775)

TM: Moinho do Caniço, larva on *Rhamnus catharticus* L., 19-V-2018, Corley. Nearly all Europe but rare in south and absent from Mediterranean islands.

Eupithecia cocciferata Millière, 1864

DL: Vilarinho, Macieira de Maia, 10-V-2018, Corley and Ferreira.

Eupithecia liguriata Millière, 1884

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Eupithecia innotata (Hufngel, 1767)

DL: Mindelo, 4-VIII-2018, Nunes, Silva and Jesus, det. Corley.

Eupithecia breviculata (Donzel, 1837)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Eupithecia weissii Prout, 1938

BB Segura, 30-IX-2018, Corley and Ferreira.

Lobophora halterata (Hufnagel, 1767)

Second record. TM: França, 19-V-2018, Corley and Ferreira.

Isturgia murinaria (Denis & Schiffermüller, 1775)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Neognopharmia stevenaria (Boisduval, 1840)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Ennomos erosaria (Denis & Schiffermüller, 1775)

ALG: Fonte da Benémola, 4-X-2018, Corley and Ferreira.

Crocallis auberti Oberthür, 1883

TM: Freixiel, 27-IX-2018, Corley, Ferreira, Gonzalez and Rodrigues.

Afriberina tenietaria (Staudinger, 1900)

BAL: see CORLEY *et al.* (2013); Mértola, 9-V-2017, Grundy.

Afriberina salemmae Skou & Sihvonen, 2019

Additional records from ALG: Boliqeime, 15-X-2010, Dale; Cruzinha, 5-V-2017, Grundy and Banza; Fonte da Benémola, 4-X-2018, Corley and Ferreira; BAL: Vila Nova de Milfontes, 14-V-2017, Grundy; Almogrove, 16-V-2017; E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Charissa mucidaria (Hübner, 1799)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

NOTODONTIDAE

Thaumetopoea processionea (Linnaeus, 1758)

BL: Castelo de Juromelo, 22-VIII-2011, Rosete.

Neoharpyia verbasci (Fabricius, 1798)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Stauropus fagi (Linnaeus, 1758)

DL: Bajouca, larva on *Quercus robur* L., 21-X-2018, Silva.

EREBIDAE

Zebebea falsalis (Herrich-Schäffer, 1839)

BB: Segura, 13-V-2018, Corley, Ferreira and Mateus.

Diaphora mendica (Clerck, 1759)

DL: Mansores, 11-V-2018, Corley, Ferreira and Oliveira.

Parascotia nisseni Turati, 1905

BB: Segura, 30-IX-2018, Corley and Ferreira.

Odice pergrata (Rambur, 1858)

BA: Vale Andinho, 26-VII-2018, Nunes, Jesus and Berkemeier.

Drasteria cailino (Lefèbvre, 1827)

BB: Segura, 13-V-2018, Corley, Ferreira and Mateus.

Grammodes bifasciata (Petagna, 1787)

BB: Segura, 30-IX-2018, Corley and Ferreira.

NOCTUIDAE

Pseudozarba bipartita (Herrich-Schäffer, 1850)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Aedia leucomelas (Linnaeus, 1758)

DL: Couce, 19-VIII-2018, Nunes and Silva.

Cucullia scrophulariphila Staudinger, 1859

BB: Segura, 13-V-2018, Corley, Ferreira and Mateus.

Cleonymia yvanii (Duponchel, 1833)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Amphipyra effusa Boisduval, 1828

E: Algueirão, in cave, 8-IX-2018, Costa.

Amphipyra pyramidea (Linnaeus, 1758)

TM: França, larva on *Fraxinus angustifolia* Vahl, 20-V-2018, Nunes.

Caradrina proxima Rambur, 1837

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Caradrina ibeasi (Fernández, 1918)

Third Portuguese locality and first record since 1970s (CRUZ & GONÇALVES, 1974). TM: Maçores, 29-IX-2018, Nunes, Silva and Jesus (fig. 4).

Luperina dumerilii (Duponchel, 1826)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Luperina testacea (Denis & Schiffermüller, 1775)

ALG: Vale Santo, 8-X-2018, Corley and Ferreira.

Eremopola orana (H. Lucas, 1848)

Third record. ALG: Sapais de Castro Marim, 2-X-2018, Corley and Ferreira.

Polymixis dubia (Duponchel, 1836)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Orthosia cruda (Denis & Schiffermüller, 1775)

TM: Minas de Santo Adrião, larva on *Quercus rotundifolia* Lam., 21-V-2018, Nunes.

Hadena magnolii (Boisduval, 1829)

BB: Segura, 13-V-2018, Corley, Ferreira and Mateus.

Leucania obsoleta (Hübner, 1803)

BA: Quinta do Chegão, 16-V-2018, Corley, Ferreira and Mateus.

Leucania putrescens (Hübner, 1824)

BB: Segura, 30-IX-2018, Corley and Ferreira.

Leucania punctosa (Treitschke, 1825)

E: Convento da Arrábida, 9-X-2018, Corley, Ferreira and Mata.

Dichagyris flammatra (Denis & Schiffermüller, 1775)

ALG: Sargaçal, 19-V-2018, Valadares.

Euxoa tritici (Linnaeus, 1761)

BL: Lagoa de São José, 11-VII-2017, Rosete, det. Corley.

Agrotis chretieni (Dumont, 1903)

BL: Frecha de Mizarela, 11-V-2018, Corley, Ferreira and Oliveira.

Xestia baja (Denis & Schiffermüller, 1775)

DL: Quinta da Lousa, 18-VIII-2018, Nunes.

Xestia kermesina (Mabille, 1869)

BAL: Bombeira da Guadiana, 1-X-2018, Corley and Ferreira.

Eugnorisma arenoflavida (Schawerda, 1934)

BB: Segura, 30-IX-2018, Corley and Ferreira.

NOLIDAE

Nola squalida Staudinger, 1871

BL: Valarinho, 18-VIII-2018, Rosete, det. Corley.

Nola cicatricalis (Treitschke, 1835)

DL: Areia, 5-V-2018, Jesus, det. Yela.

Nola confusalis (Herrich-Schäffer, 1847)

TM: Parâmio, 17-V-2018, Corley, Ferreira, Mata and Mateus.

Recent literature

BIDZILYA *et al.* (2019) point out that *Oxypteryx* Rebel, 1911 is a senior synonym of *Eulamprotes* Bradley, 1971.

BUCHNER & CORLEY (2019) describe *Agonopterix olusatri* Corley & Buchner from Algarve and elsewhere in southern Europe. This species has long been misidentified as *A. chironiella* (Constant, 1893), which must be removed from the Portuguese list.

CORLEY *et al.* (2018) add 24 species to the Portuguese list.

CORLEY *et al.* (2019) describe *Depressaria infernella* Corley & Buchner, from Portugal and Spain.

CORLEY *et al.* (2019) describe *Ypsolopha rhinolophi* Corley from Portugal and France.

HODGES (1986) placed *Dichomeris lamprostoma* (Zeller, 1847) (under the name of its synonym *Gelechia zulu* Walsingham, 1881) in genus *Helcystogramma* Zeller, 1877. This placement appears to have been overlooked until recently.

HUEMER & KARSHOLT (2018) have revised the large genus *Megacraspedus* Zeller, 1839 (Gelechiidae) describing many new species. They recognise four species in Portugal: *M. trineae* Huemer & Karsholt, sp. n., *M. occidentellus* Huemer & Karsholt, sp. n., *M. ibericus* Huemer & Karsholt, sp. n and *M. quadristictus* Lhomme, 1946. Of the two species previously recorded in Portugal (CORLEY, 2015) they question the presence of *M. binotellus* (Duponchel, 1843) in Portugal and Spain and they have no Portuguese records for *M. subdolellus* Staudinger, 1859, which they place in synonymy with *M. lanceolellus* (Zeller, 1850). Of the four species recognised from Portugal they give records of *M. trineae* from BAL, BB and BA, of *M. occidentellus* from E, of *M. ibericus* from BA and TM and of *M. quadristictus* from ALG and E. *M. occidentellus* is endemic to Portugal.

LAŠTŮVKA & LAŠTŮVKA (2019) add *Chelis maculosa* (Gerning, 1780) and *Helotropha leucostigma* (Hübner, 1808) to the Portuguese fauna.

MACIÀ *et al.* (2019) revise the genera *Coscinia* Hübner, 1819 and *Spiris* Hübner, 1819. *C. benderi* Marten, 1957, with no published record from Portugal, is reduced to subspecies rank under *C. cribraria*,

but the form *chrysocephala* of *C. cribraria* is raised to species. *C. chrysocephala* (Hübner, 1804) is widespread in the south of Portugal and known from Algarve and Baixo Alentejo (Corley, unpublished records). *C. chrysocephala* was not mentioned for Portugal in any published works. It has not been recorded separately from *C. cribraria*, so the precise distributions of the two species need revision.

MÜLLER *et al.* (2019) include the description of *Afriberina salemae* Skou & Sihvonen, sp. n., closely related to *A. tenietaria*. Earlier records of *Afriberina* Wehrli, 1947 from central and western parts of Algarve (under the names of *A. terraria* (Bang-Haas, 1907) or *A. tenietaria* (Staudinger, 1900)) belong to the new species, but not all localities are mentioned under its description. Additional records are given in the current paper. *Afriberina* records from eastern Baixo Alentejo belong to *A. tenietaria*. Other changes are listed here, including some relating to earlier volumes of Geometrid Moths of Europe which are given in an updated checklist of European Geometridae in volume 6, resulting in changes to the Portuguese list.

Isturgia pulinda deerraria (Walker, 1861) is raised to species rank.

Isturgia pulinda pulinda (Walker, 1860) is not in Portugal.

Gnopharmia stevenaria (Boisduval, 1940) is moved to genus *Neognopharmia* Wehrli, 1951.

Gnophos perspersata Treitschke, 1827 is newly combined into genus *Ortaliella* Hausmann, 1993

Charissa avilarius is reduced to subspecies level as *Charissa crenulata* (Staudinger, 1871) ssp. *avilarius* Reisser, 1936

Tephronia oranaria (Staudinger, 1892) is newly combined into genus *Eumannia* Fletcher, 1979

Idaea exilaria (Guenée, 1858) and *Idaea manicaria* (Herrich-Schäffer, 1852) are newly combined into genus *Brachyglossina* Wagner, 1914.

There are also extensive changes to the order of subfamilies and genera used in CORLEY (2015), particularly in the subfamily Ennominae. These changes are not followed here because many of the placements are tentative and therefore subject to further change.

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 due to 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 *Agonopterix olusatri* Corley & Buchner, 2019 replaces *Agonopterix chironiella* (Constant, 1893), which is the subject of a longstanding misidentification, but the species retains the number 0455 in the checklist.

MÜLLER *et al.* (2019) provide an updated checklist of European Geometridae which results in a number of changes to the Portuguese list. These are incorporated in this Appendix.

0111 *Eriocottis hispanica* Zagulajev, 1988 (*andalusiella* auct. nec Rebel, 1901)

0321.1 *Ypsolopha rhinolophi* Corley, 2019

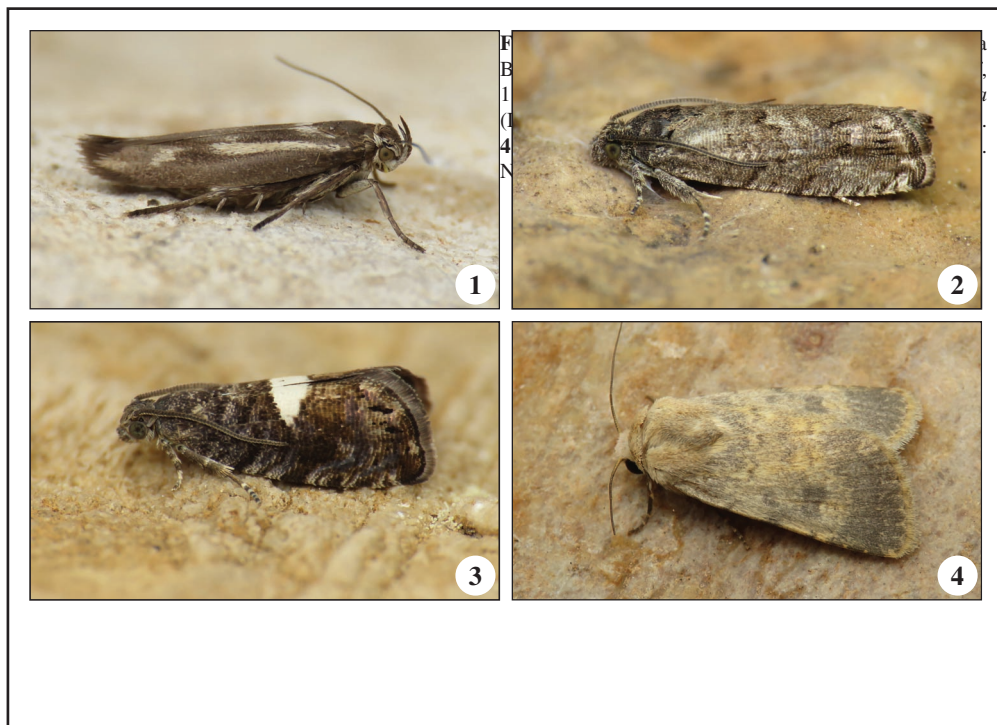
0455 *Agonopterix olusatri* Corley & Buchner, 2019 (*chironiella* auct. nec Constant, 1893)

0463.1 *Depressaria infernella* Corley & Buchner, 2019

- 0543 *Helcystogramma lamprostoma* (Zeller, 1847) (*Dichomeris lamprostoma* (Zeller, 1847))
 0576 *Megacraspedus trineae* Huemer & Karsholt, 2018 (*subdolellus auct. nec* Staudinger, 1859)
 0576.1 *Megacraspedus occidentellus* Huemer & Karsholt, 2018
 0577 *Megacraspedus ibericus* Huemer & Karsholt, 2018 (*binotella auct. nec* (Duponchel, 1859))
 0577.1 *Megacraspedus quadristictus* Lhomme, 1946
Pyncostola Meyrick, 1917
 0592.1 *bohemiella* (Nickerl, 1864)
Oxypteryx Rebel, 1911 (*Eulamprotes* Bradley, 1971)
 0620 *Oxypteryx unicolorella* (Duponchel, 1843) (*Eulamprotes unicolorella* (Duponchel, 1843))
 0621 *Oxypteryx immaculatella* (Douglas, 1850) (*Eulamprotes immaculatella* (Douglas, 1850))
 0622 *Oxypteryx helotella* (Staudinger, 1859) (*Eulamprotes helotella* (Staudinger, 1859))
 0667.1 *Scrobipalpa suaedicola* (Mabille, 1906)
 0851.1 *Coleophora adpersella* Benander, 1939
 0967.1 *Emmelina argoteles* (Meyrick, 1922)
 1157.1 *Gypsonoma imparana* Müller-Rutz, 1914
 1205.1 *Pammene agnotana* Rebel, 1914
 1206.2 *Pammene giganteana* (Peyerimhoff, 1863)
 1210.1 *Pammene spiniana* (Duponchel, 1843)
 1494.1 *Psorosa ferrugatella* (Turati, 1924)
 1579.1 *Udea prunalis* (Denis & Schiffermüller, 1775)
 1652.1 *Agriphila argentistrigellus* (Ragonot, 1888)
 1715.1 *Phyllodesma ilicifolia* (Linnaeus, 1758)
 1775 *Brachyglossina manicaria* (Herrich-Schäffer, 1852) (*Idaea manicaria* (Herrich-Schäffer, 1852))
 1789 *Brachyglossina exilaria* (Guenée, 1858) (*Idaea exilaria* (Guenée, 1858))
 1882.3 *Philereme vetulata* (Denis & Schiffermüller, 1775)
 1955 *Isturgia deerraria* (Walker, 1861) (*Isturgia pulinda deerraria* (Walker, 1861))
 1959 *Neognopharmia stevenaria* (Boisduval, 1940) (*Gnopharmia stevenaria* (Boisduval, 1940))
 2004.1 *Afriberina salemae* Skou & Sihvonen, 2019
Eumannia Fletcher, 1979
 2023 *oranaria* (Staudinger, 1892) (*Tephronia oranaria* (Staudinger, 1892))
Ortaliella Hausmann, 1993
 2033 *perspersata* (Treitschke, 1827) (*Gnophos perspersata* Treitschke, 1827)
 2036 *Charissa crenulata* (Staudinger, 1871) ssp. *avilarius* (Reisser, 1936) (*Charissa avilarius* (Reisser, 1936))
 2125.1 *Chelis maculosa* (Gerning, 1780)
 2130.1 *Coscinia chrysocephala* (Hübner, 1804)
Helotropha Lederer, 1857
 2334.1 *leucostigma* (Hübner, 1808)

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