

New and interesting Portuguese Lepidoptera records from 2010 (Insecta: Lepidoptera)

**M. F. V. Corley, J. P. Cardoso, M. J. Dale, E. Marabuto,
E. Maravalhas & P. Pires**

Abstract

28 species are added to the Portuguese Lepidoptera fauna and four species deleted, mainly as a result of fieldwork undertaken by the authors in the last year. In addition, second and third records for the country and new food-plant data for a number of species are included. A summary of papers mainly published in 2010 concerning the Portuguese fauna is included.

KEY WORDS: Insecta, Lepidoptera, distribution, Portugal.

Novos e interessantes registos portugueses de Lepidoptera de 2010 (Insecta: Lepidoptera)

Resumo

Como resultado do trabalho de campo desenvolvido pelos autores principalmente no ano de 2010, são adicionadas 28 espécies de Lepidoptera para a fauna portuguesa e quatro são retiradas. Adicionalmente, são apresentados segundos e terceiros registos de espécies previamente conhecidas para o país, além de novas plantas alimentícias para algumas outras espécies. Finalmente, é apresentado um sumário dos trabalhos relevantes para a fauna portuguesa publicados no ano de 2010.

PALAVRAS CHAVE: Insecta, Lepidoptera, distribuição geográfica, Portugal.

Nuevas e interesantes citas portuguesas de Lepidoptera del 2010 (Insecta: Lepidoptera)

Resumen

Con el trabajo de campo efectuado por los autores principalmente durante el año de 2010, se añaden 28 especies de Lepidoptera a la fauna portuguesa y se eliminan cuatro especies. Adicionalmente, se presentan segundos y terceros registros de especies ya conocidas para el país y también nuevas plantas nutricias de algunas otras especies. Finalmente presentamos un resumen de los trabajos publicados en 2010 que son relevantes para la fauna portuguesa.

PALABRAS CLAVE: Insecta, Lepidoptera, distribución geográfica, Portugal.

Introduction

This paper gives records of species of Lepidoptera added to the Portuguese fauna in 2010, with additional data including second and third records of species and sometimes further records, either

recent or older, where we consider that a species has been neglected, together with significant extensions of range within Portugal and new data on larval food-plants within the country. Also in this paper a number of species are included for which the originally published records are erroneous or have not proved possible to confirm and we therefore provide a recent confirmed record.

It follows the format established in CORLEY *et al.* (2008). It is the fifth in the series of annual summaries of new knowledge of Portuguese Lepidoptera. Finally, papers and books published in 2010 that relate to the Portuguese Lepidoptera fauna are listed and briefly summarised.

28 species new for Portugal are listed below, of which two are also new to the Iberian Peninsula. Three of these species, marked (*) have been previously listed for Portugal, but the records are erroneous or unsubstantiated. Four species are deleted from the Portuguese fauna.

With these changes including five additions in the literature, the total number of Lepidoptera species currently recognised from Portugal is 2510.

Material and Methods

Most species were captured at mercury vapour light over or beside a white sheet. Where this was not the case, the means of capture is given. Specimens are retained in the collections of the original recorders, unless otherwise stated. A few older records of overlooked or unconfirmed species are also included. We are finding that many species that are not particularly rare have only one or two published records. When we have a recent record for such a species, we have taken the opportunity to add several additional records, if these are available.

The order and nomenclature of families and species follows KARSHOLT & RAZOWSKI (1996) with a number of modifications reflecting more recent works. Recently there have been major changes in the classification of Lepidoptera which have been adopted in Fauna Europaea (KARSHOLT & NIEUKERKEN, 2011). A completely revised list of Portuguese Lepidoptera is in preparation and this will follow the new classification, but until this is published, the familiar order continues to be used here. The nomenclature of plant names follows CASTROVIEJO (1986-2010) where possible and otherwise follows TUTIN *et al.* (1964-1980).

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)

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

Localities

Abreiro station, Tua valley (Vila Flor)	PF4478	170 m
Água da Pala, Serra do Gerês (Terras de Bouro)	NG7528	900 m
Águas de Moura (Palmela)	NC2168	5 m
Alcochete	NC0791	5 m
Alfragide (Lisboa)	MC8087	165 m
Alto dos Moinhos (Lisboa)	MC8488	90 m
Amieiro, Tua valley (Alijó)	PF3471	150 m
Arnal, Serra do Alvão (Vila Real)	NF9976	920 m
Barragem de Bemposta (Mogadouro)	QF1175	400 m
Beça, Esculca, Serra do Barroso (Boticas),	PG0815	790 m
Boliqueime (Loulé)	NB7510	70 m
Bouçoães (Valpaços)	PG4922	580 m
Cabecico da Vinha, Freixiosa (Miranda do Douro)	QF2489	600 m

Cabo de São Vicente (Vila do Bispo)	NA0198	75 m
Caldas de Manteigas (Manteigas)	PE2371	850 m
Cântaro Raso, Serra da Estrela, (Manteigas)	PE1964	1710 m
Carrapateira (Vila do Bispo)	NB0806	25 m
Carvalho da Boalhosa, above Rio Trovela (Ponte de Lima)	NG4120	280 m
Carvalhelhos, Serra do Barroso (Boticas)	PG0516	800 m
Cascata da Laja, Serra do Gerês (Terras de Bouro)	NG7023	730 m
Cerro de Apra (Loulé)	NB9013	300 m
Chaparral, Lagoa de Santo André (Santiago de Cacém)	NC2016	20 m
Cimbres (Armamar)	PF0945	720 m
Comporta (Alcácer do Sal)	NC1848	10 m
Conceição (Tavira)	PB2412	30 m
Corte do Gago (Castro Marim)	PB2828	180 m
Covão do Boi, Serra da Estrela (Manteigas)	PE1864	1850 m
Cruz de Cume, São Mamede (Portalegre)	PD4151	870 m
Escusa (Marvão)	PD3762	550 m
Fafião, Serra do Gerês (Montalegre)	NG7517	350 m
Fonte da Abilheira, Serra do Gerês (Terras de Bouro)	NG7328	800 m
Fortes, Ribeira de Odeleite (Castro Marim)	PB2234	60 m
Fresulfe (Vinhais)	PG7140	650 m
Galegos (Marvão)	PD4461	470 m
Gondesende (Bragança)	PG7734	790 m
Guincho (Cascais)	MC5986	50 m
Lama Grande, Serra de Montesinho (Bragança)	PG8346	1390 m
Lamas de Olo (Vila Real)	NF9981	970 m
Malta (Vila do Conde)	NF2772	40 m
Malveira da Serra (Cascais)	MC6289	200 m
Marateca (Palmela)	NC3066	15 m
Marvão	PD3962	830 m
Mina da Preguiça (Moura)	PC4912	250 m
Minhota (Marvão)	PD3863	650 m
Moimenta (Vinhais)	PG6746	900 m
Montesinho, 2 km N. of village (Bragança)	PG8547	1220 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 Castrelos (Bragança)	PG7433	640 m
Ponte de Parâmio (Vinhais)	PG7840	770 m
Pontes, Gâmbia (Setúbal)	NC1866	10 m
Ponte Rio Maceira, Serra do Gerês (Terras de Bouro)	NG7127	650 m
Portela do Homem, Serra do Gerês (Terras de Bouro)	NG7229	820 m
Praia Verde (Castro Marim)	PB3415	5 m
Pretarouca (Lamego)	NF9242	950 m
Quarteira (Loulé)	NB7903	5 m
Querença (Loulé)	NB8917	250 m
Quinta do Freixo, Benafim Grande (Loulé)	NB7724	275 m
Quinta do Pisão (Cascais)	MC6389	140 m
Regato da Vidoeira albufeira, Prada (Vinhais)	PG6736	930 m
Ribeiradio (Oliveira de Frades)	NF5808	340 m
Salema (Vila do Bispo)	NB1513	60 m
Salgueiros (Vinhais)	PG6240	960 m
Sameiro (Braga)	NF5298	570 m
Santa Luzia (Tavira)	PB2007	3 m
São Mamede, Serra de São Mamede (Portalegre)	PD4052	810 m
São Miguel, Serra de Monte Figo (Olhão)	PB0406	360 m

Sapais de Castro Marim (Castro Marim)	PB3820	4 m
Serra da Adiça (Moura)	PC4907	280 m
Serra da Arrábida – unlocalised record	MC95	
Serra de Montejunto (Alenquer)	MD9736	490 m
Serra do Buçaco (Mealhada)	NE5369	400 m
Singeverga (Santo Tirso)	NF5277	200 m
Sobral da Adiça (Moura)	PC5111	190 m
Torrozelo (Seia)	PE0571	530 m
Vale da Fonte (Aljezur)	NB1017	25 m
Vale de Rosal (Almada)	MC8379	70 m
Vale de Vargo (Serpa)	PC3905	200 m
Videmonte, bridge over R. Mondego(Guarda)	PE3785	740 m
Vilamoura (Loulé)	NB7703	10 m
Vila Real de Santo António	PB4017	5 m
Vilarinho das Azenhas (Vila Flor)	PF5083	190 m

Recorders

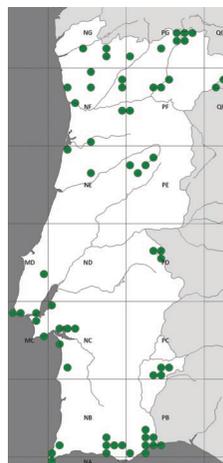
Jérôme Barbut	António Bivar de Sousa	João Pedro Cardoso
Fernando Carvalho	José Passos de Carvalho	Martin F.V. Corley
Maria Amália da Silva Cruz	Michael J. Dale	Valter Jacinto
Eduardo Marabuto	Ernestino Maravalhas	Candido Mendes de Azevedo
Teodoro Monteiro	Tatiana Moreira	Erik van Nieukerken
Pedro Pires	Ivo Rodrigues	João Castellano Rodrigues
Israel Silva	Paulo Simões	Peder Skou
Thomas J. Tams	David Wilton	

Abbreviations and symbols:

coll.	collection
comm.	communicated by
det.	determined by
IZPC	Natural History Museum of the Sciences Faculty of Porto
*	New for Portugal
**	New for the Iberian Peninsula
(*)	New for Portugal, but has previously been listed erroneously or questionably.

Provinces:

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



List of families and species

ADELIDAE

Adela collicolella (Walsingham, 1904)

Second and third Portuguese records. TM: Torre de Moncorvo, 6-IV-1999, Maravalhas, det. Corley; ALG: Querença, V-2009, Jacinto, det. Corley from photo. Previously recorded from Algarve (CORLEY *et al.*, 2000).

Adela degeerella (Linnaeus, 1758)

Second Portuguese record. TM: Parâmio, 19-VI-2010, resting on leaf by day, Corley and Pires. Recorded from nearby Moimenta (CORLEY *et al.*, 2007)

TINEIDAE

Delete *Tinea columbariella* Wocke, 1877, listed for Portugal by PETERSEN & GAEDIKE (1992) without data. Gaedike (comm. 2010) informs us that they saw no specimen of this species from Portugal.

Delete *Monopis monachella* (Hübner, 1796), listed for Portugal by PETERSEN & GAEDIKE (1992) without data. Gaedike (comm. 2010) informs us that they saw no specimen of this species from Portugal.

ERIOCOTTIDAE

Eriocottis paradoxella Staudinger, 1859

Additional records of this interesting winter species. E: Marateca, 19-XII-2004, Marabuto, Simões and Cardoso; Quinta do Pisão, 8-XII-2009, Marabuto and Cardoso; BAL: Vale de Vargo, Marabuto. Earlier records given in CORLEY *et al.* (2011).

GRACILLARIIDAE

Caloptilia alchimiella (Scopoli, 1763)

TM: Arnal, 2-IX-2002, Corley; Vilarinho das Azenhas, 25-VII-2006, Corley; Fresulfe, 16-V-2007, Corley. There are only two previous records. Mendes' record (MENDES, 1905), BB: Mata do Fundão, almost certainly refers to *C. robustella* which has a much wider distribution in Portugal, reaching as far south as Portalegre, whereas *C. alchimiella* appears to be confined to the north. MONTEIRO (1964) recorded the species from DL: Azurara, but this could be either species.

YPONOMEUTIDAE

Distagmos ledereri Herrich-Schäffer, 1854

Second and third Portuguese records. TM: Lamas de Olo, 23-V-2003, Corley, Maravalhas and Pires; ALG: Boliqueime, 19-III-2010, Dale. Previously recorded from Algarve (MONTEIRO & CARVALHO, 1984).

* *Argyresthia conjugella* Zeller, 1839

BA: Poço do Inferno, 23-VI-2010 Corley; Covão do Boi, 24-VI-2010, Corley. Northern and middle latitudes of Europe, absent from the south-east and Mediterranean islands. [Larva on fruits of *Sorbus aucuparia* and *Malus*].

ETHMIIDAE

Ethmia quadrillella (Goeze, 1783)

Second Portuguese record. M: Carvalho da Boalhosa, 10-V-2007, Corley. Previously recorded from Minho (STAINTON, 1881).

DEPRESSARIIDAE

Agonopterix alstromeriana (Clerck, 1759)

Second Portuguese record. BA: Poço do Inferno, 23-VI-2010 Corley. Previously recorded from Estremadura (MENDES, 1910a).

Agonopterix heracliana (Linnaeus, 1758)

TM: Gondesende, larvae on *Conium maculatum*, 19-VI-2010, Corley.

Agonopterix bipunctosa (Curtis, 1850)

TM: Serra do Larouco, larva on *Serratula tinctoria*, 16-VI-2010, Corley.

Depressaria douglasella Stainton, 1849

Third Portuguese record. ALG: Boliqueime, 19-V-2010, Dale. Previously recorded from two localities in Beira Litoral (CORLEY *et al.*, 2009).

Depressaria albipunctella (Denis & Schiffermüller, 1775)

Second Portuguese locality. TM: Bouçoães, 14-II-1987, Maravalhas, det. Corley. Previously known from Beira Alta (CORLEY *et al.*, 2008).

Depressaria erinaceella Staudinger, 1870

Third Portuguese record. ALG: Boliqueime, 29-IX-2009, Dale. Previously recorded from two other localities in Algarve (CARVALHO & CORLEY, 1995)

** *Depressaria krasnowodskella* Hannemann, 1953

E: Serra da Arrábida, 30-VI-1978, Carvalho det. Corley; ALG: São Miguel, 24-V-2001, 19-V-2002, Corley. This species was described on the basis of one male from Krasnowodsk, Turkmenistan and has not been refound in the area. The species is listed for Portugal in KARSHOLT & NIEUKERKEN (2011), based on the Carvalho record given here. Larva unknown.

OECOPHORIDAE

* *Crassa tinctella* (Hübner, 1796)

TM: Pretarouca, 11-VI-2007, Maravalhas, det. Corley; Gondesende, 18-VI-2010, Corley. Mainly in middle latitudes of Europe, rare in the south and absent from parts of Balkans and Mediterranean islands. [Larva believed to feed on dead wood].

LECITHOCERIDAE

Eurodachtha siculella (Wocke, 1889)

Second Portuguese record. TM: Amieiro, 22-VI-2010, Corley. Previously recorded from Douro Litoral (AMSEL, 1959).

COLEOPHORIDAE

** *Coleophora pulmonariella* Ragonot, 1974

TM: Fafião, 16-VI-2010, Corley, conf. Baldizzone. Middle latitudes of Europe, east to Hungary, but absent from many countries. [Larva on *Pulmonaria*, *Myosotis*, *Lithospermum* and *Symphytum*].

(*) *Coleophora albicostella* (Duponchel, 1842)

TM: Gondesende, 18-VI-2010, Corley. Listed in VIVES MORENO (1992) without data, but not in VIVES MORENO (1987). Middle latitudes of Europe, absent from north-west and most of south. [Larva on *Potentilla verna*].

* *Coleophora albilineella* Toll, 1960

BA: Poço do Inferno, 23-VI-2010, Corley. Spain, Sardinia and a few countries in Central Europe and the Balkans. [Larva on *Dianthus*].

GELECHIIDAE

Aristotelia subericinella (Duponchel, 1843)

Second Portuguese record. BA: Cântaro Raso, larvae on *Echinospartum lusitanicum*, 24-VI-2010, Corley. Previously recorded from Trás-os-Montes (CORLEY *et al.*, 2006).

Metzneria paucipunctella (Zeller, 1839)

AAL: 1 km N. of Galegos, 12-IV-1997 Corley; BA: Videmonte, 8-VI-2008, Corley; TM: Moimenta 2-VI-2005, Corley; Cabecico da Vinha, 9-V-2007, Corley. Previously recorded by SEEBOLD (1898) without locality.

Pseudotelphusa paripunctella (Thunberg, 1794)

TM: Moimenta, 2-VI-2005, Corley. Earlier records BB: Matta do Fundão, Mendes (MENDES, 1904) and E: Cadriceira, Mendes (MENDES, 1910a) were queried by Mendes himself, and are likely to refer to *P. occidentella* Huemer & Karsholt, 1999. The same is also the case with DL: Singeverga, V-1953, Monteiro (AMSEL, 1959).

Exoteleia dodecella (Linnaeus, 1758)

Second Portuguese record. M: Cascata da Laja, 15-VI-2010, Corley. Previously recorded from Trás-os-Montes (CORLEY *et al.*, 2006).

Scrobipalpa phagnaella (Constant, 1895)

Third Portuguese locality. TM: Amieiro, 20-X-2010, Corley and Maravalhas. Previously recorded from two localities in Algarve (CARVALHO & CORLEY, 1995)

* *Scrobipalpa bradleyi* Povolný, 1971

ALG: Sapais de Castro Marim, 18-IX-1994, Corley, det. Huemer. Spain, France and Sicily. [Larva on *Arthrocnemum fruticosum*].

* *Scrobipalpa artemisiella* (Treitschke, 1833)

ALG: Sapais de Castro Marim, 18-V-2003, Corley, det. Huemer. Nearly all Europe. [Larva on *Thymus*].

Tuta absoluta (Meyrick, 1917)

Second and subsequent Portuguese records. BAL: Chaparral, 24-IX-2009, Skou, det. and

comm. Karsholt; ALG: Boliqeime, 3-IX-2009, Dale; São Romão, 26-X-2010, Corley; Carrapateira, 31-X-2010, Corley; Cerro de Apra, larvae mining leaves of *Solanum luteum*, 31-X-2010, Corley. Previously recorded from Algarve (HUEMER & KARSHOLT, 2010).

Sophronia semicostella (Hübner, [1813])

Second confirmed Portuguese record. BA: Poço do Inferno, 32-VI-2010 Corley. Previously recorded from another locality in Beira Alta (CORLEY *et al.*, 2008).

Anarsia spartiella (Schrank, 1802)

BA: Cântaro Raso, pupa on *Echinopartum lusitanicum*, 24-VI-2010, Corley.

SESIIDAE

Bembecia sirphiformis (H. Lucas, 1849)

ALG: Estombar, 1995, W. and H. Heusch, in coll. Blaesius. Earlier record in KARSHOLT & RAZOWSKI (1996) probably based on E: Ericeira, 6-VII-1986, Karsholt, det. Z. Laštůvka, subsequently transferred to *B. iberica*, (data comm. Karsholt).

Bembecia himmighoffeni (Staudinger, 1866)

E: Ericeira, 6-VII-1986, Karsholt (comm. Z. Laštůvka). Previously listed in KARSHOLT & RAZOWSKI (1996) without data.

TORTRICIDAE

* *Cochylidia rupicola* (Curtis, 1834)

TM: Fafião, flying in afternoon, 16-VI-2010, Corley. Most of Europe but absent from parts of the north and south. [Larva on flowers and seeds of *Eupatorium cannabinum*].

* *Oporopsamma dunaria* Šumpich, 2011

ALG: Carrapateira, 5-X-1999, 29-X-2010, Corley. Only females have been found so far in Portugal. This species has been newly described from Huelva, Spain (ŠUMPICH, 2011). Foodplant unknown.

Cnephasia alticolana (Herrich-Schäffer, 1851)

TM: Montesinho, larva on *Physospermum cornubiense*, 22-V-2009, Corley.

* *Cnephasia microstrigana* Razowski, 1958

TM: Lama Grande, 19-VI-2010, Corley. The genitalia of this species are rather similar to those of *C. alticolana*, which was also found at this locality on the same night, and the possibility exists that it is only a form of that species. Most *Cnephasia* species are more reliably separated using genitalia characters rather than wing markings. However specimens with these wing markings have only been reported from Spain, whereas typical *C. alticolana* is widespread in Europe. Spain. Larva unknown.

Delete *Cnephasia pasiuana* (Hübner, 1799)

Until recently *C. pumicana* (Zeller, 1847) has been treated as a synonym of *C. pasiuana* by most authors, but it is clearly distinct, see LANGMAID & AGASSIZ (2010). Portuguese specimens that have been re-examined belong to *C. pumicana*. Not all specimens have been seen, but there is no reason at present to suppose that *pasiuana* occurs in Portugal.

* *Cnephasia pumicana* (Zeller, 1847)

ALG: Sapais de Castro Marim, 10-V-1995, Corley; AAL: Sobral de Adiça, 5-VI-2008, Corley.

* *Cnephasia daedalea* Razowski, 1983

AAL: Galegos, 3-VI-1996, Corley; São Mamede, 4-VI-1996, Corley; Minhota, 5-VI-1996, Corley; ALG: Fortes, 23-V-2001, Corley. Only females have been found so far in Portugal. Sardinia, recently recorded from Spain with description of hitherto unknown male (ŠUMPICH, 2011). Foodplant unknown.

Ditula angustiorana (Haworth, 1811)

M: Minho, larva on *Lonicera periclymenum*, Ponte Rio Maceira, 15-VI-2010, Corley.

Ditula joannisia (Ragonot, 1888)

Second Portuguese record. TM: Amieiro, 20-X-2010, Corley and Maravalhas. Previously recorded from nearby Freixiel (CORLEY *et al.*, 2009).

Pandemis cerasana (Hübner, 1786)

Second and third Portuguese records. M: Ponte Rio Maceira, disturbed by day, 15-VI-2010, Corley; BA: Poço do Inferno, 24-VI-2010, Corley. Previously recorded from Trás-os-Montes (CORLEY *et al.*, 2011).

Lozotaeniodes formosana (Geyer, [1830])

Second and third Portuguese records. TM: Carvalhelhos, 14-VIII-1983, Maravalhas, in coll. Monteiro; Beça, 23-VII-1999, Maravalhas. Previously recorded from Beira Alta (CORLEY, 2002).

Endothenia nigricostana (Haworth, 1811)

Second and third Portuguese localities. TM: Vilarinho das Azenhas, 25-VII-2006, Corley; BA: Poço do Inferno, 23-VI-2010, Corley. Previously recorded from Douro Litoral (AMSEL, 1959).

* *Epinotia bilunana* (Haworth, 1811)

TM: Lama Grande, 19-VI-2010, Corley. Through an oversight no specimen was collected, but the species is distinctive and well-known to the recorder. Northern and middle latitudes of Europe, absent from most of the Mediterranean region. [Larva in catkins of *Betula*].

* *Ancylis comptana* (Frölich, 1828)

TM: Regato da Vidoeira, 20-VI-2010, Corley. Most of Europe, absent from a few countries in the north-west. [Larva on *Potentilla*, *Fragaria*, *Sanguisorba* and *Thymus*].

Ancylis selenana (Guenée, 1845)

Second Portuguese record. DL: Singeverga, V-1957, Monteiro, det. Corley, specimen in Monteiro collection labelled *A. tineana* (Hübner, 1799). Previously recorded from Beira Litoral (PIRES & CORLEY, 2007).

* *Ancylis achatana* (Denis & Schiffermüller, 1775)

TM: Gondesende, 18-VI-2010, Corley. Most of Europe, absent from a few countries in the north-west and from most Mediterranean islands. [Larva on *Crataegus* and *Prunus spinosa*].

* *Dichrorampha cacaleana* (Herrich-Schäffer, 1852)

BA: Cântaro Raso, several pairs in copula on *Senecio pyrenaicus* by day, 24-VI-2010, Corley. Spain and middle latitudes of Europe, but absent from many countries. HUEMER (1993) divides *cacaleana* into three subspecies. Portuguese specimens belong to subsp. *quadarramana* (Kennel, 1921) known from Sierra de Guadarrama, Spain.

EPERMENIIDAE

* *Ochromolopis ictella* (Hubner, [1813])

TM: Regato da Vidoeira, larva on *Thesium humifusum*, 20-VI-2010, Corley. Middle latitudes of Europe and the south-east, but absent from a number of countries.

PTEROPHORIDAE

Agdistis bifurcatus Agenjo, 1952

Second and third Portuguese records. ALG: Cabo de São Vicente, 27-X-2010, Corley; Carrapateira, 28-X-2010, Corley. Previously recorded from south-east Algarve (CARVALHO & CORLEY, 2000).

Lantanophaga pusillidactylus (Walker, 1864)

Second Portuguese locality. E: Alto dos Moinhos, 8-X-2009, Marabuto. Previously recorded from Algarve (CORLEY *et al.*, 2009).

Cnaemidophorus rhododactyla (Denis & Schiffermüller, 1775)

Second and third Portuguese records. BAL: Sobral da Adiça, 5-VI-2008, Corley, Marabuto and Rodrigues; TM: Abreiro station, 21-VI-2010, Corley and Maravalhas. Previously recorded from Trás-os-Montes (CORLEY *et al.*, 2007).

Capperia britanniodactylus (Gregson, 1867)

Second Portuguese record. BA: Poço do Inferno, 23-VI-2010, Corley. Previously recorded from Trás-os-Montes (CORLEY *et al.*, 2008).

Merrifieldia tridactyla (Linnaeus, 1758)

BA: Caldas de Manteigas, 9-IX-2001 Corley; TM: Cabecico da Vinha, 9-V-2007, Corley; Moimenta, 8-IX-2009 Corley. Previously recorded from TM: Vila Real, 24-VI-1880, Eaton (RAGONOT, 1881); BB: São Fiel, C. Mendes (MENDES, 1904); E: Barro (MENDES, 1910a) and several localities in Algarve (MONTEIRO & CARVALHO, 1984) but specimens have not been traced or it has not yet been possible to examine them, however they are likely to refer to the commoner *M. leucodactyla*.

PYRALIDAE

Cathayia insularum (Speidel & Schmitz, 1991)

Second and third Portuguese localities. ALG: Vilamoura, 11-VII-2009, Marabuto; E: Alto dos Moinhos, 14-X-2009, Marabuto. Previously recorded from Algarve (CORLEY *et al.* 2011).

Pyralis lienigialis (Zeller, 1843)

Third Portuguese record. ALG: Quarteira, 11-V-2010, Tams. Previously recorded from two other localities in Algarve (CORLEY, 2005; CORLEY *et al.*, 2008).

* *Isauria dilucidella* (Duponchel, 1836)

TM: Barragem de Bemposta, 7-VII-1986, Monteiro, in coll. Maravalhas, det. Corley. Mainly in south and the warmer parts of central Europe, extending to Poland. [Larva on *Lotus corniculatus* and *Astragalus*].

Asartodes zapateri (Ragonot, 1882)

Second Portuguese record. BA: Covão do Boi, 24-VI-2010, Corley. Previously recorded from Serra da Estrela by Tavares (MENDES, 1913).

Ancylosis convexella (Lederer, 1855)

Second and third Portuguese records: E: Alto dos Moinhos, 30-X-2006, Marabuto; ALG: Corte do Gago, XII-2010, Jacinto, det. Corley.

Hyperlais siccalis (Guenée, 1854)

Second Portuguese record. TM: Gondesende, 18-VI-2010, Corley. Previously recorded from Trás-os-Montes (CORLEY *et al.*, 2011).

Anania terrealis (Treitschke, 1829)

Second to fourth Portuguese records. M: Gerês, 17-IX-2003, Corley; Fonte da Abilheira, flying by day, 16-VI-2010, Corley; BA: Cântaro Raso, flying by day, 24-VI-2010, Corley. Previously recorded from Gerês (MONTEIRO, 1962).

LASIOCAMPIDAE

Poecilocampa populi (Linnaeus, 1758)

TM: Lama Grande, larva on *Betula*, 19-VI-2010, Corley and Pires.

Odonestis pruni (Linnaeus, 1758)

Fifth Portuguese record. BL: Verdemilho, 9-VI-2005, Marabuto. Earlier records are summarised in CORLEY *et al.* (2011).

SPHINGIDAE

Sphinx ligustri Linnaeus, 1758

Third and subsequent records. TM: Moimenta, 10-VI-1986, Monteiro; Ponte de Parâmio, 3-VI-2005, Corley, Marabuto and Pires; Ponte de Castrelos, 26-V-2006, Marabuto; Gondesende, 18-VI-2010, Corley; M: Portela de Homem, 15-VII-2004, Barbut; BL: Serra do Buçaco, larva, 21-VII-2010, T. Moreira. Previously recorded from Beira Baixa (MENDES, 1902) and Beira Litoral (CRUZ & WATTISON, 1934).

PIERIDAE

Aporia crataegi (Linnaeus, 1758)

M: Agua da Pala, pupal exuviae on *Amelanchier ovalis*, 17-VI-2010, Corley.

GEOMETRIDAE

Abraxas grossulariata (Linnaeus, 1758)

M: Agua da Pala, larva on *Vaccinium myrtillus*, 17-VI-2010, Corley.

Agriopsis bajaran (Denis & Schiffmüller, 1775)

Second and subsequent Portuguese records. E: Alfragide, 15-II-1984, Bivar de Sousa; Malveira da Serra, 7-II-2004, Marabuto, Simões and Cardoso; Serra de Montejunto, 24-II-2007, Marabuto and Cardoso; BAL: Serra da Adiça, 28-XII-2008, Marabuto and I. Rodrigues. Previously recorded from Douro Litoral (CRUZ & GONÇALVES, 1974).

Hypomecis roboraria (Denis & Schiffermüller, 1775)

Third to fifth Portuguese localities: TM: Carvalelhos, 24-VI-1990, Maravalhas; Gondesende, 18-VI-2010, Corley; BA: Poço do Inferno, 23-VI-2010, Corley. Previously recorded from Minho (CRUZ & WATTISON, 1935) and Beira Litoral (CORLEY *et al.*, 2008).

Ectropis crepuscularia (Denis & Schiffermüller, 1775)

Second and third Portuguese localities BA: Ribeiradio, 17-VIII-2002, Marabuto; DL: Parque Biológico de Gaia, 25-VI-2010, Corley and Pires. Previously recorded from Gerês (CARVALHO, 1984).

Odontognophos perspersata (Treitschke, 1827)

BAL: Mina da Preguiça, 16-V-2009, Marabuto and I. Rodrigues. This species has many records in Algarve, but scarcely any outside that province.

Siona lineata (Scopoli, 1763)

The asterisk denoting a “new to Portugal” record was unintentionally omitted in CORLEY *et al.* (2011). Since the original 2005 record, the species has been seen again in the same locality: TM: Lama Grande, 22-V-2009, Marabuto and Pires; 19-VI-2010, Corley and Pires.

Idaea subsaturata (Guenée, 1858)

TM: Salgueiros, N. of Vinhais, 30-VII-2001 van Nieukerken, det. Corley; Abreiro station, 7-VII-2009, Corley. Also correctly recorded in PIRES & CORLEY (2007). Earlier recorded from E: Cadriceira, Torres Vedras, VI-1907, C. Mendes (MENDES, 1910a), but according to CRUZ & GONÇALVES (1977) this refers to *I. dimidiata*. Also recorded from ALG: Vila Real de Santo António, VI-1962, Monteiro (MONTEIRO & CARVALHO, 1984). This is the only Algarve record for this species and may perhaps be a misidentification of *Idaea blaesii* which was unknown in 1962.

* *Thera cupressata* (Geyer, [1831])

ALG: Boliqeime, 14-III-2005, 24-IV-2007, 1-V-2007, 23-IV-2008, 4-X-2009, 14-XI-2010, Dale; E: Alto dos Moinhos, 15-IV-2007, 25-IV-2008, 23-IX-2008, 14-X-2010, Marabuto. The only locality for this species in continental Spain is in Guipúzcoa. The Portuguese populations, which are evidently well established, must result from introduction on imported plants of *Cupressus*. This has previously happened in England. Western and southern Europe including several Mediterranean islands. [*Cupressus*, *Juniperus*].

Eupithecia schiefereri Bohatsch, 1893

BA: Vale de Zêzere, 5 km south-west of Caldas de Manteigas, larva on *Silene nutans*, 24-VI-2010, Corley.

Chesias rufata (Fabricius, 1775)

This species has been confused with *C. isabella* Schawerda, 1915 by several Portuguese authors. It appears to be much rarer than *C. isabella*, but the following records belong to *C. rufata*: E: Vale de Rosal, IV-1909, Mendes (MENDES, 1910b); ALG: Vila Real de Santo António, VI-1960, Monteiro (MONTEIRO & CARVALHO, 1984); Quinta do Freixo, 20-V-2002, Corley; AAL: São Mamede, 20-V-2003, Corley; M: Sameiro, 1-VI-2010, Marabuto.

NOCTUIDAE

Pandesma robusta (Walker, 1858)

Second and subsequent records. ALG: Conceição, 7-VIII-2008, Wilton; Salema, 22-IX-2009,

Skou; E: Guincho, 13-X-2009, Cardoso and Marabuto; Alto dos Moinhos, 14-X-2009, Marabuto. Previously recorded from Algarve (MONTEIRO & CARVALHO, 1984).

Shargacucullia scrophulariphila (Staudinger, 1859)

DL: Malta, larvae on *Scrophularia scorodonia*, 15-VI-2010, Corley.

* *Shargacucullia lanceolata* (Villers, 1789) (= *thapsiphaga* Treitschke, 1826)

BA: Torrozel, 4-VII-1985, Carvalho in coll. Cardoso, det. Corley; Poço do Inferno, 23-VI-2010, Corley. Mainly in south and the warmer parts of central Europe, extending to Poland. [Larva on *Verbascum*].

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

AAL: Galegos, 12-III-1996 Corley, given as *C. alicia* in CORLEY *et al.* (2006); Marvão, larva on *Prunus domestica*, 18-IV-2000; TM: Amieiro, 16-XI-2009, Corley. Recently described from south Spain.

Delete *Conistra alicia* Lajonquière, 1939. Records in CORLEY *et al.* (2006) and CORLEY *et al.* (2011) all refer to *C. haleae*.

(* *Conistra erythrocephala* (Denis & Schiffermüller, 1775)

TM: Gondesende, 13-XI-2009, Corley and Maravalhas. Previously recorded from DL: Gaia, Cruz (CRUZ & GONÇALVES, 1961). No specimen found in IZPC (CORLEY, 2008). Regarded as questionable by CRUZ & GONÇALVES (1977). The month given would surely exclude this species. Most of Europe.

Eremopola orana (H. Lucas, 1848)

Second Portuguese record. ALG: Santa Luzia, 29-X-2010, Corley. Previously recorded from western Algarve (CORLEY *et al.*, 2000).

Gortyna borelii (Pierret, 1837)

Third and fourth Portuguese records. ALG: Cabo de São Vicente, 27-X-2010, Corley; Carrapateira, 28-X-2010, Corley. Previously recorded from Trás-os-Montes (as *leucographa* Borkhausen, 1792) (MONTEIRO, 1972) and Serra da Arrábida (CARVALHO, 1978)

* *Rhizedra lutosa* (Hübner, [1803])

ALG: Boliqueime, 16-XI-2010, Dale. Almost all Europe except for some Mediterranean islands. [Larva in roots and stems of *Phragmites*].

Denticucullus pygmina (Haworth, 1809)

With the recognition of *D. mabiliei* in Portugal, it is necessary to confirm the presence of *D. pygmina*. M: Leonte, Gerês, 18-IX-2003, Corley is correct. There are a number of other records still to be investigated.

* *Denticucullus mabiliei* (D. Lucas, 1907)

AAL: Escusa, 30-IX-1998, Corley; ALG: Quinta da Rocha, 3-XI-1998 Gardiner, det. Corley (as *Chortodes pygmina* in CORLEY *et al.*, 2000); Carrapateira, 5-X-1999, Corley; TM: Amieiro, 30-IX-2008 Corley. This species had not previously been recognised in Portugal. All these specimens were recorded as *D. pygmina*. Spain. Larva unknown.

Polia nebulosa (Hufnagel, 1766)

Third Portuguese record. M: Cascata da Laja, 15-VI-2010, Corley. Previously recorded from the Gerês district, (CRUZ & GONÇALVES, 1961; CARVALHO, 1986).

(*) *Lacanobia thalassina* (Hufnagel, 1766)

M: Cascata da Laja, 15-VI-2010, Corley. Previously recorded from M: Caldelas (CRUZ & WATTISON, 1935). The Caldelas specimen not seen, but R: Abrantes, IV-1967, Cruz (IZPC) is *Hadula trifolii*, and other Cruz records must therefore be considered doubtful. Almost all Europe except for some Mediterranean islands. [Larva polyphagous on trees, shrubs and herbs].

Hadena compta (Denis & Schiffermüller, 1775)

TM: Amieiro, larva on *Dianthus lusitanus*, 22-VI-2010, Corley.

* *Diarsia rubi* (Vieweg, 1790)

TM: Ponte de Parâmio, 3-VI-2005, Corley, Marabuto and Pires. Almost all Europe except for parts of the south-east and some Mediterranean islands. [Larva polyphagous on herbs and on *Calluna*].

Rhyacia simulans (Hufnagel, 1766)

Second Portuguese record. BA: Covão do Boi, 24.VI-2010, Corley. Previous record also from Serra da Estrela (CRUZ & GONÇALVES, 1961).

Agrotis obesa Boisduval, 1829

TM: Cimbres, 10-IX-1975 and 5-IX-1983, F. Carvalho. Previously recorded from Setúbal (VIEILLEDENT, 1905) and Gerês (CRUZ & WATTISON, 1931; CARVALHO, 1986), but none of these confirmed.

* *Agrotis catalaunensis* (Millière, 1873) (*syricola* Berio, 1936)

ALG: Praia Verde, 2-X-1993, Corley; Vale da Fonte, 24-IX-1995, Corley; E: Águas de Moura, 20-III-2004, Marabuto, Cardoso, Pires and Simões; Marateca, 8-V-2004, Marabuto, Cardoso and Simões; Pontes - Gâmbia, 12-IV-2007, Marabuto and Maravalhas; Alcochete, 13-X-2007, J.C. Rodrigues and Silva, det. Marabuto; BAL: Comporta, 24-III-2006, Marabuto.

Recent literature affecting the Portuguese Lepidoptera fauna list

CORLEY *et al.* (2011) add fifty species to the Portuguese fauna, and delete two.

FIBIGER *et al.* (2010) includes a supplement covering earlier volumes, encompassing a few name changes that affect the Portuguese list, that are necessary for nomenclatural or taxonomic reasons. It also includes a list (compiled by MFVC) of Noctuidae that appear to be given for Portugal erroneously and of species added to the Portuguese fauna which did not appear in the relevant volumes of the series.

GAEDIKE (2010) adds *Niditinea striolella* (Matsumura, 1931) to the Portuguese fauna. He also gives *Tinagma balteolellum* (Fischer von Röslerstamm, 1841) new to the Portuguese fauna, but this species was already known (CORLEY *et al.*, 2006).

HUEMER & KARSHOLT (2010) describe *Scrobipalpa corleyi* Huemer & Karsholt from Portugal, and add *Tuta absoluta* (Meyrick, 1917) and *Scrobipalpa halymella* (Millière, 1864) to the Portuguese fauna.

NIEUKERKEN *et al.* (2010) describe *Ectoedemia phaeolepis* Nieuwerkerken, Laštůvka, A. & Laštůvka, Z. from Spain and Portugal.

TRIVIÑO *et al.* (2010) show that Portuguese records of *Earias vernana* (Fabricius, 1787) are misidentifications of the hitherto overlooked *Earias albovenosana* Oberthür, 1917.

Acknowledgements

We are most grateful to all those who have allowed us to include their records, to Dr. Giorgio Balduzzi for confirming *Coleophora pulmonariella*, to Dr. Reinhart Gaedike for information on Tineidae, Dr. Peter Huemer for determinations of *Scrobipalpa* species and Ole Karsholt for various information. We also thank Paulo Alves for botanical assistance and MFVC thanks Prof. Paulo Célio Alves of CIBIO for financial assistance within Portugal.

BIBLIOGRAPHY

- AMSEL, H. G., 1959.– Portugiesische Kleinschmetterlinge gesammelt von Teodoro Monteiro, O.S.B.– *Anais Fac. Ciênc. Porto*, **41**: 5-20.
- CARVALHO, J. PASSOS DE, 1978.– Notícia sobre a Entomofauna do Parque Natural da Arrábida.– *Natureza e Paisagem*, **6**: 7-8.
- CARVALHO, J. PASSOS DE, 1984.– *Contribuição para o conhecimento da Lepidopterafauna do Parque Nacional. Família Geometridae*. Parque Nacional da Peneda-Gerês.
- CARVALHO, J. PASSOS DE, 1986.– *Contribuição para o conhecimento da Lepidopterafauna do Parque Nacional. Família Noctuidae*. Parque Nacional da Peneda-Gerês.
- CARVALHO, J. PASSOS DE, & CORLEY, M. F. V., 1995.– Additions to the Lepidoptera of Algarve, Portugal.– *SHILAP Revta. lepid.*, **23**(91): 191-230.
- CASTROVIEJO, S., 1986-2010.– *Flora Iberica*: **1**: 575 pp., **2**: 897 pp., **3**: 730 pp., **4**: 730 pp., **5**: 320 pp., **6**: 592 pp., **7**: 1119 pp., **8**: 375 pp., **10**: 498 pp., **12**: 650 pp., **13**: 677 pp., **14**: 251 pp., **17**: 298 pp., **21**: 366 pp. Real Jardín Botánico, Madrid.
- CORLEY, M. F. V., 2002.– A week in Serra da Estrela, Portugal in early September 2001, with additional Lepidoptera species for the Portuguese fauna.– *Entomologist's. Rec. J. Var.*, **114**: 97-104.
- CORLEY, M. F. V., 2005.– Further additions to the Lepidoptera of Algarve, Portugal. II. (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **33**(131): 347-364.
- CORLEY, M. F. V., 2008.– The Lepidoptera collections of deceased Portuguese entomologists.– *Entomologist's Gaz.*, **59**: 145-171.
- CORLEY M. F. V., GARDINER, A. J., CLEERE, N. & WALLIS, P. D., 2000.– Further additions to the Lepidoptera of Algarve, Portugal (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **28**(111): 245-319.
- CORLEY, M. F. V., MARABUTO, E., MARAVALHAS, E., PIRES, P. & CARDOSO, J. P., 2011.– New and interesting Portuguese Lepidoptera records from 2009. (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **39**(153): 15-35.
- CORLEY, M. F. V., MARABUTO, E. & PIRES, P., 2007.– New Lepidoptera for the fauna of Portugal (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **35**(139): 321-334
- CORLEY, M. F. V., MARABUTO, E., MARAVALHAS, E., PIRES, P. & CARDOSO, J. P., 2008.– New and interesting Portuguese Lepidoptera records from 2007. (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **36**(143): 283-300.
- CORLEY, M. F. V., MARAVALHAS, E. & CARVALHO, J. PASSOS DE, 2006.–Miscellaneous additions to the Lepidoptera of Portugal (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **34**(136): 407-427.
- CRUZ, M. A. DA SILVA, & GONÇALVES, T., 1961.– Notas Lepidopterológicas. IV. Uma Nova Espécie de Rhopalocera para a Fauna Portuguesa e Contribuição Sistemática para o Inventário dos Heteróceros Portugueses.– *Mem. Est. Mus. zool. Univ. Coimbra*, **273**: 1-7.
- CRUZ, M. A. DA SILVA, & GONÇALVES, T., 1974.– Notas Lepidopterológicas. Contribuição Sistemática para o Inventário dos Heteróceros de Portugal.– *Publ. Inst. Zool. Dr. Augusto Nobre*, **122**: 9-12.
- CRUZ, M. A. DA SILVA, & GONÇALVES, T., 1977.– Catálogo sistemático dos macrolepidópteros de Portugal.– *Publ. Inst. Zool. Dr. Augusto Nobre*, **133**: 11-56.
- CRUZ, M. A. DA SILVA, & WATTISON, J. T., 1931.– Lepidópteros de Vizela coleccionados por M. A. da Silva Cruz e J. T. Wattison (1928-1930).– *Mem. Est. Mus. Coimbra*, **151**: 1-7.
- CRUZ, M. A. DA SILVA, & WATTISON, J. T., 1934.– Heteróceros de Portugal.– *Mem. Est. Mus. Coimbra*, **178**: 1-39.
- CRUZ, M. A. DA SILVA, & WATTISON, J. T., 1935.– Heteróceros de Portugal.– *Mem. Est. Mus. Coimbra*, **187**: 1-104.

- FIBIGER, M., RONKAY, L., YELA, J. L. & ZILLI, A., 2010.– *Rivulinae-Phytometrinae and Micronoctuidae*, including Supplement to Noctuidae Europaeae, vols. 1-11.– *Noctuidae Europaeae*, **12**: 451 pp. Entomological Press, Sorø.
- GAEDIKE, R., 2010.– New and poorly known Palaearctic Microlepidoptera (Tineidae, Acrolepiidae, Douglasiidae, Epermeniidae).– *Nota lepid.*, **33**: 9-24.
- HUEMER, P., 1993.– Subspeziationstrends von *Dichrorampha cacaleana* (Herrich-Schäffer) (*Lepidoptera, Tortricidae*).– *Mitt. Münch. Ent. Ges.*, **83**: 109-117.
- HUEMER, P. & KARSHOLT, O., 2010.– *Gelechiidae II (Gelechiinae: Gnorimoschemini)*.– In P. HUEMER, O. KARSHOLT & L. LYNEBORG (eds.).– *Microlepidoptera of Europe*, **6**: 586 pp. Apollo Books, Stenstrup.
- KARSHOLT, O. & NIEUKERKEN, E. J. van (eds.), 2011.– *Fauna Europaea: Lepidoptera, Moths. Fauna Europaea version 2.4*, <http://www.faunaeur.org>.
- KARSHOLT, O. & RAZOWSKI, J., 1996.– *The Lepidoptera of Europe*: 380 pp. Apollo Books, Stenstrup.
- LANGMAID, J. R. & AGASSIZ, D. J. L., 2010.– *Cnephasia pumicana* (Zeller, 1847) (Lep.: Tortricidae) stat. rev. newly recognised as British.– *Entomologist's Rec. J. Var.*, **122**: 137-142.
- MENDES, C. DE AZEVEDO, 1902.– Lepidopteros de Portugal. I. Lepidopteros da região de S. Fiel (Beira Baixa).– *Brotéria*, **1**: 149-171.
- MENDES, C. DE AZEVEDO, 1904.– Lepidopteros de Portugal. II. Lepidopteros da região de S. Fiel (Beira Baixa).– *Brotéria*, **3**: 223-254.
- MENDES, C. DE AZEVEDO, 1905.– Lepidopteros de Portugal. II. Lepidopteros da região de S. Fiel (Beira Baixa).– *Brotéria*, **4**: 166-177.
- MENDES, C. DE AZEVEDO, 1910a.– Lepidopteros de Portugal. I. Lepidopteros dos arredores de Torres Vedras.– *Brotéria, Série zool.*, **9**: 110-129
- MENDES, C. DE AZEVEDO, 1910b.– Lepidopteros de Portugal. II. Lepidopteros de Val de Rosal (Caparica de Monte) em 12 e 13 Abril.– *Brotéria, Série zool.*, **9**: 129-132.
- MENDES, C. DE AZEVEDO, 1913.– Lepidopteros de S. Fiel (Beira Baixa-Portugal). Supplemento.– *Brotéria, Série zool.*, **11**: 15-44.
- MONTEIRO, T., 1962.– Pyralides novos para Portugal.– *Publ. Inst. Zool Dr. Augusto Nobre*, **87**: 9-21.
- MONTEIRO, T., 1964.– Primeiros Contactos com a Fauna lepidoptérica de Mindelo (Vila do Conde). II.– *Publ. Inst. Zool. Dr. Augusto Nobre*, **90**: 9-27.
- MONTEIRO, T., 1972.– *Discestra pedrosai*, n. sp.: un Noctuidae nouveau pour la Péninsula ibérique et quatres autres nouveaux pour le Portugal.– *Publ. Inst. Zool. Dr. Augusto Nobre*, **115**: 9-26.
- NIEUKERKEN, E. J. van, LAŠTŮVKA, Z. & LAŠTŮVKA, A., 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.
- PETERSEN, G. & GAEDIKE, R., 1992.– Artenbestand und geographische Verbreitung der Tineiden der Iberischen Halbinsel.– *SHILAP Revta. lepid.*, **20**(80): 325-353.
- PIRES, P. & CORLEY, M. F. V., 2007.– The Lepidoptera of Baixo Mondego (Beira Litoral, Portugal) (Insecta: Lepidoptera).– *SHILAP Revta. lepid.*, **35**(138): 187-230.
- RAGONOT, E. L., 1881.– Notes on the entomology of Portugal. IV. Lepidoptera (continued). Micro-lepidoptera (except Tineina) collected by the Rev. A. E. Eaton in 1880 with descriptions of new species.– *Entomologist's mon. Mag.*, **17**: 229-233.
- SEEBOLD, T., 1898.– Beiträge zur Kenntnis der Microlepidopterenfauna Spaniens und Portugal.– *Dt. ent. Z., Iris*, **11**: 20-32, 291-322.
- STANTON, H. T., 1881.– Notes on the entomology of Portugal. V. Lepidoptera (continued). Micro-lepidoptera (Tineina) collected by the Rev. A. E. Eaton in 1880.– *Entomologist's mon. Mag.*, **17**: 246-249.
- ŠUMPICH, J., 2011.– Faunistic data of several significant tortricid species from Spain with descriptions of four new species (Lepidoptera: Tortricidae).– *SHILAP Revta. lepid.*, **39**(154): 141-153.
- TRIVIÑO, V., ESCUDERO, C. M., MARTÍNEZ, I., VARGAS, S. M., PIRES, P., CORLEY, M. F. V., GASTÓN, J., FIBIGER, M. & YELA, J. L., 2010.– Expansion of distribution area following climate change versus increasing knowledge accuracy: the case of *Earias albovenosana* (Oberthür, 1917) in the Iberian Peninsula (Noctuidae, Eariadinae).– *Entomologia Generalis*, **32**(3): 181-192.
- TUTIN, T. G., HEYWOOD, V. H., BURGESS, N. A., MOORE, D. M., VALENTINE, D. H., WALTERS, S. M. & WEBB, D. A., 1964-1980.– *Flora Europaea*, **1**: xxxii + 464 pp., **2**: xxvii + 455 pp., **3**: xxix + 370 pp., **4**: xxix + 505 pp., **5**: xxxvi + 452 pp. Cambridge University Press, Cambridge.
- VIEILLEDENT, P., 1905.– Lepidópteros da Região de Setúbal.– *Brotéria*, **4**: 185-206.

- VIVES MORENO, A. 1987.– *La Familia Coleophoridae Hübner, [1825] en la Península Ibérica (Insecta: Coleophoridae)*: 468 pp., 213 pls. Universidad Complutense, Madrid.
- VIVES MORENO, A. 1992.– *Catálogo sistemático y sinónimo de los lepidópteros de la Península Ibérica y Baleares (Insecta: Lepidoptera)*: 378 pp. Ministerio de Agricultura, Pesca y Alimentación, Madrid.

*M. F. V. C.
Pucketty Farm Cottage, Faringdon
GB-Oxfordshire SN7 8JP
GRAN BRETAÑA/ GREAT BRITAIN
E-mail: martin.corley@btinternet.com

J. P. C.
Rua Conde Arnoso, nº 1, r/c dto.
P-2750-297 Cascais
PORTUGAL / PORTUGAL
E-mail: jpcardoso56@gmail.com

and

CIBIO
Centro de Investigação em Biodiversidade e Recursos Genéticos
Universidade do Porto
Campus Agrário de Vairão
P-4485-661 Vairão
PORTUGAL / PORTUGAL

E. M.
Tagis-Centro de Conservação das Borboletas de Portugal
Rua da Escola Politécnica, 58
P-1250-102 Lisboa
PORTUGAL / PORTUGAL
E-mail: emsmaravalhas@gmail.com

M. J. D.
Lynwode House,
Linley Road, Talke
GB-Stoke-on-Trent ST7 1TZ
GRAN BRETAÑA/ GREAT BRITAIN
E-mail: mike.dale@btinternet.com

P. P.
Flat 65, St Giles House
St Giles Road
Camberwell Green
GB-London SE57UD
GRAN BRETAÑA / GREAT BRITAIN
E-mail: pedromspires@gmail.com

E. M. M.
FCUL/CBA, Computational Biology and Population Genomics Group
Edifício C2, sala 2.3.22
Faculdade de Ciências de Lisboa
P-749-016 Lisboa
PORTUGAL / PORTUGAL
E-mail: eduardo.marabuto@gmail.com

*Autor para la correspondencia / *Corresponding author*

(Recibido para publicación / *Received for publication* 3-X-2011)
(Revisado y aceptado / *Revised and accepted* 25-X-2011)
(Publicado / *Published* 30-III-2012)