## FIVE NEW SPECIES OF MICROLEPIDOPTERA FROM PORTUGAL

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## Abstract

Five new species of microlepidoptera are described from Portugal: *Caloptilia conimbricensis* Corley, sp. n., also present in Spain, *Denisia piresi* Corley, sp. n., *Filatima algarbiella* Corley, sp. n., *Stomopteryx lusitaniella* Corley & Karsholt, sp. n., also present in France, Spain and Crete, and *Agnoea nonscriptella* Corley, sp. n.

**Keywords:** Lepidoptera, Gracillariidae, Oecophoridae, Gelechiidae, Lypusidae, Portugal, new species.

#### Introduction

In the course of field work in Portugal over the last 25 years a substantial number of undescribed microlepidoptera species were encountered. Over the years many of these have now been described, often by experts specialising in particular families, either based on Portuguese material or on material from Spain, or sometimes both. However, approximately 27 species remain undescribed at present. Some are being worked on at present by experts in particular groups. Others cannot yet be described, because the available material is inadequate or because a major revision of the relevant genus is needed, but there are also undescribed species in relatively well known genera. As a fully revised Portuguese list is in an advanced stage of compilation, it is desirable to include some of these species where this is practicable. Five are treated here.

## Material and Methods

Most of the material studied is in my personal collection, but there are also specimens studied from the collections of Pedro Pires (London), Jorge Rosete (Louriçal) and the late José Passos de Carvalho (Oeiras). Holotypes will be placed in the Natural History Museum, London.

#### Results

## **GRACILLARIIDAE**

# Caloptilia conimbricensis Corley, sp. n.

Material: Holotype (Plate 1): ♂, "Portugal | Ansião | Beira Litoral | 13.iv.2014 | J. Rosete" "4171 m | M. Corley | Gen. prep.". Paratypes: ♂♂, "Portugal | Ansião | Beira Litoral | 03.v.2013 | J. Rosete" "4092 m | M. Corley | Gen. prep."; "Portugal | Ansião | Beira Litoral | 13.iv.2014 | J. Rosete" "4174 m | M. Corley | Gen. prep."; "P7493 | Portugal | Santa Clara | Coimbra | Beira Litoral | 12.v.2006 | M.F.V. Corley" "♀ 2586"; "P8285 | Portugal | Santa Clara | Coimbra | Beira Litoral | 9.ix.2006 | M.F.V.

Corley" "♀ 2720"; "P8855 | Cast.[elo de] Rabaçal | Serra de Sicó | Beira Litoral | 27.ix.2008 | M.F.V. Corley" "♀ 3148".

**Description:** Wingspan 13-14.5 mm. Head with vertex light brown with violet gloss, face pale yellow. Labial palp whitish buff, tipped blackish. Antenna pale yellow-brown, weakly barred darker brown above. Thorax ochreous to light brown, tegulae light brown. Forewing brown with violet gloss, darker brown near base, more orange-brown in outer half of wing, yellow at base of dorsum to fold, extending to one-quarter wing-length and a large four-sided patch on costa from one-fifth, inner edge slightly curved, reaching fold, third side short, following fold, outer edge slightly waved, extending at a shallow angle to costa at three-quarters to four-fifths; cilia orange-ochreous, paler around tornus. Hindwing grey; cilia light grey. Fore- and midlegs dark brown with white tarsus; hindleg whitish buff, tibia fuscous in distal half.

Variation. The examined specimens show very minor variation in the extent of the yellow forewing coloration.

Male genitalia (Fig. 1). Valva curved, gradually widened to cucullus. Saccus triangular with rounded apex. Phallus with a basal group of 5-7 long cornuti and a longitudinal row of 8-10 smaller cornuti, diminishing in size towards apex.

Female genitalia (Fig. 2). Lateral horns of antrum a pair of slightly curved digitate processes with some small teeth mainly on inner margins; ostium funnel-shaped. Ductus bursae sclerotised throughout, parallel-sided for posterior third, expanding anteriorly to corpus bursae; signa a pair of long curved capitate thorns.

**Diagnosis:** Caloptilia conimbricensis is superficially indistinguishable from *C. alchimiella* (Scopoli, 1763) and also very similar to *C. robustella* Jäckh, 1972. The yellow costal patch is usually slightly smaller in *C. robustella*, beginning at one-third, not at one-quarter. The new species is easily distinguished by male and female genitalia. The phallus with a basal group of long cornuti and a row of smaller cornuti, diminishing in size contrasts with *C. robustella* which has a double row of equal-sized cornuti and very different from *C. alchimiella* which has much smaller cornuti. In the female genitalia the ductus bursae is broader than in the other two species, widening towards the corpus bursae, and uniformly sclerotised. *C. alchimiella* has a slender ductus bursae of uniform width and *C. robustella* has the ductus bursae rather irregularly expanded and widest near the middle, more heavily sclerotised on one side than the other.

**Distribution:** In Portugal known from three sites in Beira Litoral (Map 1). Also present in Spain: Cadiz and Palencia.

**Biology:** Adults have been taken at light in April, May and September, indicating two generations. An intermediate generation in July is probable, as takes place in Portugal

with *C. robustella*. The first specimens seen were assumed to be *C. robustella*. The new species has only been recognised very recently, with the result that no attempt has yet been made to search for larvae. It is most probable that the larva feeds on *Quercus* and there is a possibility that the foodplant may be the semi-evergreen *Q. faginea*, which is the dominant tree at Ansião (J. Rosete, pers. comm.). The sites at Ansião and Castelo de Rabaçal are on limestone. The geology at Santa Clara is not known to me, but does not appear to be limestone. The Spanish records suggest that other evergreen *Quercus* species might be foodplants.

**Derivation of name:** The species name *conimbricensis* is a Latin word in genitive singular literally meaning 'belonging to Coimbra' after the Roman name of Coimbra, *Conimbrica*. The site Santa Clara is just outside Coimbra, while the other two Portuguese localities for the new species are within 30 kilometres of the city.

**Remarks:** The genus *Caloptilia* is a large one with over 300 species distributed over all continents except Antarctica in temperate and tropical zones (De Prins & De Prins, 2005; 2011). *C. conimbricensis* is a close relative of the two European *Quercus*-feeding species, *C. alchimiella* and *C. robustella* from which it is clearly different in genitalia characters.

## **OECOPHORIDAE**

# Denisia piresi Corley, sp. n.

Material: Holotype (Plate 2): ♂, "P8025 | Portugal | Valinhas | Monte Córdova | Douro Litoral | 16.v.2006 | M.F.V. Corley" 4259 gen. prep. Paratype ♂: "P8024 − same data as holotype". Also examined two male genitalia preparations in coll. Corley: 2535, same data as holotype, no moth retained and 2546, Portugal: Ceira, Coimbra, Beira Litoral, 25.iv.2006, P. Pires, moth in coll. Pires. One further specimen seen: Portugal: Ceira, Coimbra, Beira Litoral, 5.v.2006, P. Pires, in coll. Pires.

**Description:** Wingspan 8-8.5 mm. Head blackish. Labial palp segment 2 blackish, whitish below, segment 3 dark fuscous, whitish at base and all of inner side. Antenna dark fuscous, scape without pecten. Thorax blackish, tegulae tipped whitish. Forewing blackish fuscous, scattered whitish scales all over forming more distinct spots in apex, and on dorsum at one-quarter, and indistinct or obsolete fasciae at one-quarter and one-half, a clear white spot at tornus and a larger one on costa at four-fifths; cilia fuscous. Hindwing dark grey; cilia grey. Abdomen dark grey.

Variation. Only very limited material has been seen, but the extent to which the scattered white scales form spots on costa and dorsum and indistinct fasciae varies between specimens and even between one wing and the other on a single specimen.

Male genitalia (Fig. 4 a,b,c). Uncus ends in two divergent points with a sinus between. Gnathos broad with pointed apex. Valva broadly rounded at apex with a short ridge with long setae beneath the costa, sacculus broad. Saccus rounded. Juxta lobes strongly recurved near base, almost as long as valva. Phallus slightly tapering, relatively broad. The direction of the juxta lobes depends on the preparation. In Fig. 4a, they are crossed at the base, in Fig. 4b, they are directed posteriorly.

Female Unknown



Plate 2. Denisia piresi sp. n., holotype (Valinhas, Portugal).

Plate 1. Caloptilia conimbricensis sp. n., holotype (Ansião, Portugal).

Plate 4. Stomopteryx lusitaniella sp. n., holotype (Gondesende, Portugal). Plate 3. Filatima algarbiella sp. n., holotype (Fonte de Apra, Portugal).

**Diagnosis:** The species is characterised by its small size and lack of yellow coloration. The long juxta lobes which curve through 90° close to the base are characteristic.

**Distribution:** Only known from two localities in north-west Portugal, in provinces Beira Litoral and Douro Litoral (Map 1).

**Biology:** Specimens have been taken at mercury vapour light in April and May. The localities are in hilly places at low altitude. Ceira is at 100 m a.s.l. The collection site was near the edge of the village close to an area planted with *Pinus pinaster*. Valinhas, at 280 m a.s.l., is a small *Quercus robur* wood surrounded by *Eucalyptus* plantations. Many of the oaks are senescent with some dead wood on the trees, but little on the ground. Larvae of the new species are unknown, but probably feed in dead wood or under bark, like other *Denisia* Hübner, 1825 species.

**Derivation of name:** The species name is an adjective in genitive case honouring Pedro Pires who collected the first specimens and in recognition of his contribution to the knowledge of Portuguese Microlepidoptera.

Remarks: The genus *Denisia* has been circumscribed differently by various authors in the past, but currently includes species that were formerly placed in *Buvatina* Leraut, 1984 and *Chambersia* Riley, 1891. There are around 24 species, 19 of these occurring in Europe with additional species in North Africa, Turkey, the Caucasus and two in North America. Leraut (1989) figured male genitalia of 13 species in the genus together with two species of *Buvatina* Leraut. Genitalia figures or descriptions of all known species have been studied but the new species clearly belongs to none of them. *D. fiduciella* (Rebel, 1935) does not have genitalia figured anywhere. From its type locality, Sierra de Gredos in Spain it was particularly important to compare it with the new species. However, from the original description it is clearly quite different from *D. piresi* with yellow head and palps and longitudinal markings in the forewing.

The closest relatives of *D. piresi*, based on the male genitalia, are probably *D. subaquilea* (Stainton, 1849), *D. augustella* (Hübner, 1796) and *D. albimaculea* (Haworth, 1828), but they are clearly different in size, forewing markings and none of them has such strongly developed juxta lobes.

## **GELECHIIDAE**

# Filatima algarbiella Corley, sp. n.

Material: Holotype (Plate 3): ♂, "P1482 | Fonte de Apra | Loulé | Algarve | 18.4.1993 | M.F.V. Corley". "375 [Corley genitalia prep.] ♂". Paratype ♂♂: "P2182 | Fonte de Apra | Loulé | Algarve | 13.4.1994 | M.F.V. Corley". "556 [Corley genitalia prep.] ♂"; "P2993 | Fonte de Apra | Loulé | Algarve | 10.5.1995 | M.F.V. Corley" "882 ♂"; P4855 | Fonte de Apra | Loulé | Algarve | 13.4.1998 | M.F.V. Corley". "São Romão | Algarve | 15/5/1982 | Passos Carvalho" "PC92 [gen. prep.]" in coll. J. Passos de Carvalho, Oeiras.



Fig. 1. *Caloptilia conimbricensis* sp. n., male gen. prep. 7092 paratype and phallus of holotype gen. prep. 4172 (Ansião, Portugal).



Fig. 3. *Agnoea nonscriptella* sp. n., male genitalia gen. prep. 4200 holotype (Gondesende, Portugal).



Fig. 2. Caloptilia conimbricensis sp. n., female genitalia gen. prep. 2586 paratype (Santa Clara, Portugal)

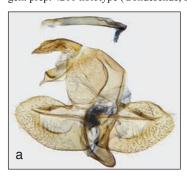


Fig. 4. *Denisia piresi* sp. n. (a) male genitalia (gen. prep. 4259) holotype (Valinhas, Portugal); (b) juxta lobe and (c) uncus of paratype gen. prep. 2535 (Valinhas, Portugal).





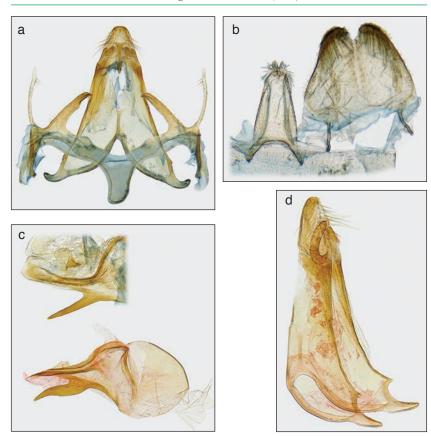


Fig. 5. *Filatima algarbiella* sp. n., male genitalia gen. prep. 822 paratype (a) ventral view, (b) segment 8, (c) phallus of holotype gen. prep. 375 with phallus of gen. prep. 822 above, (d) lateral view of tegumen gen. prep. 375 (all Fonte de Apra, Portugal).

**Description:** Wingspan 15.5-16.5 mm. Head with face greyish fuscous, vertex dark fuscous; labial palpus pale buff, more or less heavily speckled on upper side with fuscous scales, thickest on second segment; antenna dark fuscous, scape paler. Thorax dark fuscous. Forewing dark fuscous with three inconspicuous blackish fuscous dots often preceded and followed by a few ochreous fuscous or ferruginous scales, plical dot at one-third, smaller than discal dots, which are at two-fifths and three-fifths; terminal cilia greyish fuscous. Hindwings greyish fuscous, with a strip of scent scales on the underside; cilia grey. Legs dark fuscous, tarsal segments ochreous fuscous distally. Abdomen grey, first three tergites ochreous yellow.

Variation. The pale scales preceding and following the forewing dots are variable features, in the holotype they are almost obsolete.

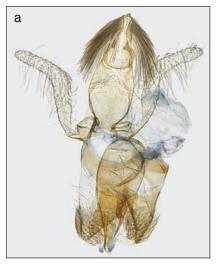




Fig. 6. Stomopteryx lusitaniella sp. n. (a) male genitalia (gen. prep. 4260) holotype (Gondesende, Portugal) and (b) phallus of gen. prep. 1512 (Marvão, Portugal).





Fig. 7. *Stomopteryx lusitaniella* sp. n., female genitalia (a) gen. prep. 2617 paratype (São Lourenço, Portugal), (b) paratype gen. prep. 2694 El Mirador, Spain (ZMUC).

Male genitalia (Fig. 5 a,b,c,d). Tergite 8 widest at base, apex shallowly notched between two rounded lobes; sternite 8 trapeziform. Tegumen and gnathos similar to other species of *Filatima* Busck, 1939. Uncus broad, truncate, produced ventrally into two very short points. Valvae symmetrical, simple, slender, slightly thickened towards apex, slightly longer than sacculi, which are stout, obliquely inwardly directed, and not quite symmetrical, with a small tooth on ventral margin of left sacculus. Anellus lobes absent. Saccus parallel-sided with rounded end. Phallus stout with rounded basal half, abruptly contracted to tapering apical half, with a stout smooth horn-like external carina, a small triangular cornutus and a ribbon-like sclerotisation initially running transversely around part of middle of phallus before turning towards apex.

Female, Unknown.

**Diagnosis:** Characterised by dark fuscous forewing with inconspicuous discal and plical dots and absence of costal and tornal pale spots and by grey hindwings. In the genitalia the stout smooth carina distinguishes it from all other species.

**Distribution:** The two sites are less than four kilometres apart between Loulé and São Brás de Alportel, on the Barrocal of the Algarve (Map 2). The Barrocal is a band of limestone forming a range of low hills running most of the length of the Algarve.

**Biology**: The five specimens known were taken at mercury vapour light in April and May. The two known sites are villas with some garden attached, surrounded by extensively managed orchards mainly of almond, fig, orange and carob, interspersed with areas of scrubland and a few *Quercus rotundifolia* trees.

Larva and foodplant unknown. The other European species of *Filatima* with known foodplants are attached to *Salix (F. incomptella* (Herrich-Schäffer, 1854)), *Prunus*, *Amelanchier* and *Crataegus (F. spurcella* (Duponchel, 1843)) and *Dorycnium pentaphyllum (F. textorella* (Chrétien, 1908) which has gregarious larvae). With such a range of foodplants it is not possible to predict the foodplant of *F. algarbiella*, although the similarity of *F. algarbiella* to *F. spurcella* might suggest that the foodplant is most likely to be a Rosaceous tree or shrub.

**Derivation of name**: The name *algarbiella* is an adjective derived from Algarve, the province of Portugal in which it occurs.

**Remarks:** The genus *Filatima* is large, with over 70 species, the majority occurring in North America. There are currently ten species recognised in Europe. As there is no evidence of shared species between Europe and North America, the North American species have not been studied in relation to the new species.

F. algarbiella is similar to F. spurcella (Duponchel, 1843). The forewings are similar in colour and markings, except that they lack the costal and tornal spots of F. spurcella. In the male genitalia, F. spurcella has the sacculus longer than the valva, the saccus is shorter than in F. algarbiella and the phallus lacks the conspicuous horn-like carina. Two other species of Filatima from easternmost parts of Europe are also similar (Junnilainen et al., 2010). F. transsilvanella Z. Kovács & S. Kovács, 2001 has slightly



Plate 5. Agnoea nonscriptella sp. n., holotype (Gondesende, Portugal).

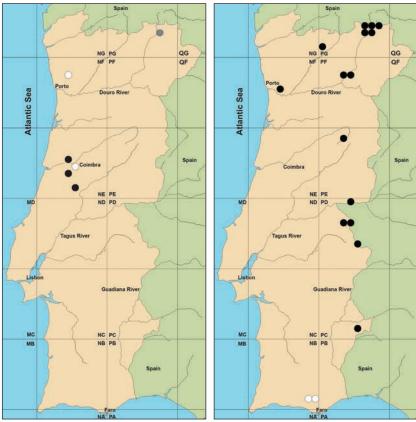
lighter coloured forewing. It has similar male genitalia but phallus is without carina or triangular cornutus. *F. autocrossa* (Meyrick, 1937) has strong discal and plical dots and whitish hindwings; the sacculi are markedly asymmetrical and stouter than those of *algarbiella*, and the phallus without triangular cornutus but it does have a carina, different from that of *algarbiella* in being toothed on one side. Huemer & Karsholt (1999) describe the remaining European *Filatima* species, but none of these is close to *F. algarbiella*.

F. spurcella was on the Portuguese list for many years, based on a specimen collected by Eaton in 1880 and identified by Stainton (1881). This has been shown to be a misidentification of Neofaculta ericetella (Geyer, 1832) (Corley & Goodey, 2014). The Iberian form of this species, subspecies orcella (Zerny, 1927) has longer, narrower, blacker forewings than the Filatima and lacks yellow tergites. The male genitalia are quite different. It is found in acid habitats where Erica species or Calluna are present.

# Stomopteryx lusitaniella Corley & Karsholt, sp. n.

Material: Holotype (Plate 4): ♂, "P9500 | Portugal | Gondesende | Trás-os-Montes | 18.vi.2010 | M.F.V. Corley" gen. prep. 4260. Paratypes: ♂, "P10219 | Portugal | Rebordelo | Trás-os-Montes | 22.vi.2012 | M.F.V. Corley"; ♂, "P6247 | Portugal | Videmonte | Beira Alta | 750m 5.ix.2001 | M.F.V. Corley" "1873 m"; ♀, "P8095 Portugal | São Lourenço | R. Tua | Trás-os-Montes | 20.vii.2006 | M.F.V. Corley" "2657 f"; 2♂, "France, Dept. Ardèche | St. Laurent-du-Pape | 400m, 20-21.vi.1999 | P. Skou leg." (ZMUC); 1♂, "Portugal, BB | Serra de Estrèla | above Manteigas | 12.vii.1986, 1000m | O. Karsholt" (ZMUC); ♂, "Spain, Avila | Sierra de Gredos | La Plataforma, 1700m | 20-21.vii.2003 | P. Skou" "Gen, præp. | 4434♂ | H. Hendriksen" (ZMUC);

# Distribution in Portugal of new Microlepidoptera



Map 1
Caloptilia conimbricensis sp. n. – Black
Denisia piresi sp. n. – White
Agnoea nonscriptella sp. n. – Grey

Map 2
Filatima algarbiella sp. n. – White
Stomopteryx lusitaniella sp. n. – Black

2 $\circlearrowleft$ , 1 $\circlearrowleft$ , "Spain, Madrid | Sierra de Guadarama | Lozoya, 1000m | 20-21.vii.1995 | P. Skou leg." (ZMUC); 1 $\circlearrowleft$ , "Spain, Andalucia | Marbella, El Mirador | 100m | 12.vii.1972 | E. Traugott-Olsen" "Gen. Præp. | nr. 2694 $\circlearrowleft$  | O. Karsholt" (ZMUC); 2 $\circlearrowleft$ , 1 $\circlearrowleft$ , "Spain, Andalucia | Camino de Istan | 400m | 17.vii.1971, 4.vii.1973 & 25.vi.1975 | E. Traugott-Olsen" "Gen. Præp. | nr. 2693 & 2718 $\circlearrowleft$  | O. Karsholt" (ZMUC); 1 $\circlearrowleft$ , "Spain, Andalucia | Marbella, Casa y Campo | 100m | 26.vii.1971 | E. Traugott-Olsen" "Gen. Præp. | nr. 2692 $\circlearrowleft$  | O. Karsholt" (ZMUC); 2 $\circlearrowleft$ , 3 $\circlearrowleft$ , "Spain, Andalucia | Provincia Malaga | Camino de Ojen, 150m | 25.vii.1982, 20.vii.1983 and 22.vi.1986 | E. Traugott-Olsen" "Genital præparat | nr. 5718 sex: $\circlearrowleft$  & 5730 sex: $\circlearrowleft$  | E. Traugott-Olsen" (ZMUC).

Material excluded from type series: 1 ♂, "Greece, Lakonia | Monemvasia | 5.vi.1979 | leg. G. Christensen & L. Gozmány"; 1 ♂, "Greece, Serres | Vrontus Mts. | 5 km SE Kapnofito, 850 m | 27.vi.2004 | leg. B. Skule" | "Gen. præp. | 4877 ♂ | H. Hendriksen"; 1 ♂, 3 ♀, "Greece, Crete | Lassithi distr. | Makrygialos, 11-19.vi.1988 | leg. R. Johansson" "Gen. præp. | 4418 ♂ | H. Hendriksen"; 3 ♀, same data but "26-31.v.1993"; 5 ♂, "Greece, W Crete | 1,7 km. S of Topolia, 380 m | 15-19.vi.2014 | leg. C. Hviid, O. Karsholt & F. Vilhelmsen" (all ZMUC).

**Description:** Wingspan 9-11.5 mm. Head light fuscous; labial palpus segment 2 dark fuscous on outer side, inner side pale buff, segment 3 pale buff; antenna dark fuscous. Forewing dark fuscous, individual scales dark fuscous but with a grey-buff base, largely concealed by overlapping scales, but giving the wing a mottled appearance at higher magnification; cilia light grey, with scattered dark fuscous scale tips. Hindwing pale grey, darker towards costa; cilia pale grey. Abdomen dark greyish fuscous.

Variation. Some specimens show a hint of a dark dot at the end of the cell.

Male genitalia (Fig. 6 a,b). Very similar to other species of *Stomopteryx* Heinemann, 1870. Uncus with dense long lateral hairs directed anteriorly. Gnathos short, broadly rounded. Valva ribbon-like, slightly angled in middle. Vinculum with a pair of rounded strongly bristled processes surrounding aedeagus. Aedeagus conical from rounded base, with a slightly sclerotised arm from widest point towards apex ending in small hook.

Female genitalia (Fig. 7 a,b). Very similar to other *Stomopteryx* species. Signa a pair of small slender thorns with caps.

**Diagnosis:** The species is recognised by its blackish brown coloration and lack of markings. It cannot be confused with any of its close relatives, except the larger *S. hungaricella* Gozmány, 1957, but might be confused with *Eulamprotes unicolorella* (Duponchel, 1843) or *Monochroa tenebrella* (Hübner, 1817), however both of these are more glossy than the *Stomopteryx*. Genitalia features show rather little difference in either gender between this species and other *Stomopteryx* species. The most useful character lies in the arm and hook on the aedeagus: the arm is more triangular and the hook larger than in *S. hungaricella*.

**Distribution:** In Portugal the species is recorded from Baixo Alentejo northwards to the extreme north-east of the country in Trás-os-Montes, mainly well inland (Map 2). Because it has had no name some records have certainly been lost. Outside Portugal it is also known from Spain and France. In Spain there are records from Malaga, Madrid and Avila. In France it is known from Ardèche, Haute-Loire, Hérault, Pyrenées-Orientales and Vendée, according to Nel (2006) (under the name *hungaricella*). Nel also gives a record from Sardinia.

**Biology:** The new species has been recorded at light from mid-May to late September, implying at least two generations. Localities vary in altitude from 100 m a.s.l. to 1800 m a.s.l. Habitats are typically areas of scrub on well drained moderately acid soils

with plentiful *Cytisus* or at higher altitudes damp meadows with *Genista florida*. The foodplant is unknown.

**Derivation of name:** The name *lusitaniella* is an adjective derived from Lusitania, the Roman name for Portugal.

**Remarks:** Although the species of *Stomopteryx* show considerable diversity in external appearance, differences in genitalia are remarkably small, with the result that some easily distinguishable species can scarcely be separated by genitalia. Fauna Europaea (Karsholt & Nieukerken, 2011) lists 13 species for Europe. Of the European species, most species have distinctive wing markings, only *S. hungaricella* Gozmány, 1957 comes close to the new species, but differs in its larger size with 14-16 mm wingspan and the usual presence of a few pale scales forming a weak whitish spot on the costa at four-fifths. In the male genitalia, the hook on the narrow sclerotized arm of the aedeagus is smaller than in *S. lusitaniella*. *S. nigricella* (Chrétien, 1915) described from Tunisia has also been considered, but is externally quite different from *S. lusitaniella*.

Nel (2006) added S. hungaricella to the faunas of France and Portugal. The Portuguese specimen he mentions was one collected by MFVC from Galegos, near Portalegre (Alto Alentejo) which had all the characters of S. lusitaniella. Nel based his identification on the figures in Elsner et al. (1999), not on a study of the original description or type material. Moreover he concluded that Elsner et al. (loc. cit.) had inadvertently transposed the figures of male genitalia of S. hungaricella and S. flavipalpella Jäckh, 1959. This supposition was erroneous, as the Elsner male genitalia figure is a very good match for the drawing accompanying the description of the species (Jäckh, 1959). Two factors must have led Nel to his conclusions: the male genitalia of S. lusitaniella are very similar to those of typical S. flavipalpella and the male genitalia of some flavipalpella specimens from the south of France and from Portugal are closer in appearance to those of S. hungaricella. Almost certainly 'flavipalpella' is a species complex. This proposition is yet to be investigated, but there are differences in the aedeagus and in habitat between the type of *flavipalpella* from Trentino, in the Italian Alps and specimens from Portugal pointing to the existence of at least two species. This will only be resolved following DNA studies. The genitalia figures of hungaricella in Gozmány (1957) are rather stylised and therefore not very useful, but photographs of the male genitalia of the type series have also been examined. In his description of the species, Gozmány refers to the wingspan of 14-16 mm, much larger than lusitaniella, and its occurrence on karstic limestone, whereas lusitaniella is found in moderately acid habitats.

From this, it follows that *S. hungaricella* should be removed from the French Lepidoptera list.

We have also examined specimens of a *Stomopteryx* from Greece (including Crete) which is almost indistinguishable from the type series of *S. lusitaniella* sp. n. Due to the geographical separation, and because of the difficulties in separating *Stomopteryx*-species on the genitalia it will require studies of the DNA barcode to decide if the

Greece populations are conspecific with western European *S. lusitaniella*, and the Greek specimens are hence excluded from the type series.

## LYPUSIDAE

Agnoea nonscriptella Corley, sp. n.

**Material:** Holotype (Plate 5):  $\circlearrowleft$ , "P10584 | Portugal | Gondesende | Trás-os-Montes | 2.vii.2014 | M.F.V. Corley" "4200 m | M. Corley | Gen. prep."

**Description:** Wingspan 14.5 mm. Head brownish buff. Labial palp buff, segment 3 half as long as segment 2. Antenna light brown. Thorax light brown. Forewing light fuscous, slightly darker towards costa, without discal or plical dots, all scales with buff base and greyish fuscous tips; cilia buff, flecked with fuscous-tipped scales. Hindwing grey, cilia light grey.

Male genitalia (Fig. 3). Uncus broad-based, strongly narrowed to slender apex. Gnathos with two contiguous lobes, each wider than high. Valva from broad base straight-sided, slightly tapering, apex broadly triangular. Saccus short. Juxta lobes much reduced. Phallus with jug-shape typical for the genus, but short. The holotype genitalia photograph in Fig. 3 has been improved.

Female, Unknown.

**Diagnosis:** Forewing without discal or plical dots. The male genitalia are characteristic: the combination of slender uncus, wide bilobed gnathos, simple valva, undeveloped juxta lobes and short phallus does not occur in any other species.

**Distribution:** Known only from the type locality in Trás-os-Montes, north-east Portugal (Map 1).

**Biology:** The holotype was taken at light at the beginning of July in a locality with open grassland and scrub on ultrabasic soil, with *Ouercus pyrenaica* woodland adjacent.

**Derivation of name:** The species name is an adjective derived from the Latin *non scriptus*, meaning "not written" referring to the absence of markings on the forewing.

**Remarks:** Sinev & Lvovsky (2014) have transferred all *Pseudatemelia* Rebel, 1910 species to the genus *Agnoea* Walsingham 1907. Figures of the male genitalia of all 19 species have been compared with those of the new species. *A. nonscriptella* is in subgenus *Agnoea*, perhaps most closely related to *A. pallorella* (Jäckh, 1972), which has similar uncus and gnathos but much longer phallus.

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