

***Polymixis germana* (Rothschild, 1914), a new noctuid species for the European fauna (Lepidoptera: Noctuidae, Xyleninae)**

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Resum. *Polymixis germana* (Rothschild, 1914), nova espècie de noctuid per a la fauna europea (Lepidoptera: Noctuidae). Els autors donen a conèixer la troballa de *Polymixis germana* (Rothschild, 1914), a la península Ibèrica, citació que aporta una nova espècie de noctuid per al continent europeu. Aquesta troballa ha permès establir la sinonímia entre *P. germana* i *Polymixis boursini* (Rungs, 1949).

Abstract. The authors report the finding of *Polymixis germana* (Rothschild, 1914), in the Iberian Peninsula, a quotation that represents a new noctuid species for Europe. This new discovery has allowed the establishment of the synonymy between *P. germana* and *Polymixis boursini* (Rungs, 1949).

Key words: *Polymixis germana*, *Polymixis boursini*, Xyleninae, Noctuidae, Lepidoptera, synonym, faunistics, Almeria, Iberian Peninsula.

Introduction

Antitype (now in *Polymixis*) *germana* was described by Rothschild from the locality of Guelt-es-Stel in central Algeria, where the type (làm. 4, fig. 1a), in coll. Natural History Museum, London, was collected on 8.X.1913. *Antitype* (now in *Polymixis*) *boursini* was described by Rungs in 1949 from some specimens collected in Bou Ouchane (Morocco), on 27-28.II.1946. The type, in coll. Musée National d'Historie Naturelle, Paris is presented in làm. 4, fig. 1b.

According to Rungs (1981), *P. boursini* is an endemic species from south-west Morocco where it replaces *P. germana*. Until now, both have been treated as separate and valid species, resembling the species of the subgenus *Eumichtis* (Ronkay *et al.*, 2001).

Material and methods

All the Spanish specimens were attracted by a 125 W mercury vapour light trap. For a correct identification, they were at first externally compared with both of the

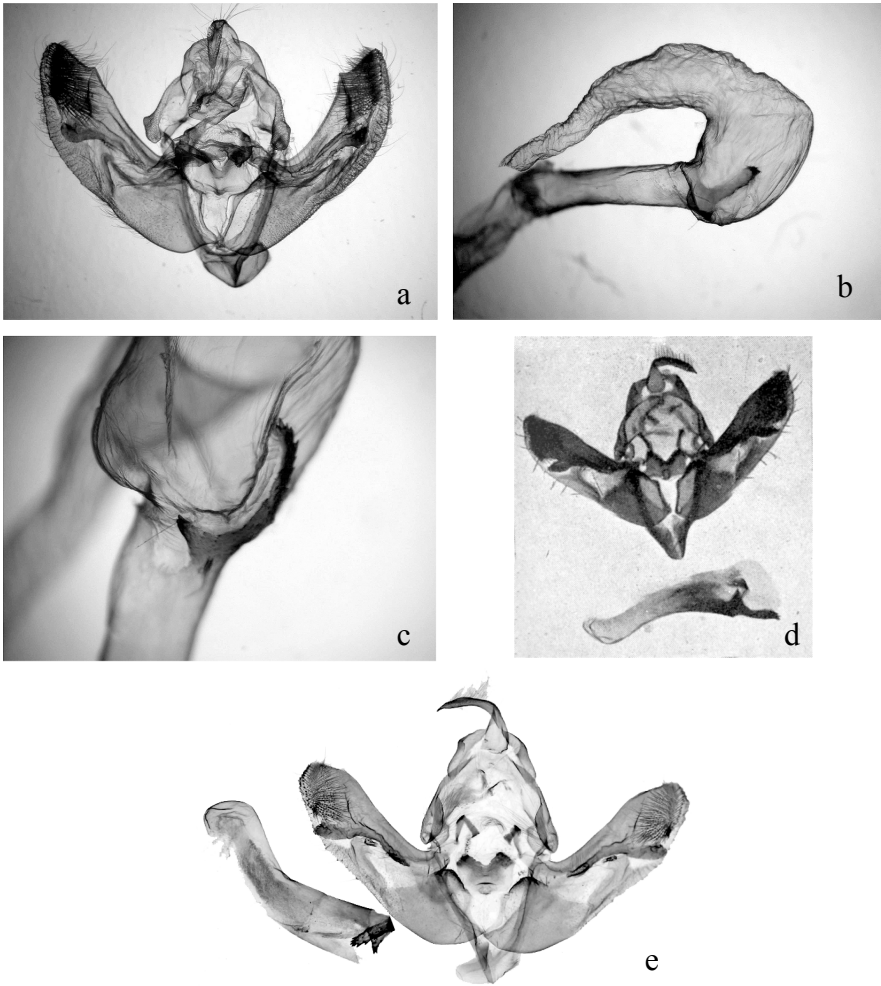


Fig. 1 Male genitalia of *P. germana* type: **a**, genitalia without aedeagus; **b**, aedeagus with the everted vesica; **c**, detail of aedeagus and vesica; **d**, male genitalia of *P. boursini* type (from Rungs 1949); **e**, male genitalia of *P. germana* from Almeria.

illustrated type specimens above, afterwards one Spanish specimen was dissected and its genitalic structures were compared with that of the *P. germana* type (fig. 1a-c) and with that of *P. boursini* type (fig. 1d).

Besides these two type specimens, other examined material has been one male from Tighmi (Morocco), 1-14.XII.1999, Seibald-Hofer *leg.* and one female (lãm. 4, fig. 1c) from the same locality, 15-22.III.1999, Seibald *leg.*

Results

The above stated comparisons has allowed the establishment of the synonymy between *P. germana* (Rothschild, 1914) and *P. boursini* (Rungs, 1949) and the identification of the Spanish specimens as belonging to *P. germana*.

These two Spanish males of *P. germana* were collected by the first two listed authors, the night of 14.X.2004, at the locality of Sierra Cabrera, near the village of Turre (Almeria) (30SWG90, 480 m). The habitat is a xerothermophilus steppe, with a vegetation very similar to that present in many areas of Morocco, Algeria and Tunisia (fig. 2).



Fig. 2 Habitat where *P. germana* has been found.

All the efforts trying to get more specimens in October 2005 were in vain.

If we assume that, like is characteristic in the majority of species of *Polymixis*, *P. germana* is also univoltine, its flight period should be very long, as adults seems to be on wing from October until March. In that case, adults should be the overwintering stage. This is something that awaits investigation, but that it is already known to occur in some desert species of this genus, as for example *P. juditha* (Staudinger, 1898).

One of the collected Spanish males and its genitalia is presented in (lãm. 4, fig 1d, adult and fig. 1e, genitalia).

Systematics

The genus *Polymixis* Hübner [1820] is a large mainly Central and West Palaearctic unit, placed in the subtribe Antitypina Forbes & Franclemont, 1954 in the tribe Xylenini of the trifold subfamily Xyleninae Guenée, 1837 (*sensu* Fibiger & Lafontaine 2005). In the new European checklist of the Noctuoidea (Fibiger & Hacker 2005) *P. germana* should be placed after *P. lichenea* (Hübner, [1913]). Superficially and in size *P. germana* very much resembles the North East African and Middle East species, *P. rebecca* (Staudinger, 1892) (see Kravchenko *et al.* 2005), and

light specimens of the newly described *P. steinhardti* Kravchenko *et al.* 2005; however, these two species belong in another species-group, and the similarities of the imagines are due to ecological factors.

Distribution

P. germana is Atlanto-Mediterranean, a widespread species of North West Africa, known to occur in Morocco, Algeria, and Tunisia. Further investigations in southern Spain must show if the species is resident there, the area definitively possesses habitats hardly distinguishable from those of North Africa; and male specimens in an area normally hints at a steady population, where females are much more often recorded far away from its territory, seeking sufficient places for egg deposits.

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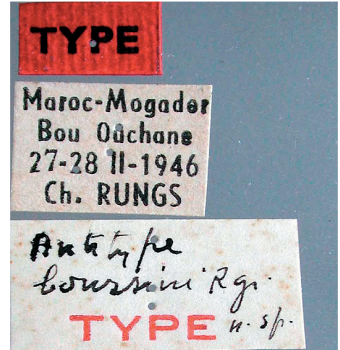
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a



b



c



d

Fig. 1 Adults of *Polymixis* species: a, type of *P. germana*; b, type of *P. bourkini*; c, female of *P. germana*, as is usual in *Polymixis* species, the hindwing is darker than in males; d, *P. germana* from Almeria.