

Blastobasis sardinica sp. nov. – a new species from the Mediterranean region (Lepidoptera, Blastobasidae)

● JAN ŠUMPICH

Abstract. *Blastobasis sardinica* sp. nov. is described from specimens captured in Sardinia, Corsica, Spain and France. Adults and genitalia of both sexes are figured. The habitus of the new species may resemble certain forms of the species *Blastobasis vittata* (WOLLASTON, 1858) and *Blastobasis marocanel-la* (AMSEL, 1952) from which it can be very easily distinguished by features of genitalia in both sexes. The types of all taxons described in *Blastobasis* ZELLER, 1855 from Sardinia and Corsica are figured for the first time, namely *Blastobasis roscidella magna* AMSEL, 1952 (Sardinia), and *Blastobasis evanescens* WALSINGHAM, 1901 (Corsica).

Key words. Lepidoptera, Blastobasidae, taxonomy, new species, Palaearctic Region Sardinia, Corsica, Spain, France.

Zusammenfassung. *Blastobasis sardinica* sp. nov. wird nach Exemplaren aus Sardinien, Korsika, dem kontinentalen Frankreich und Spanien beschrieben. Fotos und Zeichnungen der Genitalien beider Geschlechter werden abgebildet. Die neue Art ähnelt einigen Formen von *Blastobasis vittata* (WOLLASTON, 1858) und *Blastobasis marocanel-la* (AMSEL, 1952) am stärksten, von denen sie aber sehr leicht durch die Genitalien zu unterscheiden ist. Zum ersten Mal sind die Typen aller Taxa der Gattung *Blastobasis* ZELLER, 1855 beschriebene aus Sardinien und Korsika gezeigt, nämlich *Blastobasis roscidella magna* AMSEL, 1952 (Sardinien) und *Blastobasis evanescens* WALSINGHAM, 1901 (Korsika).

(coll. J. SKYVA; to be later stored in National Museum in Prague).

Paratypes. *Italy, Sardinia.* 1 ♀, the same locality and data as holotypus (coll. J. SKYVA); 1 ♂, 1 ♀, Olbia, Le Saline, 5.V.2006, leg. J. SKYVA (♂ coll. J. SKYVA, ♀ coll. J. ŠUMPICH); 2 ♂, Budoni, Brunella, 2.V.2010, leg. J. SKYVA (coll. J. SKYVA et J. ŠUMPICH). – *France, mainland.* 3 ♀, Port la Nouvelle, 23.–24.V.1995, leg. J. SKYVA (2 ♀ coll. J. SKYVA, 1 ♀ coll. J. ŠUMPICH). – *France, Corsica.* 1 ♂, St. Lucia di Porto Vecchio, Tagliu Rossu, 19.VI.1993, leg. J. LIŠKA (coll. J. LIŠKA). – *Spain.* 1 ♀, Catalonia, Platja d'Aro, 24.–29.VII.2002, leg. J. ŠUMPICH (coll. J. ŠUMPICH).

Etymology. The species name is derived from the name of the Sardinia Island where the species records have been most frequent.

Description. *Adult. Male* (Fig. 1). Wingspan 12–14 mm. Head and scape of antenna light grey. Antenna brown, flagellum with basal notch. Labial palpi narrow, very light with cream tinge, on lower side covered with brown scales being distincter on its second segment. Forewings very narrow, sharply pointed at apex. Forewing ground colour light grey, covered with brownish scales. Basal third of the forewing wing lighter, emarginate with sharply folded fascia, directed towards apex. A few of smaller, darker and more or less distinct dots are present on forewing, one at its lighter basal third and others predominantly at outer margin of wing apex. Hindwings light grey, moderately lighter than forewings. Cilia coloured as the wings.

Female (Fig. 2). Wingspan 13 mm. Similar to male, in wingspan a little smaller in average. Basal antennal segment without notch. The folded fascia emarginating the lighter basal part of forewing less distinct.

Male genitalia (Fig. 3). Uncus relatively broad at base, slightly narrowing to blunt-ended apex. Gnathos with weakly developed and very shortly bifurcate median protrusion. Tegumen very broad, as wide as long. Basal pillow of valva

Introduction

Within Europe, *Blastobasis* ZELLER, 1855 belongs to very well explored groups of Microlepidoptera. Currently a total of 36 species of this genus are reported from Europe (SINEV 2011, ŠUMPICH 2011), with most of them being restricted to Madeira (KARSHOLT & SINEV 2004), to a lesser extent also to the Canary Islands (SINEV 2011). Hitherto only one taxon of the genus *Blastobasis* has been described from Sardinia, namely *Blastobasis roscidella magna* AMSEL, 1952. The type material consisting two females (Figs 7–8) was recently studied by SINEV (2007) who ranked this taxon to the species level. *Blastobasis evanescens* WALSINGHAM, 1901 was described from one female captured in Corsica (WALSINGHAM 1901). It was last time listed as a part of the lepidopteran fauna of Corsica by LERAUT (1980) and RUNGS (1988); later on, however, it was deleted from all European checklists because of its unclarified species identity. The examination of the holotype has shown that this species in

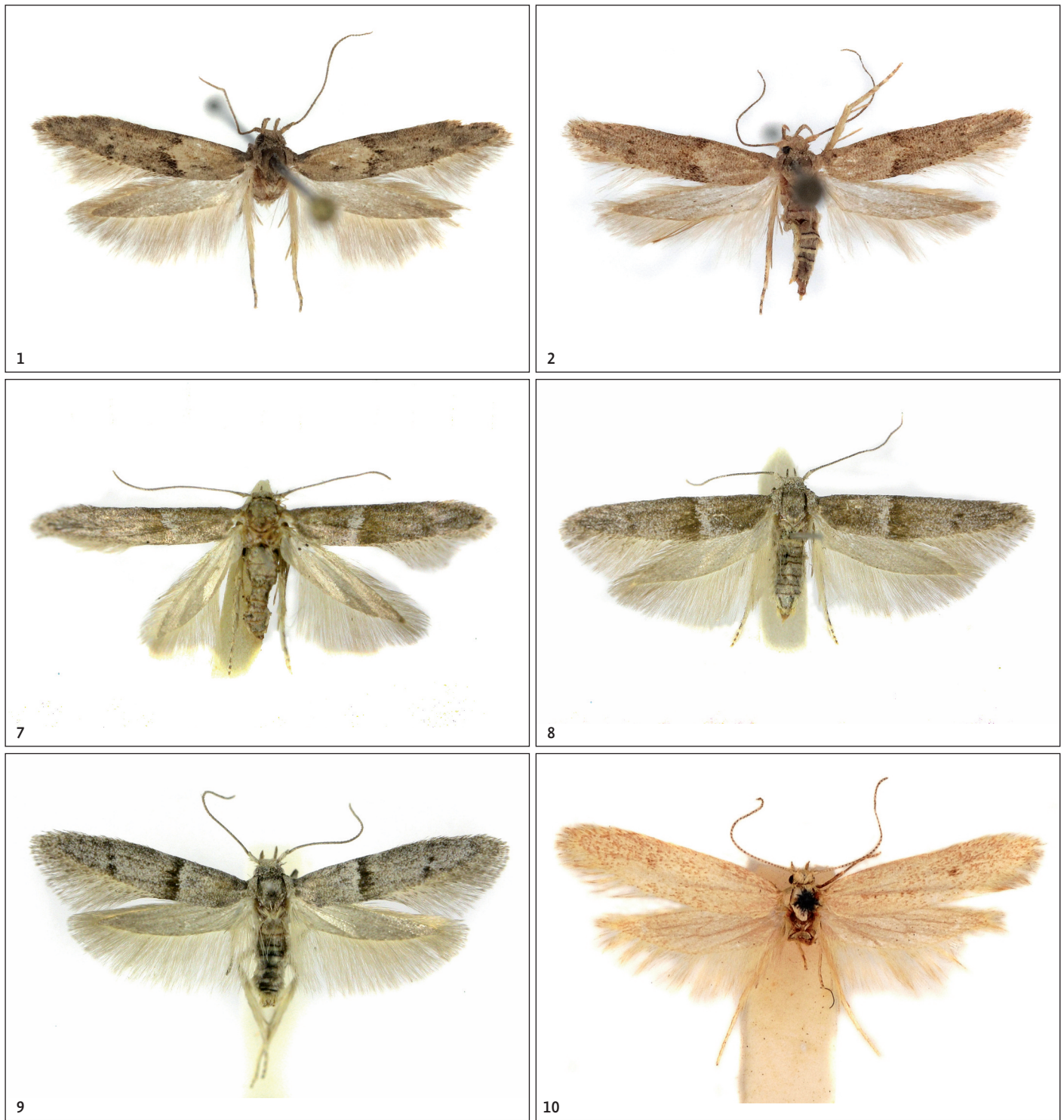
fact belongs to the family Symmocidae, but it is still not included in a recently published monograph on this family by GOZMÁNY (2008). As its taxonomic position remains open, a figure of the holotype is attached here (Fig. 10) in order to be available for possible clarification. The comparison of the material used for the description of *Blastobasis sardinica* sp. nov. with all the palaearctic species of the genus *Blastobasis* known to the author has given negative results. Therefore a new species for science is described here.

Abbreviations

LSNK – Staatliches Museum für Naturkunde, Karlsruhe, Germany; BMNH – The Natural History Museum, London, U.K.

Blastobasis sardinica sp. nov.

Holotype. ♂, “Sardinia, Témpio 1200 m, Mt. Limbara, 2.7.2004, J. SKYVA lgt.”



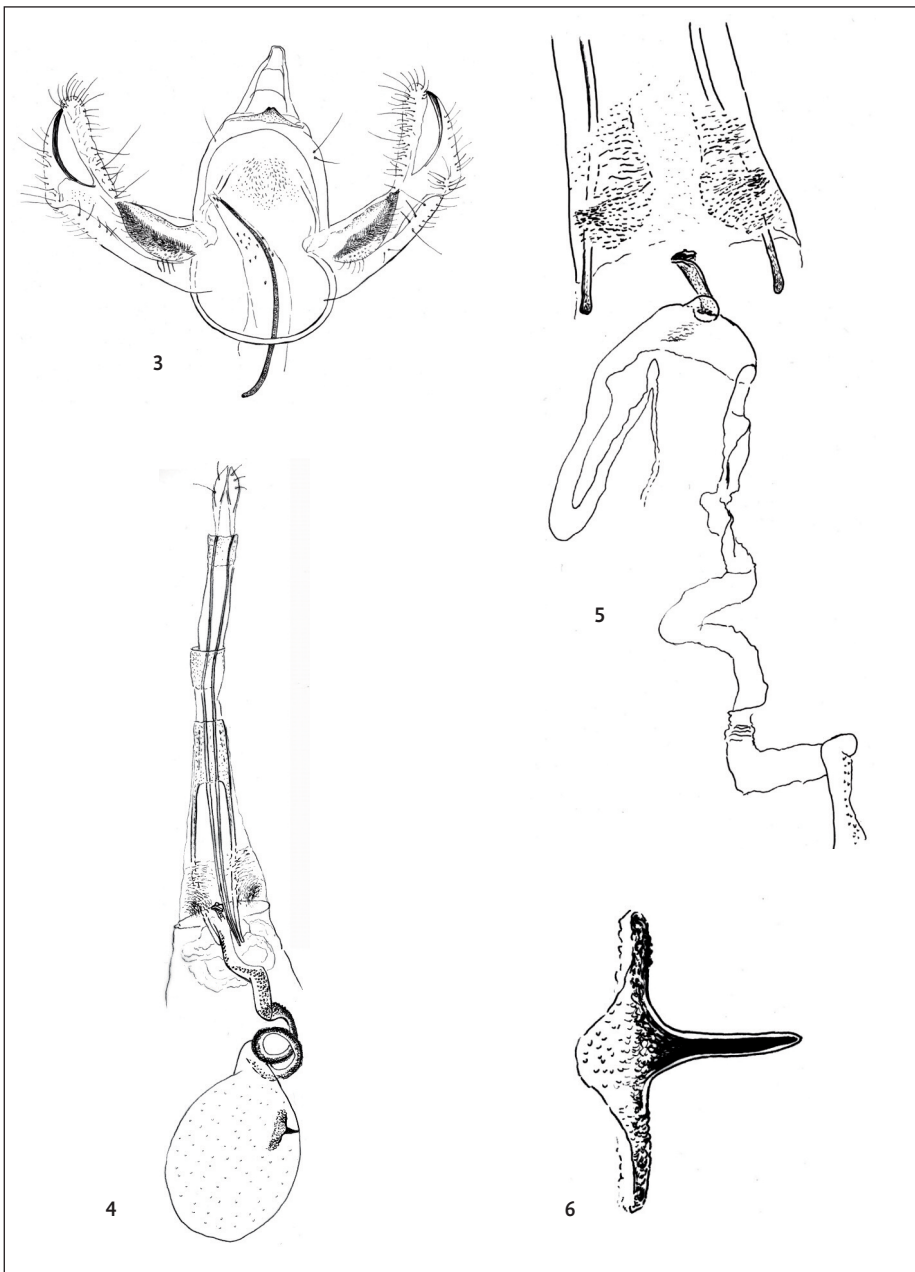
Figs 1, 2. *Blastobasis sardinica* sp. nov. – 1. Holotype, ♂, 14 mm. Sardinia, Témpio 1200 m, Mt. Limbara, 2.VII.2004, J. SKYVA lgt. (NMP). 2. Paratype, ♀, 13 mm. France, Port la Nouvelle, 23.–24.V.1995, leg. J. SKYVA (coll. J. SKYVA).
Figs 7–9. *Blastobasis magna* AMSEL, 1952. – 7. Holotype, ♀, 12 mm. Sardinia, Porto Santoru, 18.VI.1936, leg. H. G. AMSEL (LSNK). 8. Paratype, ♀, 12 mm. Sardinia, Porto Santoru, 12.VI.1936, leg. H. G. AMSEL (LSNK). 9. ♂, 12 mm. Spain, Platja d'Aro, 24.–29.VII.2002, leg. J. ŠUMPICH (coll. J. ŠUMPICH).
Fig. 10. Holotype of *Blastobasis evanescens* WALSINGHAM, 1901, ♀, 16 mm. Corsica, Vizzavona, 12.VI.1899 (NHML; copyright of the Trustees of the Natural History Museum, London).

covered with microtrichiae which form a narrow band. Valva narrow, slightly broadening towards apex, cucullus moderately curved and pointed apically. Aedeagus relatively narrow, narrowing towards apex, moderately bent in middle, with long and strongly sclerotized rim.

Female genitalia (Figs 4–6). Apophyses posteriores more than 2.5 times long as apophyses anteriores. Sternite VIII without median sclerotization. Ostium bursae narrow, moderately sclerotized. Ductus bursae very long, anterior part very fine, membranous, posterior more strongly built, with densely spined and spirally

twisted part before corpus bursae. Corpus bursae moderately oval, signum hook shaped.

Diagnosis. *Blastobasis sardinica* sp. nov. is in habitus most similar to certain forms of the species *Blastobasis vittata* (WOLLASTON, 1858) and *Blastobasis maro-*



Figs 3–6. Genitalia of *Blastobasis sardinica* sp. nov. – 3. Male genitalia, Sardinia. 4–6. Female genitalia, Sardinia. 4. Total view. 5. Detail of ostium bursae. 6. Signum.

canella (AMSEL, 1952). It differs from these species distinctly in genitalia armature in both sexes, namely by its extremely broad tegumen, the shape of uncus and the aedeagus structure in males, and by the different shape of ostium bursae and signum in females. In contrast to the both species mentioned (but also to *B. phycidella* ZELLER, 1839), adults of *B. sardinica* sp. nov. show only very slight variability in the colour pattern of forewings. The genitalia armature of the newly described species is most closest to *B. magna* which differs by the elongate shape of tegumen and by the formation of microtrichiae on basal pillow of valva in males, and by the ending of ostium bursae in females. The two species are, however, unmistakable only according to

the colour pattern of forewings (Figs 7–9). What makes the new species unique within the palaeartic species of the genus *Blastobasis* is the combination of broad tegumen, broad and blunt-ended uncus and the formation of microtrichiae to the narrow elongate band in males, as well as the combination of the shape of ductus bursae and signum in females.

Bionomy. Early stages unknown. All the material was collected at light. Most of specimens were captured at very low altitudes (0–250 m) in the vicinity of sea coast, only two specimens were found in a mountain environment in the Sardinia inland (Mt. Limbara). At low altitudes the flight period was recorded in May

and in turn of July and August what indicates two generations, at sites above 1000 m the species was found in a single generation within July.

Distribution. Known from Sardinia, Corsica, Spain and France.

Remarks. *Blastobasis sardinica* sp. nov. seems to belong to widely distributed species in Sardinia, particularly in its northern part, and, with regard to the records in other seaside countries, it is expected to occur more largely also within the Mediterranean. On the contrary *B. magna* is rarer in Sardinia, having the centre of its occurrence probably in Spain. Considering the rather low number of published records from Sardinia (SINEV 2007) I have added further faunistic data of this species. The third species of the genus *Blastobasis* known from Sardinia is *B. phycidella* which is most prevalent as well as most abundant of the three species, and which creates here a number of individual forms in the colour pattern of wings and the size of adults.

Blastobasis magna AMSEL, 1952

Material. *Italy, Sardinia.* 1 ♂, Siniscola, 14.VII.1975, leg. R. U. ROESLER (LSNK). – *Spain.* 11 ♂, 4 ♀, Catalonia, Platja d'Aro, 24.–29.VII.2002, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 2 ♀, Catalonia, Llaberia near Reus, 29.–30.V.1996, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 1 ♂, Aragon, Castejon de Monegros, 10.VI.2007, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 3 ♂, Almeria, Nijar, 13.–14.VI.2007, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 3 ♂, Alacant, Santa Pola, 26.–27.IX.2005, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 3 ♂, 1 ♀, Alacant, Finestrat, 28.IX.2005, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 1 ♂, Alacant, Salinas, 25.IX.2005, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 1 ♂, Alacant, Albatera, 28.IV.2008, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 1 ♂, the same locality, but 20.X.2009, leg. J. ŠUMPICH (coll. J. ŠUMPICH); 2 ♀, Almeria, Mojacar, 4.V.2008, leg. J. ŠUMPICH (coll. J. ŠUMPICH).

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loan of study material of the family Blastobasidae which represents the main part of the type series of the newly described species. Thanks belong to PETR KAPITOLA for English translation of the manuscript.

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