

A new *Stomopteryx* Heinemann, 1870 from southern Spain (Lepidoptera: Gelechiidae)

O. Karsholt & J. Šumpich

Abstract

The description of *Stomopteryx jeppeseni* Karsholt & Šumpich, sp. n. is presented. The description is based on a large series of specimens originating from Andalusia in southern Spain. The newly described species is morphologically most similar to *S. lusitaniella* Corley & Karsholt, 2014, but due to different coloration of the wings they are easily distinguishable. Photos of the adults and genitalia of both sexes are given.

KEY WORDS: Lepidoptera, Gelechiidae, *Stomopteryx*, new species, Spain.

Un nuevo *Stomopteryx* Heinemann, 1870 del sur de España (Lepidoptera: Gelechiidae)

Resumen

Se presenta la descripción de *Stomopteryx jeppeseni* Karsholt & Šumpich, sp. n. La descripción está basada en una gran serie de ejemplares procedentes de Andalucía, en el sur de España. La nueva especie descrita, es morfológicamente más parecida a *S. lusitaniella* Corley & Karsholt, 2014, pero debido a la diferente coloración de las alas, ambas son fácilmente distinguibles. Se proporcionan fotos del adulto y de la genitalia de ambos sexos.

PALABRAS CLAVE: Lepidoptera, Gelechiidae, *Stomopteryx*, nueva especie, España.

Introduction

Gelechiidae is among the least known Lepidoptera families in Europe. Although some progress has been made (e.g. HUEMER & KARSHOLT, 2010), a number of undescribed species are known to specialists, and even though it is preferable to describe these within revisionary framework, there is an increasing need to have such species named in order to be able to discuss them for taxonomic or conservation purposes. Below we describe a new, distinct species belonging to the genus *Stomopteryx* Heinemann, 1870.

Stomopteryx, as currently restricted, includes 15 species from Europe (KARSHOLT, 2011; CORLEY & KARSHOLT, 2014; NEL & VARENNE, 2016), 18 species from the Afrotropical region (DE PRINS & DE PRINS, 2017) and some additional species from North Africa and Asia.

Abbreviations used

HW	Collection Hugo van der Wolf, Neunen, The Netherlands
MNCN	Museo Nacional de Ciencias Naturales, Madrid, Spain
NMPC	National Museum, Prague, Czech Republic
ZMUC	Zoological Museum, Natural History Museum of Denmark, Copenhagen, Denmark
ZT	Collection Zdenko Tokár, Šal'a, Slovakia

Stomopteryx jeppeseni Karsholt & Šumpich, sp. n. (figs 1-4, 6-13)

Holotype ♂, "SPAIN: ALMERÍA | Sierra de Alhamilla | 37 00' 02" N 02 09' 58" W | Nijar env. 560 m | 13-14.6.2007 | Jan Šumpich leg." "Holotypus | *Stomopteryx jeppeseni* | Karsholt & Šumpich, 2018" "Photo / 1 Gen. prep. | J. Šumpich | 18/164" (NMPC).

Paratypes (87 ♂♂, 22 ♀♀). SPAIN: ALMERÍA: 15 ♂♂, 6 ♀♀, same data as holotype (2 ♀♀, M. Dvořák leg.) (NMPC, 1 ♂, in MNCN); 1 ♂, ditto, but 30-IV-2008, J. Šumpich leg. (NMPC); 1 ♂, Sierra de Alhamilla, vicinity of Nijar, 560 m, 19-V-1999, M. Dvořák leg. (NMPC); 1 ♀, 5 km N Carboneras, 10 m, 15-X-1992, M. Fibiger leg. (ZMUC); 2 ♂♂, 1 ♀, 5 km SW Tabernas, Rambla de Tabernas, 200 m, 28-V-1998, P. Skou leg. (ZMUC); 1 ♂, ditto, but 350 m, 18-25-IV-2000, C. Hviid & B. Skule leg. (ZMUC); 1 ♂, ditto, but 350 m, 18-25-IV-2001, C. Hviid, P. Skou & B. Skule leg. (ZMUC); 1 ♂, 2 km W Tabernas, Rambla de Tabernas, 400 m, 3-V-2000, P. Skou leg. (ZMUC); 3 ♂♂, ditto, but 24-25-V-2006, P. Skou leg. (ZMUC); 11 ♂♂, 2 ♀♀, ditto, but 2-3-V-2008, J. Šumpich leg. (NMPC); 1 ♀, ditto but Z. Tokár leg. (ZT); 1 ♂, ditto, but 20-21-IV-2009, Z. Tokár leg. (ZT); 1 ♂, ditto, but 7-VII-2010, Z. Tokár leg. (ZT); 1 ♀, Cabo de Gata, 5 m, 2-V-2000, P. Skou leg. (ZMUC); 2 ♂♂, Sierra de Alhamilla, road Turrillas-Colativi Hill, 1000 m, 15-19-VI-2007, J. Šumpich leg. (NMPC); 1 ♂, Sierra de los Filabres, Alto del Calar del Gallinero, 2000 m, 17-18-VI-2007, J. Šumpich leg. (NMPC); 1 ♂, Mojácar, 50 m, 4-V-2008, J. Šumpich leg. (NMPC); GRANADA: 2 ♂♂, Almuñecar, 150 m, 6-12-V-2000, C. Hviid & B. Skule leg. (ZMUC); 2 ♂♂, ditto, but 125 m, 11-23-V-2002, G. Jeppesen; 2 ♂♂, ditto, but 125 m, 17-29-V-2003, G. Jeppesen leg.; 1 ♂, ditto, but 135 m, 26-VIII-15-IX-2005, G. Jeppesen leg.; 1 ♂, 1 ♀, 25 km N Almuñecar, Moscaril, 500 m, 14-22-V-2002, G. Jeppesen leg.; 2 ♂♂, ditto, but 17-29-V-2003, G. Jeppesen leg.; 13 ♂♂, 1 ♀, ditto, but 28-VIII-9-IX-2004, G. Jeppesen leg.; 19 ♂♂, 5 ♀♀, ditto, but 26-VIII-15-IX-2005, G. Jeppesen leg.; 1 ♂, Sierra de los Guájares, 1220 m, 26-VIII-15-IX-2005, G. Jeppesen leg.; 1 ♂, Sierra del Chaparral, 400 m, 4-V-2009, G. Jeppesen leg. (all ZMUC); 1 ♀, MÁLAGA: Camino de Benahavis, 150 m, 21-VI-1980, leg. E. Traugott-Olsen, genitalia slide 5336 Traugott-Olsen; 1 ♂, ditto, but 24-VI-1981, genitalia slide 5600 Traugott-Olsen; 1 ♀, ditto, but 8-VI-1983, genitalia slide 5719 Traugott-Olsen (all ZMUC); 1 ♀, prov. Málaga, 5 km W Archez, Casa Las Jaras, 1-VI-2008, leg. H. van der Wolf; 1 ♀, ditto, but 15-VI-2011 (HW).

Description adult (Figs 1-4): Wingspan 8-11 mm. Labial palpus slender; segment 2 blackish brown with lighter inner surface and white apex; segment 3 shorter than segment 2, whitish with black tip. Antenna ringed with black and dark grey. Head light grey-brown, thorax grey-brown, tegula as forewing. Forewing clear ochreous, without markings; some black-tipped scales along termen; cilia light grey, with black tips. Hindwing grey; cilia pale grey with yellow tinge at base.

Variation: There is some variation in the amount of black-tipped scales along the termen. Otherwise there is almost no variation.

Male genitalia (Figs 6-9): Tegumen elongate, elliptical. Uncus with long thick hairs reaching middle of tegumen. Gnathos broadly rounded. Valvae narrow, almost straight, broadened in the middle and with rounded apex. Vinculum with a pair of round hairy flaps covering the phallus. Phallus broad, slightly bent, and with small sclerotized pointed tooth.

Female genitalia (Figs 10-13): Papillae anales rounded, both pairs of apophyses comparatively short. Ductus bursae narrow, slightly broadened near antrum, as long as bursa copulatrix. Bursa copulatrix elongated with two small drop-shaped signa on hollow bases.

Diagnosis: The species is recognised by its relatively small wingspan and by the clear ochreous coloration of the forewing and lack of markings. It may resemble some forms of *Stomopteryx remissella* (Zeller, 1847), but that species has three black spots in the forewing which is often reddish at base. *S. lusitaniella* Corley & Karsholt, 2014 and the larger *S. hungaricella* Gozmány, 1957, which have almost unmarked forewings, but these are blackish or blackish brown – not clear ochreous as in *S. jeppeseni* sp. n. Genitalia of both sexes are very similar to other *Stomopteryx* species, especially to *S. lusitaniella*. Small but distinct differences are in the shape of valvae in males (almost straight with the bulge in *S. jeppeseni* sp. n., curved and without conspicuous bulge in *S. lusitaniella*), and also in the shape the gnathos (smoothly oval in *S. lusitaniella*, noticeably widespread in *S. jeppeseni* sp. n.).

Female genitalia of both species are without noticeable differences (see also CORLEY & KARSHOLT, 2014). Legs of *S. jeppeseni* sp. n. and *S. lusitaniella* have been sent for DNA barcoding, and the results will be published in a study of the DNA barcodes of European Gelechiidae (P. Huemer *et al.*, in preparation).

Biology: Early stages and host plant are unknown. Adults have been collected from late April to middle of October, and the species may thus be bivoltine. Most localities are situated in the lowlands between sea level and 1000 m altitude, with a single specimen from an altitude of 2000 m. It is abundant predominantly at lower altitudes up to 500 m above sea level. Various kinds of dry steppes with sparse vegetation, mostly without trees, are predominant habitats (Fig. 5).

Distribution: Only known from the provinces of Almería, Granada and Málaga in southern Spain. Derivatio nominis: Named in honour of Mr. Gert Jeppesen (Denmark) who collected most of the type material.

Remarks: Although the species of *Stomopteryx* show considerable diversity in external appearance, differences in genitalia are small, with the result that some easily distinguishable species can scarcely be separated by genitalia. Of the European species, most species have distinctive wing markings, only *S. hungaricella*, *S. lusitaniella* and *S. jeppeseni* sp. n. have forewings almost without markings. In the catalogue of Lepidoptera of the Iberian Peninsula (VIVES MORENO, 2014) *S. jeppeseni* sp. n. should be placed (together with *S. lusitaniella*) between *S. remissella* and *S. flavipalpella* Jäckh, 1959.

We examined type specimens of the *Stomopteryx* species described from North Africa (*S. bivittella* (Chrétien, 1915) - TL: Tunisia; *S. deverrae* (Walsingham, 1905) - TL: Algeria; *S. diploodoxa* Meyrick, 1936 - TL: Tunisia; *S. discolorella* Turati, 1924 - TL: Libya; *S. flavoclavella* Zerny, 1936 - TL: Morocco; *S. geryella* (Chrétien, 1915) - TL: Algeria; *S. kermella* Chrétien, 1915 - TL: Algeria; *S. lacticolella* - Turati, 1924 - TL: Libya; *S. maculatella* (Lucas, 1956) - TL: Morocco; *S. multilineatella* (Lucas, 1932) - TL: Morocco; *S. nigricella* (Chrétien, 1915) - TL: Algeria and Tunisia; *S. quadripunctella* Chrétien, 1915 - TL: Algeria; *S. pelomicta* Meyrick, 1928 - TL: Morocco; *S. plurivittella* Turati, 1930 - TL: Libya; *S. speciosella* Zerny, 1936 - TL: Morocco; *S. tenuisignella* Turati, 1924 - TL: Libya; *S. zanoni* Turati, 1922 - TL: Libya). Most of these are distinctly larger than *S. jeppeseni* sp. n., and none of them have a clear ochreous coloration of the forewing and lack of markings.

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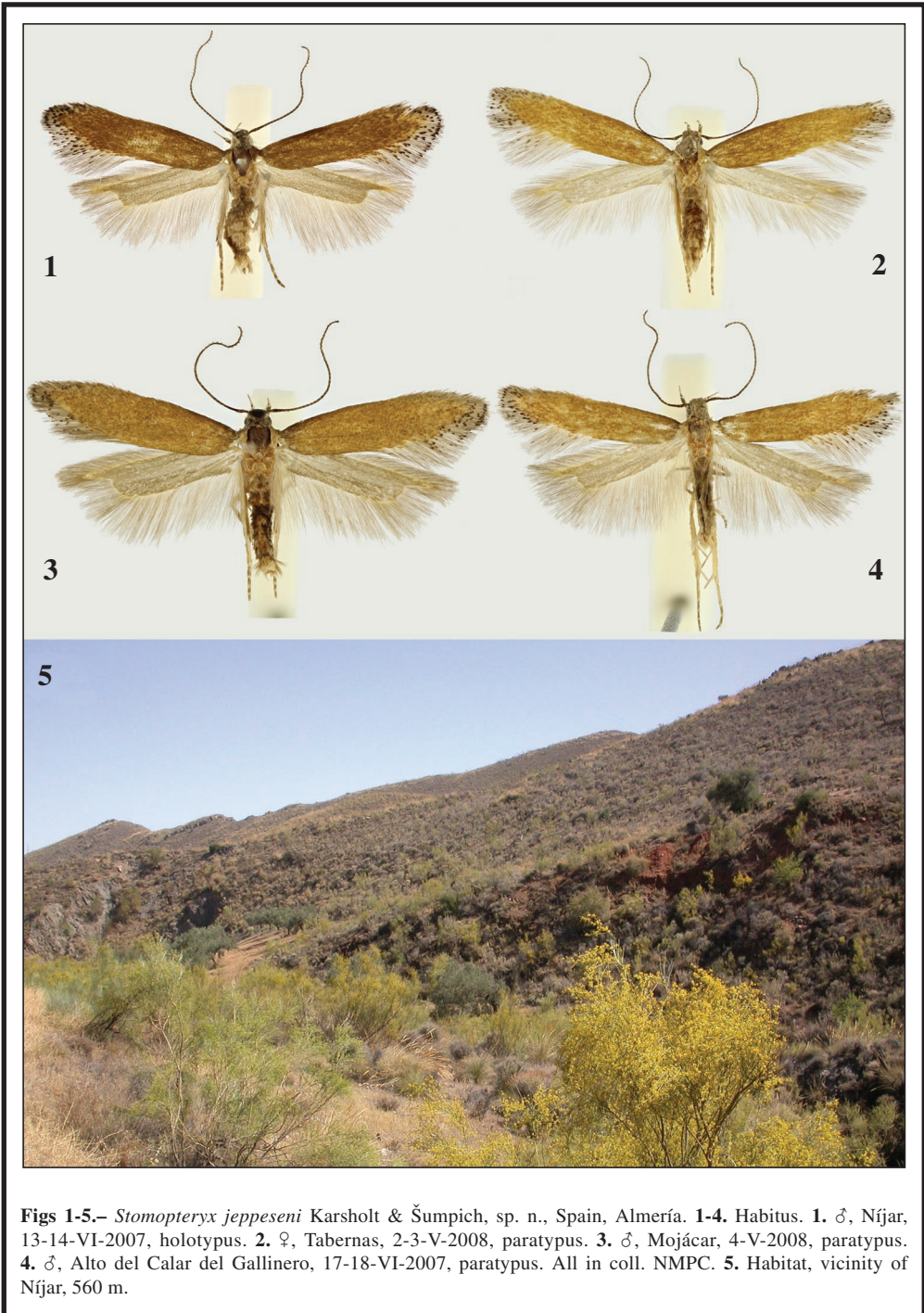
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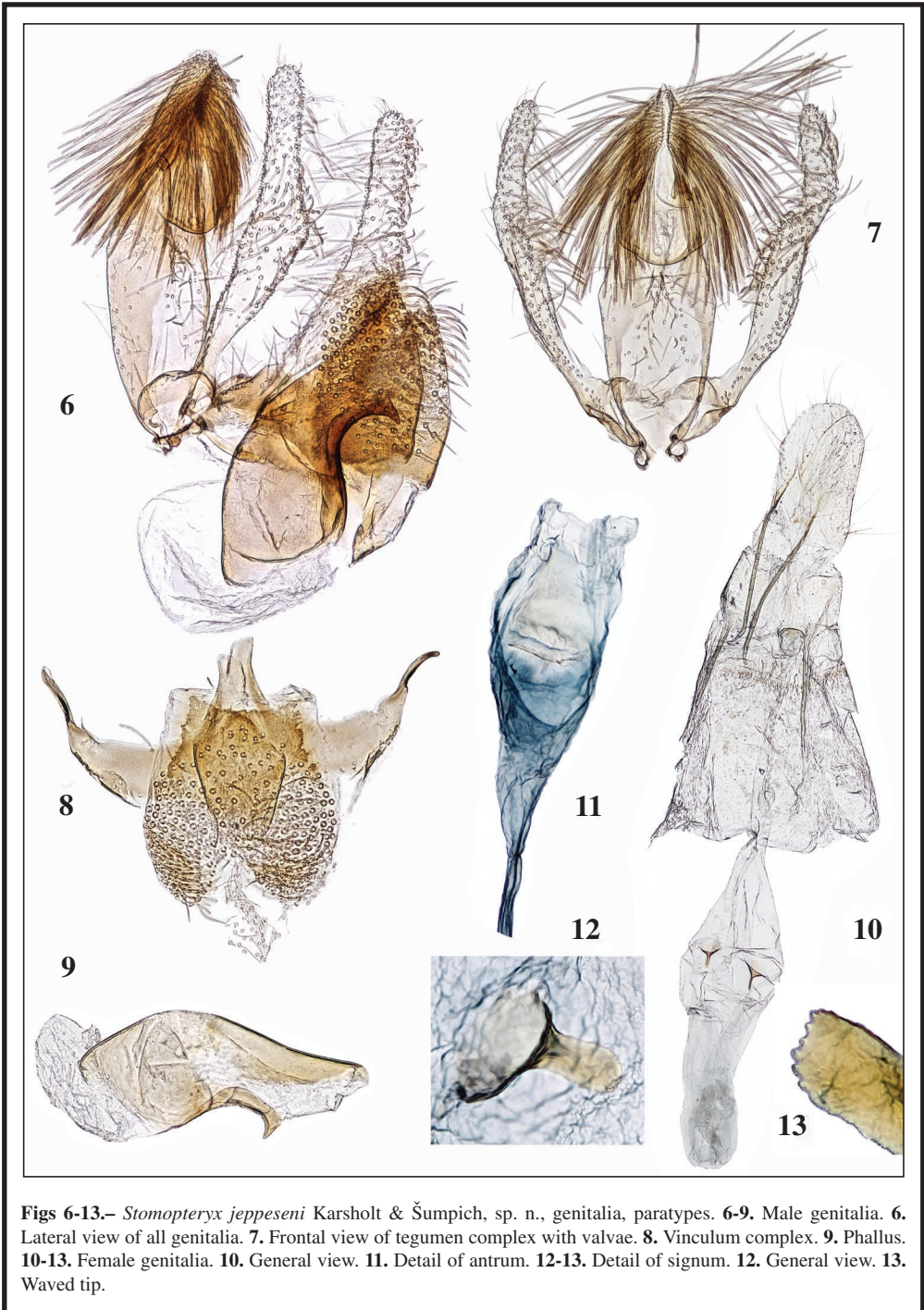
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Figs 1-5.— *Stomopteryx jeppeseni* Karsholt & Šumpich, sp. n., Spain, Almería. **1-4.** Habitus. **1.** ♂, Níjar, 13-14-VI-2007, holotypus. **2.** ♀, Tabernas, 2-3-V-2008, paratypus. **3.** ♂, Mojácar, 4-V-2008, paratypus. **4.** ♂, Alto del Calar del Gallinero, 17-18-VI-2007, paratypus. All in coll. NMPC. **5.** Habitat, vicinity of Níjar, 560 m.



Figs 6-13.– *Stomopteryx jeppeseni* Karsholt & Šumpich, sp. n., genitalia, paratypes. **6-9.** Male genitalia. **6.** Lateral view of all genitalia. **7.** Frontal view of tegumen complex with valvae. **8.** Vinculum complex. **9.** Phallus. **10-13.** Female genitalia. **10.** General view. **11.** Detail of antrum. **12-13.** Detail of signum. **12.** General view. **13.** Waved tip.