

***Tinagma asignatum* Gaedike & Falck, sp. n. from the Canary Islands (Spain) (Lepidoptera: Douglasiidae)**

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Abstract

Tinagma asignatum Gaedike & Falck, sp. n. is described from the Canary Island, Gran Canaria. Images of the adult and the genitalia are presented.

KEY WORDS: Lepidoptera, Douglasiidae, new species, Gran Canaria, Canary Islands, Spain.

***Tinagma asignatum* Gaedike & Falck, sp. n. de las Islas Canarias (España)
(Lepidoptera: Douglasiidae)**

Resumen

Se describe de las Islas Canarias, Gran Canaria *Tinagma asignatum* Gaedike & Falck, sp. n. Se presentan imágenes del adulto y de la genitalia.

PALABRAS CLAVE: Lepidoptera, Douglasiidae, nueva especie, Gran Canaria, Islas Canarias, España.

Introduction

Recent field work by the second author has revealed several undescribed species of Lepidoptera occurring in the Canary Islands (FALCK *et al.*, 2019; FALCK & KARSHOLT, 2019; GAEDIKE & FALCK, 2019). In this paper we deal with a new Douglasiidae species, representing the first record of that family from the Canary Islands (VIVES MORENO, 2014).

According to REGIER *et al.* (2014) the Douglasiidae together with the Millieriidae are members of an unassigned superfamily, located between Gracillarioidea and Hyblaeoidea. Hitherto, 31 species were known worldwide: 1 Holarctic, 21 Palaearctic, 8 Nearctic and 1 Australasian.

Larvae of Douglasiidae are internal feeders in leaves or reproductive parts of their host plants. They feed on Boraginaceae, Hydrophyllaceae, Rosaceae and Lamiaceae.

Adults of some species have been observed to fly at dusk, in the morning hours and during the daytime.

Abbreviations

GP	Genitalia preparation
PF	Collection of Per Falck, Neksø, Denmark
MNCN	Collection Antonio Vives, Museo Nacional de Ciencias Naturales, Madrid, Spain
RG	Reinhard Gaedike, Bonn, Germany
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany
ZMUC	Zoological Museum, Natural History Museum of Denmark, Copenhagen, Denmark

Tinagma asignatum Gaedike & Falck, sp. n.

Material examined: Holotype, ♂, SPAIN, Gran Canaria, Ayacata, 1400 m, 4-23-III-2019, leg. P. Falck (ZMUC).

Paratypes: 7 ♂♂, 14 ♀♀, SPAIN, Gran Canaria, Ayacata, 1400 m, 4-23-III-2019, leg. P. Falck, genitalia slides 3041PF, 3042PF, 3061PF, 3062PF, 9718RG, 9719RG (coll. PF, MNCN, SDEI).

Description (Figs 1-3): Wingspan 10-11 mm (male), 11-12 mm (female). Labial palpus short, dark grey with few white scales towards the tip and medially. Antenna as long as the forewing in the males, and 3/4 of the length of the forewing in the females. Scape without pecten. Head and thorax covered by deep-grey scales, some with whitish base and some with white tip, underside of thorax and abdomen with more whitish coloured scales. Forewing covered by white and black-grey tipped scales, without any distinct pattern. Fringe grey; at dorsum, a short narrow light yellowish coloured stripe, in females somewhat triangularly shaped. Hindwing grey, lighter towards base. Fringe grey, basally yellowish coloured.

Male genitalia (Figs 4-5): Uncus apically rounded, with two minute bristled processes. Vinculum with strongly sclerotized apical edge, without saccus. Anellus basally broad, narrower to apex. Valva basally broad, broadening towards apex, ventral edge straight, costal edge convex, on inside along apical edge with numerous long bristles, mostly with more or less blunt tip. Phallus more than two times longer than valva, narrow, sometimes apically pointed, without any internal structures.

Female genitalia (Figs 6-7): Anterior apophyses apically enlarged, more or less triangularly; at 1/2 with two small hook-shaped prolongations; between the apical ends of apophyses a small, more or less square structure, a little more strongly sclerotized than the surrounding area. Corpus bursae without signum.

Diagnosis: Superficially distinguishable from *T. ocnerostomella* (Stainton, 1850) by its deep-grey forewings and by yellow fringes (this is most clearly seen on the underside, see fig. 3), while *T. ocnerostomella* with light grey forewings and fringes. The male genitalia are rather similar to *T. ocnerostomella*, but the vinculum is strongly sclerotized and a saccus is lacking in *T. asignatum*. In the female genitalia the absence of a signum is characteristic.

Biology: The early stages are unknown. Adults were flying in numbers in the afternoon sun.

Distribution: Only known from the type-locality Ayacata, Gran Canaria, Spain.

Etymology: The species is named after the lack of a signum in the female genitalia.

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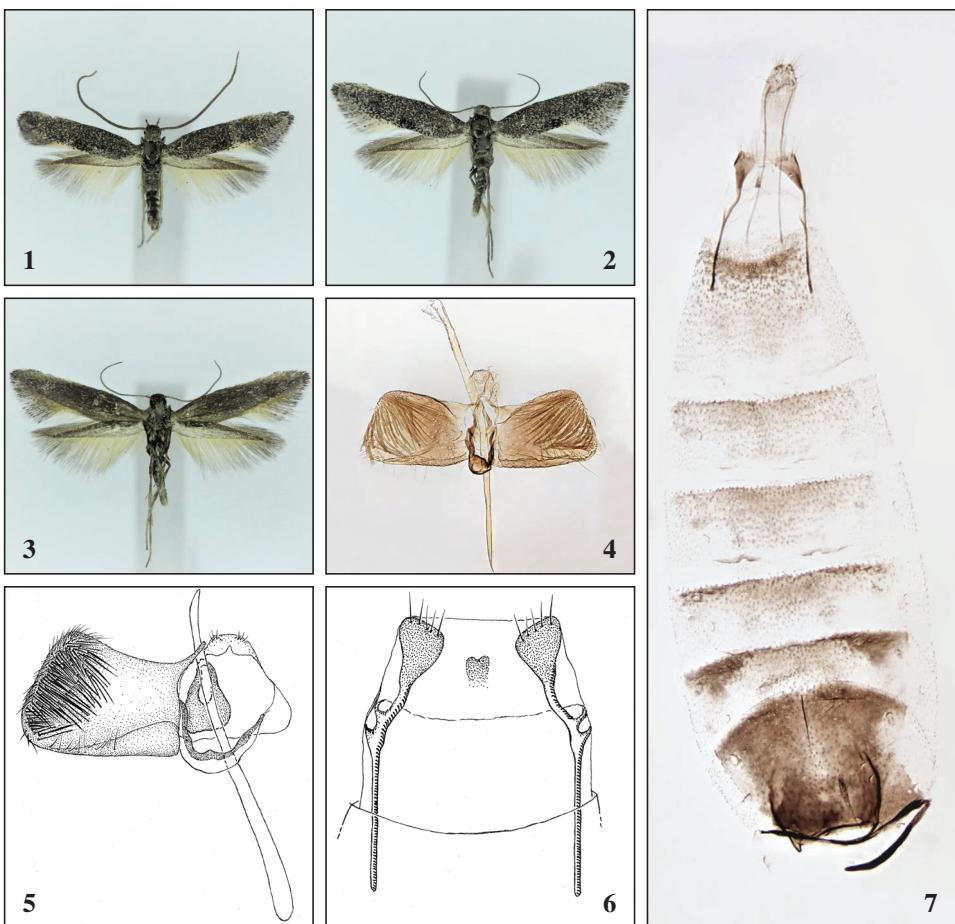
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Figs 1-7.— 1. *Tinagma asignatum* Gaedike & Falck, sp. n., ♂, Gran Canaria, 10.5 mm. 2. *Tinagma asignatum* Gaedike & Falck, sp. n., ♀, Gran Canaria, 11.5 mm. 3. Ditto, underside. 4. *Tinagma asignatum* Gaedike & Falck, sp. n., ♂, GP3077PF (apex of phallus pointing towards abdomen). 5. *Tinagma asignatum* Gaedike & Falck, sp. n., ♂, GP9778RG. 6. *Tinagma asignatum* Gaedike & Falck, sp. n., ♀, abdomen, GP3042PF. 7. *Tinagma asignatum* Gaedike & Falck, sp. n., ♀, GP 9779RG.