

Coleophora donata Baldizzone, sp. n., a new species from Turkey. Contribution to the knowledge of the Coleophoridae CXLVII (Lepidoptera: Coleophoridae)

G. Baldizzone

Abstract

Coleophora donata Baldizzone, sp. n., a new species from Turkey belonging to the 18th group of the Toll system (1953), is described based on a pair of specimens found in the undetermined Coleophoridae material donated to the author by Günther Baisch.

KEY WORDS: Lepidoptera, Coleophoridae, *Coleophora*, new species, Turkey.

Coleophora donata Baldizzone, sp. n., una nueva especie de Turquía. Contribución al conocimiento de los Coleophoridae CXLVII (Lepidoptera: Coleophoridae)

Resumen

Se describe una nueva especie de Turquía *Coleophora donata* Baldizzone, sp. n., perteneciendo al grupo 18th del sistema de Toll (1953), basada sobre un par de especímenes encontrados entre el material indeterminados de Coleophoridae donados al autor por Günther Baisch.

PALABRAS CLAVE: Lepidoptera, Coleophoridae, *Coleophora*, nueva especie, Turquía.

Introduction

Currently about 200 Coleophoridae species are known from Turkey, but certainly many others remain to be discovered and also new species to be described, in consideration to the rich biodiversity of that vast region. During my research I have dealt with Turkish species, in particular in 1994 in a book on the Coleophoridae of the Irano-Anatolian fauna, in which I described 83 new species, of which 16 from Turkey (BALDIZZONE, 1994). In 2001 I described nine new species from the material housed in the Zoological Museum, University of Copenhagen (BALDIZZONE, 2001). Subsequently, I collaborated with Jukka Tabell for three publications (BALDIZZONE & TABELL, 1999, 2002, 2006) in which five new species were described and unpublished data were provided on some new or little known species of the Turkish fauna. Finally, in 2007 I published two more new species from Turkey (BALDIZZONE, 2007). One of these was *Coleophora baischi*, dedicated to Mr. Günther Baisch from Biberach an der Riss (Germany). For many decades Günther Baisch has been an excellent collector of microlepidoptera who carried out his activity as an amateur naturalist in a commendable way. His collecting expeditions include some to Turkey in the last decade of the 20th century and in the early years of the 21st. I have had the opportunity to study all of his Coleophoridae

material over the last 15 years, with the added interest in the fact that the city of Biberach an der Riss is twinned with the city of Asti, which generated a dense exchange of reciprocal visits and collaborations. In 2020 Mr. Baisch kindly gave me all the material that still remained to be determined; it consisted of some species that was not easy to identify and required complex investigation. The following lines give the description of one new species found in this material: *Coleophora donata* Baldizzone, sp. n.

Material and methods

The Euparal slide mounts of dissected genitalia were photographed with a Bresser 5.0 camera attached to a Bresser BioScienze 40-1000x trinocular microscope, using a Leitz PL Fluotar 6.3 / 0.20 objective. The images were edited in Corel PaintShop Pro. The habitus was photographed with a Canon EOS 5D Mark II digital camera equipped with a Canon MP-E 65 mm objective, with lighting provided by two circular neon lamps OSRAM L 32W / 8400 C (cool white).

Morphological terms follow BALDIZZONE (2019).

Abbreviations:

Bldz = Giorgio Baldizzone.

PG = genitalia preparation.

Coleophora donata Baldizzone, sp. n. (Figs 1-7)

Holotype ♂ (PG Bldz 12873) “TÜRKEI, Sivas | 12 km nördl.[isch] Yildizeli | Camlibel Gec.[idi] | 1600 - 1800 m | 8-7 - 11-7-[19]92 Li. [chtfang] | G. Baisch”, coll. Baldizzone. Paratype ♀ (PG Bldz 12876) idem, coll. Baldizzone.

Diagnosis: A moderately large species, with the characteristic appearance of many species of the 18th group of TOLL (1953) i.e. an ochre forewing with a long subcostal brown band and silvery white streaks. Based only on the habitus, however, it cannot be identified with certainty. The genitalia resemble those of some species of the *C. cartilaginella* Christoph, 1872 group. The main characteristics of the male genitalia of *C. donata* are the shape of the valvula, which is larger and longer, and that of the sacculus, which is shorter and more strongly curved; the general appearance is more massive and stocky than that of all of the other species of the group. The female genitalia are unmistakable because of the shape of the sterigma, which is twice as wide as its length and slightly corrugated on the surface, and because of the shape of the large signum bursae.

Description (Fig. 1): Wingspan 18-19 mm. Head pure white, slightly ochre suffused dorsally. Antenna white, scape white on outer side, light ochre on inner side with long tuft of erect scales. Labial palpus pure white, glossy; second article about as long as third. Haustellum of normal size. Thorax pure white, glossy. Tegula white, pale ochraceous suffused. Forewing ochre, with a long brown band between white costa and cell starting from 1/5 from base and reaching wing apex, with fringes also brown; three silvery white streaks present: widest running along costa, starting from 1/5 base, stopping before apex and involving costal fringes; second shorter, slightly angled, located on lower edge of cell; third running along anal fold up to edge of wing, stopping shortly before; along basal edge of dorsum some inconspicuous silvery white scales also present; dorsal fringes pale ochraceous. Hindwing light brown, darker along edges; fringes pale ochraceous. Abdomen white.

Male genitalia (Figs 2-4): Gnathos knob big, globular. Tegumen large, slightly constricted medially, pedunculus short, slightly dilated outwardly. Transtilla triangular, elongated, thinner at apex, joined in middle. Valvula large of irregular triangular shape, adorned with long setae, among which three more robust and evident at distal edge. Cucullus short, curved, slightly restricted at base,

ear shaped. Sacculus narrow, curved and heavily sclerotized, with a small triangular tooth at dorsal angle. Phallotheca conical, slightly curved, sclerotized only at base and on dorsal edge. Cornuti consisting of a dozen spines of different lengths arranged in an elongated formation, with only the proximal two joined at their bases.

Female genitalia (Figs 5-6): Papillae anales large, oval. Posterior apophysis about twice as long as anterior. Subtrapezoidal sterigma about twice as wide as long, finely corrugated, with distal edge setose, deeply hollowed medially by sinus vaginalis. Ostium bursae oval. Colliculum cup-shaped at distal end and thin and elongated with thickly sclerotized lateral edges and thin medial line in proximal section. Ductus bursae very long, with large convolutions in median section; distal section with medial sclerotized line surrounded by dense short spines for a length of about ten times that of sterigma; proximal part wider and spiraled, transparent, with thickly cover of small spinules. Corpus bursae large, pyriform, covered with spinules; large leaf-shaped signum with slightly hollowed distal edge in laminar part and long, curved, thin and sharp pedunculated part.

Abdominal structures (Fig. 7): Without latero-posterior struts; transverse strut thick, straight, with distal edge curved medially and thickened close to tergal disks. Tergal disk (3rd tergite), about four times longer than wide, adorned with 30-35 short conical spines.

Distribution: Turkey, central Anatolia, Sivas province, Çamlıbel mountains (= Çamlıbel geçidi).

Etymology: The name derives from the Latin *donatus* [-a, -um] = gifted, to recall the gift of specimens made to me by G. Baish.

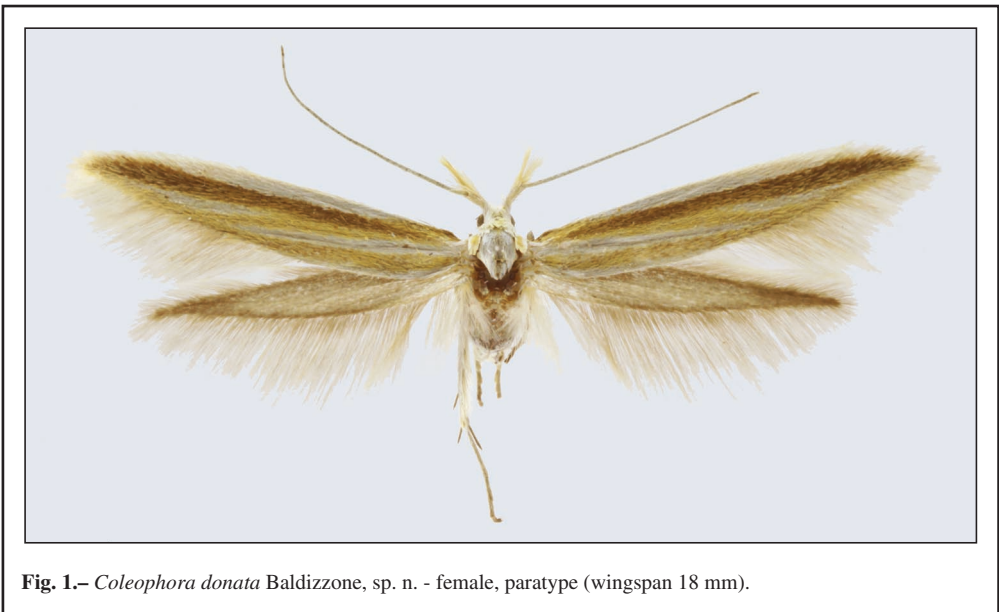


Fig. 1.– *Coleophora donata* Baldizzone, sp. n. - female, paratype (wingspan 18 mm).

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G. B.

Via Manzoni, 24

I-14100 Asti (AT)

ITALIA / ITALY

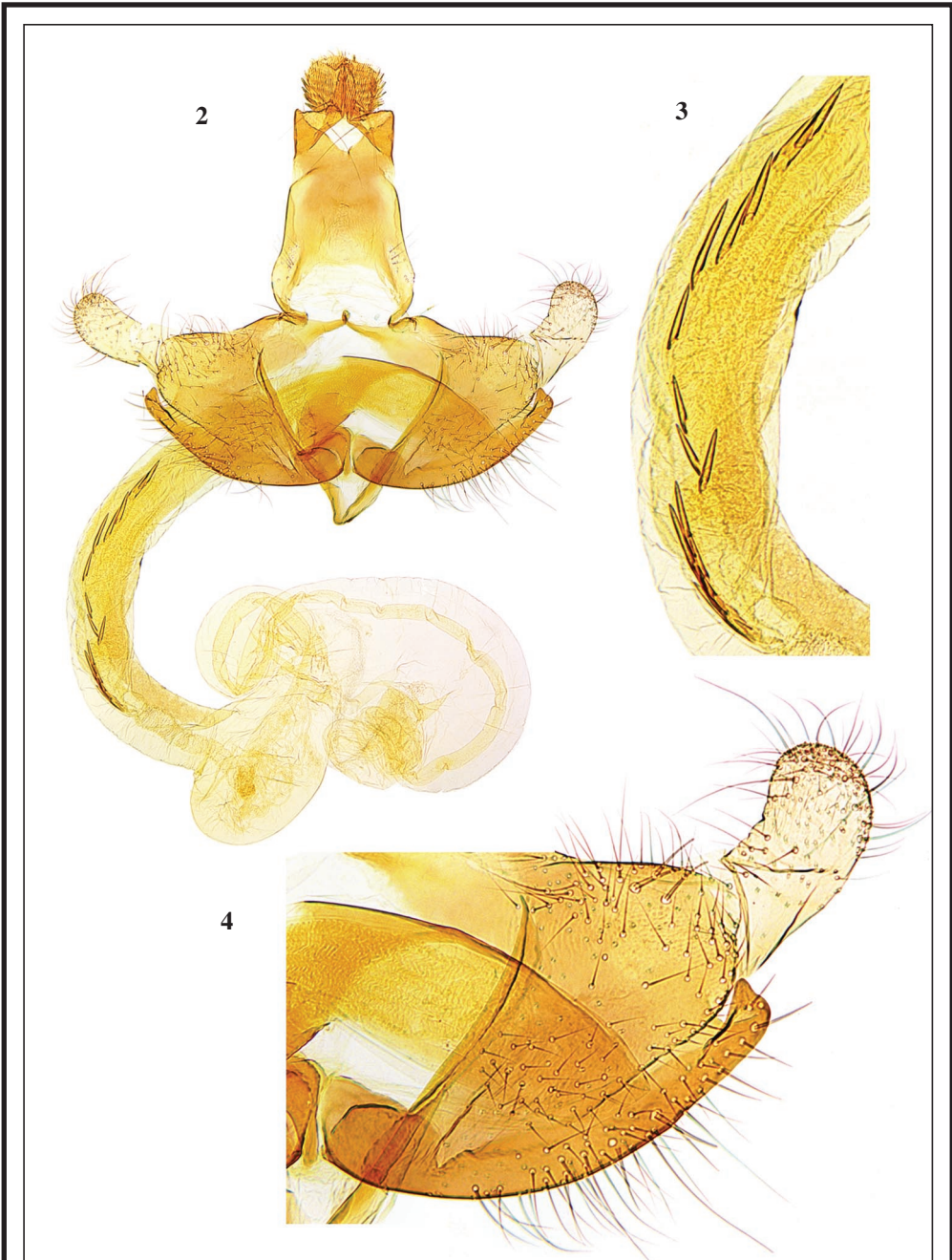
E-mail: baldizzonegiorgio@gmail.com

<https://orcid.org/0000-0001-8127-0843>

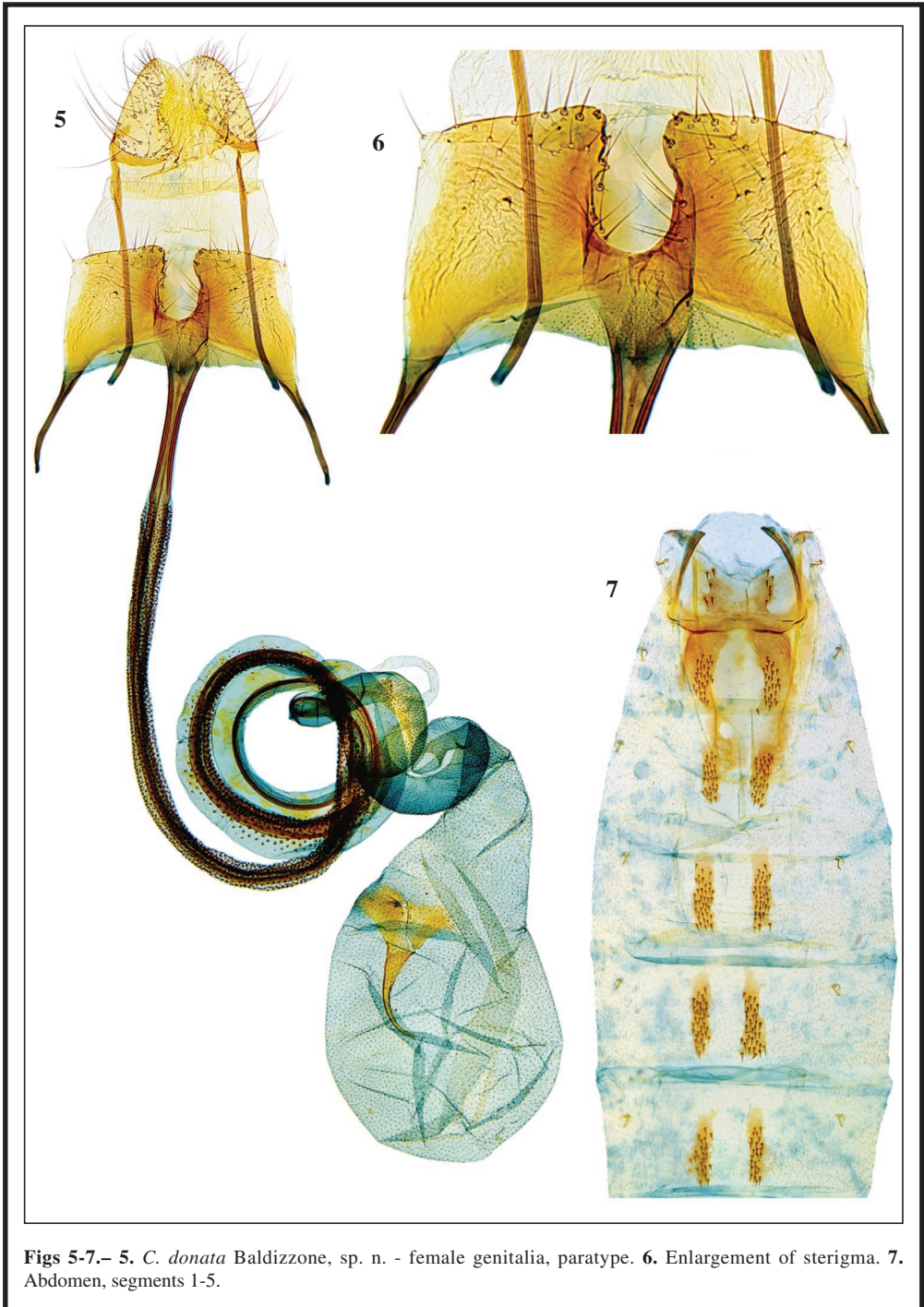
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Figs 2-4.– 2. *C. donata* Baldizzone, sp. n. - male genitalia, holotype. 3. Enlargement of cornuti. 4. Enlargement of valva and phallosome.



Figs 5-7.— 5. *C. donata* Baldizzone, sp. n. - female genitalia, paratype. 6. Enlargement of sterigma. 7. Abdomen, segments 1-5.