

# ***Coleophora gecidiella* Baldizzone, sp. n., a new species from Turkey. The female of *Coleophora turca* Baldizzone, 1994. Contribution to the knowledge of the Coleophoridae CLI (Lepidoptera: Coleophoridae)**

Giorgio Baldizzone

## **Abstract**

*Coleophora gecidiella* Baldizzone, sp. n., new species from Turkey belonging to the group of *C. onobrychiella* Zeller, 1849 is described based on specimens collected by Günther Baisch. The female of *C. turca* Baldizzone, 1994, a species of which only the male is known, is described for the first time.

**Keywords:** Lepidoptera, Coleophoridae, *Coleophora*, new species, Turkey.

*Coleophora gecidiella* Baldizzone, sp. n., una nueva especie de Turquía. La hembra de *Coleophora turca* Baldizzone, 1994. Contribución al conocimiento de los Coleophoridae CLI (Lepidoptera: Coleophoridae)

## **Resumen**

Se describe *Coleophora gecidiella* Baldizzone, sp. n., nueva especie de Turquía perteneciente al grupo de *C. onobrychiella* Zeller, 1849, a partir de ejemplares recogidos por Günther Baisch. Se describe la hembra, por primera vez, de *C. turca* Baldizzone, 1994, una especie de la que sólo se conoce el macho.

**Palabras clave:** Lepidoptera, Coleophoridae, *Coleophora*, nueva especie, Turquía.

## **Introduction**

On the occasion of the description of *Coleophora donata* Baldizzone, 2021, I highlighted how the fauna of the Coleophoridae of Turkey is very rich and that certainly many other species will be added to the 200 already known. In the present work, a further new species is described, *C. gecidiella* Baldizzone, sp. n. collected in Eastern Anatolia by Günther Baisch. The female of *C. turca* Baldizzone, 1994, a species described only on the male, is also described and illustrated.

## **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). The CombineZP program was used for stacking layers into deep-focus images.

Morphological terms follow Baldizzone (2019).

## Abbreviations

Bldz = Giorgio Baldizzone

PG = genital preparation

ZMUC = Zoological Museum, University of Copenhagen, Copenhagen, Denmark.

### ***Coleophora gecidiella* Baldizzone, sp. n. (Figures 1, 3-6)**

Holotype ♂ (PG Bldz 13776) “TÜRKYE, Erzincan | ca. 16 km nördl.[isch] | Kolcekmezdagı Gec.[idi] 2100 m | 13.-14.7.1992 Li.[chtfang] | G. Baisch”, in coll. Baldizzone. Paratype ♂ (PG Bldz 13777) same label, in coll. Baldizzone.

**Diagnosis:** Medium-sized species, with light ochre forewing and white costal stripe. Based on male genitalia belongs to the group of *C. onobrychiella* Zeller. It is a complicated group with some species not yet described, especially from Anatolia, the Caucasus, Iran and neighbouring regions. The main distinguishing feature consists in the shape of the sacculus, wide, not notched on the lower edge and straight on the external edge, perpendicular to the ventral angle. No other known species has a similar structure to the sacculus.

**Description (Figure 1):** Wingspan 13 mm. Head white, creamy suffused on the dorsum. Antenna: scape light yellowish ochre, with a tuft of erect scales yellowish ochre on the outer side, ferruginous ochre on the inner side; flagellum white and dark brown ringed. Labial palpus white, creamy tinged dorsally, the second segment is about 0.5 times longer than the third. Proboscis of normal shape. Thorax white, creamy suffused medially. Tegula white, creamy on the inner side. Forewing light ochre with a white stripe along the costa, ending just before the apex; a thin stripe along the anal fold, from the base to one-half; very short stripe along the dorsum, broad at the base, becoming very thin, ending before the cilia; costal cilia white, apical cilia brown, dorsal cilia light brownish grey. Hindwing and cilia light brownish grey. Abdomen dirty white.

**Abdominal structures (Figure 6):** Anterior lateral strut about 5 times longer than the posterior, transverse strut with proximal edge straight, sclerotized only in middle, distal edge arched, not medially sclerotized. Tergal disks (3rd tergite) long, about twice their width, covered with about 45 conical spines.

**Male genitalia (Figures 3-5):** Gnathos knob oval. Tegumen slightly medially constricted; pedunculus short. Transtilla short and curved. Valvula large, dorsal edge curved, with a long and sturdy curve seta at the apex, ventral edge weakly delimited, external edge curved, prominent between the cucullus base and the dorsal edge of sacculus. Cucullus long, slightly more expanded in the ventral part. Sacculus large inclined on ventral edge, ventral angle curved, lateral edge straight, dorsal angle small and curved. Phallotheca conical, more sclerotized dorsally. Cornuti numerous, of different length, gathered in a long braid, progressively longer towards the apex where two protrude long and sinuous.

**Female genitalia:** Unknown.

**Distribution:** Turkey, Oriental Anatolia, prov. Erzincan.

**Etymology:** From the Turkish word *geçidi* = pass.

### ***Coleophora turca* Baldizzone, 1994 (Figures 2, 7-12)**

The species was described from a single male specimen collected in Turkey. In the following years I had the opportunity to study other specimens of the two sexes, and therefore I can describe the female genitalia.

**Material:** Holotypus ♂ (PG 9871) “Asia min. | Turcia | Nevsehir | Göreme | 10-11-VI-1985, leg. Hahn”, in coll. Baldizzone; 1 ♀ (PG Bldz 11137) TURKEY, Kayseri, 20 km S, Erciyas Dagi, 2000 m,

Bldz 13089) Kayseri, 25 km S, Erciyas Dagi, 1900 m, 31-VII-1997, leg. T. Nuppenen, in coll. Baldizzone; 1 ♂ (PG Bldz 14205), 1 ♀ (PG Bldz 14206) Anatolia, Cappadocia, dint. Uçhisar, Mustafapaşa, 1400 m, 25-VI-2005, leg. G. Bassi, in coll. Bassi.

Female genitalia (Figures 11-12): Papillae anales narrow and long. Apophyses posteriores about 3.5 times as long as the anteriores. Sterigma trapezoidal, excavated by the sinus vaginalis up to the middle, ostium bursae large, oval. Colliculum large, about as long as the sterigma, more sclerotized on the outer edges, asymmetrical in the proximal part at the insertion of the ductus bursae. Ductus with distal part divided into two sections, of which the posterior is covered with small spines with two very sclerified bands, while the anterior is without spines, very sclerified, curved and narrows in the direction of the insertion of the proximal part of the ductus, which is much thinner, transparent, finely dotted. Corpus bursae in the shape of an oval sac, with a small leaf-shaped signum.

Note: In the specimens studied there are variations in the length of the spinulate part of the ductus and in the length and thickness of the very sclerified curved part.

Distribution: The species is known only from Turkey, where it appears to be widespread.

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## References

- Baldizzone, G. (1994). Contribuzioni alla conoscenza dei Coleophoridae. LXXV. Coleophoridae dell'Area Irano-Anatolica e regioni limitrofe (Lepidoptera). *Associazione Naturalistica Piemontese, Memorie*, 3: 424 pp.  
Baldizzone, G. (2019). Lepidoptera Coleophoridae. *Fauna d'Italia* (Vol. 53). Calderini.  
Baldizzone, G. (2021). *Coleophora donata* Baldizzone, sp. n., a new species from Turkey. Contribution to the knowledge of the Coleophoridae CXLVII (Lepidoptera: Coleophoridae). *SHILAP Revista de lepidopterología*, 49(195), 479-484.

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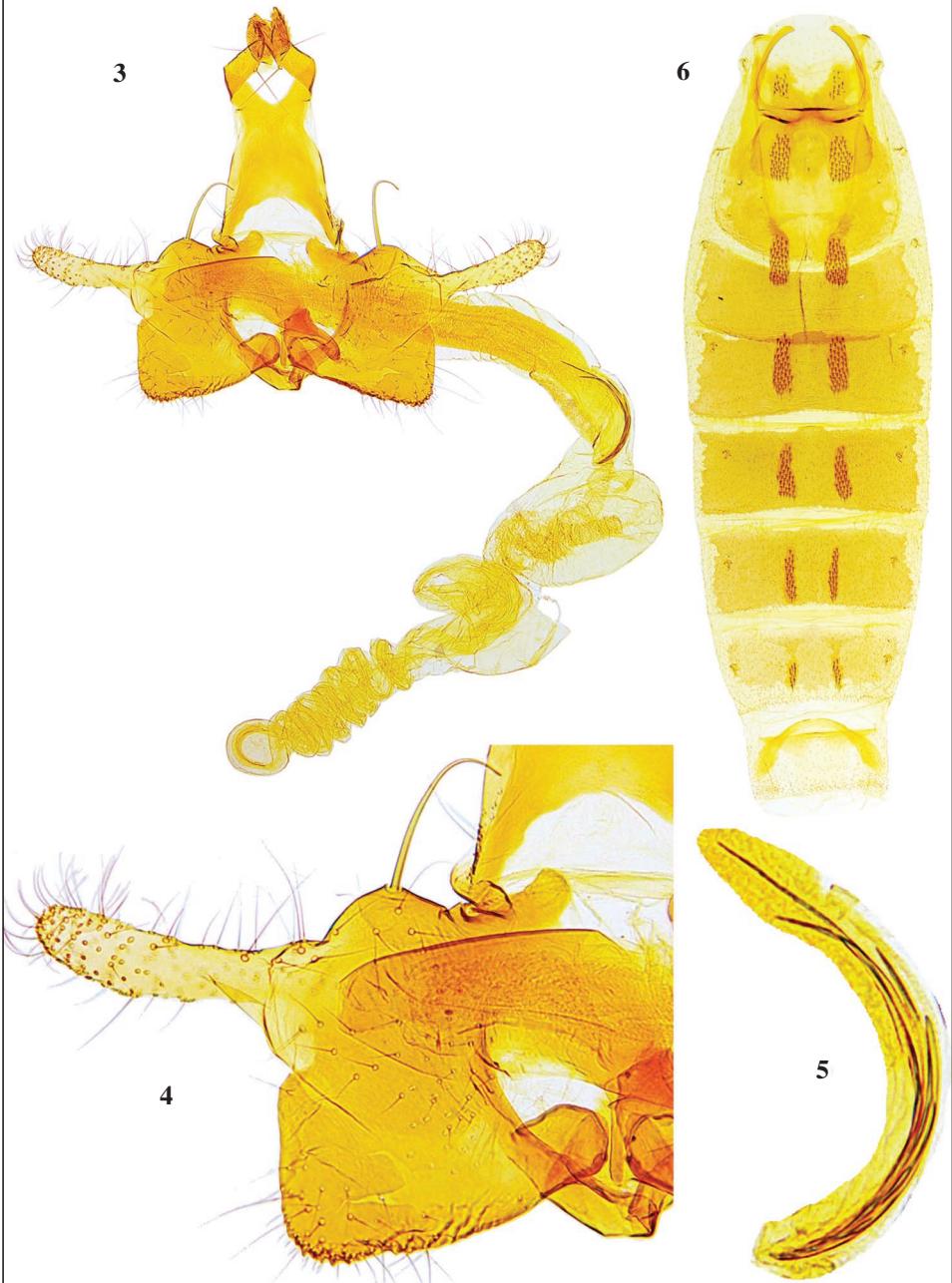


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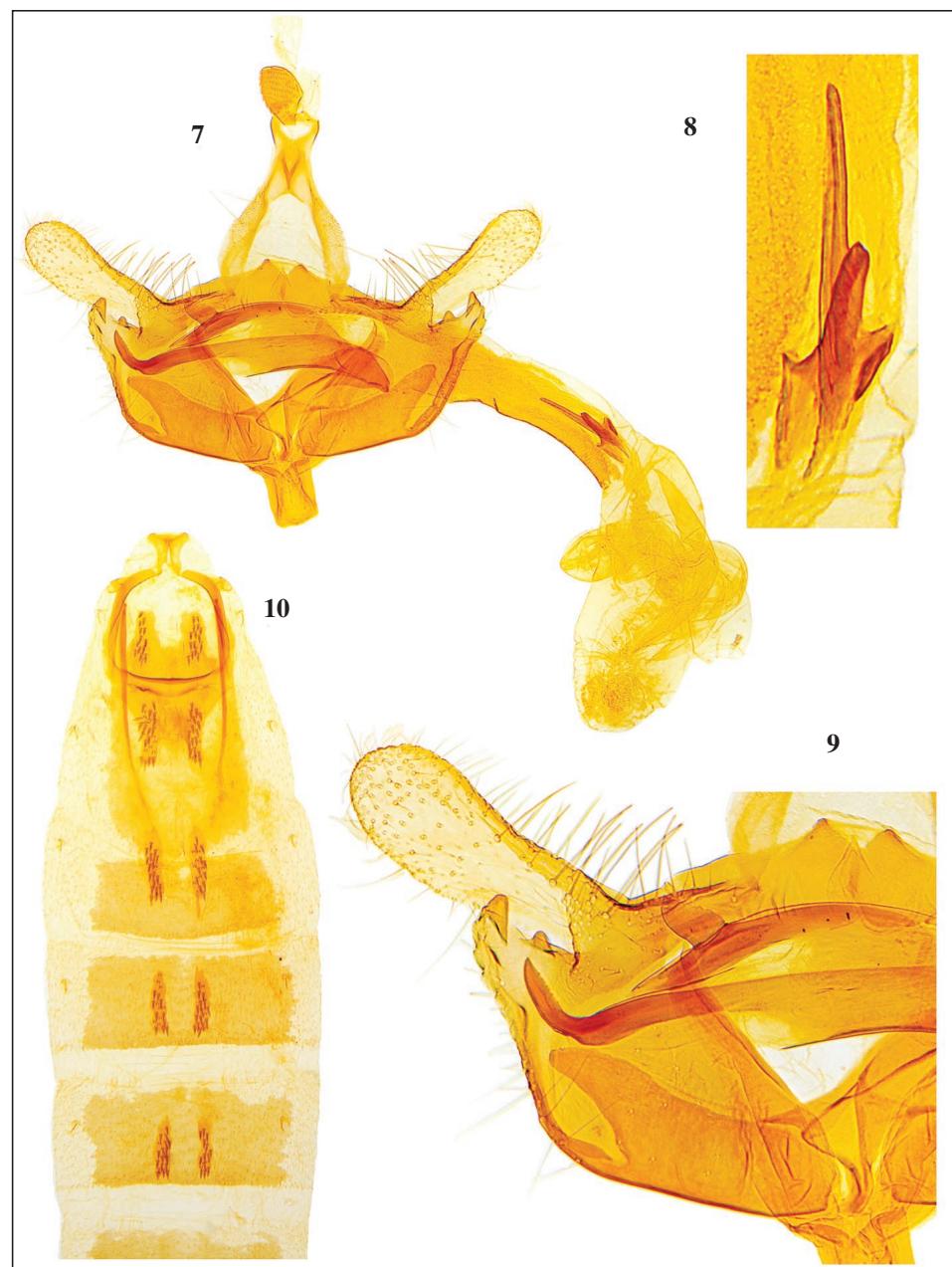


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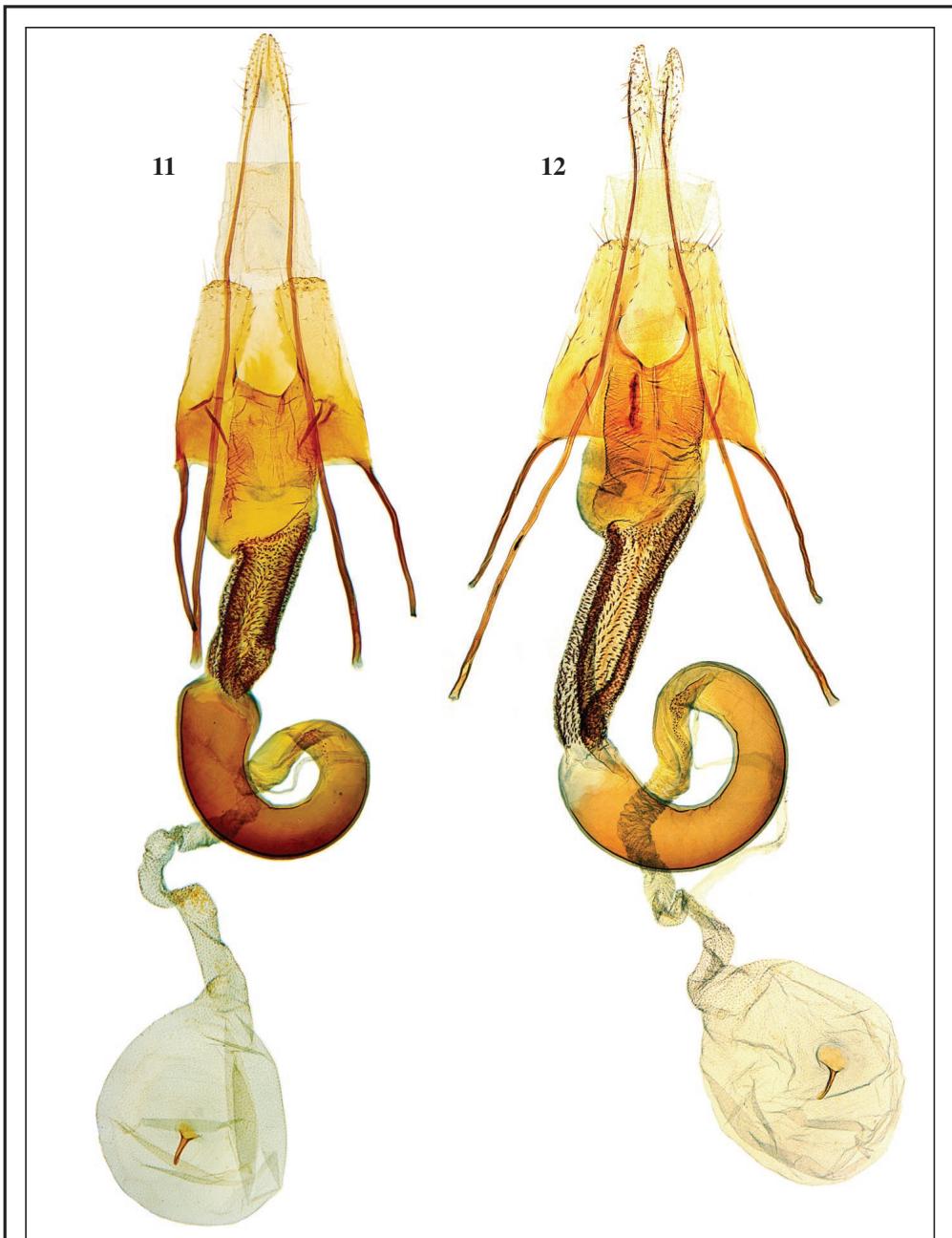
**Figures 1-2.** 1. *Coleophora gecidiella* Baldizzone, sp. n. - male, paratype (wingspan 13 mm). 2. *C. turca* Baldizzone, 1994 - female, Turkey, Sivas, 12 km nördl. Yidizeli, Çamlibel geçidi, 1600-1800 m, 8-11-VII-1992, leg. G. Baisch, in coll. Baldizzone (wingspan 12 mm).



**Figures 3-6.** 3. *C. gecidiella* Baldizzone, sp. n. - male genitalia (PG Bldz 13776), holotype. 4. Enlargement of valva and phallotheca. 5. Enlargement of cornuti. 6. Abdomen.



**Figures 7-10.** 7. *C. turca* Baldizzone, 1994 - male genitalia (PG Bldz 14205), Turkey, Anatolia, Cappadocia, dint. Uçhisar, Mustafapaşa, 1400 m, 25-VI-2005, leg. G. Bassi, in coll. Bassi. 8. Enlargement of cornuti. 9. Enlargement of valva and phalotheca. 10. Abdominal segments 1-5.



**Figures 11-12.** *C. turca* Baldizzone, 1994 - female genitalia. **11.** (PG Bldz 14206), Turkey, Anatolia, Cappadocia, dint. Uçhisar, Mustafapaşa, 1400 m, 25-VI-2005, leg. G. Bassi, in coll. Bassi. **12.** (PG Bldz 13089) Turkey, Kayseri, 25 km S, Erciyas Dagi, 1900 m, 31-VII-1997, leg. T. Nuppenen, in coll. Baldizzone.