

# REDESCRIPTION OF *PEPLOMINETTIA CODINAI* (HENNIG, 1951) (DIPTERA, LAUXANIIDAE)

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## ABSTRACT

Redescription of *Peplominettia codinai* (Hennig, 1951) (Diptera, Lauxaniidae).

*Peplominettia codinai* (Hennig) is redescribed on the basis of new material collected in Andorra and Spain. The male and female genitalia are figured and the female is described for the first time. A list of all known species of genus *Peplominettia* Szilády and their geographical distribution are also given.

**Key words:** Diptera, Lauxaniidae, *Peplominettia codinai*, redescription, Andorra, Spain.

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## RESUMEN

*Peplominettia codinai* (Hennig) es redescrita en base a nuevo material capturado en Andorra y España. Se dibuja la genitalia de ambos sexos y se describe la hembra por primera vez. Se presenta también una lista de todas las especies conocidas del género *Peplominettia* Szilády, así como su distribución geográfica.

## INTRODUCTION

*Peplominettia* Szilády, 1943 is a genus with westpalaeartic distribution. It is a small genus in species, as only 3 have been described. Its distribution is limited to North Africa (Algeria and Tunisia) and Portugal (PAPP, 1984). *Peplominettia* is a curious genus as it shares characters of *Peplomyza* Haliday, 1837 (although it has only 2 dorsocentral bristles) and the characteristic intraalar bristle of *Minettia* Robineau-Desvoidy, 1830, so it looks like a «hybrid» of these two genera.

During the study of dipterological material collected in Andorra few years ago by Dr. Pujade, four specimens (2 males and 2 females) belonging to *Peplominettia codinai* (Hennig, 1951) were identified. Later, another specimen (female) was collected in Spain by the author.

*Peplominettia codinai* was described on a sole male specimen, although the author confused it with a female (HENNIG, 1951: 75). Hennig based its description only on external morphological characters. He unfortunately didn't study its genitalia. The only figure was that of the head in profile. 40 years later, PAPP (1991) did a revision of the genus *Peplominettia*, redescrining it with new material collected in Algeria. Papp included the 3 known species, one of them described as new. He made a brief description of *P. codinai* based again on its only known specimen (the male holotype, as is indicated by him) and included a short description of the genitalia, but also without figures.

The new material now found (2 males and 3 females) has allowed not only the redescription of this interesting and rare species, but also to make a detailed study of both male and female

genitalia. Figures of the genitalia of both sexes are presented for the first time. The new material has been compared with the holotype, which was very kindly loaned by Dr. F. Menzel (Eberswalde) for study.

Finally, the geographical distribution of the 3 known species of genus *Peplominettia* is given.

## REDESCRIPTION OF *PEPLOMINETTIA CODINAI* (HENNIG, 1951)

*Minettia codinai* Hennig, 1951: 75.

Male. Head completely orangish yellow excepting: a) 3 large blackish spots between and beside antennal bases, b) a distinct brown postgenal spot (in contact with the ocular margin), c) peristoma brownish, d) brown ocellar triangle, and e) brown around the orbits. Antennae, palpi and proboscis orangish yellow. Chaetotaxy: 2 reclinate ors, oc, vte, vti, pvt convergent (but not cruciate). Arista plumose.

Thorax orangish yellow. Mesonotum orangish, a lateral wide dark brown stripe above humeral callus and notopleura and outside dorsocentral row reaching the base of scutellum. Dorsum of mesonotum (between dc rows) orangish, excepting a pair of short brown stripes between first and second row of acrostichals and reaching the anterior dorsocentrals. Pleurae orangish yellow, with a brown stripe extending from below humeral callus to the base of haltere, and with a narrow discontinuous light brown stripe from the prothoracal bristle to above the sternopleural bristles. Sternopleura with a brownish mid spot. Scutellum orangish yellow, brownish laterobasally. Metanotum brownish laterally. Chaetotaxy: 1 h, 2 np, 1 prst, 1 ia, 1 sa, 2 pa, 0+3 dc (anterior dc half shorter than other dc), ac in 6 regular rows, 1 prsc (somewhat longer than anterior dc), 2 sc, 1 prth, 1 mp (and some additional short hairs), 2 st (and some thin hairs on mid and upper parts).

Legs yellowish. Fore femur brownish posteriorly, mid femur with an anterodistal row of bristles, hind femur with a brownish spot on the tip and a dorsal preapical bristle. Ventroapical bristle of mid tibia present. Dorsal preapical bristle and ventroapical spur of hind tibia very short.

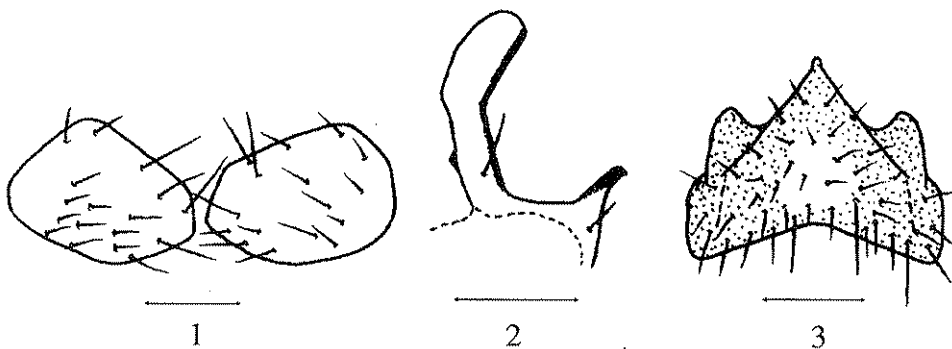
Wings brown anteriorly to light brown posteriorly. Costal cell, subcostal cell and r1 cell uniformly brown; r2+3 radial cell brown, but light brown along its 1/3 posterior margin; basal radial cell and r4+5 radial cell also light brown; discal cell, medial cell and cubital cell much lighter. Veins dark brown. Medial vein, cubital vein and both transversal veins (anterior and posterior) shadowed. Haltere yellowish, knob more or less brownish anteriorly.

Abdomen orangish yellow. Tergites 1-6 dark brown laterally, forming a continuous longitudinal band, tergites 3-6 with lateromedial transversal brown spots, not reaching the lateral longitudinal band. Posterotergal bristles short, only posterolateral ones somewhat longer. Sternites yellowish, brown laterally.

Male postabdomen: epandrium small, haired. Surstyli (Fig. 1) (= gonostyli of Papp) oval, haired, slightly pointed apically. Gonites with semi-tubular form, surrounding left postgonite. Postgonites (Fig. 2) very different from each other: a) left one well developed, long, dilated and curved distally, with a basal hair, b) right one reduced, slightly curved apically, with a basal hair. Cerci small, with short and dense pilosity.

Female: 3rd abdominal segment with a pair of eversible sacs at the pleural membrane, posterior side covered with dense, black, short hairs. Lateromedial spot of tergite 6 very small. One specimen lacks the presutural acrostichal bristles. Sternite 8 (Fig. 3) very convex, haired, trifid anteriorly, with a posterior row of long hairs. Cerci long, with 3 pairs of dorsal sinuate hairs: 2 very long (longer than cerci), 1 apical and 1 preapical; and 1 shorter, apical; some additional shorter hairs also present. Other characters as in the male.

Total body length: males 4.7-4.8 mm, females 4.8-5.1 mm.



**Figures 1-3.** *Peplominettia codinai* (Hennig). 1) surstyli in ventral view, 2) postgonites in anteroventral view, 3) female sternite 8 in ventral view. Scales: 0.1 mm.

#### Material examined

**Andorra:** Santa Coloma, 1-15.8.1993 1 male and 1 female, 1-15.9.1993 1 male, 16-31.10.1993 1 female, all Malaise trap, 1080 m, J. Pujade *leg.*

**Spain:** Tarragona, L'Espluga de Francolí (Les Masies), 1.11.1996 1 female, 420 m, on the wall (outside) of a house, M. Carles-Tolrà *leg.*

All the material is deposited in alcohol in the author's collection.

Male holotype (Eberswalde, Deutsches Entomologisches Institut): 1) (handwritten) «Mont. Alegre, 18.VII.10»; 2) «Peplomyza Codinai Lichtw.» det. Lichtwardt; 3) coll. Oldenberg; 4) (red) Holotypus «1972» (on the reverse side); 5) (red, round) «Type»; 6) (red) Holotypus.

It is worth mentioning that these new findings represent the first record of the family Lauxaniidae for Andorra and of this genus for Spain.

#### GEOGRAPHICAL DISTRIBUTION OF ALL KNOWN *PEPLOMINETTIA*'S SPECIES

*P. codinai* (Hennig, 1951): Andorra, Portugal, Spain.

*P. milleri* Papp, 1991: Algeria.

*P. striata* Szilády, 1943: Algeria, Tunisia.

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