

Two Interesting Species of Moth Flies (Diptera: Psychodidae) from Greece

Jan JEZEK and Vassilis GOUTNER

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Atrichobrunettia graeca sp. n. (♂, ♀) is described and a differential diagnosis is presented in comparison with the male lectotype of the very closely related *A. angustipennis* (Tonn.). *Mormia revisenda* (Eat.) is shortly redescribed and diagnosed: lectotype and paralectotype are designated. All diagnostic characters of the two species are illustrated. *M. revisenda* (Eat.) is new to the fauna of Greece.

Keywords: Taxonomy, faunistics, new species, redescription.

J. JEZEK, National Museum in Prague (Natural History), Department of Entomology, Kunratice 1, 148 00 Praha 4, Czech Republic.

V. GOUTNER, Aristotelian University of Thessaloniki, Department of Zoology, GR-540 06, Thessaloniki, Greece.

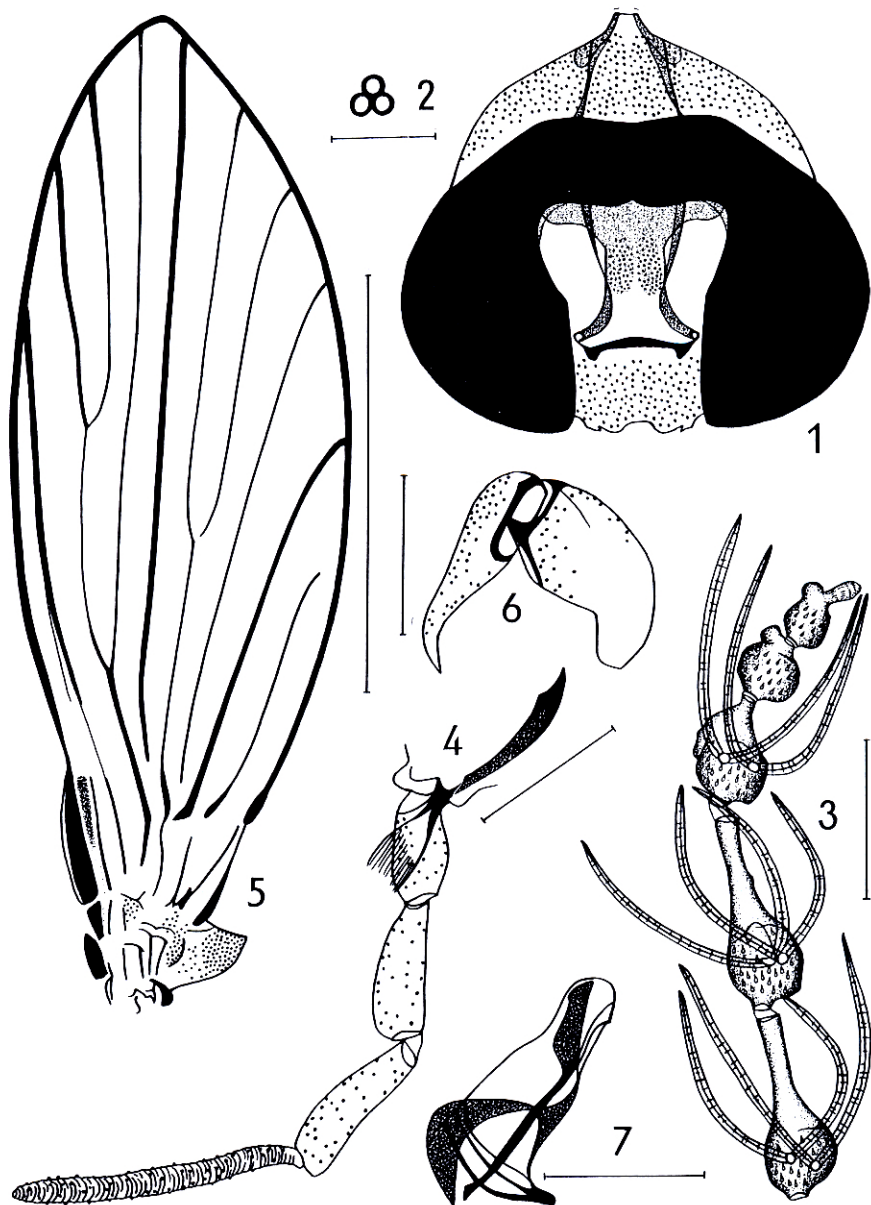
INTRODUCTION

This paper represents the first result of a joint programme in taxonomical and faunistic research of moth flies (Diptera: Psychodidae) in Greece between the National Museum in Prague (Department of Entomology) and the Aristotelian University of Thessaloniki (Department of Zoology). Two problematic species are examined below and their taxonomical position is fixed. There are several old figures of the European *Mormia revisenda* (Eat.), unfortunately, of a historical value only (questionable identity). The species has been quoted by many authors, however, unfortunately, without adequate study of the type material. Therefore, we at first considered this Greek species as one new for science. We are following the modern terminology of genital parts in the sense of Wood (1991).

Mormia revisenda (Eaton) (Figs 1-14)

Pericoma revisenda Eaton, 1893: 129.

Lectotype- and paralectotype- designation: Lectotype: "♂, *Pericoma revisenda* Eaton, det. Eaton 1894, Somerset, Stoney Stoke near Wincanton, 16.9.1890, Rev. A.E. Eaton 94-144." Jezek and Goutner prepared a new slide (Canada Balsam) of the dry specimen and a small Eaton's slide with hypopygium. Specimen is dissected: head, two antennae, damaged thorax with legs, one wing, epandrium with surstyli, part of the abdominal segments, aedeagal complex and gonostyles. Left: P₃ and left wing missing. Paralectotype: "♂, *Melanchimus revisendus*, Stoney Stoke near Wincanton, Somerset, 1.9.1890, dried



Figs 1-7. *Mormia revisenda* (Eat.) ♂. 1-head; 2-facets; 3-apical antennal segments; 4-maxilla and palpus maxillaris; 5-wing; 6-gonocoxite and gonostyle laterally; 7-aedeagal complex laterally. Scales 0.1 mm, in Fig. 5-1 mm.

fly, Eaton No 56a, Eaton Bequest, B.M. 1929-590". Antennae, neuration, genitalia (Dc.). Other insect parts of Eaton's original slide missing. Slides of additional males in coll. Eaton: "♂, Kauze Chaudes (alt. 2210 ft.), Basses Pyrénées, 5.9.1905, Eaton Bequest, B.M. 1929-590, Eaton No. 56 b"; "♂, Road side near Kauze Chaudes (alt. 2200 ft.), Basses Pyrénées, 5.9.1905, Eaton Bequest, B.M. 1929-590, Eaton No. 56 c." Deposited in the British Museum (Natural History), London.

Material: 1 ♂, Greece, Olympus, 4 km E of the monastery Aghios Dionysios nr. Lithoro, 29.4.1989, Jezek lgt., Cat. No. 33537, Inv. No. 3105 (Department of Entomology of the National Museum, Praha). Habitat: Growths of *Myrtha* near a spring on rocky cornice covered by mosses and shaded by *Fagus* and *Pinus*.

Male. Eyes (Fig. 1) contiguous, proportions of facets on Fig. 2. Antennae 16-segmented. Scape almost cylindrical (Fig. 8), short. Pedicel very short. The last 3 flagellar segments gradually reduced (Fig. 3), much smaller than segment 13. Ascoids long, forked, with indistinct cavities, paired. Last segment of maxillary palpus annulate (Fig. 4). Terminal lobe of labium only inconspicuously wrinkled apically (Fig. 9). Proportions of thoracic sclerites on Fig. 10. Wings (Fig. 5) narrowly lancet-shaped, 2.4 mm long, clear. Paired tarsal claws of P₁ of complicated shape, pointed and distally bent (Fig. 11). Basal apodeme (Figs 7, 13) narrowed proximally and straight on dorsal aspect, the tops of two caudal arms harpoon-shaped, connected by the almost spherical sclerotized annulus. Gonocoxites as long as pointed gonostyles (Fig. 6). Epandrium (Fig. 14) with basal paired apertures of irregular shape. Sclerotized remnants of 10th tergite and sternite inside epandrium very reduced. Hypandrium narrow, bare. Epiproct small, haired. Hypoproct large, equilaterally triangular with additional thin lobuli on both sides, all three with long hairs terminally. Surstyli subapically with 15-16 retinacula (Fig. 12).

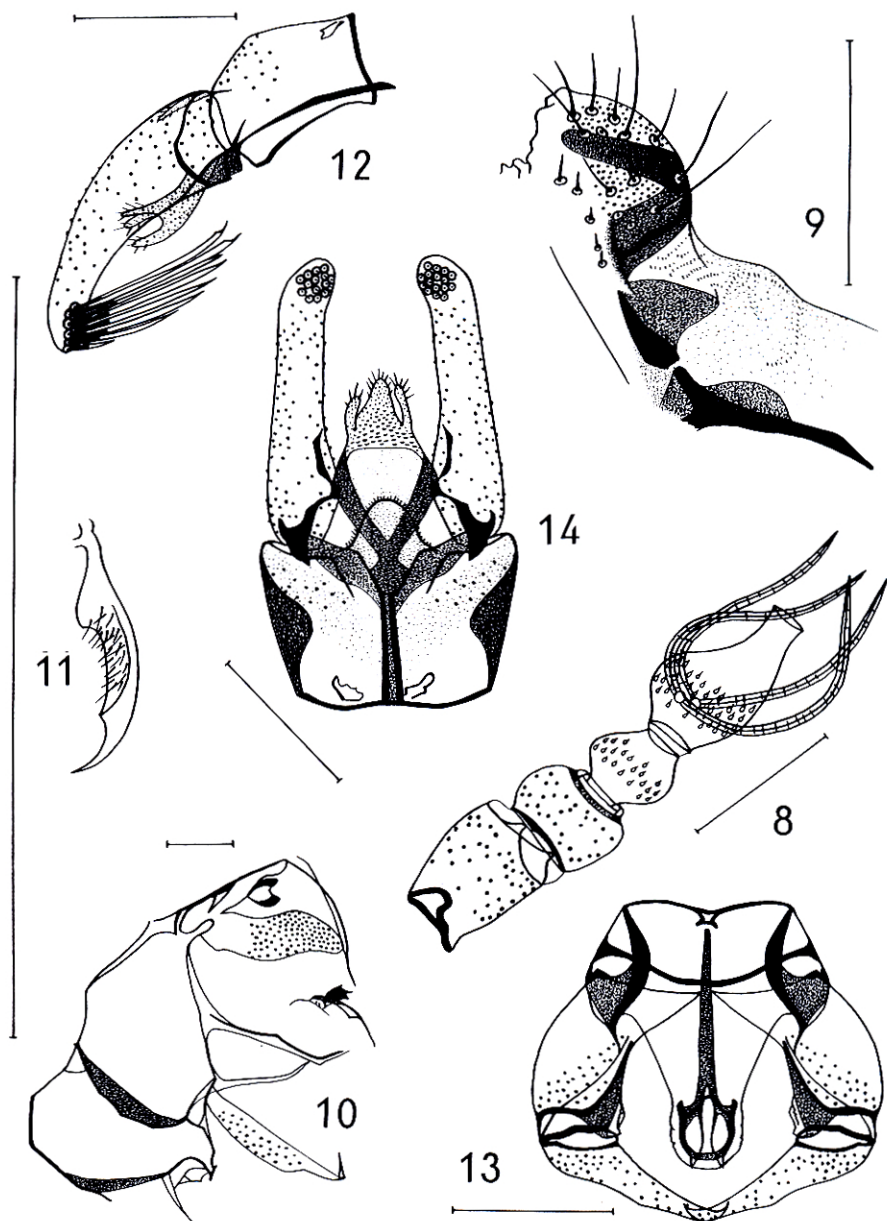
Differential diagnosis: Closely related to *Mormia pazukii* Jezek, 1984 from which it differs by short scape, the first flagellar segment symmetrical, by proximally narrowed basal apodeme, thin lobuli on both sides of hypoproct. *M. pazukii* has a very long scape, the first flagellar segment with conspicuous lateral protuberance, basal apodeme widened proximally, lobuli missing; however, large paraproctal lobes present.

Atrichobrunettia graeca sp. n. (Figs 15-33)

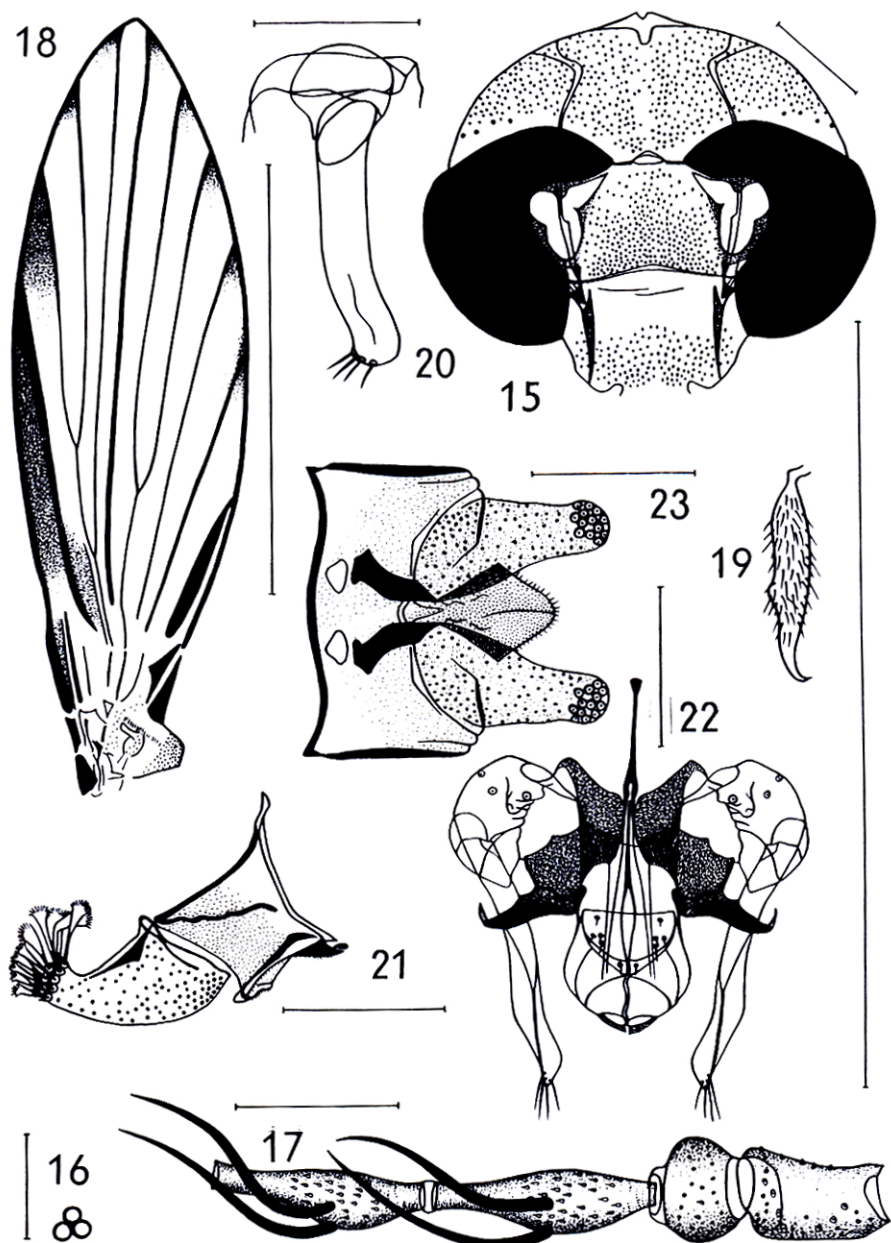
Material: Holotype ♂, Greece, Aghia Varvara env. Veria, 5.5.1989, Cat. No. 33538, Inv. No. 3106, Jezek and Goutner lgt.; Paratypes: ♀ (allotype), the same locality, 2.7.1989, Cat. No. 33539, Inv. No. 3107, only Goutner lgt.; ♀, Cat. No. 33540, Inv. No. 3108, the same data. Deposited in the Department of Entomology of the National Museum, Praha. Compared with the lectotype male of *angustipennis* from the Brussels Museum. Habitat: Banks of a village gutter with dustbins shaded by *Platanus* and *Urtica*.

Derivatio nominis: The name is derived from Greece.

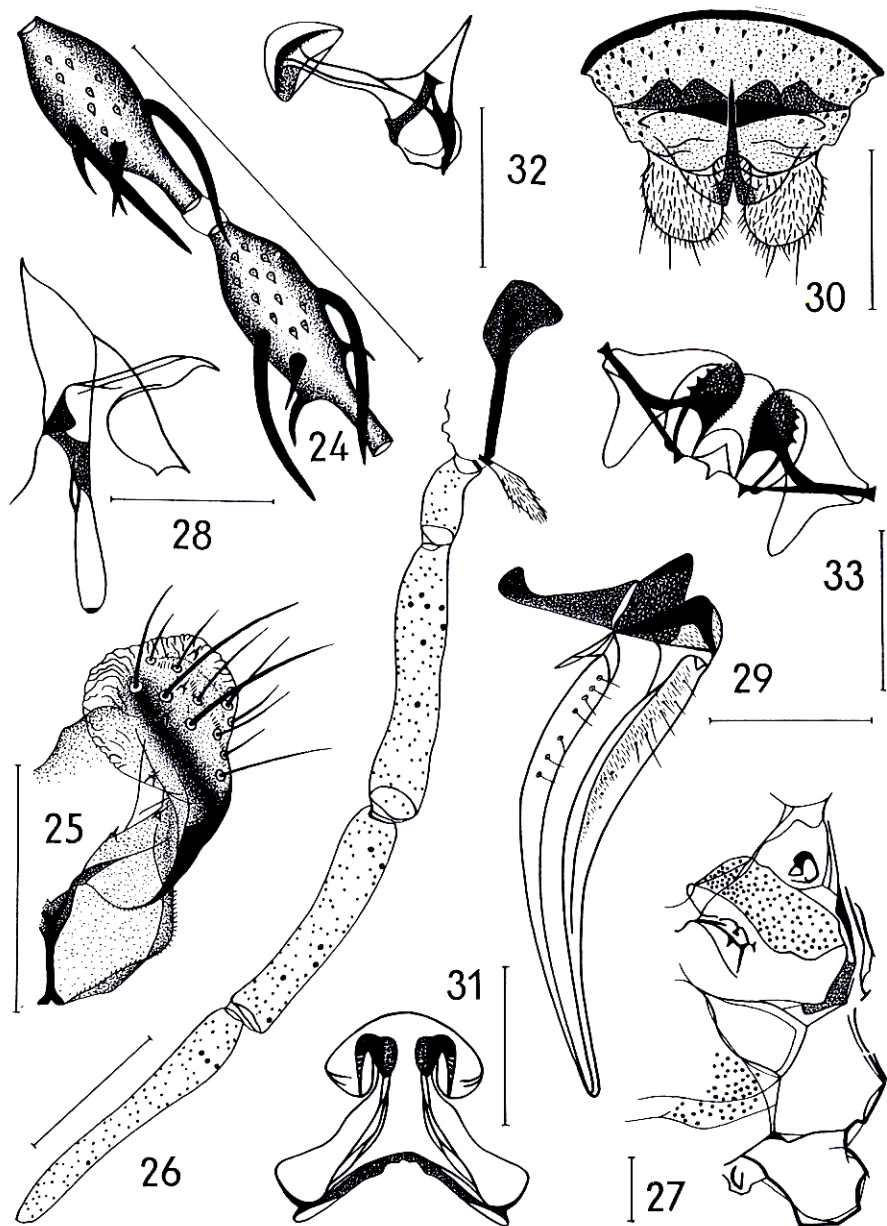
Male. Eyes separated, proportions of facets on Fig. 16, frontal suture developed (Fig. 15), with a small triangle in the middle. Antennae with 15 segments. Scape (Fig. 17) almost cylindrical, pedicel almost ball-shaped, flagellar segments flask-shaped, with long necks. Ascoids (Fig. 24) long, thin, simple, paired. Last segment of maxillary palpus not annulate (♀ Fig. 26). Terminal lobe of labium conspicu-



Figs 8-14. *Mormia revisenda* (Eat.) ♂. 8-basal antennal segments; 9-terminal lobe of labium; 10-thoracic sclerites laterally; 11-claw of P_1 ; 12-epandrium and surstylus laterally; 13-aedeagal complex and gonopods dorsally; 14-epandrium and surstyli dorsally (retinacula omitted). Scales 0.1 mm.



Figs 15-23. *Atrichobrunettia graeca* sp. n. ♂. 15-head; 16-facets; 17-basal antennal segments; 18-wing; 19-claw of P_1 ; 20-gonocoxite and gonostyle laterally; 21-epandrium and surstylus laterally; 22-aedeagal complex and gonopods dorsally; 23-epandrium and surstyli dorsally (retinacula omitted). Scales 0.1 mm, in Fig. 18-1 mm.



Figs 24-33. *Atrichobrunettia graeca* sp. n. ♂, ♀. 24-antennal segments 12 and 13 (♀); 25-terminal lobe of labium (♂); 26-maxilla and palpus maxillaris (♀); 27-thoracic sclerites laterally (♂); 28-aedeagal complex laterally (♂); 29-cercus (♀); 30-subgenital plate (♀); 31-structures of genital chamber anteriorly (♀); 32-the same laterad (♀); 33-the same ventrad (♀). Scales 0.1 mm.

ously wrinkled apically (Fig. 25). Ratio of maximal length of cibarium to length of epipharynx 2.5:1. Proportions of thoracal sclerites on Fig. 27. Wings (Fig. 18) very narrow, 1.8 mm long, almost clear. M_3 and Cu without a connection to M_4 . R_5 extends distally to reach wing margin a little behind the apex of the wing. Medial wing angle 146° (BCD), index of base of M_{1+2} , A to maximal width of wing 2.7 (A = end of R_5 , B = radial fork, C = medial fork, D = end of Cu). Paired tarsal claws of P_1 slightly hooked at the tip, haired (Fig. 19). Basal apodeme of male genitalia (Figs 22, 28) long, aedeagal complex with smooth surface, broadened distad, almost hemispherical, with 5 setae on each side and distal margin with paired strengthened and pointed lamellae apically. Paired external additional protuberances fully developed, sclerotized, big, very long, pointed, curved and divergent. Gonocoxite short, thick, gonostyle long, almost tube-shaped, with 4 setae terminally (Fig. 20). Basal paired apertures of epandrium (Fig. 23) conspicuous, largely separated. Sclerotized remainders of 10th tergite and sternite inside epandrium conspicuously developed, paired. Epiproct minute, hypoproct very broad and long, both parts haired. Surstyli rather short, narrowed apically, subapically with 13 characteristic frayed-like retinacula (Fig. 21), irregularly arranged.

Female. Width of frons equals almost to 6 facet diameters. Subgenital plate (Fig. 30) with two obvious lobes caudally, rounded, divided by wide and deep incision, with two small additional pointed lobes, fused basally. The mesh-like structures of the genital chamber developed (Figs 31-33). Cercus a little bent (Fig. 29).

Differential diagnosis: Conspicuously closely related to *Atrichobrunettia angustipennis* (Tonnoir, 1920) which has aedeagal complex very narrowed distally, triangular, distal margin without lamellae apically. *A. graeca* sp. n. has aedeagal complex broadened distally, almost hemispherical, distal margin with paired strengthened and pointed lamellae.

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