

29 (25) Left arm of left gonite simple (Fig. 41), right arm of right gonite not much shorter than left arm (Fig. 41); left arm of right gonite thinner, its bristle far from tip, Surstylus short (Fig. 35), surstylar tooth far from apex of surstylus (Greene, Poros 1) genera sp. ?

### Carnidae

Very small black flies with various life habits; their larvae develop in many kinds of dead organic material (dung, nests of birds, etc.). About 60 species have hitherto been known from the Palearctic Region (for bibliography see Papp, 1977), but there are numerous undescribed species even in museum collections (e.g., in the collection of the Naturhistorisches Museum, Wien; the Muséum d'Histoire naturelle, Genève; the Hungarian Natural History Museum, etc.); it seems obvious that a far more extensive collecting work will be necessary to reach a better level of knowledge on the species of this family. Two species of *Meonura* Kohn, will now be described from a material collected in Obergaral (Ötztal, Tirol, Austria) by Dr. HANS STROCKEN (Institut für Zoologie der Universität, Innsbruck) and from a part of the material of the Hungarian Natural History Museum.

### *Meonura atoma* sp. n.

Body and legs completely black, except for a linear anterior margin of frons. Mesonotum dusted. Frontal triangle very much shining and reaching anterior 4/5 of frons. Other parts of frons with dark silky reflexion. 1—2 pairs of minute bristles on margin of frontal triangle. Arista only 0.13—0.14 mm long with microscopic pubescence. Genae not wide, at narrowest only 1/4 length of longitudinal axis of eyes. 3 pairs of *vi* and some strong genal bristles. Only 1 dorso-central pair, anterior pairs not separable from *deni*. Other thoracic bristles as in *M. carpatica* L. Papp. Wings greyish, costal and radial veins light brown. Knob of halteres yellowish white, stalk dark brown. Anterior half of fore femora with 2 long posteroventral bristles. Male genitalia with lamella and surstylus coalescent (Fig. 46). Surstylus comparatively long with a sharp apex, lamella small, on apical part only 1 long bristle and 4 short bristles.

Length of body: holotype male: 1.12 mm; paratype male: 1.24 mm; paratype female: 1.31 mm; wings: holotype: 1.16 × 0.51 mm, paratype male: 1.28 × 0.57 mm, paratype female: 1.49 × 0.62 mm.

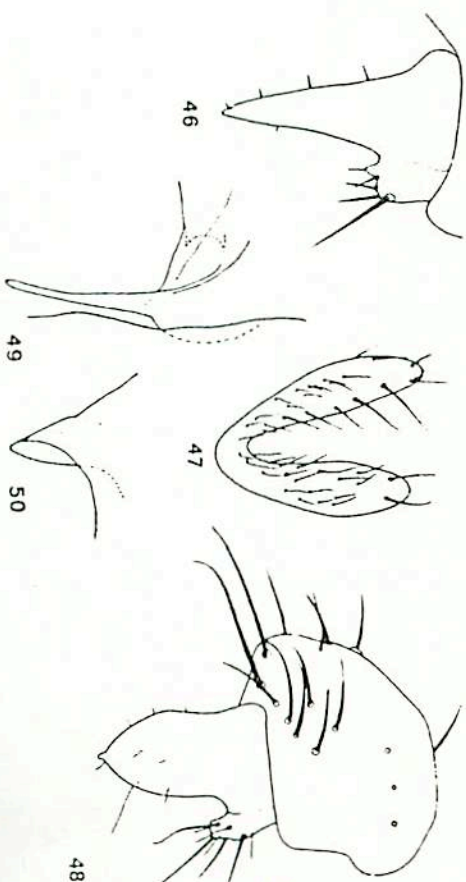
Holotype male: Austria, Obergaral, 1950—2000 m, rét [= meadow], 1974, VII, 16, leg. BAJZA & PAPP L.; paratype female: Austria, Pillersee, 1777 m, hálózás fenyőerdőben leg. BAJZA & PAPP L.; paratype female (Larix), 1974, VII, 24, leg. BAJZA & PAPP L. (in the collection of the HNHM, Budapest); paratype male (in the collection of Institut für Zoologie der Universität, Innsbruck): Austria, Obergaral, I. 77/07/27 1500—1800, leg. H. STROCKEN.

*M. atoma* sp. n. is one of the smallest species of *Meonura*. Its closest relative is *M. carpatica* L. Papp, 1977, but its anterior *de* bristles pairs are not separable from *deni* (actually it has only 1 pair of *de*; 3 in *carpatica*), its surstylus is with a sharp apex, its lamella bears only 1 long bristle (contrarily to the 3 long bristles of *carpatica*); its surstylus has only very short bristles

### *Meonura flavifrons* sp. n.

Body and legs black, anterior half of frons yellow to reddish yellow, facial plate incl. antennal foveae yellow, upper anterior part of genae reddish yellow to greyish yellow. Frontal triangle reaching anterior 7/19 of frons, frontal triangle strongly shining, 2 inclinate *ori*, 2 declinate *ors*, 1 pair of long interfrontals of 0.08 mm, 3 pairs of *vi*, genae wide, at narrowest almost 1/3 length of longitudinal axis of eyes. Arista 0.17 mm, microscopically pubescent. Mesonotum covered with some greyish pollen, 0 + 3 *de* pairs, two anterior pairs short. Pteropleuron without bristle. Thoracic chaetotaxy as in *flavifrons* (Kohn). Wings greyish, radial veins brown, other veins weak, light greyish. Knob of halteres long, waxen yellow, stalk dark brown. Apical half of posteroventral side of fore femora with 2 long bristles. Genital vault (epandrium) rather big, hemispherical, ventrocaudal part with some thick bristles (Fig. 48). Surstylus and lamella coalescent, lamella small and edged with four long and some short bristles. Surstylus very big and wide with a minute apical process and with some thin bristles. Length of body: holotype male: 1.49 mm; paratypes: 1.40—1.80 mm; wings of holotype: 1.40 × 0.61 mm, wings of a paratype male: 1.56 × 0.64 mm.

Holotype male: Austria, Obergaral, M. I. 77/09/01, 1500—1800, leg. H. STROCKEN (mounted from alcohol to a minuten-pipe in the collection of the Institut für Zoologie der Universität, Innsbruck). Paratypes: 1 ♂; data same as for holotype; 1 ♂; *ibid.*, M. I. 73/09/02, 1200—1300, 1 ♂; 4 ♀; M. I. 77/07/27, 1500—1800, 1 ♂; *ibid.*, M. I. 77/08/25, 1800—2100, 2 ♂; 1 ♀; *ibid.*, M. I. 77/09/02, 300—600, 1 ♂; M. I. 77/09/02, 500—900. The paratypes are preserved in alcohol in the collection of the Institut für Zoologie der Universität, Innsbruck, three males and one female paratypes are pinned and deposited in the collection of the HNHM, Budapest.



Figs. 46—50. 46 = *Meonura atoma* sp. n., surstylus and lamella in lateral view; 47 = *Homonura pseudolimnaea* sp. n., holotype male, pregenital sternite; 48 = *Meonura flavifrons* sp. n., lateral epandrium and outer genitalia in lateral view; 49 = *Homonura pseudolimnaea* sp. n., lateral

Papp, 1981

A STUDY OF THE CIRCUMTROPICAL DERMAPTERA  
MATERIAL IN THE "INSTITUUT  
VOOR TAXONOMISCHE ZOOLOGIE", AMSTERDAM

By  
H. STEINMANN

(Received 10 April, 1980)

Six new Dermaptera species (*Carriophora boesemani* sp. n., *Absorbidis tanzi-  
nia* sp. n., *Gonolabis desoria* sp. n., *Euborellia flava* sp. n., *Spongostox tempus* sp. n.,  
and *Euborellia boesemani* sp. n.) described from the material of the zootaxonomical  
institute, Amsterdam, deriving from the Neotropical, Ethiopian and Indo-Australian  
Regions.

Through the kindness of Mr. J. P. DUFFELS, I had the opportunity to  
study the Dermaptera material housed in the "Instituut voor Taxonomische  
Zoölogie", Amsterdam, which proved to be very rich in species from the Neo-  
tropical, Ethiopian and Indo-Australian faunal regions. I further had a list  
of the identified species and the type-material deposited by M. BOESEMAN.  
The latter author published, in 1954 "The Dermaptera in the Museums  
of Leiden and Amsterdam", including several new species. His species proved  
to be valid although he did not make genital preparations, indispensable today.  
The present paper is aimed at giving figures of these genital apparatuses  
and publish data accumulated since that date.

Family: Pygidieranidae VENHOEFF, 1902

*Pyrgygra fuscata fuscata* AUDINET-SERVILLE, 1831

*Pyrgygra fuscata* AUDINET-SERVILLE, 1831. Ann. Sci. nat., 22: 31. — Terra typica: French  
Guiana.  
*Pyrgygra fuscata fuscata* AUDINET-SERVILLE: HUSCKS, 1959. Syst. Mon. Dermaptera, 2: 191.

Ultimate tergite of male (Fig. 1) broad, without medial longitudinal fur-  
row. Male forceps asymmetrical: trigonal basally, cylindrical and curved  
apically. Male genitalia (Fig. 2) narrow, media incision of anterior margin of  
paramere very deep, external parameres small, obtuse. Genital lobes well  
developed, with characteristic sclerotized plates.

Distribution: Central America (Mexico to Nicaragua).

Material examined: Mexico, "Provincias Unidas" 1 male.

*M. flarifrons* sp. n. is related to *M. flarifacies* COLLIN, 1930, since its  
frons anteriorly and its face (and partly also genae) are yellow, but the genae  
are wider and its male grandirium is much bigger. The surstyli of the new  
species is much bigger and has a small apical process on it. The lamella of  
*flarifrons* is much smaller than that of *flarifacies* (in *flarifacies* lamella and  
surstyli are about equal in length) and its lamella bears less bristles than in  
*flarifacies* (Fig. 1B, cf. 29 C of PAPP, 1978a); the females can be separated by  
the different genital widths.

I should like to express my sincere thanks to Mrs. SARVA MYSZKOWSKI (Museum  
Zoologico della Spezia, Florence), to Dr. HENRIET SCHEFFERS (Museum für Naturkunde,  
Zoologisches Museum, Berlin) and to Dr. LEONIDAS TSACAS (Museum National d'Histoire  
Naturelle, Paris), for their help by loans of types. To Dr. HANS STROUSSEN (Institut für  
Zoologie der Universität, Innsbruck) for making his *Meiomera* material available for study.  
I should like to thank Dr. HENRIET SCHEFFERS (Dept. of Entomology, Natal University,  
Pietermaritzburg) for his invaluable information.

REFERENCES

BRACH, Th. (1895): Dipterologische Studien II. Saproxyzidae. — Berl. Ent. Zeitschr., 40:  
171-204.  
BUCKER, Th. (1907): Die Ergebnisse meiner dipterologischen Frühjahrsexpedition nach Alger und  
Tunis, 1906. — Zeitschr. f. llym. u. Dipt., 7: 309-107.  
COLLIN, J. E. (1918): A short synopsis of the British Saproxyzidae (Diptera). — Trans. R.  
Ent. Soc. London, 99: 225-242.  
CZENNY, L. (1932): 50. Lanxaniidae (Saproxyzidae). — In: LINDSKOG, E.: Die Fliegen der  
palaearktischen Region, 5 (2): 1-76.  
HEWY, E. and ELLIOTT, K. (1979): Permatidia of the Lausanidae (Diptera) found in Estonia,  
Latvia and Lithuania. — Dipterologische Kurze, Eesti NSV Tead. Akad., Tartu,  
60: 117.  
LÖW, H. (1877): Dipterologische Beiträge. Dritter Theil. — Jahrbch. Naturw. Ver. Posen,  
1846: 1-11.  
LÖW, H. (1873): Beschreibung von europäischen Dipteren. — Halle, 3: 1-320.  
PAPP, L. (1977): New species and records of Hungarian Odonidae, Mischidae and Ceramby-  
ca (Diptera). — Acta Zool. Hungar., 23: 171-181.  
PAPP, L. (1978): Contribution to the revision of the Palaearctic Lausanidae (Diptera). —  
Ann. Hist-nat. Mus. Nat. Hungar., 70: 213-231.  
PAPP, L. (1978a): 72a. psalidi. Carabidae. — In: Fauna Hungarica, 15 (9): 32-50 (in Hun-  
garian).  
RODOLPH, V. (1868): Dipterologie. In: Fauna prodromus, Vol. 7: Species. In: Fauna ordinis dip-  
terorum a Prof. Camillo Rodolfo collectae, distinctae, et in ordinem dispositae, Orthoptera  
vel minus cognite descriptis. Pars sexta: Scaphophaginae, Scomyzinae, Dermaptera  
Mihani: 1-60.  
RODOLPH, V. (1877): Species In: Fauna ordinis Dipterorum (Muscaria Part). Stirps. XIX. Scio-  
myzinae. — Ann. Soc. Nat. di Modena, 11: 7-79.  
SÉLYS, E. (1911): Diptères recueillis par M. L. Berland dans le Sud Marocain. — Ann. Soc.  
ent. France, 110: 1-23.  
TSACAS, L. (1959): Contribution à la connaissance des Diptères de Grèce (1<sup>re</sup> note). — Bull.  
Soc. ent. France, Paris, 64: 123-130.

Author's address: Dr. L. PAPP  
Zoological Department  
Hungarian Natural History Museum  
H-1060 Budapest  
Baross u. 13, Hungary