

# Two new palaearctic species of Piophilidae (Diptera).

## Два новых палеарктических вида двукрылых семейства Piophilidae (Diptera).

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KEY WORDS: Diptera, Piophilidae, new species.

КЛЮЧЕВЫЕ СЛОВА: Diptera, Piophilidae, новые виды.

ABSTRACT: Two new species of the family Piophilidae - *Mycetaulus latipennis* sp.n., from Czechia and Georgia, and *Parapiophila vernicosa* sp.n., from Czechia are described.

РЕЗЮМЕ: Описаны два новых вида двукрылых из семейства Piophilidae - *Mycetaulus latipennis* sp.n. из Чехии и Грузии, а также *Parapiophila vernicosa* sp.n. по материалам из Чехии.

Joint examination of two interesting species of Piophilidae from the genera *Mycetaulus* Loew and *Parapiophila* McAlpine convinced us, that they represent undescribed species.

The specimens of the new *Mycetaulus* were collected in Czechia and Georgia. It is the fifth species of *Mycetaulus* known from Palaearctic. All the specimens of the new species of *Parapiophila* were collected in Czechia. Most specimens of both species were taken by means of reverse funnel fly traps baited with decayed meat, described by Bartak and Martinek [1990].

The types of the new species are deposited in the collection of the Zoological Museum of the Moscow State University (ZMUM) and in the private collection of Bartak (CB) which will be later transferred to National Museum, Prague. The terminology used follows McAlpine [1977].

*Mycetaulus latipennis* sp.nov.

Fig. 1.

MATERIAL. Holotype: ♂, Czechia, Praha, Prokopske udoli, fly trap, 50° 02'N, 14°23'E, 280 m, VI.1987, Bartak (ZMUM). Paratypes: 6♂, 2♀, same data as holotype (CB); ♀, Sumava, Plechy, fly trap, 48°46'N, 13°53'E, 1300 m, 17.VIII.1987, Pavlicko (ZMUM); ♀, Sumava, Rakouska louka, fly

trap, 48°46'N, 13°50'E, 1300 m, VII-VIII.1987, Pavlicko (CB); ♀, Caucasus, Georgia, near Kazbegi, 13.VII.1988, A.L.Ozerov (ZMUM).

DESCRIPTION. Head a little higher than long (35: 27), frons strongly divergent posteriorly, distance between eyes at antennal level subequal to third of the width of head of male and slightly more in female. Head as a whole reddish yellow. Ocellar triangle and occiput along border with median occipital sclerite reddish yellow to dark brown. Frons subshining, similar to *M.bipunctatus* (Fallen, 1823). Face weakly greyish pruinose. Gena subshining. Vertical diameter of eye 2.2-2.3 times as long as width of gena. Antenna, proboscis and palpus reddish yellow. Anterior margin of first flagellomere darkened. First flagellomere oval, its length is slightly more than width (not 1.5 times as in *M.bipunctatus*). Head with following paired setae: 1 ocellar, 2 orbitals (posterior seta 2-2.5 times as long as anterior one), 1 inner vertical, 1 outer vertical, and 1 postocellar. Gena with a row of genal setae in lower half. One pair of vibrissae.

Thorax subshining, bicolorous. Scutum (except postpronotal lobe, notopleuron, and postalar callus), katepisternum, lower part of anepimeron, meron,

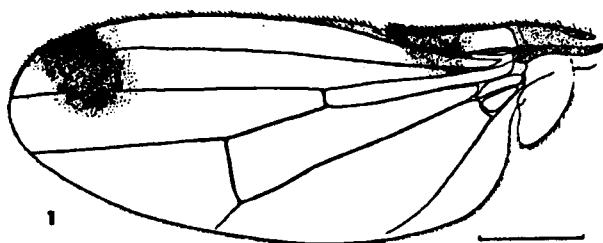


Fig. 1. *Mlatipennis* sp.nov., wing. Scale = 0.5 mm.

Рис. 1. *Mlatipennis* sp.nov., крыло. Шкала = 0.5 mm.

katatergite, anatergite, and mediotergite black. Several specimens with blackish brown meron, mediotergite, and lower part of anepimeron. The rest of thorax reddish yellow. Scutum with short black setulae (setulae absent behind posterior dc) and with following paired setae: 1 postpronotal, 2 notopleurals, 1+2 supra-alars, 1 postsutural intra-alar, and 2 postsutural dorsocentrals. Posterior dorsocentral seta 1.5-2 times as long as anterior one. Distance from transverse suture to anterior dorsocentral seta 2 times as long as than from anterior dorsocentral seta to posterior one. Proepisternum whitish microtomentose, with a strong seta on lower margin. Katatergite and anatergite with greyish microtomentum. Katepisternum with 3 strong setae on upper margin and with 2-6 setae on lower quarter (before mid coxa). Scutellum yellow, with two pairs of setae: basal pair is slightly shorter than apical one.

Legs yellow with short hairs. Mid tibia on basal third, hind tibia, fore tarsus completely, and tarsomeres 3-5 of mid and hind tarsi dark brown to black. All coxae with a row of dorsal setae. Fore femur with a row of posteroventral setae on apical half and a row of setae on dorso-posterodorsal surface. Mid tibia with a ventral apical seta.

Wing (Fig. 1) hyaline, with yellowish tinge, and with two dark spots near base and apex. Veins yellow. Length of wing 2.5-2.6 times as long as wide. Calypters darkened, with brownish margins. Base and stem of halter yellow, knob white or yellowish white.

Abdomen black, subshining, with black hairs. Male: tergite 1+2 reddish yellow; tergites 1+2 and 3 with several lateral marginal setae; tergites 4 and 5 with a row of marginal setae. Length of tergite 3 equal to those of tergite 4, tergite 5 about 1.5 times as long as tergite 4. Female: tergites 3 and 4 with several lateral marginal setae, tergites 5 and 6 with a row of marginal setae. Tergites 3-5 equal in length; length of tergite 6 slightly shorter than those of tergites 3-5.

Length of body: 3.0 - 3.7 mm. Length of wing: 2.7 - 3.5 mm.

**DIAGNOSIS.** Resembling *M. bipunctatus*, but differing as follows: intra-alar seta present; scutum mostly, katepisternum, lower part of anepimeron, and meron black; distance from transverse suture to anterior dorsocentral seta 2 times as long as than from anterior dorsocentral seta to posterior one; apical seta of scutellum 1.5 times as long as basal one or equal with it; length of wing 2.5-2.6 times as long as wide. *M. bipunctatus* has scutum and pleural sclerites (except katatergite, anatergite, and mediotergite) dark yellow; distance from transverse

suture to anterior dorsocentral seta equal to distance from anterior dorsocentral seta to posterior one; apical seta of scutellum 2 times or more as long as basal one; length of wing 3.0-3.1 times as long as wide.

**DISTRIBUTION.** Czechia, Georgia (Caucasus).

*Parapiophila vernicosa* sp. nov.

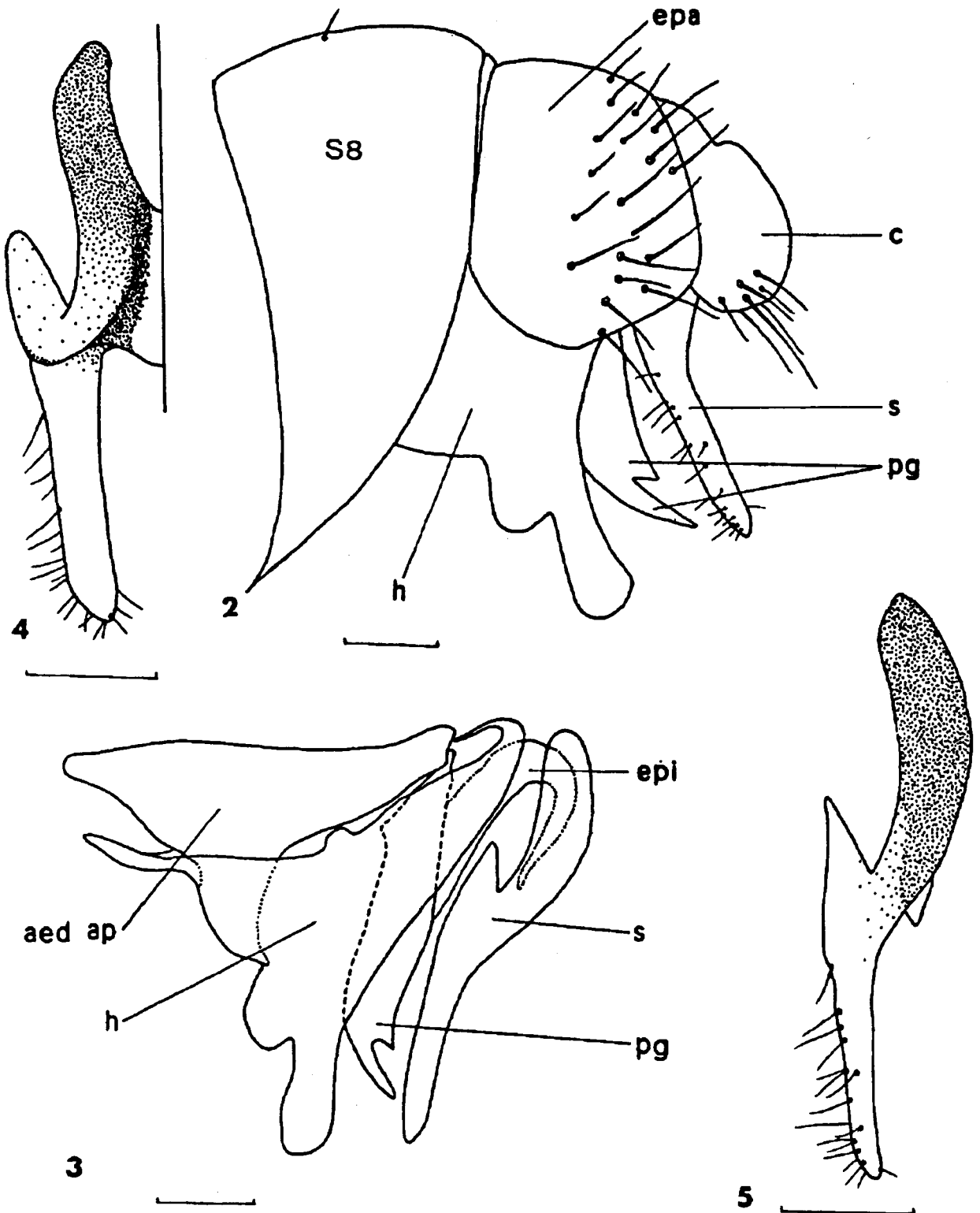
Figs. 2-5.

**MATERIAL.** Holotype: ♂, Czechia, Dobrichov, 50°04'N, 15°03'E, 200 m, fly trap, 23.VI.1986, Bartak (ZMUM). Paratypes: Czechoslovakia: ♂, 8 ♀, Beskydy, Horni Lomna, fly trap, 49°32'N, 18°37'E, 650 m, 20.VI.1986, Bartak (CB); ♂, same place, 10.VIII.1986, Bartak (CB); 7 ♂, 2 ♀, Beskydy, Murinkovy Vrch, fly trap, 49°31'N, 18°39'E, 950 m, IV.-VI.1987, Bartak (CB); ♂, 7 ♀, same place, VII-VIII.1987, Bartak (CB); ♂, 2 ♀, V.-VII.1987, Bartak (CB, ZMUM); 3 ♂, 8 ♀, Sumava, Rakouska louka, fly trap, 48°46'N, 13°50'E, 1300 m, VII-VIII.1987, Pavlicko, (CB, ZMUM); ♀, same place, 7.VIII.1987, Pavlicko (CB); ♂, Praha, Troja, fly trap, 50°07'N, 14°24'E, 17.VII.1986, Bartak (CB); ♀, same place, 3.VII.1986, Bartak (CB); ♀, Dobrichov, fly trap, 50°04'N, 15°03'E, 200 m, 14.V.1986, Bartak (CB); 2 ♀, Kunice, fly trap, 49°56'N, 14°40'E, 430 m, 25.V.1986, Bartak (CB); ♀, same place, 7.VI.1987, Bartak (CB); ♀, same place, Malaise trap, 21-27.V.1985, Bartak (CB).

**DESCRIPTION.** Head black. Frons subshining, ocellar triangle and gena shining, postcranium and antennal groove greyish pruinose. Vertical diameter of eye 4 times as long as width of gena. Lower part of frons, ocellar triangle between ocelli and behind ocelli to postocellar setae with short hairs. Antenna reddish, with darkened anterior margin. Arista, proboscis, and palpus black. Head with following paired setae: 1 ocellar, 2 orbitals, 1 inner vertical, 1 outer vertical, and 1 postocellar. Gena with a row of genal setae on lower half. One pair of vibrissae.

Thorax black, polish. Katatergite and anatergite microtomentose. Scutum with short black hairs and with following paired setae: 1 weak postpronotal, 2 notopleurals, 1 postsutural supra-alar, 1 postalar, 1+1 intra-alars (both weak), and 1 postsutural dorsocentral. Proepisternum with a seta on lower margin. Katepisternum with 2 weak setae on upper margin and with numerous setulae on lower half. Scutellum with transverse wrinkles and with two pairs of marginal setae. Basal seta of scutellum half as long as apical one.

Legs yellow. Fore femur, excluding apex and base, fore tarsus, hind femur on apical half brown.



Figs. 2-5. *P. vernicosa* sp. nov., male: 2 - end of abdomen, lateral view; 3 - surstylus, epiphallus, hypandrium, and aedeagal apodeme, lateral view; 4 - surstylus, dorsal view; 5 - same, lateral view; aed ap - aedeagal apodeme; c - cercus; epa - epandrium; epi - epiphallus; h - hypandrium; pg - postgonite; s - surstylus; S8 - sternite 8. Scale = 0.1 mm.

Рис. 2-5. *P. vernicosa* sp. nov., самец: 2 - конец брюшка, вид сбоку; 3 - сурстий, эпифалл, гипандрий, аподема эдеагуса, вид сбоку; 4 - сурстий, вид сверху; 5 - то же, вид сбоку; aed ap - аподема эдеагуса; с - церк; ера - эпандрий; епi - эпифалл; h - гипандрий; pg - постгонит; s - сурстий; S8 - VIII стернит. Шкала = 0.1 мм.

Several specimens with mid femur brown in middle. Fore femur with a row of posteroventral setae on apical half and a row of setae on dorso-posterodorsal surface. Mid tibia with a ventral apical seta.

Wing hyaline, with pale yellow tinge. Veins, calypters and their margins pale yellow. Halter yellowish white, base and stem brown.

Abdomen black, shining, with black hairs. Hairs shorter and less numerous in female than in male. Male: general lateral view of end of abdomen (genitalia directed down) as in Fig. 2. Surstyli symmetrical, stick-like, fused together (Figs. 4-5). Epiphallus, hypandrium, aedeagal apodeme as in Fig. 3. Aedeagus filamentous, bare, resembles those in *Arctopiophila arctica* (Holmgren, 1883).

Length of body: 2.5-3.4 mm. Length of wing: 2.4-

3.4 mm.

**DIAGNOSIS.** Resembling *Parapiophila flavipes* (Zetterstedt, 1847), but differing by the black thorax, proboscis, and palpus; by the dark brown fore femur, excluding the apex and base, and the dark brown in the apical half hind femur. *P. flavipes* has the thorax dark red brown; the proboscis, palpus, and femora of the fore and hind legs yellow.

**DISTRIBUTION.** Czechia.

## References

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