

Mallock, 1934

Pelomyia wiedmae, sp. n.

A paler species than either of those already dealt with, the frontal triangle and mesonotum being pale grey dusted, and though the legs are entirely dark the tarsi are brownish rather than black, at least at their bases. The anteroventral armature of the fore femur consists of short rather fine hairs, and the penultimate section of the fourth vein is comparatively shorter than in the Chilean species.

♂. Length, 2 mm.

Head coloured as in the other species, but the triangle pale grey dusted, the armature similar also, but the eyes longer and the genae not as high as in *P. peruviana*.

Thorax fuscous, densely and quite uniformly pale grey dusted, the bristles as in *P. peruviana*, and the hairs weak and as in *P. trivittata*.

Abdomen coloured as thorax, the whole densely dark grey dusted.

Legs fuscous, rather densely grey dusted, the tarsi brownish basally.

Wings hyaline, veins pale brown. Inner cross-vein about two-fifths from apex of discal cell, ultimate section of fourth vein about three times as long as penultimate, outer cross-vein distinctly more than its own length from apex of fifth. Halteres yellow.

Holotype, and one paratype, Viedma.

[*Pelomyia intermedia*, sp. n.]

Similar to *P. wiedmae*, differing in having the mesonotum greyish-brown, with faint traces of vittae, the frontal triangle brown, and the wings brownish-hyaline with different venation.

♀. Length, 2 mm.

Head similar to that of *P. wiedmae*, but with the triangle brown and the genae higher.

Thorax darker than in *P. wiedmae*, the mesonotum brown with slight traces of vittae, and the mesopleura slightly darkened above.

Abdomen fuscous, greyish-brown dusted, slightly shining.

Legs fuscous, grey dusted, bases of all tibiae rather broadly brownish-yellow, mid and hind tarsi slightly brownish at bases, armature of fore femur as in *wiedmae*.

Wings brownish-hyaline, veins brown, venation almost as in *P. peruviana*. Halteres yellow.

Holotype, Bahia Blanca.

It appears to me extremely unlikely that this is the female of *P. wiedmae*. In most respects it rather closely resembles *P. coronata*, Loew, of North America, but the legs in the latter are more extensively yellowish and there are some other characters that distinguish it from the specimen before me.

MILICHIIDAE.

This group until a few years ago was generally accepted as a subfamily of Agromyzidae, but now is ranked by European writers

as a separate family, a course first taken by Dr. F. Hendel. There is no gainsaying the propriety of separating it from Agromyzidae, with which group it has little in common, but the family status is not to be accepted as concurred in by the use of the name Milichiidae herein. It does appear that it is much better distinguished, however, than are a number of the rather widely accepted families in this Division of the Diptera.

A summary of the common characters of the group may be given as follows: Vibrissae present, though sometimes quite poorly distinguished from several bristles that form a series on the facial ridge; frons with bristles on almost the entire length of the orbits, those on the upper half variously directed, the infra-orbitals usually incurved; interfrontalia (central stripe) with two series of hairs or setulae, which series converge to anterior margin; postverticals parallel or convergent; eyes large, frequently with a notch in middle of hind margin, or emarginate on lower half behind; thorax with from 1 to 4 pairs of dorso-centrals, the sternopleura always, and the mesopleura sometimes, bristled in part; postscutellum well developed; legs normal, the preapical dorsal tibial bristle lacking; wings generally quite large and with well-developed anal angle; subcostal vein evanescent at apex; costal vein interrupted at just beyond the humeral cross-vein and again at apex of subcostal vein, the latter sometimes in the form of a deep notch.

Practically no descriptive matter has been published on the immature stages. The larvae of most species feed in manure or decaying vegetable or animal matter, and the adults are frequently found in large numbers on flowers and foliage. Some species have been recorded as associating with predacious insects and spiders, sometimes riding on the thorax of large Asilidae, and feeding in the presence of the predator upon the juices of their freshly killed prey. I have seen such an occurrence as the last on the campus of the University of Illinois. In most recorded cases the species involved belonged to the genus *Desmometopa*.

No species have been recorded from Patagonia or Southern Chile, though the following species have been recorded from Chile north of the territory covered by this report:—

Milichiella tricineta, Becker.

Ecoptomma montanum, Becker.

“ *concauum*, Becker.

“ *frontale*, Becker.

I present below a key to the genera in this collection.

KEY TO THE GENERA.

- 1. Mesopleura with two or three hind marginal bristles.....2.
- Mesopleura bare.....3.
- 2. Frontal lunule exposed, setulose.....[*Phalcomyia*, Hillemeck (p. 462)].
- Frontal lunule concealed or almost so, bare
- [*Rhynchomilichia*, Hendel (p. 462)].

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3. Outer cross-vein of the wing lacking; proboscis about as long as the insect, long and slender, elbowed near middle
Paromyia, Williston (p. 464).
4. Outer cross-vein present; proboscis much shorter and stouter.....4.
Posterior margin of eye with a sharp notch near middle; frons not sharply differentiated in texture on any parts.....5.
Posterior margin of the eye entire; frons largely velvety black, the two setulose interfrontal stripes and the orbits grey dusted and breaking the black part in the form of the letter M
Desmometopa, Loew (p. 464).
5. Mesonotum with 4 pairs of strong dorsocentrals and the acrostichal series irregular but with a number of bristles that are almost as long as the dorsocentrals.....*Eccoptomma*, Becker (p. 463).
Mesonotum with 1 or 2 pairs of postsutural dorsocentrals, and the intra-dorsocentral (acrostichal) hairs fine and short
Milichiella, Giglio-Tos (p. 463).

[PHOLEOMYIA, Bilimek.]

1867. Verh. zool.-bot. Ges. Wien, 17: 903.
1907. *Rhynchomilichia*, Becker (nec Hendel), Ann. Mus. Nat. Hung., 5: 521.
1932. *Pholeomyia*, Hendel, Konowia, 11: 134.

This genus has recently been distinguished from *Rhynchomilichia* by the describer of the latter as above indicated, but the two concepts are so closely allied that there is a probability they may yet be merged, the character cited in the foregoing key being rather inadequate to my mind for generic segregations in this group. However, both genera are represented, each by one species, in this collection, and lacking a better basis for consideration of the question of their status they are both accepted herein.

Pholeomyia is exclusively an American genus, occurring in North and South America, and much more commonly in the warmer parts of the southern half of its range.

[Pholeomyia, sp.]

One female in good condition does not agree with any known to me and is not *P. palparis*, Becker, described from Paraguay. As it is extralimital and there are no males accompanying it I prefer to leave it without a specific name.
Bompland, Argentina.

[RHYNCHOMILICHIA, Hendel.]

1903. Wien. Ent. Zeit., 22: 250.
1932. Hendel, Konowia, 11: 134.

As restricted recently by Hendel this genus contains only two species, both South American. The originally cited genotype, *R. argyrophenga*, Schiner, was a misidentification by Hendel according to that author, and in the last paper cited above he has given the species a new name as shown below.

[*Rhynchomilichia schineri*, Hendel.]

1903. *Rhynchomilichia argyrophenga*, Hendel (nec Schiner), Wien. Ent. Zeit., 22: 250.
1932. *Rhynchomilichia schineri*, Hendel, Konowia, 11: 136.
Bompland, Argentina. 1 ♀, 2 ♂♂.

Eccoptomma, Becker.

1907. Ann. Mus. Nat. Hung., 5: 540.

This genus is quite similar to *Milichiella*, being distinguished mainly by the bristling of the mesonotum, which has four pairs of well-developed dorsocentrals and some pairs of long setulae in the intradorsocentral area amongst the shorter setulose hairs.

All the three described species are reported from Chile, only one being known from adjacent countries, Peru and Bolivia.

As I can find no genotype cited I am now designating as such *E. frontale*, Becker.

Becker's key is rather unsatisfactory, based as it is entirely upon the colour of the abdomen and the extent of its silvery-white dusted markings in the males. I find that there is a great degree of variation in the extent to which the lateral margins of the tergites are incurved and also in the extent of telescoping of the tergites, which has a decided effect upon the amount of exposure of the pale markings. In the large series of males now before me I find difficulty in determining whether they all belong to one species, but after making allowance for variation due to the expansion or retraction of the segments I believe they all belong to the same species.

Eccoptomma frontale, Becker.

1907. Ann. Mus. Nat. Hung., 5: 542.

In expanded specimens the males have the abdomen dull brownish-black, with the sides of second tergite, bases of third, fourth, and fifth, and sides of the first two, silvery-white dusted, sixth whitish-grey dusted. Becker calls my sixth tergite the apex of fifth, which it resembles because of the poor differentiation.

Bariloche, Ensenada, Puerto Varas, Ancud, Angol.
There are no females amongst the material in hand.¹

MILICHIELLA, Giglio-Tos.

1895. Ann. Soc. Ent. France, 64: 367.
1898. *Ophthalmomyia*, Williston, Trans. Ent. Soc. Lond.: 426.
1903. *Stenoporomyia*, Hendel, Wien. Ent. Zeit., 22: 250.

One or more species of this genus have been recorded from all the faunal regions, one in particular, that first listed below, being of almost cosmopolitan occurrence.

The very noticeable angulate emargination near the middle of the hind margin of the eye in both sexes readily distinguishes the

¹ The males were found flying in small swarms in the sun, a habit recorded for other *Milichiella*.

genus from most of its allies, and the lack of presutural dorsocentrals and well-developed bristles on the centre of the disc of the mesonotum distinguishes it from *Ecoptomma*, Becker, which is confined to the territory immediately adjacent to that covered by this report.

Milichliella lacteipennis (Loew).

1865. *Lobioptera lacteipennis*, Loew, Berl. Ent. Zeitschr., 9: 185.

This species has the abdomen entirely black in both sexes, which is unusual in the case of males in the genus. It is found in many countries of both hemispheres, the larvae as scavengers, the adults usually on flowers.

Angol. 1 ♀.

[*Milichliella lucidula*, Becker.]

1907. Ann. Mus. Nat. Hung., 5: 537.

Very similar to the preceding species, but readily distinguished in the male sex by the presence of a silvery-white dusted mark on each side of the second tergite at apex on the lateral curve.

Bahia Blanca. 1 ♂.

This species is extralimital, but being originally obtained from Peru and Bolivia, and having been recorded since from North America, where I have taken it in Illinois and the District of Columbia, it is very probable that it will yet be found in the territory now reported upon.

DESMOMETOPA, Loew.

1865. Berl. Ent. Zeitschr., 9: 185.

1864. *Macrurus*, Lioy, Atti Inst. Veneto, (3) 9, 1313. (Preoccupied.)

The peculiar M-shaped velvety-black mark on the frons is characteristic of this genus.

There is but one species in this collection.

Desmometopa m-nigrum (Zetterstedt).

1848. *Agromyza m-nigrum*, Zetterstedt, Dipt. Scand., 7: 2743.

Osorno; Angol; Valparaiso, on board a steamer off the coast.

This last record would appear to indicate at least one method of distribution of the species, which occurs in Europe, Asia, Australia, and North and South America.

PARAMYIA, Williston.

1897. Kansas Univ. Quart., 6: 1.

There is but one described species of this genus which is apparently widely distributed in the New World, as I can see no distinctions between specimens taken by me near Washington, D.C., and those before me from Brazil and Patagonia. I have a second species from Peru that may occur in Chile and briefly describe it below.

Paramyia nitens (Loew).

1869. *Phylomyza nitens*, Loew, Berl. Ent. Zeitschr., 8: 45.

1897. *Paramyia nigra*, Williston, Kansas Univ. Quart., 6: 2.

Williston based his description on specimens from Grenada; Loew's were from Pennsylvania.

Casa Pangué. 3 ♀.

[*Paramyia fumipennis*, sp. n.]

A larger species than the foregoing one, with much darker wings, the costa being dark brown from apex of first vein to apex of second and as far on to field as the latter.

♀. Length, 2.75 mm.

Head entirely shining black, with the frons glossy, microscopically shagreened, the interfrontalia on each side of the triangle more brownish and less glossy than the triangle; antennae and palpi entirely black. Distance between posterior ocelli distinctly less than that from either to eye, the pair of incurved bristles directly behind the ocelli stronger than in *P. nitens*; third antennal segment slightly angulate at upper apex; palpi as long as head, more tapered at apex and with fewer and stronger bristles than in *P. nitens*.

Thorax as in *P. nitens*, the anterior of the two postsutural pairs of dorsocentral bristles and the anterior pair of scutellars much smaller than the other pair.

Abdomen entirely glossy black.

Legs black, tarsi dull yellow; fore femur with some short posteroventral setulae and no strong bristles.

Wings brownish-hyaline, veins black, marginal cell quite dark brown. First posterior cell at its apex is very little wider than submarginal cell (in *P. nitens* it is usually more than twice as wide). Knobs of halteres fuscous.

Holotype, Iquitos, Peru, Mar.-Apr., 1931 (R. C. Shannon). U.S. National Museum.

I have a specimen from Brazil that may represent a third species as the apex of first posterior cell of the wing is hardly wider than in *P. fumipennis*, and the knobs of the halteres are yellow. It has been in alcohol, so that this last character may be due to that fact and I leave it tentatively as *P. nitens*, with which it agrees in other respects.

AGROMYZIDAE.

The great majority of the members of this family are very readily distinguished from their allies, the most reliable characters for that purpose being found in the divergent postvertical bristles, the presence of one or more reclinate upper, and from two to six incurved lower orbital bristles, the bristled vibrissal angle, presence of one or more bristles on the upper margin of the sternopleura and on the hind margin of the mesopleura, the