

Gregor, 1973

- Antennal segment 3 smaller and narrower; arista very long, almost 3 times as long as segment 2. Hypopygium with left cercus conspicuously long and very broad, dorsal processes on both lamellae very long. . . . . *♂ P. pygmaea* sp. n.
- 5 (2) Frons dull grey. Legs extensively blackish, mid femora about 1.5 times as stout as fore femora. Antennal segment 3 pointed towards tip; arista subequal in length. Wings very slightly tinted brownish. Hypopygium rather small, apical processes and cerci only slightly overlapping hypopygium. . . . . *P. albocapillata* (Fall.)
- Frons polished black. Legs bicoloured, yellowish brown and black, mid femora stouter, about twice as deep as fore femora. Antennal segment 3 broader towards tip; arista slightly longer. Wings brown clouded. Hypopygium very large, dorsal processes and left cercus conspicuously long. . . . . *P. nitrocapillata* sp. n.
- 6 (1) Antennal segment 3 about 4 times as long as deep; arista subequal or slightly longer than antennal segment 3 scarcely twice as long as deep; arista much longer. . . . . *♂ P. argenteola* (Coll.)
- 7 (6) Acr biserial, mesonotum almost bare, thoracic hairs minute. Legs yellow or brownish. Hypopygium closed with cerci concealed in lamellae. . . . . *♂ P. argenteola* (Coll.)
- 8 Acr quadriserial, longer and distinct. Legs extensively blackish. Hypopygium with long cerci overlapping lamellae. . . . . *♂ P. argenteola* (Coll.)
- 8 (7) Frons at least as deep as front ocellus, fore femora with a double row of longer dark bristly hairs beneath. Hypopygium small. . . . . *P. nitrocapillata* sp. n.
- Eyes practically touching on frons, fore femora with only short fine pale pubescence beneath. Hypopygium conspicuously large. . . . . *♂ P. nitrocapillata* sp. n.
- 9 (7) Mesonotum and sternopleura largely polished black. Large thoracic bristles and long posteroventral bristles on mid femora yellowish. . . . . *P. flavivitta* nom. n.
- Mesonotum entirely thick grey dusted, sternopleura narrowly polished only anteriorly. Large thoracic bristles and long posteroventral bristles on mid femora blackish. . . . . *P. obscurus* (V. Kos.)

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Two new species of the genus *Meoneura* Rondani (Diptera, Mniichidae) from Czechoslovakia

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The holarctic genus *Meoneura* comprises about 35 species and is one of the little known genera of acalyptrate Diptera. About 80% of the known species of this genus have been described since 1930 (Collin, 1930, 1937, 1949; Drda, 1936; Frey, 1935; Gregor, 1971; Hexvig, 1937, 1948; Sabrosky, 1959, 1961). Their relative habitual uniformity contrasts with a considerable diversity of structures in the male genitalia, from which all the known species can be easily identified. *Meoneura milleri* sp. n. described in this paper, is quite characteristic in the morphology of its male genitalia, whereas *Meoneura acutiterca* sp. n. is closely related to the British species *M. bicuspidata* Collin, 1930. It is possible that *M. bicuspidata* and *M. acutiterca* may well represent a geographically "dualspecies" similarly as *M. laetipennis* Fall. and *M. glaberrima* Beck., and *M. minutissima* Zett. and *M. alpina* Hexvig.

Thanks to extensive material of the two new species the author could follow the variability of habitual characters used in determination keys. It seems as if the variability of characters mentioned is more extensive than previously assumed in *Meoneura*. This makes it difficult to distinguish females on the basis of keys and characters given in the literature. The application of these characters appears to be problematic also because the new species recently discovered are less distinct in their habitual characters.

*Meoneura milleri* sp. n.

(Figs. 1-3)

1.4-2.0 mm. Black subshining species with thinly pollinose, brown black fore part of front, whitish knob of halteres, three pairs of dorsoventral bristles. The species is related to *M. neodiphila* Collin and *M. bicuspidata* Collin, as indicated by its habitual character, though completely different in male terminalia, which have side lamellae similar build as *M. lamellata* Collin. I dedicate this species after Prof. Dr. F. Miller, D.Sc., Full Professor of Entomology, College of Agriculture, Brno.

Male, holotype

Head black, only the anterior 1/3 of frons black-brown and a narrow stripe above antennae ochraceous; frontal triangle three-fifths as long as front, polished caudally; proximally scarcely rugulose and poorly distinguished; cheek frontally not substantially broader than width of 3rd antennal segment, caudally twice broader, frons distinctly convergent; eye subrounded; chaetotaxy normal, middle bristle of the three situated in the



vibrissal angle distinctly shorter than the others; 3rd antennal segment as broad as long; brown to black; arista shortly pubescent.

Thorax practically as broad as head, black, subshining, slightly grey pollinose; scutellum densely pollinose, flattened; three pairs of de: pre-scutellare strong, three times longer than 1st pair, second pair shortest and positioned near to prescutellare; mesonotal mi between de frontally in six irregular rows; other chaetotaxy as usual.

Wings transparent, iridescence not differentiated in the wing area (compared with *M. acuticera* sp. n.), fore veins pale brown, wing tip slight angulated, first costal sector setulose as usual; vein r<sub>2+3</sub> bisinuate, outer half of r<sub>1+2</sub> slightly bent inwards. Knob of halteres whitish, twice length of second joint.

Legs. Fore femur with two strong pr-bristles on distal third, one soft bristle is positioned distal to pr bristles; middle and hind metatarsus a little more than twice as long as second joint of the same tarsus.

Abdomen pitch black, finely rugulose; tergites 3rd—5th nearly of the same length, 5th frontally narrower than 4th and becoming even more narrow caudally, 5th tergite with 8 marginal bristles, the longest of them being half as long as length of tergite; membrane of 3rd segment on both sides with one row and membrane of 4th and 5th segments with two rows of 2 to 3 thorn-like setae; 5th sternite deltoid, its hind margin twice as broad as fore margin, each edge with one pair of chaetae tapering outwards. Male genitalia well characterised. First lamella pale brown, strongly bent at basis, with single long bristles, second lamella black, dorsoventrally flattened, its end spiral and a little spatuloid; on fused tergite (9—10) and under 3rd lamella laterally crowded long bristles are present. 9th sternite (Gabelplatte sensu HEXTER, 1937) with two hooklet-like thorns.

Measurements (in mm). Width of head 0.48, height of head 0.35, length of head 0.24, height of eye 0.24, cheek anteriorly 0.066, posteriorly 0.132, width of front anteriorly 0.21, posteriorly 0.28, length of thorax 0.60, width of thorax (interdistance of humeral bristles) 0.46, length of wing 1.43, III, costal sector 0.27, IV, costal sector 0.23, hind leg: length of femur 0.39, length of tibia 0.35, length of tarsus 0.42 (0.176—0.070—0.062+0.044).

Variability. Colouration of the fore section of front varying from dark reddish to black according to the degree of pigmentation of the imago. Second pair of de invariably shorter than first pair, sometimes only as long as acrostichal microchaetae and then only two visible pairs of de are present. Position of de corresponds always the reduction of 4 pairs, namely 1+1+0+0+1, contrary to 1+1+1+1, as seen e.g. in *M. triangularis* COLLIN. Relative length of hind metatarsus varying from twice to three times as long as 2nd tarsal joint of the same tarsus.

Material. 22 ♂. Devin in Pavlovski vrel'y-hills, Moravia merid., 13. X. 1971, hatched on human faeces, sunny day, 22° C, poorly striped (galite), exposed to south, 350 m a.s.l. — 1 ♂. Vd'lye Chod — mountain near Jozosoborok, Slovakia centr., 12. VII. 58, hatched on human faeces, sunny day, 27° C, Sesiherium (galite), 1500 m a.s.l. — Holotype ♂ and 5 Paratypes (Devin, same data) in Moravian Museum. Brno: remaining Paratypes in the author's collection. Female unknown.\*

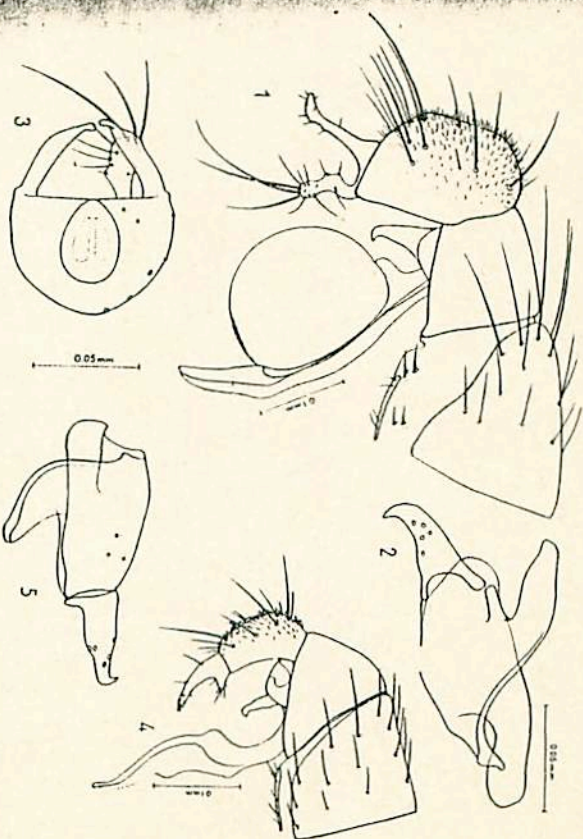
*Meconeta acuticera* sp. n.

(Figs. 4—5)

1.2—1.6 mm. Black subshining species thinly pollinose, black or nearly black frons, whitish knob of halteres, three pairs of de bristles, with 2—3

\* See foot-note p. 140.

strong bristles on distal third of fore femur; male terminalia similar to those of *M. bicuspidata* COLLIN, but the longer thorn on both the side lamellae is relatively straight, 1/4 shorter than the epandrium and carries at the basis a much shorter and obtuse thorn; in *M. bicuspidata* both these differ slightly in length and are not longer than 1/2 of epandrium.



Figs. 1—3. — *Meconeta milleri* sp. n., male terminalia, lateral view, 2 — hypandrium with lamellae, caudal view, simplified, 3 — 9th sternite, lateral view, Figs. 4, 5. — *Meconeta acuticera* sp. n., male terminalia, lateral view, 4 — 9th sternite, lateral view, 5 — 9th sternite, lateral view. Scales 0.1 mm to Figs. 1, 3, 4.

Male, holotype

Head black; frons above antennae dark ferruginous; frontal triangle reaching 3/4 of frons, polished caudally and scarcely rugulose proximally, subshining; frons slightly convergent, cheek visibly broader than width of the third antennal segment, posteriorly 1/3 broader than anteriorly; eye subrounded; middle bristle of the three bristles present in the vibrissal angle distinctly shorter than others and converging medially, prv slightly divergent; third antennal segment as broad as long; arista shortly pubescent. Thorax black, same breadth as head, subshining, slightly rugulose and pollinose; scutellum densely pollinose, less convex but not flattened; three pairs of de: prsc strong, twice as long as both the fore pairs, second pair situated nearer to the scutellar than to the first pair; mesonotal microchaetae between de frontally in six regular rows; pteropleura bare, other chaetotaxy as usual.

Wings transparent, iridescence localized: area between costal vein and r<sub>4+5</sub> generally golden-iridescent, hind part of wing generally violet-iridescent as usual.



(not well seen in alcohol material); fore veins pale brown, costal vein hardly reaching over the mouth of vein  $r_{2+3}$  in the form of a pale brownish shade; vein  $r_{4+5}$  bisinuate, outer half of  $r_{4+5}$  slightly bent hindwards; knob of halteres yellowish white, nearly three times as long as second joint.

Legs black-brown, fore femur with two (left) and three (right) strong py bristles on distal third; hind metatarsus twice longer than second joint of the same tarsus.

Abdomen pitch black, finely rugulose, chaetotaxy of tergites normal; second to fourth sternites three times longer than broad; fifth sternite 1/3 longer than broad, caudally with a row of four setae, frontally with 5 irregular setae; membrane of third segment with a row of thorn-like setae; membrane of 4th and 5th segment with 5-8 irregularly placed thorn-like setae on both sides.

Male genitalia. 3rd lamella reduced, 2nd (or fused 1 + 2) forming a long inwards-bent black thorn on the basis of which is frontally a smaller obtuse thorn; on convex part of big and on tip of small thorns are several bristles and hairs; epandrium slightly flattened, but distinctly convex above third lamella, densely haired, the longest hairs being positioned laterally above and under third lamella, their length corresponding with the longer thorn of second lamella; tergite 6 - 7 strongly sclerotised, bare, probably not completely retractile; 9th sternite with two black somewhat hooklet-like thorns posteriorly.

Measurements (in mm). Width of head 0.48, height of head 0.34, length of head 0.25, height of eye 0.23, cheek anteriorly 0.081, posteriorly 0.131, width of front anteriorly 0.22, posteriorly 0.28, length of thorax 0.57, width of thorax (interdistance of humeral bristles) 0.42, length of wing 1.24, III. costal sector 0.21, IV. costal sector 0.19, hind leg: length of femur 0.31, of tibia 0.33, of tarsus 0.34 (0.130 - 0.065 - 0.045 - 0.035 - 0.065).

Variability. Colouration of frons varying similarly as in *M. milleri* sp. n. First and second pairs of dc usually same length, their position being the same as in *M. milleri*. Localization of iridescent shine relatively constant. In some imagines a comparatively distinct continuation of the costal vein beyond the mouth of  $r_{2+3}$  is visible. This character has so far not been observed in *Meoneura*, but is not constant in this case. Position and number of bristles on both the processes of second lamella are constant and no convergences towards *M. bicuspidata* COLLIN were observed.

Material. 28 ♂, Dévin in Pavlovské vrchy-hills, Moravia merid., 13. X. 1971, baited on human faeces, sunny day, 22° C, rocky steppe (calcite), exposed to south, 350 m a.s.l. - Holotype ♂ and 5 Paratypes (Dévin, same data) in Moravian Museum, Brno, the rest of Paratypes in the author's collection.

Female unknown.\*

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\* Together with the type specimens 2 ♂ *M. minutissima* ZETT., 18 ♂ 3 ♀ *M. triangularis* COLLIN and 34 undetermined females have been collected which probably represent both new species but at present with no positive means of distinguishing between them in this sex.

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