

**On the type specimens of *Macrocera nigricoxa*
WINNERTZ 1863 and *Macrorrhyncha exempla*
(PLASSMANN 1978)**

(Insecta: Diptera: Mycetophiloidea).

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With 5 figures.

Abstract: Additional descriptions and illustrations of the ♂ genitalia of *Macrocera nigricoxa* and *Macrorrhyncha exempla* type specimens are given. *Macrocera tusca* LOEW is a synonym of *M. nigricoxa*.

The finding of some specimens of the little known species *Macrocera nigricoxa* and *Macrorrhyncha exempla* provoked a comparison with the respective type specimens, preserved in the Forschungsinstitut Senckenberg, Frankfurt a. M. The study of the types led to the addition of some new characters to the descriptions of both species.

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***Macrocera nigricoxa* WINNERTZ 1863.**

Figs. 1–2.

1863 *Macrocera nigricoxa* WINNERTZ, Verh. zool.-bot. Ges., 13: 679.

1869 *Macrocera tusca* LOEW, Beschreibungen europ. Dipteren, 1: 17 [n. syn.].

Material: ♂ lectotype, SMF D 541, Frankfurt [a. M., HESSIA, Germany], HEYDEN, rev. PLASSMANN VII.1969 — 1♂, Bulgaria, Vratza, 30.V.1985, leg. D. BECHEV. — 1♂, ZMB 8612, type of *Macrocera tusca* LOEW, Toscana, Manor., Coll. H. LOEW.

Description of the lectotype: Length of wing 4 mm, length of antennae 4·8 mm.

Head: Dark brown, clypeus and mouthparts yellowish, palpi brown. Antennae with 14 flagellomeres, about ¼ longer than body, yellow-brown, with paler base

of flagellomeres 1–4. Length ratio of flagellomeres 1–5 = 0·45:0·38:0·38:0·38:0·45. Flagellomeres 1–6 in front with short thin setulae, at the back with short thick hairs. Apical flagellomeres slender, covered with thick hairs little longer than segment's diameter.

Thorax: Mesonotum yellow-brown with three shining black-brown fused longitudinal stripes. Pleurae and mediotergite blackish brown.

Wings: Membrane covered only with microtrichia, clear, only with one scarcely perceptible indistinct spot in the basal constriction of Cu fork. Costa produced at about $\frac{1}{4}$ from distance between apex of R5 and M1. Sc ending in C above fusion radio-mediale. Sc2 very pale, scarcely visible, situated in the basal part of Sc. R1 slightly thickened at the tip. R4 arch-shaped, beginning little after apex of R1. Fusion radio-mediale equal in length with m-cu and thrice shorter than stem of M. Sc, Rs after frm, M1, M2, M4, Cu1b and An from above with macrotrichia; from below similarly, but R1 with macrotrichia only in apical part.

Legs: Coxae I and II yellow-brown, coxae III black-brown. Femora and tibiae yellowish, tarsi pale brown. Ratio tibia I : fore tarsomeres 1–5 = 1·42:1·18:0·62:0·22:0·15:0·18.

Abdomen: Coloration of lectotype is not distinct. According to the original description, tergites 1–4 are yellow, with dark bands in the fore parts, the others are entirely dark. Male genitalia as in Figs. 1–2.

Discussion: Coxae III of the lectotype of *M. nigricoxa* are dark, whereas those of the type of *M. tusca* LOEW 1869 are yellow-brownish, and yellowish in the ♂ from Bulgaria. The ♂ genitalia of the type of *tusca* have been lost (see LANDROCK 1927: T. III F. 22, and CHANDLER 1978: fig. 1). As for the ♂ genitalia of *nigricoxa* and of the Bulgarian specimen, they are quite identical. The three specimens are identical in many other characters. Thus, I consider *tusca* as a synonym of *nigricoxa*. The difference in the coloration of their coxae III seems to be just a variability in this feature.

Macrorrhyncha exempla (PLASSMANN 1978).

Figs. 3–5.

1978 *Asindulum exemplum* PLASSMANN, Senckenbergiana biol., 59 (¾): 205.

1984 *Macrorrhyncha exempla*. — PLASSMANN, Entomofauna, 5 (18): 225.

Material: ♂ holotype, SMF D 7724, Bulgaria, Balkan Mts., tributary of River Strjama above Zopot, 1.X.1976, JOOST leg. — 2♂♂, Bulgaria, Rodopi, Lilkovo, 27.VIII.1990, leg. D. BECHEV.

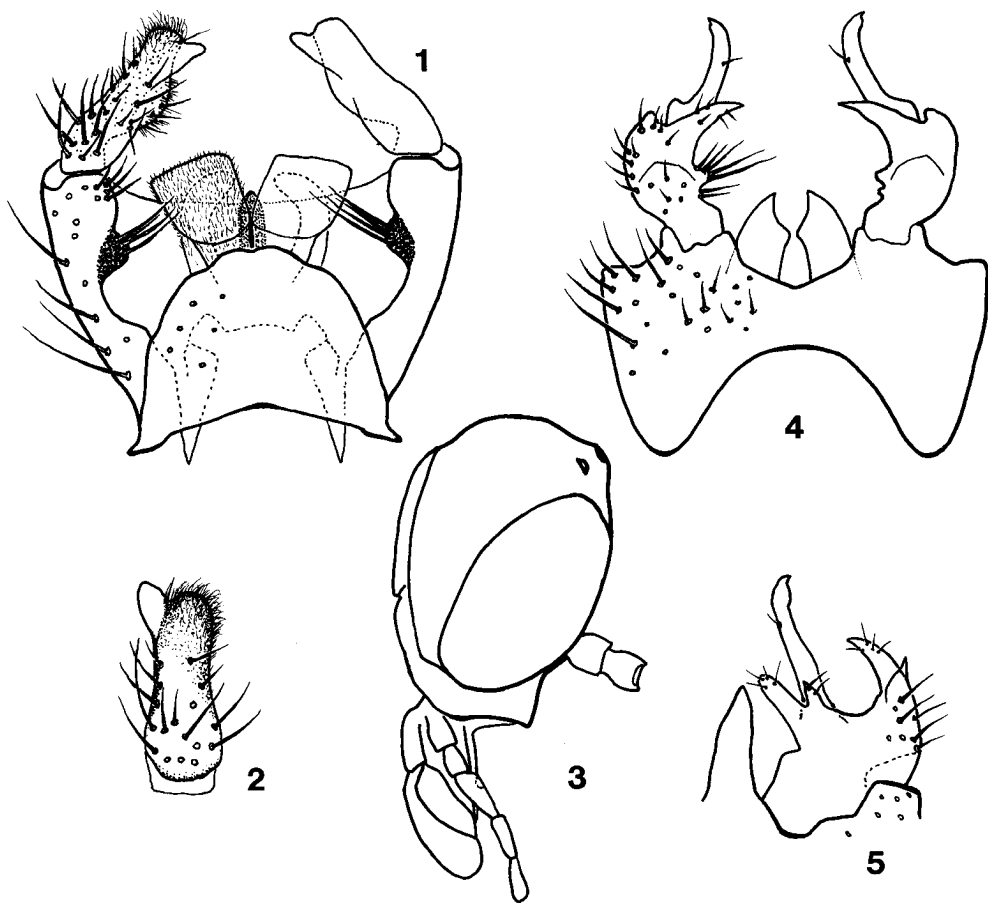
Additional description; head: Length of the mouthparts 0·7 from height of eyes (Fig. 3).

Thorax: Pronotum and propleurae with setae. Mediotergite and remaining pleurae bare. Two prospiracular setulae present.

Wings: Costa produced at $\frac{1}{2}$ of distance between apex of R5 and M1. Sc ending in C close before Rs. Fusion radio-mediale equal in length with m-cu. An ends before wing margin. R1, frm, R4+5, R5, M1, M2, M4 and Cu1b from above with macrotrichia, from below with macrotrichia only on frm and R5.

Legs: Ratio tibia I : fore tarsomeres 1–5 = 1·25:0·88:0·68:0·58:0·38:0·30.

Abdomen: Male genitalia as in Figs. 4–5.



Figs. 1-2. *Macrocera nigricoxa*, ♂ genitalia. — 1) Dorsal view; 2) gonostyle, lateral view.

Figs. 3-5. *Macrorrhyncha exempla*. — 3) Head; 4) ♂ genitalia, ventral view; 5) gonostyle, lateral view.

Discussion: This species was originally described by PLASSMANN (1978) in the genus *Asindulum* LATREILLE 1804. The structure of ♂ genitalia of *exempla* are similar to other *Macrorrhyncha* species and I consider this species was correctly transferred by PLASSMANN (1984) to the genus *Macrorrhyncha* WINNERTZ 1846. Accepting this, it becomes necessary to correct the diagnostic characters of *Macrorrhyncha* in two points:

Mouthparts elongate, length $\frac{2}{3}$ from height of eyes to several times longer than their height;

Sc ending free or in C.

References.

- CHANDLER, P. (1978): Notes on British fungus-gnats of the subfamilies Ditomyiinae, Bolitophilinae, Diadocidiinae, Manotinae and Keroplatinae (Dipt., Mycetophilidae). — *Entomologist's month. Mag.*, **113**: 31–44; London [for 1977].
- LANDROCK, K. (1927): Fungivoridae (Mycetophilidae). — In: LINDNER, E.: *Die Fliegen der Paläarktischen Region*, **2 I** (8): 1–196; Stuttgart (Schweizerbarth).
- LOEW, H. (1869): Beschreibungen europäischer Dipteren, **1**: xvi + 310 p. — In: MEIGEN, J. W.: *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*. — *Suppl. 2*; Halle (H. W. Schmidt).
- PLASSMANN, E. (1978): Neue Pilzmücken aus Schweden und Bulgarien (Insecta: Diptera: Mycetophilidae). — *Senckenbergiana biol.*, **59** (3/4): 205–215; Frankfurt a. M.
- — — (1984): Neue Mitteilungen von Pilzmücken aus dem Alpenraum (Diptera, Nematocera, Mycetophilidae). — *Entomofauna*, **5** (18): 221–233; Ansfelden.
- WINNERTZ, J. (1863): Beitrag zu einer Monographie der Pilzmücken (Mycetophilidae). — *Verh. zool.-bot. Ges.*, **13**: 637–964; Wien.

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