

A new species of Trichocera (Metatrachocera) Meigen with further records of Metatrachocera from Switzerland (Diptera, Trichoceridae)

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A new species of *Trichocera* (*Metatrachocera*) MEIGEN with further records of *Metatrachocera* from Switzerland (Diptera, Trichoceridae)

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A new species, *Trichocera* (*Metatrachocera*) *ticina* sp. n., is described and records are given of the following *Metatrachocera* species from Switzerland: *T. (M.) candida* DAHL, 1976; *T. (M.) dahliae* MENDL, 1971; *T. (M.) inexplorata* (DAHL, 1967) and *T. (M.) lutea* BECHER, 1886.

Keywords: *Trichocera* (*Metatrachocera*) *ticina* sp. n., Trichoceridae, Switzerland.

INTRODUCTION

On examining material deposited in the Musée d'Histoire Naturelle, Neuchâtel, a new species of *Trichocera* MEIGEN, 1803, subgenus *Metatrachocera* DAHL, 1966, was discovered, characterized by the genital structure not approximated by any of European representatives of the subgenus. Description of the species is presented below, based on material preserved in alcohol. Further records of the Swiss *Metatrachocera* are given, based on material from the Neuchâtel Museum and my own collection.

DESCRIPTION

Trichocera (*Metatrachocera*) *ticina* sp. n.

(Figs. 1-4)

Diagnosis. A small species. General body colouration brown, abdomen paler than thorax. Legs comparatively short. Body length 4-4.5 mm, wing length 4.5-5.5 mm.

Male. Head dark brown. Palpi comparatively short, somewhat longer than head. Antennae (Fig. 4) long, extending beyond 2/3 length of abdomen. Flagellomeres long and cylindrical. 1st flagellomere somewhat swollen in proximal half, about 1.4 times as long as 2nd. The latter and following 4-5 segments subequal in length, distal ones becoming gradually shorter and more slender. As usual in the genus, antennae are provided with dense, suberrect pubescence, slightly shorter than diameter of flagellomeres. Stouter setae, analogous to so-called verticils in e.g. Limoniidae, sparse and short, only a little longer than pubescence and somewhat

more erect, more numerous on 1st flagellomere, otherwise situated at about 2/3 length of flagellomeres.

Thorax brown. Pleura bare. Wings with venation generally usual for the genus. Following details may be significant taxonomically: Sc_1 (Sc) ending considerably before R_2 (cross-vein r or r-r), approximately at level of fork $R_{2+3}-R_4$ (normally, tip of Sc_1 lies opposite vertical R_2); Sc_2 (sc-r) opposite 1/4 Rs; R_{2+3+4} slightly longer than R_{2+3} ; discal cell generally narrow, about twice as long as high; distal section of M_{1+2} (outside discal cell) shorter than M_1 or M_2 ; A_2 only moderately arched distally, running rather close to wing margin, with cell A_2 narrow (as opposed to abruptly bent A_2 in many *Trichocera*, with cell A_2 considerably broad). The condition of A_2 in *T. (M.) ticina* sp. n. is similar to that in *T. (M.) forcipula* NIELSEN, 1920 and some other *Metatrachocera*. Halteres whitish yellow, extending beyond abdominal segment 3. Legs yellowish brown, comparatively short and stout (as in *T. (M.) forcipula*).

Abdomen paler than thorax except for dark brown segments 8 and 9. Male genitalia (Figs. 1-3) comparatively large. Segment 9 (basal ring) transverse, generally rather low (short), sternal part with protruding lateral corners, widely and shallowly emarginate distally, with row of bristles all along distal margin. Basistyle (gonocoxite) short and stout. Ventrobasal lobes of basistyles, forming so-called bridge, firmly connected, however, with distinct suture demarcating connection line, not completely fused. They are very broad at base, arising at nearly right angle from basistyle (lateral view, Fig. 2), then bent posteriorly and conspicuously narrowed and flattened laterally to produce elongate blades closely attached to each other for considerable length. On the whole, bridge looks not especially high (ventral view, Fig. 1) but it is drawn out into long, blunt point medially. Dististyle (gonostylus) stout, distinctly longer than basistyle, slightly expanded before apex (Fig. 1), then bent dorsally at about right angle (Fig. 2). Inner dorsal surface of dististyle with conical lobe situated at mid-length of dististyle and tapered apically into blunt tip, directed inwardly and somewhat posteriorly. Length of lobe equalling dististyle diameter. Parameres slender, their laterodorsal blades (lateral parts of parameres) roughly triangular, not especially broad and not considerably deflected from parameres in lateral view (Fig. 3). Vaginal apodeme of vesica (ejaculatory apodeme) dark pigmented, comparatively broad laterally. Other details in structure of aedeagal complex are evident from Fig. 3.

Female unknown.

Material examined: Holotype ♂: Switzerland/Ticino: Lugano, Mt. Bre-east (835 m), late Oct. 1984, at light (REZBANYAI - RESER leg. - in alcohol); deposited in coll. Musée d'histoire naturelle, Neuchâtel.

Paratypes: same locality as for holotype, from mid-Oct. to mid-Nov. 1984, 20 ♂♂, at light (REZBANYAI - RESER leg., in alcohol); deposited in coll. Musée d'histoire naturelle, Neuchâtel, and J. Sary, Olomouc.

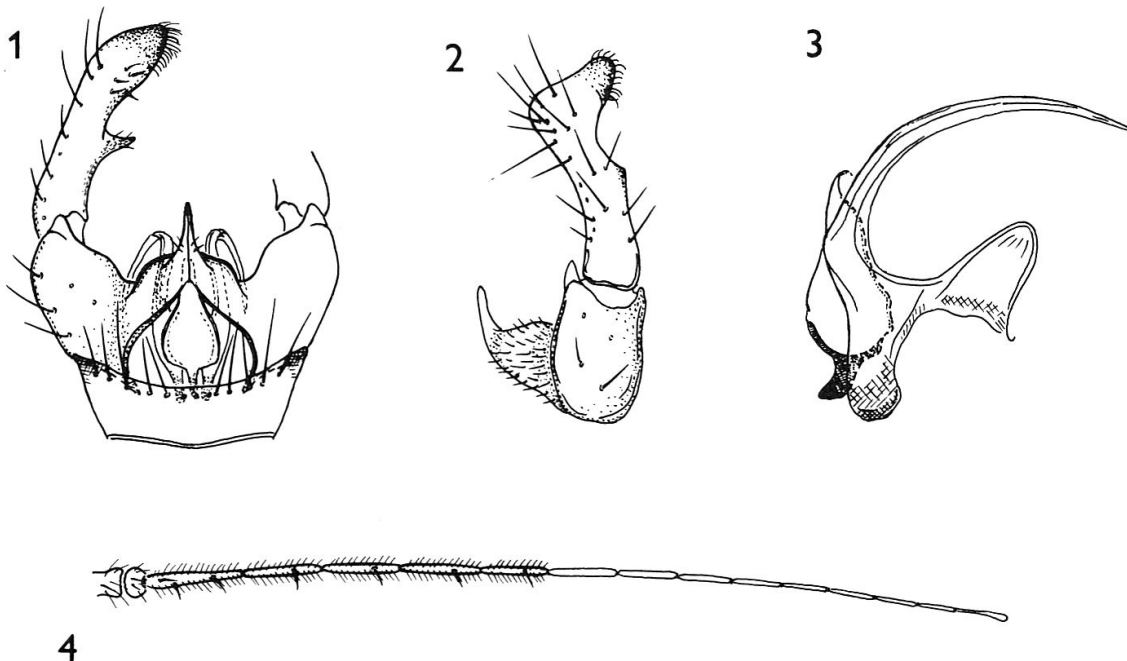
Discussion. Although not closely related to and quite different in the structure of the male genitalia, the new species resembles *T. (M.) forcipula* in general appearance, especially due to small size, pale body colouration and comparatively short and stout legs. (The body colouration as described here for *T. (M.) ticina* is most probably influenced by clearing in alcohol.) Based on the shape of the dististyle,

the new species seems to have much in common with species such as the Nearctic *T. (M.) tetonensis* ALEXANDER, 1945, and East Palaearctic *T. (M.) sakaguchii* ALEXANDER 1930; however, it differs from them in many details of the genital structures as indicated above and illustrated (Figs. 1-3 and comparable figures in ALEXANDER, 1930 and 1946).

Nomenclatural note. The name of the new species, derived from the Swiss canton Ticino where the type series was collected, is deemed to be and treated as a latinized adjective in nominative singular (with termination appropriate to feminine gender of the combined genus), in accordance with relevant provisions of the Article 11 of the ICZN (1985).

FURTHER RECORDS OF *METATRICHOCERA*

In the following paragraphs, records are given of further *Metatrichocera* from Switzerland. Considering the present taxonomic concept of the two subgenera of the genus *Trichocera*, *T. dahlae*, previously referred to *Trichocera* s. str., is better to be assigned to *Metatrichocera*, based on the overall shape of the bridge and the dististyle, and some other characters. *T. (M.) candida* and *T. (M.) dahlae* are new for the Swiss fauna. *T. (M.) lutea* was described from Switzerland by BANGERTER (1948) under the junior synonym *T. stecki*, and *T. (M.) inexplorata* was recorded by MENDL (1982). The material examined is deposited in the Musée d'histoire naturelle, Neuchâtel, and in coll. J. STARY, Olomouc. Taxonomy of European species of the subgenus *Trichocera* s. str. is understood very poorly. Except for a few forms equipped with well-defined characters (some will be discussed in a sub-



Figs. 1-4: *Trichocera (Metatrichocera) ticina* sp. n. (Paratype). 1-3: Male genitalia, general view, ventral (1) and lateral (2); aedeagal complex, lateral (3). 4: Male antenna.

sequent paper), species of *Trichocera* s. str. are vaguely characterized being often identified on inadequate features. Some species have been misinterpreted, others variously confused or neglected at all. Therefore, for the present, we refrain from giving any records on the subgenus, although rich material is available.

Trichocera (Metatrachocera) candida DAHL, 1976

Graubünden: S-chanf, Alp Vauglia, 8.x.1985, 2 ♂♂, 3 ♀♀ (GEIGER leg., in alcohol).

Trichocera (Metatrachocera) dahlae MENDL, 1971

Neuchâtel: Le Cachot, 25.xi.1992, 1 ♂; Bern: Gampelen, 27.xi.1992, 4 ♂♂, 10 ♀♀, 28.xi.1992, 4 ♂♂, 13 ♀♀ (all STARÝ leg.); Luzern: Hasle, Balmoos (970 m), 28.x.1976, 1 ♂, 21.x.1977, 1 ♂ (REZBANYAI leg.).

Trichocera (Metatrachocera) inexplorata (DAHL, 1967)

Graubünden: S-chanf, God Drosa, 8.x.1985, 2 ♂♂, S-chanf, Alp Vauglia, 8.x.1985, 1 ♂, 1 ♀ (GEIGER leg., in alcohol).

Trichocera (Metatrachocera) lutea BECHER, 1886

Luzern: Hasle, Balmoos (970 m), 26.ix.1977, 1 ♂, 16.v.1978, 1 ♂ (REZBANYAI leg.); Schwyz: Rigi, mid-July 1979, 2 ♂♂, 3 ♀♀, early August 1980, 1 ♂, 2 ♀♀ (REZBANYAI leg. - light trap - in alcohol).

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