

## A new *Trichocera* from Switzerland and the Czech Republic (Diptera, Trichoceridae)

Jaroslav STARÝ and Ewa KRZEMIŃSKA

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Abstract. A new species of *Trichocera* (*Metatrachocera*), *T. (M.) geigeri* sp. nov., is described from Switzerland and the Czech Republic. It is distinguished by very short and broad parameres.

Key words: Trichoceridae, *Trichocera*, *Metatrachocera*, new species, Switzerland, Czech Republic.

Jaroslav STARÝ, Department of Zoology and Anthropology, Faculty of Science, Palacký University, tr. Svobody 26, 771 46 Olomouc, Czech Republic.

E-mail: stary@prfnw.upol.cz

Ewa KRZEMIŃSKA, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, ul. Slawkowska 17, 31-016 Kraków, Poland.

E-mail: krzeminska@isez.pan.krakow.pl

### I. INTRODUCTION

New species of the genus *Trichocera* MEIGEN, 1803 often have recently been described from Central Europe (KRZEMIŃSKA 1999, STARÝ 1998, 1999, STARÝ & MARTINOVSKÝ 1996). In the material collected in Switzerland, two male specimens of a further new *Trichocera* were recognized. Later, another male was taken in the Czech Republic. Description of this species is given below. The new species is peculiar in having its parameres very short and rather broad, somewhat reminiscent of the condition in the *T. (T.) rectistylus* group, as defined recently by STARÝ (1998), although, based on other features of the aedeagal complex, it belongs to species around *Trichocera (Metatrachocera) saltator* (HARRIS, 1776).

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### II. SYSTEMATIC PART

*Trichocera (Metatrachocera) geigeri* sp. nov.

(Figs 1-3)

**D i a g n o s i s.** A medium-sized species. Male antenna with verticils only slightly exceeding length of pubescence. Pleural sclerites bare. Male terminalia with bridge high, and with ae-

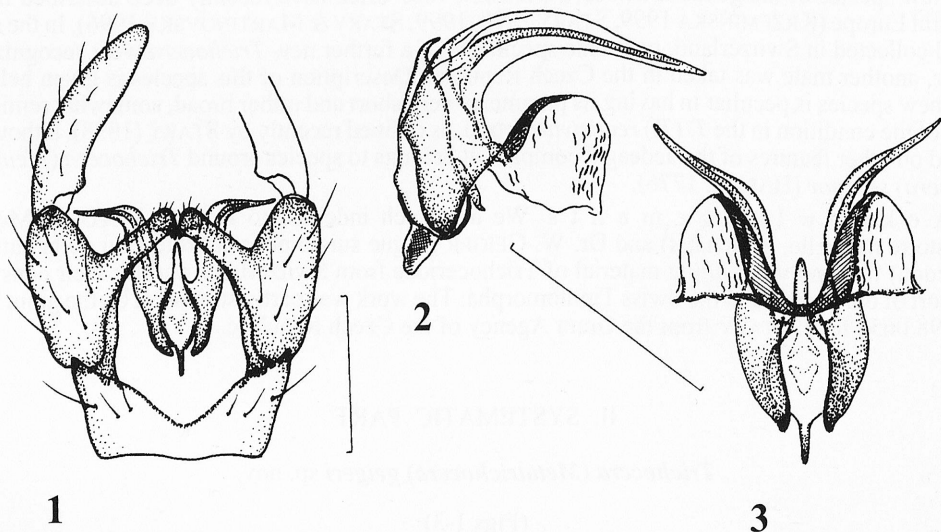
deagal complex distinguished by very short and broad parameres. Body length 5.0-6.5 mm, wing length 6.0-7.5 mm.

**M a t e r i a l.** Holotype, ♂: Switzerland: Canton Neuchâtel, Rochefort, 780 m, Chateau 551,350 / 201, 750, 3.-8.xi.1982, Malaise light trap (Ch. DUFOUR leg.; in alcohol); deposited in coll. Musée d'histoire naturelle, Neuchâtel, Switzerland. Paratypes (2 ♂♂): 1 ♂, all data as for holotype; deposited in coll. Museum of the Institute of Systematics and Evolution of Animals, Kraków, Poland. 1 ♂, Czech Republic, Moravia, Libavá env., Stará Voda, 30.x.1998, (J. STARÝ leg.; dry); deposited in coll. J. STARÝ, Olomouc, Czech Republic.

**D e s c r i p t i o n.** Head: Male antenna comparatively short, reaching to about middle of abdomen. Proximal flagellomeres cylindrical, with verticils short, delicate, not especially outstanding, only slightly exceeding length of pubescence. First flagellomere longer than second. Following three or four flagellomeres subequal in length to second.

Thorax (and other body parts) generally shiny, yellow to yellowish brown in two specimens preserved in alcohol (holotype + one paratype); in the other, dried paratype, colouration is dark brown, subshiny, slightly greyish pruinose. Pleural sclerites bare, without any setae on mesothoracic epimeron and metathoracic episternum. Wing (in dried specimen) slightly tinged with brownish, veins brown. A2 bare, except for a few setae at dorsal base. Wing venation: Crossvein sc-r (Sc2) at from one-fourth to one-third the length of Rs. R2+3+4 longer than R2+3 (about 3:2). Discal cell rather long, more than twice as long as broad, only slightly broadened distally, with median section of M1+2 and vein M3+4 only slightly divergent. Length ratio of basal, median and distal sections of M1+2 about 3:5:4. Distal section of M1+2 (outside discal cell) half the length of M1, or even less so. Male tarsal claws short, about, or less than, one-third the length of last tarsomere; the latter slightly more than half the length of penultimate tarsomere.

Abdomen. Male terminalia (Figs 1-3): Sternite 9 with wide, shallow excision. Gonocoxite comparatively stout, somewhat inflated, swollen especially at outer anterior margin, with ventrobasal lobe long and almost straight, generally parallel-sided, touching its counterpart at top of bridge; bridge high, reversely V-shaped. Gonostylus somewhat longer than gonocoxite, slightly curved inwardly, narrowed just before apex, rounded at tip, and provided with rather distinct tubercle at inner base. Aedeagal complex as in Figs 2-3, generally darkly pigmented. Paramere very short and broad,



Figs 1-3. *Trichocera* (*Metatrichocera*) *geigeri*, n. sp. 1 – male genitalia ventrally; 2 – aedeagal complex laterally; 3 – aedeagal complex dorsally. Scale = 0.25 mm.

almost as broad at base as lateral apodeme, gradually tapered to subacute tip, separated from its counterpart. Lateral apodeme (omitted from Fig. 1) roughly semicircular in outline, about as broad as high, slightly wrinkled on blade. Lateral apodemes connected to each other with narrow, darkened membraneous strip. Basal apodeme short, reaching to anterior margin of vesica; apodeme of vesica (ejaculatory apodeme) darkly pigmented, exceeding beyond basal apodeme by its entire length.

**D i s t r i b u t i o n.** Switzerland, Czech Republic.

**E t y m o l o g y.** The new species is named in honour of our friend and colleague, Dr. Willy GEIGER, Neuchâtel, Switzerland, to whom we owe highly interesting material of Trichoceridae.

### III. REMARKS

This is a species with the shortest and broadest parameres, as known within European species of the *T. (M.) saltator* species group. The shape of the parameres is reminiscent of the condition in *Trichocera* s. str., namely the *T. (T.) rectistylus* species group, as defined recently by STARÝ (1998). However, the parameres are separate for most of their length, not fused to each other at base with a membrane covering aedeagus dorsally, and the lateral apodemes are connected to each other with a narrow, darkened membraneous strip. This clearly indicates that the new species is a member of the subgenus *Metatrachocera* DAHL, 1966, and additional features, especially the simple structure of the gonostyli, place it in the *T. (M.) saltator* species group. In this case, the short parameres may be considered a secondary modification evolved from the long condition of these structures within the subgenus *Metatrachocera*. According to the preliminary key to Czech and Slovak species of the *T. (M.) saltator* species group (cf. STARÝ 1999), *T. (M.) geigeri* sp. nov. would run to the couplet 10 that separates *T. (M.) rufescens* EDWARDS, 1921 and *T. (M.) rufulenta* EDWARDS, 1938, a yellow and reddish brown species respectively, both with the bridge lower and the parameres distinctly longer.

It should be emphasized that the junior author (E. KRZEMIŃSKA) has not accepted the classification of the genus *Trichocera* into subgenera and species groups, as proposed by the senior author (STARÝ 1998), from which different classificatory views follow. However, the co-authors have easily reached an agreement on the validity of the new species.

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