



A new distinctive species of the genus *Orthocladius* with hairy eyes from Japan (Diptera: Chironomidae)

TADASHI KOBAYASHI

3-2-4-303, Mita, Tama-Ku, Kawasaki, Kanagawa Prefecture, 214-0034 Japan. E-mail: tadkoba@k.email.ne.jp

Abstract

Orthocladius (*Euorthocladius*) *piloculatus* **sp. nov.** is described from Kanagawa Prefecture, Kanto Area, Japan. A character of hairy eyes found in the new species is discussed, and emendations of the generic and subgeneric diagnoses are proposed.

Key words: Diptera, Chironomidae, *Orthocladius*, *Euorthocladius*, new species, Japan

Introduction

The genus *Orthocladius* van der Wulp is divided into six subgenera, *Eudactylocladius* Thienemann, *Euorthocladius* Thienemann, *Mesorthocladius* Sæther, *Orthocladius* s. str. van der Wulp, *Pogonocladius* Brundin and *Symposiocladius* Cranston (Sæther 2005). Most diagnostic characters given for adults of *Orthocladius* in the past, and found in a species presently described, allow its inclusion in the subgenus *Euorthocladius*. However, in diagnoses or keys to *Orthocladius* eyes have never been described as “hairy”, but either as bare or at most “pubescent”.

In the glossary, Sæther (1980) says “in chironomids eyes are “hairy” when microtrichia between ommatidial lenses are longer than height of lens. It is proposed that shorter microtrichia be called pubescent eyes”. Presence or absence of hair on eyes is supposed to be one of the most important generic characters in Chironomidae. According to definitions or keys to adults of the genus *Orthocladius* in the past the eyes always have been described as “bare” or “bare or occasionally pubescent”, never “hairy”; e.g. Brundin (1956: 93), Cranston *et al.* (1989: 216), Cranston (1999: 274, subgen. *Eudactylocladius*), Edwards (1929: 327, as *Spaniotoma* including *Orthocladius*), Langton & Pinder (2007: 70, as key couplet 27), Makarchenko (2006: 333), Rossaro *et al.* (2003: 214, *Orthocladius* s. str.), Sæther *et al.* (2000: 153, key couplet 69’), Sæther (2003: 284, *Symposiocladius*; 2005: 13, 17 in Table 3), Sasa & Kikuchi (1995: 162), Saponis (1977: 13) and Tokunaga (1940: 315, *Spaniotoma* (*Orthocladius*) *kani*). Descriptions or definitions of *Orthocladius* concerning the bare eyes may often be omitted as a matter of course.

According to Cranston *et al.* (1989), the characters of the presently described species agree well with those of genus *Orthocladius* except for the hairy eyes, as follows: anteprenotal lobes narrowed medially and narrowly jointed anterior to scutal projection and with a shallow median notch, anal point strong with lateral setae, usually triangular and pointed but sometimes parallel-sided with rounded apex, oral projections of sternapodeme present, inferior volsella double, gonostylus simple with crista dorsalis. According to Sæther (2005), acrostichals are usually present, excepting several species of the subgenus *Euorthocladius*: *O. (E.) appersoni* Saponis, *O. (E.) coffmani* Saponis, *O. (E.) kani* (Tokunaga), *O. (E.) luteipes* Goetghebuer, *O. (E.) rivulorum* Kieffer, *O. (E.) rivicola* Kieffer, *O. (E.) saxosus* (Tokunaga), *O. (E.) suspensus* (Tokunaga), *O. (E.) thienemanni* Kieffer, and *O. (Orthocladius) wetterensis* Brundin.

The present species keys to the subgenus *Euorthocladius* based on the key to subgenera by Sæther (2005), and also by Cranston *et al.* (1989) and Saponis (1977). However, differences between adult males of *Euorthocladius* and *Mesorthocladius* are not significant, thus further studies on immatures may shed new light on their systematic placement (Sæther pers.comm.).