



Four new species of *Nanocladius* Kieffer from Oriental China (Diptera: Chironomidae: Orthoclaadiinae)

YUE FU & XINHUA WANG¹

College of Life Sciences, Nankai University, Tianjin 300071, China

¹Corresponding author. E-mail: xhwang@nankai.edu.cn

Abstract

Four new species of *Nanocladius* Kieffer, 1913 from Oriental China, *N. (N.) baltus*, *N. (N.) calvatus*, *N. (N.) taiwanensis*, and *N. (N.) trinus* are described and illustrated as males. A key to the males of the Chinese *Nanocladius* is provided.

Key words: Chironomidae, Orthoclaadiinae, *Nanocladius*, new species, key, Oriental China

Introduction

The genus *Nanocladius* was erected by Kieffer (1913); the type species is *Nanocladius vitellinus* Kieffer, 1913. *Nanocladius* include two subgenera *Nanocladius s. str.* and *Plecopteracoluthus* Steffan, 1965. Steffan (1965) erected *Plecopteracoluthus* as a separate genus. However, Sæther (1977) suggested that *Plecopteracoluthus* should be regarded as subgenus of *Nanocladius* and that the diagnostic characters given for adults and pupa of *Nanocladius* by Fittkau and Lehmann (1970) should be emended to include *Plecopteracoluthus*. Sæther (1977) also demonstrated that the subgenus *Nanocladius* consists of three species groups, the *bicolor*-, *pervulus*-, and *balticus* groups.

The genus comprises 39 species worldwide; 21 species is recorded from the Palaearctic Region, 13 from the Nearctic Region, 1 from the Neotropical Region, 5 from the Oriental Region, and 9 from the Afrotropical Region (Bhattacharya & Chaudhuri 1987; Cranston & Martin 1989; Cranston *et al.* 1989; Epler 1986; Freeman 1954, 1956; Freeman & Cranston 1980; Harrison 1994; Hayashi 1998; Lehmann 1979, 1981; Makarchenko & Makarchenko 2004; Makarchenko *et al.* 2001, Niitsuma 1991; Sæther 1977; Sasa 1981, 1989, 1990, 1996; Sasa *et al.* 1988, 1998; Wang 2000; Yamamoto 2004)

Wang (1987) recorded the larva of *Nanocladius (N.) vitellinus* from the Qinghai Province in China. *Nanocladius (N.) vittelinus* is an Afrotropical species and as there is no additional material to corroborate this record, we regard it as doubtful. In the checklist of the Chironomidae from China, Wang (2000) recorded males of *N. (N.) bicolor* (Zetterstedt, 1838) from the Liaoning and Gansu Provinces and of *N. (N.) rectinervis* (Kieffer, 1911) from the Shandong Province and Ningxia Autonomous Region. After re-examining the Chinese specimens, the record of *N. (N.) bicolor* should be corrected to *N. (N.) rectinervis*.

Below we describe 4 new *Nanocladius* species from Oriental China and provide a key to the males of the Chinese species.

Material and methods

The material examined was mounted on slides following the procedure outlined by Sæther (1969). The