



Cladopelma Kieffer from the Sino-Indian Region (Diptera: Chironomidae)

CHUNCAI YAN¹, ZHAOHUI JIN¹ & XINHUA WANG²

¹ College of Environmental Science and Engineering, Nankai University, Tianjin, 300071, China

² Corresponding author: College of Life Sciences, Nankai University, 300071, Tianjin, China. E-mail: xhwang@nankai.edu.cn

Abstract

The Sino-Indian species of the genus *Cladopelma* Kieffer are reviewed and one new species from China, *C. costum* sp. n., is described and illustrated as male. The males of *C. edwardsi* (Kruseman) and *C. virescens* (Meigen) from China are re-examined. Type material of *Cryptotendipes inawaabeus* Sasa, Kitami et Suzuki, *Harnischia daitoheia* Sasa et Suzuki, *H. ginzandeeus* Sasa et Suzuki, *H. inadeeus* Sasa, Kitami et Suzuki, *H. sibacedea* Sasa, Sumita et Suzuki, *H. simantocedeae* Sasa, Suzuki et Sakai from Japan and *Cladopelma indicum* Bhattacharyay, Duta et Chaudhuri from India are re-examined, and all regarded as new synonyms of *C. edwardsi*. *Cladopelma onogawaprima* Sasa is regarded as a new synonym of *C. hibaraprima* Sasa and the species is transferred to *Cryptotendipes* as a new combination. *Cladopelma kamalanagari* Maheshwari et Agarwal from India is transferred to *Paracladopelma* as a new combination. A key to all known males of *Cladopelma* is provided.

Key words: Chironomidae, *Cladopelma*, new species, new combinations, new synonyms, key, Sino-Indian region

Introduction

The genus *Cladopelma* Kieffer, 1921 belong in the *Harnischia* generic complex. The type species is *Chironomus virescens* Meigen, 1818, designated by Harnisch (1923). The genus *Cryptoclادopelma* was erected by Lenz (1941), but due to the lack of a type species, the genus name is a nomen nudum, and according to Sæther (1977) a synonym of *Cladopelma*.

Cladopelma is easily distinguished from other genera in the *Harnischia* generic complex having an elongate, bent, usually partially constricted and pointed gonostylus, anal point often bearing setae and microtrichia, superior volsella greatly reduced, and inferior volsella lacking. To date, the genus contains 19 species worldwide, several of which are widely distributed (Freeman & Cranston 1980; Cranston & Martin 1989; Oliver *et al.* 1990; Maheshwari & Agarwal 1993; Sasa & Kikuchi 1995; Spies & Reiss 1996; Sæther *et al.* 2000; Chaudhuri *et al.* 2001; Yan *et al.* 2005a; Yamamoto 1997; Kobayashi & Endo 2008). Carew *et al.* (2005) studied the cytochrome oxidase subunit I to differentiate Australian *Cladopelma* and demonstrated that the genus in fact may contain as many as 4 species in Australia. However, further studies are required to identify the morphotypes associated with the differences found in the DNA.

Chaudhuri *et al.* (2001) listed *C. indicum* Bhattacharyay, Duta et Chaudhuri, 1985 from India; below we place this species as a synonym of *C. edwardsi* (Kruseman, 1933). Maheshwari and Agarwal (1993) described *C. kamalanagari* from India; below we transfer it to *Paracladopelma* as a new combination. Hashimoto *et al.* (1981) recorded *Harnischia viridulum* (Linnaeus, 1767) from Thailand; Yamamoto (1997) later considered these specimens to belong to *Cladopelma edwardsi*.

Makarchenko *et al.* (2005) listed five *Cladopelma* species from the Russian Far East, *C. edwardsi*, *C. goetghebueri* Spies et Sæther, 2004, *C. krusemani* (Goetghebuer, 1935), *C. virescens* (Meigen, 1818), and *C.*