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

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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. ginzandeus Sasa et Suzuki, H. inadeeus Sasa, Kitami et Suzuki, H. sibacedea Sasa, Suzuki et Sakai from Japan and Cladopelma indicum Bhattachayary, 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 Cryptocladopelma 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.