



New species and records of *Nandeva* Wiedenbrug, Reiss *et* Fittkau (Chironomidae: Chironominae)

TROND ANDERSEN^{1,3}, OLE A. SÆTHER¹ & ATILANO CONTRERAS-RAMOS²

¹Department of Natural History, University Museum of Bergen, University of Bergen, P.O. Box 7800, N-5020 Bergen, Norway.
E-mail: ole.sather@zmb.uib.no

²Instituto de Biología, UNAM, Departamento de Zoología, Apdo. Postal 70-153, Cd. Universitaria, 04510 México, D.F., Mexico.
E-mail: acontreras@ibiologia.unam.mx

³Corresponding author. E-mail: trond.andersen@zmb.uib.no

Abstract

Nandeva digitifer **sp. n.** from Chile is described and figured as male and female and *N. verruculata* **sp. n.** from Brazil as male. The female of *N. latiloba* Sæther *et* Roque is also described and figured and new Neotropical records of *N. latiloba*, *N. strixinorum* Sæther *et* Roque and *N. tropica* Wiedenbrug, Reiss *et* Fittkau are given. The female of *N. fittkai* Cranston is re-examined. New generic diagnosis and description are given for the imagines. Some character states from previous parsimony analyses are corrected and new analyses performed indicating *Nandeva* as part of Tanytarsini or as part of the sister group to Tanytarsini.

Key words: Chironomidae, *Nandeva*, new species, new records, Brazil, Chile, Mexico, Venezuela

Introduction

The subfamily Chironominae has been divided into three tribes, the Tanytarsini, the Chironomini and the Pseudochironomini (Sæther 1977). The tribe Tanytarsini can be divided into two fairly distinct groups, the subtribes Zavreliina and Tanytarsina (Sæther 1977). Recently the genera *Friederia* Sæther *et* Andersen and *Seppia* Ekrem *et* Sæther showing reduction in several features were described from the western rainforest of Ghana (Sæther & Andersen 1998; Ekrem & Sæther 2000). Both genera were placed in Zavreliina primarily because of the lacking digitus. However, of these genera no females or immatures are known.

The genus *Nandeva* Wiedenbrug, Reiss *et* Fittkau originally was described as belonging to the tribe Chironomini (Wiedenbrug *et al.* 1998). However, as stated by Sæther and Roque (2004) Wiedenbrug after publication found that the illustration of the wing (Wiedenbrug *et al.* 1998: fig. 1B) was in error and that the wing venation was of Tanytarsini type with RM continuous with R₄₊₅ and also with R₄₊₅ ending proximal to apex of M₃₊₄. Cranston (1999) found the genus in Australia and suggested that it is associated to a grouping of Gondwanian taxa, namely *Nilodosis* Kieffer, *Imparipecten* Freeman and *Fissimentum* Cranston *et* Nolte. However, both the male and the female described by Cranston were pharate and the wing venation thus not observable. Here we describe two new species and two females and re-examine the female of *N. fittkai* Cranston from Australia. While the males conform to previously described species, the Neotropical females differ in several details from that of the only previously known female.

Cranston (1999) described the female of *Nandeva* and the present paper describes the females of two additional species. The gonapophysis VIII is divided as in *Micropsectra* Kieffer and related genera, while all genera of the Zavreliina of which the female genitalia are known as well as in all *Tanytarsus* van der Wulp and related genera the gonapophysis VIII is undivided. [Trivinho Strixino and Sonoda (2006), however, mention that gonapophysis VIII in *Tanytarsus obiriciae* is slightly divided, but their drawing contradicts this]. Sæther & Roque (2004) did a parsimony analysis of the tribe Tanytarsini. Their preferred trees had *Nandeva* either as the sister genus of all the Tany-