



## ***Ubatubaneura*, a new genus of the *Corynoneura* group (Diptera: Chironomidae: Orthoclaadiinae) from the Brazilian Atlantic Forest**

SOFIA WIEDENBRUG<sup>1</sup> & SUSANA TRIVINHO-STRIXINO<sup>2</sup>

*Laboratório de Entomologia Aquática, Departamento de Hidrobiologia, Universidade Federal de São Carlos, C. P. 676, 13.565-905, São Carlos, SP, Brazil. E-mails: <sup>1</sup>s.wiedenbrug@web.de; <sup>2</sup>strixino@power.ufscar.br*

### **Abstract**

Male, female, pupa, and larva of *Ubatubaneura atlantica* **n. gen., n. sp.** from the Brazilian Atlantic Forest are described based on specimens collected from the surface of stones in low order streams and reared in the laboratory. The adults can be separated from other members of the *Corynoneura* group on the right-angled dorsolateral region of the head and on the terminal flagellomere of the antenna having a triangular apex surrounded by sensilla chaetica. The pupa can be distinguished by the presence of two long, taeniate L-setae on segments III–V, the presence of only non-taeniate L-setae on segments VI–VIII, and by having three macrosetae ventrally on the anal lobe. The 5-segmented antenna of about 1/2 the length of the head, antennal blade not longer than the flagellum, bifid SI, short body setae, and apically split sub-basal seta on the posterior parapod are diagnostic characters differentiating the larva from other genera. Several characters in the male, pupa, and larva indicate that *Ubatubaneura* has a basal position within the *Corynoneura* group of genera. Preliminary keys to the males, females, pupae, and larvae for most genera of the *Corynoneura* group are given.

**Key words:** Chironomidae, Orthoclaadiinae, *Corynoneura* group, new genus, new species, systematics, Mata Atlântica, Neotropical

### **Introduction**

The *Corynoneura* group of genera is characterized by having costa apically fused with R<sub>1</sub> and R<sub>2+3</sub>, forming a thick clavus (see e.g. Sæther & Kristoffersen 1996). Seven genera: *Corynoneura* Winnertz, 1846; *Ichthyocladus* Fittkau, 1974; *Notocladus* Harrison, 1997; *Onconeura* Andersen *et* Sæther, 2005; *Physoneura* Ferrington *et* Sæther, 1995; *Tempisquitoneura* Epler *et* de la Rosa, 1995; and *Thienemanniella* Kieffer, 1911 are included in the group. Of these *Corynoneura* is represented by 3 species in the Neotropical Region, *Ichthyocladus* by 3, *Onconeura* by 2, *Physoneura* by 3, *Tempisquitoneura* by 1, and *Thienemanniella* by 4 species (Spies & Reiss 1996; Stur & Andersen 2000; Mendes *et al.* 2004; Andersen & Sæther 2005; Paggi 2007). *Ichthyocladus* and *Physoneura* are endemic to the Neotropical Region, while *Notocladus* is restricted to the Afrotropical Region.

The genera *Thienemanniella* and *Corynoneura* are frequently listed in faunistical or ecological studies on small rivers in Brazil (i.e. Sanseverino *et al.* 1998; Stur *et al.* 2000; Henriques-Oliveira *et al.* 2003; Suriano & Fonseca-Gessner 2004; Roque & Trivinho-Strixino 2007). However, except for two species of *Ichthyocladus* Fittkau described by Mendes *et al.* (2004) no named species belonging to the *Corynoneura* group have been recorded or described from Brazil.

Pupae belonging to *Ubatubaneura* n. gen. have been recorded from the Brazilian States Rio Grande do Sul and Amazonas (Ospina-Torres 1992; Wiedenbrug 2000), but although they clearly represented a new genus within the *Corynoneura* group, the taxon was not formally proposed due to the lack of associated adults. Recently the first author obtained associated larva, pupa, and adults when collecting and rearing larvae