

Bromelicolous *Polypedilum* Kieffer from South Brazil (Diptera: Chironomidae)

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Abstract

Polypedilum (s. str.) *kaingangi* sp. n. is described and figured as male, female, pupa and larva and the female and immature stages of *Polypedilum* (s. str.) *solimoes* Bidawid-Kafka, 1996 are described and illustrated. The immatures of both species inhabit leaf axils of various bromeliad species in the Atlantic rainforest in Santa Catarina State, South Brazil.

Key words: *Polypedilum*, Chironomidae, new species, Neotropical, phytotelmata

Introduction

The genus *Polypedilum* Kieffer, 1912 has a worldwide distribution, known from all biogeographic regions, except Antarctica. According to Sæther *et al.* (2010) eight subgenera are recognized: *Cerobregma* Sæther *et al.* 1998; *Kribionympha* Kieffer, 1921; *Polypedilum* s. str. Kieffer, 1912; *Pentapedilum* Kieffer, 1913; *Probolum* Sæther *et al.* 2010; *Tripedilum* Kieffer, 1921; *Tripodura* Townes, 1945; and *Uresipedilum* Oyewo *et al.* 1998. The larvae occur in all types of standing and flowing waters, except at high altitudes and latitudes. Although *Polypedilum* is relatively well known in the Neotropical region, with approximately 70 species described or recorded, the immatures remain poorly studied. Only about ten of these Neotropical species have the immatures described (Roback & Coffman 1983; Sublette & Sasa 1994; Donato & Paggi 2008; Sæther *et al.* 2010; Mendes *et al.* 2011).

Polypedilum larvae have been recorded from many types of phytotelmata (“plant-held waters”), such as bamboo internodes (Pinder 1995), pitcher-plants of the genus *Nepenthes* (Nepenthaceae) (Cresswell 1998), tree holes (Boesel 1985; Derraik & Heath 2005), leaf axils of *Eryngium* (Apiaceae) (Donato & Paggi 2008; Siri *et al.* 2008), from *Collospermum* (Liliaceae) (Derraik & Heath 2005), and from various bromeliads (Bromeliaceae) (Cranston & Judd 1987; Epler & Janetzky 1999; Srivastava 2006; Sæther *et al.* 2010; Mendes *et al.* 2011). Moreover, *Polypedilum amataura* Bidawid-Kafka was collected in mycotelmata (“fungi-held waters”) in the Amazon (Serpa-Filho *et al.* 2007).

The new species, *Polypedilum kaingangi* and the female and immatures of *Polypedilum solimoes* Bidawid-Kafka described below were collected during a project focusing on the bromelicolous fauna in two conservation units with secondary rainforest in Santa Catarina State, South Brazil (Pinho *et al.* 2005).