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Contribution to the knowledge of Terpidinae Kluge 2009 (Ephemeroptera: Leptophlebiidae)

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Abstract

Three new species of *Terpides* s.str. from Peru are described as larvae, reared subimagoes and imagoes of both sexes, and eggs extracted from female imagoes: *T. ornatodermis* sp. n., *T. echinovaris* sp. n. and *T. contamanensis* sp. n. Besides hitherto known characters, *Terpides* s.str. is characterized by unusual structure of eggs and differs from *Fittkaulus* and *Tikuna* by arrangement of microtrichia and microlepidies on subimaginal legs. Tergalii and eggs of *Tikuna bilineata* (Needham & Murphy 1924) and eggs of *Fittkaulus amazonicus* (Kluge 2009) are described for the first time. Comments about structure, phylogenetic position and classification of Terpidinae are given.

Key words: Peru, mayflies, Ephemeroptera, Leptophlebiidae, *Terpides*, systematics, new species

Introduction

The taxon treated either as the genus *Terpides* s.l., or *Terpides*-lineage, or *Terpides*/fg1, or subfamily Terpidinae, have been discovered by Demoulin (1966), who gave diagnosis of the genus *Terpides* Demoulin 1966 based on larval and imaginal characters examined on mature larvae of a single species *T. guyanensis* Demoulin 1966 from Surinam. Before this, winged stages of three Terpidinae species had been formally described, being erroneously placed to the genus *Choroterpes* Eaton 1881 (Needham & Murphy 1924; Traver 1947).

The subfamily Terpidinae Kluge 2009 occupies a peculiar position in the phylogenetic system of Leptophlebiidae, being a sister group for the holophylum Atalophlebomaxillata, and comprising with the latter the holophylum Atalophleboculata (Kluge 2009). Earlier, an opinion about sister group relation between Terpidinae