



A new species of *Thraulodes* (Ephemeroptera: Leptophlebiidae, Atalophlebiinae) from a highly altered river in western Ecuador

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Abstract

Thraulodes quevedoensis **new species** (type locality: Quevedo, Ecuador) is described from adults and nymphs. This species was found in a moderately polluted river running through a highly altered agricultural and urban landscape of western Ecuador.

Key words: *Thraulodes*, Ephemeroptera, Leptophlebiidae, Ecuador, Quevedo, indicators

Resumen

Se describen imagos y ninfas de *Thraulodes quevedoensis* una **especie nueva** (localidad tipo: Quevedo, Ecuador). Esta especie fue encontrada en un río de contaminación moderada que atraviesa por un paisaje agrícola y urbano muy alterado en el oeste del Ecuador.

Introduction

In 2007 during a visit to the downtown area of the city of Quevedo in western Ecuador, male and female imagos of a species of *Thraulodes* Ulmer were collected in the evening at light at the city's 'Malecón' (river walk) (Fig. 1). Additional adults were collected the following year at the same location, and associated nymphs were collected in a riffle in the Río Quevedo 0.5 km upstream from where the adults were found. Additional nymphs were collected at Holandesa, a river crossing north of Quevedo. On comparing the Quevedo species with descriptions of all other known *Thraulodes* in Dominguez *et al.* (2006), it became apparent that this species was undescribed. *Thraulodes* is one of the most ubiquitous Neotropical mayfly genera in low- and mid-elevation streams. However, of the 27 known South American species only eight are known from the nymphal stage (Domínguez *et al.* 2006, Giordano & Domínguez 2005). In this paper I describe the adults and nymphs of this new species and provide some ecological notes.

Materials and methods

Adults were collected into alcohol by hand from the walls and lampposts in the Malecón. Nymphs were collected by kick-sampling riffles with a D-frame net at Quevedo and at an upstream riffle at Holandesa. In the following description, terms referring to the adult thorax follow Kluge (1994) and terms referring to the genitalia follow Traver and Edmunds (1967). Specimens are deposited in the following institutions: FAMU, Florida A&M University, Tallahassee, Florida, USA; MECN, Museo Ecuatoriano de Ciencias Naturales, Quito, Ecuador.