



A new species of *Leptobasis* from Costa Rica (Odonata: Coenagrionidae)

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Abstract

Leptobasis guanacaste is described from seasonal wetlands in dry forest in Guanacaste, Costa Rica. It is unique among the five species of the genus in thoracic color pattern and the structure of the male terminal appendages and female mesostigmal laminae and appears to be closest to *L. candelaria* through similarities in genital ligula, male metafemur, and female ovipositor.

Key words: Coenagrionidae, Costa Rica, *Leptobasis*, new species, Odonata, Zygoptera

Introduction

The family Coenagrionidae in the New World tropics has remained one of the more difficult taxonomic groups, especially the allocation of species to genera. Many genera have been catch-alls for numbers of species that were superficially similar but very likely not closely related (von Ellenrieder and Garrison 2008). Collections are still full of undescribed species, especially in the larger genera such as *Argia*, *Acanthagrion*, and *Telebasis*. Some genera have been split and recombined, presenting a taxonomic anastomosis.

One of several genera that have consistently confused taxonomists over the years is *Leptobasis* Selys, 1877. This genus was coined for the newly described species *L. vacillans* Hagen in Selys, which remains the best-known and most widely distributed species. Since that time, numerous additional species have been described in this genus, but Garrison and Costa (2002), De Marmels and Garrison (2005), von Ellenrieder and Garrison (2007), and Machado (2009) showed that many of these species were synonyms or were not congeneric with *L. vacillans*.

At present, only four species remain in the genus: *Leptobasis candelaria* Alayo, 1968, from Mexico and Cuba; *L. melinogaster* González-Soriano, 2002, from S Texas and Mexico; *L. raineyi* (Williamson, 1915) from Trinidad; and *L. vacillans* Hagen in Selys, 1877 from S Texas to Ecuador, French Guiana, and the Greater Antilles. I am herein describing a fifth species, known so far only from Costa Rica.

Methodology

Adults of all species of *Leptobasis* were examined. Drawings of the new species were made from a specimen intended to be the holotype, but the end of its abdomen was inadvertently lost later, so a different specimen was chosen for the holotype. Thus reference to figures of a male represent the paratype that was illustrated, one of those deposited in FSCA. Total length and abdominal length include appendages. Wing terminology follows Riek & Kukalová-Peck (1984), genital ligula terminology Kennedy (1916). Abbreviations for structures are as follows: pt: pterostigma; Ax: antenodals; Px: postnodals; S1-10: abdominal segments 1 to 10.