

## ABSTRACT

### THE TAXONOMY OF JAMAICAN DRAGONFLIES (ODONATA : ANISOPTERA) WITH NOTES ON THEIR DISTRIBUTION AND ECOLOGY

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The purpose of this study was twofold: first, to develop an illustrated taxonomic key for the final instar nymphs of dragonflies (ANISOPTERA) known to occur in Jamaica, and secondly, to prepare brief notes on their distribution and ecology.

A total of forty four species were investigated during this study. Twenty eight of these were collected from various lotic and lentic habitats around the island and reared to the adult stage in order to correctly identify each species. These included, Tramea onusta Hagen, a species never before recorded from Jamaica. Nymphs of the remaining sixteen species were borrowed from the collection at the University of Florida, Gainesville. The exuviae and nymphs were used to identify taxonomic characters unique to each species. These characters were identified by using light and electron microscopy. Photographs were used, where possible, to illustrate the key.

In developing the key, new characters were used

which included the mesolateral setae on the outer margin of the labium as well as spines and setae on the fore and midlegs of nymphs.

Nymphs were found in both lotic and lentic habitats with a greater diversity occurring in the latter habitat. Four species were restricted to riverine ecosystems with some of the lentic species also occurring in the slower reaches of rivers.

The mean size of Scapanea frontalis (Burmeister) was found to differ significantly (to .001 level) with altitude (based on mean abdominal lengths).