



The true *Dythemis multipunctata* Kirby, 1894, from the West Indies and proposed new taxonomic status (Odonata: Anisoptera: Libellulidae)

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Abstract

The true *Dythemis multipunctata* Kirby is illustrated and the female is described for the first time based on specimens from the type locality, St. Vincent (Lesser Antilles). The taxonomic status of the species is discussed, and notes on behavior, habitat, and range distribution are provided. *D. multipunctata* is to be considered a subspecies of *D. sterilis* (Hagen), and mainland populations previously known as *multipunctata* are now to be called *D. nigra* Martin.

Key words: Odonata, dragonfly, Libellulidae, *Dythemis multipunctata*, *Dythemis nigra*, *Dythemis sterilis*, description, taxonomy, West Indies

Introduction

The Neotropical genus *Dythemis* Hagen comprises seven species (Garrison *et al.* 2006) of which three occur in the West Indies (*D. rufinervis* [Burmeister] in the Greater Antilles and *D. sterilis* Hagen and *D. multipunctata* Kirby in the Lesser Antilles). Kirby (1894) described *Dythemis multipunctata* based on 10 males from St. Vincent, from which Kimmins (1968) selected a male from "St. Vincent/Pools near Bannonville, Jan. 12" as lectotype. Since that time, both female and larva have remained undescribed.

Dythemis multipunctata is recorded from Central and South America (Ris 1913, 1919; Needham, Westfall & May 2000; Machet 2004; Garrison *et al.* 2006; Esquivel 2006; von Ellenrieder & Garrison 2007) where two subspecies are known; *D. m. multipunctata* Kirby and *D. m. reducta*. This species is also recorded from St. Vincent and Grenada in the Lesser Antilles (Clarcke 1904; Woodruff *et al.* 1998).

Although it is well known on the mainland, we failed to find *D. multipunctata* in the Lesser Antilles, as later authors Westfall (1988) and de Marmels (1982, 1989) followed Ris (1919) in applying the name *D. multipunctata* to the widespread, blue-eyed species from Central and South America. During our studies on the island of St. Vincent in June 2010, we caught an extensive series of *Dythemis*, which we preliminarily identified as *Dythemis sterilis*. However, these specimens all had a blue metallic frons and vertex and black body. Upon comparing these specimens with Kirby's original description of *D. multipunctata*, we concluded that they represented the true *D. multipunctata* Kirby, not *D. multipunctata auctorum*. Thus, the true *Dythemis multipunctata* is endemic to the Lesser Antilles (St. Vincent) and differs specifically from mainland material currently assigned this name.

As a part of an ongoing study of Caribbean Odonata, we redescribe the male of *Dythemis multipunctata*, describe the female for the first time and propose a new taxonomic status for taxa collectively going under the name *D. multipunctata*.

Material and methods

Nomenclature follows Needham, Westfall & May (2000) for body morphology. All measurements are given in mm; total length and length of abdomen include cerci. Abbreviations for structures used throughout the text are as