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A new species of *Libellula* Linnaeus, 1758, from the Cuatro Ciénegas basin, Coahuila, México (Anisoptera: Libellulidae)

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Abstract. A new species of *Libellula* is described from specimens collected in the most interesting area of Cuatro Ciénegas, Coahuila, México. *Libellula coahuiltecana* **sp. nov.** is similar in color and morphology to *L. needhami* Westfall with which it co-occurs locally. It differs from the latter by having conspicuous orange spots on base of wings and nodal area, and costal, subcostal, and wing tip areas slightly infumated with the same color. Other differences exist in the morphology of the secondary genitalia of males and the shape of the vulvar plate of female.

Key words: Odonata, Anisoptera, Libellulidae, *Libellula*, new species, Cuatro Ciénegas, Coahuila, México

Resumen. Se describe una nueva especie del género *Libellula* a partir de ejemplares recolectados en la muy interesante área de Cuatro Ciénegas, Coahuila, México. *Libellula coahuiltecana* **sp. nov.** es similar en color y morfología a *L. needhami* Westfall con la que coexiste localmente. Difiere de esta última por poseer manchas conspicuas de color anaranjado en la base de las alas y en el área nodal de las mismas, y una coloración difusa de la misma tonalidad a lo largo de las áreas costal, subcostal y apical. Otras diferencias están dadas en la morfología de los genitales secundarios en los machos y en la forma de la lámina vulvar de las hembras.

Palabras clave: Odonata, Anisoptera, Libellulidae, *Libellula*, especie nueva, Cuatro Ciénegas, Coahuila, México

Introduction

The primarily holarctic genus *Libellula* Linnaeus, 1758, is represented in the New World by 27 species (Garrison 1991). The latest described species, *Libellula mariae* Garrison, 1992, was discovered in the highlands of Costa Rica within the Neotropical Region (Garrison 1992).

Recent general insect collecting in the most interesting area of Cuatro Ciénegas Basin, Coahuila State, Mexico, revealed individuals of a new species of this genus. We at first thought these to be variants of the locally common and widespread *Libellula needhami* Westfall, 1943, which is similar in size and coloration. The addition of this new species raises the number of species of *Libellula* known from Mexico to twelve (González-Soriano & Novelo-Gutiérrez 2007).

Material and methods

Nomenclature follows Riek & Kukalová-Peck (1984) for wing venation, Garrison *et al.* (2006) for body morphology, Kennedy (1922) and Miller (1991) for genitalia. All measurements are given in mm; total length and abdomen length include cerci; means (in parentheses) are given for more than two specimens. Wings were scanned from specimens. Abbreviations used throughout the text are as follows: FW: forewing; HW: hindwing; Pt: pterostigma; Ax: antenodal crossveins; Px: postnodal crossveins; Cx: cross veins; S1–10: abdominal segments 1 to 10; (R) right; (L) left.