



<http://dx.doi.org/10.11646/zootaxa.3999.1.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:98C60CDD-82AD-4A36-903F-C25633968508>

Three new species of the genus *Trachelas* (Araneae: Trachelidae) from an oak forest inside the Mesoamerican biodiversity hotspot in Mexico

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Abstract

Three new species of the spider genus *Trachelas* L. Koch, 1872 are described and included in the *speciosus* group based on the following features: embolus as a separate sclerite from the tegulum with no basal coils, legs with a conspicuous fringe of long trichobothria and narrow copulatory ducts coiled irregularly. The new species described are: *T. crassus* sp. n., *T. ductonuda* sp. n. and *T. odoreus* sp. n. A total of 46 specimens were collected in an oak forest near Pico de Orizaba Volcano, Mexico. Most individuals were collected on low vegetation using beating trays and direct collecting at night. Additional images are available at www.unamfcaracnolab.com.

Key words: Cybertaxonomy, Neotropical, Mexico, RTA clade

Introduction

The family Trachelidae currently includes 202 species with a cosmopolitan distribution except in Australia (WSC 2015). This family has been largely recognized as a monophyletic group traditionally placed with a subfamily rank inside Clubionidae (Gertsch 1942; Chickering 1972) and recently within Corinnidae (Bosselaers & Jocqué 2002). The first study that suggested trachelids as a separate family was Deeleman-Reinhold (2001), as part of her revision of six RTA clade families from Asia; however, that author did not change the rank. Trachelidae was recognized as a family by Ramírez (2014), separated from Corinnidae and placed within the CTC clade named after the claw tuft clasping mechanism. Trachelidae is supported by the following six synapomorphies: spination on legs III–IV reduced, absence of scales, absence of epiandrous spigots, number of major ampullate glands in female reduced to one, median apophysis absent, and secondary spermatheca (enlargement of the copulatory duct) about as large as the primary ones. In this phylogeny Corinnidae was placed several nodes away from Trachelidae (Ramírez 2014).

The genus *Trachelas* L. Koch, 1872 has currently 82 species described worldwide. In the last ten years only five species have been described, all of them from Asia (WSC 2015). America is the continent with the highest diversity, with 58 described species with a distribution extending from Canada to Paraguay. There are two taxonomic revisions that include the North, Central American and Caribbean taxa (Platnick & Shadab 1974a, 1974b), dividing *Trachelas* into four species groups: *bicolor*, *bispinosus*, *speciosus* and *tranquillus*. Forty-one species are known to inhabit the Neotropics and 18 of these have a distribution that includes Mexico (WSC 2015). Of the Mexican *Trachelas*, 14 species are known from both sexes, *Trachelas fuscus* Platnick & Shadab, 1974 only from one female specimen, and three species are only represented by male individuals: *T. rotundus* Platnick & Shadab, 1974, *T. spicus* Platnick & Shadab, 1974, *T. truncatulus* F. O. Pickard-Cambridge, 1899. Finally, some North American species have medical importance due to the mild envenomation cases that have been reported (Uetz 1973; Platnick & Shadab 1974a; Vossbrinck & Krinsky 2014). In this paper three new species of Mexican *Trachelas* are described and included in the *speciosus* group by the presence of the following diagnostic characters: