



## A new troglobitic species of the spider genus *Tengella* Dahl (Araneae, Tengellidae) from Chiapas, Mexico

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### Abstract

A new species of troglobitic spider of the genus *Tengella* Dahl is described from Mexico: *Tengella kalebi* **new species**, from a limestone cave in Chiapas, Mexico. The species is described on the basis of adult male and females. This is the fifth species described for the genus *Tengella*, the third species described from Mexico, the first species that has notable troglomorphic modifications, and the first cribellate *Tengella* species.

**Key words:** *Tengella*, cribellate, taxonomy, troglomorphic, Chiapas

### Resumen

Una especie nueva de araña troglobia del género *Tengella* Dahl es descrita de México: *Tengella kalebi* **sp. nov.**, de una cueva kárstica en Chiapas, México. La especie se describe en base a machos y hembras adultos. Esta es la quinta especie descrita para el género *Tengella*, la tercera especie descrita para México, la primera especie que tiene notables modificaciones troglomórficas, y la primera especie no cribelada de *Tengella*.

### Introduction

The spider family Tengellidae Dahl, 1908 belongs to the RTA clade and is composed of nine genera and 57 species (Platnick, 2014). Currently, there are four genera and eight species reported from Mexico: *Anachemmis* Chamberlin, 1919, with one species from Sonora; *Lauricius* Simon, 1888, with one species from Durango and Guerrero, although due to the wide distribution there might be additional species included; *Socalchemmis* Platnick & Ubick, 2001, with four species from Baja California, and *Tengella* Dahl, 1901 with two species: *Tengella albolineata* (F. O. P.-Cambridge, 1902) from Guerrero, and *Tengella thaleri* Platnick, 2009 from a cave of San Luis Potosi (Simon, 1888; F. O. P.-Cambridge, 1902; Platnick, 2009; Platnick & Ubick, 2001, 2005). The genus *Tengella* includes four extant species; the other two species are *Tengella perfuga* Dahl, 1901, originally described from an unknown locality in South America, and recently reported from Nicaragua by Leister *et al.* (2013); and *Tengella radiata* (Kulczyn'ski, 1909) from Costa Rica, Honduras, and Panama. The genus *Tengella* represents the only cribellate tengellid genus in the Western Hemisphere (Leister *et al.*, 2013).

Tengellids are medium to large spiders (5–13 mm) that may be distinguished from entelegyne spiders in having tarsi with the three claws, despite heavy tarsal scopulae or claw tufts in some cases (Ubick *et al.*, 2005; Leister *et al.*, 2013). These spiders are ground dwelling, nocturnal wandering hunters and live in open tubular burrows in the vertical sides of bare soil embankments or amongst rock outcrops and in leaf litter. However, species of the genera *Titiotus* Simon, 1897, *Liocranoides* Keyserling, 1881, *Anachemmis*, and one species of *Tengella* often have been recorded in caves, even species as *Anachemmis aalbui* Platnick & Ubick, 2005 and *Anachemmis jungi* Platnick &

described with notable troglomorphic modifications, such as loss of eyes, pale coloration, and long appendages. We could consider that the loss of cribellum and calamistrum in *T. kalebi* is also a troglomorphic modification. However, loss of the cribellum and calamistrum is actually fairly common in males of many cribellate groups, even considered as relictual in every male of a cribellate species, this loss is less common in females; in addition, loss of the cribellum within a single genus seems less common (Platnick & Ubick, 2007). Actually, there is a genus in a closely related group, *Zorocrates* Simon, 1888 (revised by Platnick & Ubick, 2007), that contains both cribellate and ecribellate members, so it is certainly possible that there are ecribellate members of *Tengella* (Platnick, pers. comm.).

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