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The male of *Tengella perfuga* Dahl, 1901 with re-description of the female and comparisons with *T. radiata* (Kulczynski, 1909) (Araneae: Tengellidae)

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Abstract

Tengella perfuga Dahl, 1901, is the type species for Tengella, the type genus for the family Tengellidae Dahl, 1908. Here, the males are described for the first time and females re-described based on new specimens collected in Nicaragua. We confirm the species status of T. perfuga (instead of previously suggested synonymy with Tengella radiata (Kulczynski, 1909)), since the colour pattern and genitalia of both sexes, particularly the palp RTA and the epigynal median septum, are unique in the genus. Important diagnostic features are illustrated for both males and females. Also new distribution records are reported for T. perfuga from Nicaragua and T. radiata from Honduras, Nicaragua and Panama.

Key words: Taxonomy, lectotype, palp morphology, cribellate, Central America

Introduction

The family Tengellidae (Dahl 1908) is currently represented by 9 genera and 57 species with a worldwide distribution (Platnick 2013). Of these nine, three are cribellate genera comprising six species (Lehtinen 1967; Raven & Stumkat 2003; Platnick 2013). Currently six genera are recognised in the New World and of these only *Tengella* Dahl, 1901, is found south of Mexico. *Tengella* also represents the only cribellate tengellid genus in the Western Hemisphere (Lehtinen 1967; Platnick, 2013). A majority of tengellids are medium to large ecribellate wandering hunters, but members of a few genera, including *Tengella*, make web structures using cribellate silk. One unifying morphological feature of this family is the presence of a third tarsal claw, despite heavy tarsal scopulae or claw tufts in some cases (Wolff 1977; Platnick 1999; Platnick & Ubick 2005, 2007).

The type species of *Tengella* is *T. perfuga* Dahl, 1901, described from two female specimens labelled only "Süd Amerika?" which has been thought to mean Brazil or Colombia (Platnick 2009). Originally *T. perfuga* was placed in the family Zoropsidae Bertkau (Dahl 1901), but later used as the basis of the family Tengellidae Dahl, 1908. The genus now includes four species: *T. perfuga*, *T. radiata*, *T. albolineata* (F. O. Pickard-Cambridge, 1902), and *T. thaleri* Platnick, 2009.

During a field trip in 2010 to Nicaragua five spiders were collected, one immature female, three mature females and a single mature male. While curating these, they were identified as *Tengella*, and after further investigation, were later determined to be *Tengella perfuga*, previously known only from the original type series. After this exciting discovery, during a second trip to Nicaragua in 2012, additional specimens were recovered from the same locality in Departamento Matagalpa and another in Departamento Jinotega (Fig. 1). An examination of the spider collection of Nicaraguan entomologist Jean-Michel Maes revealed two additional mature males from Departamento Matagalpa. These represent the first examples of *T. perfuga* known to have been collected since Dahl's (1901) original description. Here we redescribe the species, including the male for the first time. Our rediscovery is important, not only because this represents the first description of a male *T. perfuga*, but also because these specimens are the first examples of this species to be recorded in over a century, as well as the first ones from a precise locality. The validity of the species has been questioned (Lehtinen 1967; Wolff 1977 but see Platnick 2009), and we re-examine its specific status in light of the new specimens.