

SHORT COMMUNICATION

A new species of *Tinus* (Araneae, Lycosoidea, Pisauridae) from Mexico

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Abstract. A single male from Oaxaca, Mexico is described as the new species, *Tinus oaxaca*, based on distinct features of the palpus including the shape of the retrolateral apophysis, the position of components of the palpal bulb, and the color pattern of the dorsum. Notes on the current taxonomic status of the genus *Tinus* are included.

Keywords: Taxonomy, morphology, spider

A male of the genus *Tinus* F.O. Pickard-Cambridge 1901 from Mexico was found among a collection of unidentified pisaurids borrowed from the California Academy of Science, San Francisco (CAS) that was clearly different from any of the currently known species in the western hemisphere based on the types of species included in a revision of the genus (Carico 1976) and *Tinus connexa* Bryant 1940. The objective of this paper is to describe this specimen and to include notes on the current status of the genus.

The genus *Tinus* is currently represented by 11 species (Platnick 2008). Seven species in the western hemisphere are found ranging from the southwestern USA to Panama (Carico 1976) and one is located in Cuba and Hispaniola (Bryant 1940, 1948). Types of the three Indian species (Tikader 1970; Reddy & Patel 1991; Biswas & Roy 2005) were not available at the time of this writing. The published descriptions of the latter, which are based only on females, are inconclusive regarding their generic affiliation with the species of the genus in the western hemisphere.

Gertsch (1940) implied that the Neotropical genus *Thaumasia* might be the closest relative to *Tinus* and could be a subgenus of the former. Sierwald (1989, 1990), who provided extensive analyses of the female (Sierwald 1989) and male (Sierwald 1990) genitalia of several pisaurid genera, detailed several similarities of these two genera and concluded that these "...features could be evidence for a closer relationship of both genera." The close affiliation of these two genera was recently confirmed by Santos (2007) who placed the two as sister taxa in his phylogeny of the Pisauridae.

In the western hemisphere the genus *Tinus* is distinguished by details of the male palpus: the large retrolateral tibial apophysis arises dorsally, may bifurcate and often curves ventrally; the conductor is conspicuous and projects distad as a distinct, spatulate apophysis; the embolus in its pars pendula occurs in a series of distinct, often overlapping loops which are visible ventrally; part of the tegulum is a conspicuous, membranous sac which occurs in various, species-specific shapes when viewed ventrally.

Measurements are in millimeters. Abbreviations: AE = anterior eye row; PE = posterior eye row; OQA = length of ocular quadrangle, anterior; OQP = length of ocular quadrangle, posterior; OQH = height of ocular quadrangle; PLE = lateral eye of posterior row, diameter; PME = median eye of posterior row, diameter; ALE = lateral eye of anterior row, diameter; AME = median eye of anterior row, diameter; PLE–PME = length of row PLE and PME; PME–PME = length of row including both PME; ALE–AME = length of row ALE and AME; AME–AME = length of row including both AME. The names and abbreviations for structures of the male palpus used in this paper (Fig. 2) are based on the work of Sierwald (1990): bmt = basal membranous tube (= "tegulum" in Carico (1976), c = conductor, e = embolus, ma = median apophysis, pp = pars pendula, rta = retrolateral tibial apophysis, , st = subtegulum t = tegulum.

Family Pisauridae Simon 1890

Genus *Tinus* F.O. Pickard-Cambridge 1901

Type species.—*Tinus nigrinus* F.O. Pickard-Cambridge, 1901, by original designation.

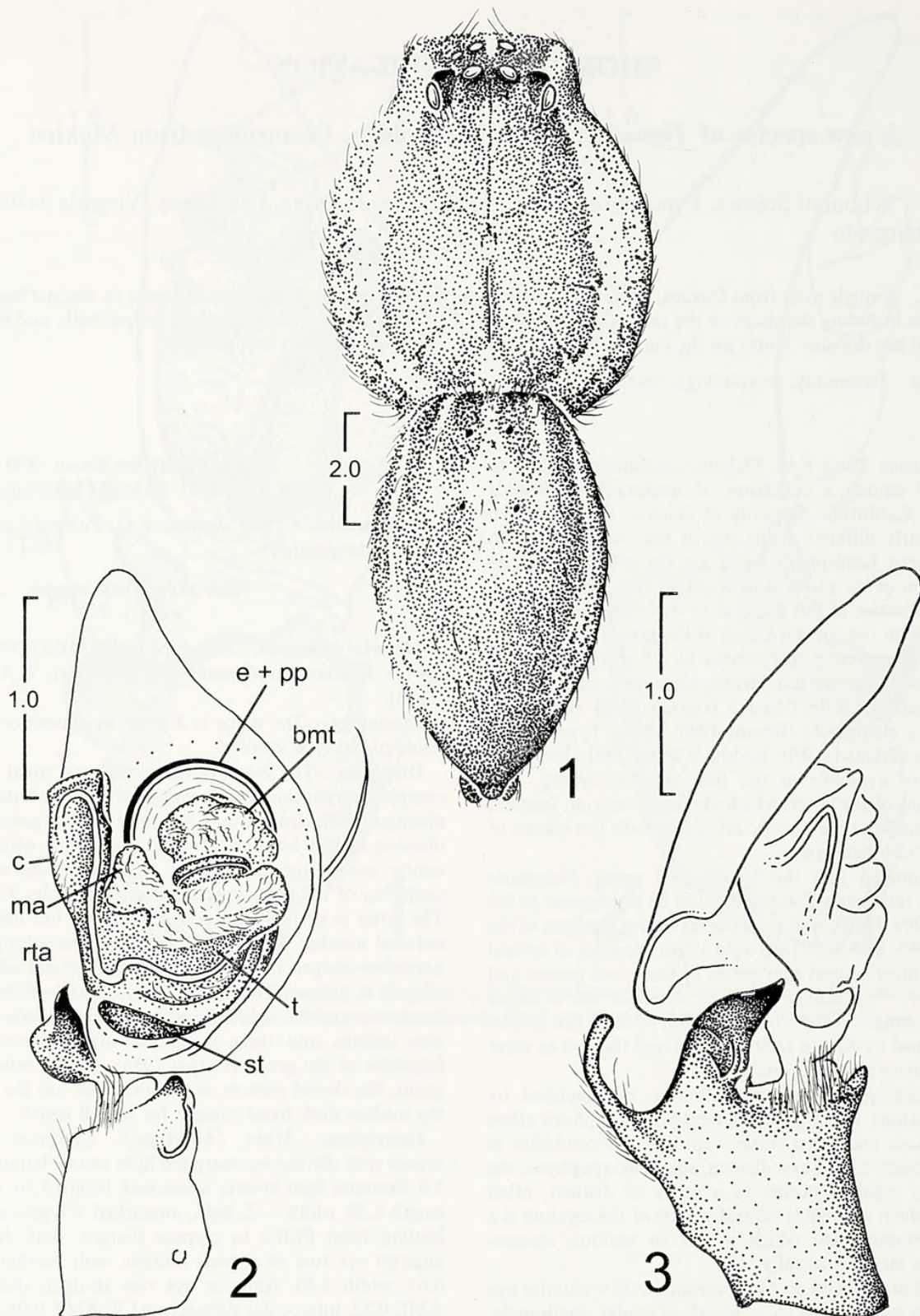
Tinus oaxaca new species
Figs. 1–3

Material examined.—Holotype male: MEXICO: Oaxaca: Rancho Carlos Minnas (coordinates not available), 1 April 1967, J. Nee (CAS).

Etymology.—The name is a noun in apposition derived from the name of the type locality.

Diagnosis.—The shape of the retrolateral tibial apophysis and the complex arrangement and shape of parts of the palpal bulb are distinguishable from other members of the genus. The large ectal division of the retrolateral tibial apophysis, which extends prominently away from the axis of the tibia along with the structural similarity of the acute ental division, resembles *Tinus palictus* most. The latter is perhaps the closest congener but differs from it in the reduced number of visible loops of the embolus/pars pendula. The horseshoe-shaped indentation on the retrolateral side of the cymbium (Fig. 2) is unique. The truncated distal end of the apophysis of the conductor and the reduced number of visible coils of the embolus are also unique, and these characters are not present in any other members of the genus (Carico 1976). Unlike other members of the genus, the dorsal pattern of the abdomen has the lateral margins of the median dark band straight for its full length.

Description.—*Male (holotype)*: Carapace (Fig. 1) medium brown with distinct submarginal light brown bands, length 6.6, width 5.6. Sternum light brown, unmarked, length 3.20, width 3.08; labium length 1.20, width 1.12, light, unmarked. Clypeus narrow dark bands leading from PMEs to clypeus margin, dark band leading from anterior eye row to clypeus margin, with median light spot, height 0.65, width 2.80. Anterior eye row straight, diameters ALE 0.26, AME 0.32; interocular distances ALE–AME 0.08, AME–AME 0.15. Posterior eye row, diameters; PLE 0.38, PME 0.38; interocular distances PLE–PME 0.42, PME–PME 0.30. Chelicerae medium brown, each with a longitudinal, dark, reticulated band narrowing from clypeus to fang origin; three promarginal teeth, middle largest, proximal two closest; three retromarginal teeth, equal size, distal two closest. Only legs II and III remain attached; II femur 9.4, patella-tibia 12.3, metatarsus 9.0, tarsus 4.1; III femur 7.8, patella-tibia 9.5, metatarsus 7.3, tarsus 3.2. Color of legs light brown with indistinct pattern dorsally on femora and patella-tibiae. Abdominal dorsum with wide, dark brown band, lateral, straight, narrow white band distinct anteriorly and becoming diffuse posteriorly, sides mottled gray, venter light and unmarked, length 6.7. Palpus (Figs. 1, 2) with



Figures 1-3.—*Tinus oaxaca*: 1. Dorsum; 2. Right palp, ventral view; 3. Right palp, retrolateral view. Abbreviations: bmt = basal membranous tube, c = conductor, e = embolus, ma = median apophysis, pp = pars pendula, rta = retrolateral tibial apophysis, st = subtegulum t = tegulum.

conductor shaped as large, distally-projecting, blade-like and truncated apophysis; median apophysis distinct, white, and rounded distally, pars pendula, transparent along with dark, curved embolus inside presenting only two loops ventrally; ectal division of retrolateral tibial apophysis long, curved, arising dorsally; ental division

large, flattened, curved, bent, acute; retrolateral surface of cymbium with a horseshoe-shaped indentation.

Natural history.—Unknown.

Distribution.—Known only from the type locality. The locality for this specimen is apparently a ranch, presumably in the state of

Oaxaca. This specific locality was not found in standard databases or gazetteers.

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