

## First record of *Trachyzelotes lyonneti* (Audouin, 1826) (Araneae: Gnaphosidae) for Mexico

María-Luisa Jiménez<sup>1</sup>, Yolanda Bizuet-Flores<sup>2</sup>  
& Pablo Corcuera-Martínez del Río<sup>2</sup>

<sup>1</sup>Laboratorio de Aracnología y Entomología, Centro de Investigaciones Biológicas del Noroeste, S.C. (CIBNOR), Instituto Politécnico Nacional 195, Playa Palo de Santa Rita Sur, La Paz, B.C.S. 23096, México – [ljimenez04@cibnor.mx](mailto:ljimenez04@cibnor.mx)

<sup>2</sup>Departamento de Biología, Universidad Autónoma Metropolitana-Iztapalapa, Av. San Rafael Atlixco 186, Col. Vicentina, Iztapalapa, C.P. 09340, México, D.F.

**Abstract:** The ground spider *Trachyzelotes lyonneti* (Audouin, 1826) (Gnaphosidae) is recorded for the first time from México. The specimens were collected in the Biosphere Reserve of Cuatro Ciénegas, Coahuila, México.

**Key words:** Araneae, Gnaphosidae, *Trachyzelotes lyonneti*, first record, Mexico.

### Primera cita de *Trachyzelotes lyonneti* (Audouin, 1826) (Araneae:Gnaphosidae) para México

**Resumen:** La especie *Trachyzelotes lyonneti* (Audouin, 1826) (Gnaphosidae), se cita por vez primera de México. Los ejemplares fueron capturados en la Reserva de la Biósfera de Cuatro Ciénegas, Coahuila, México.

**Palabras clave:** Araneae, Gnaphosidae, *Trachyzelotes lyonneti*, primera cita, México..

Spiders of the genus *Trachyzelotes* Lohmander, 1944, are ground dwellers and have nocturnal habits. The genus is apparently native from the Mediterranean region; it consists of 20 species distributed worldwide, four of which are cited for America: *T. barbatus* (L. Koch, 1866), *T. jaxartensis* (Kroneberg, 1875), *T. kulczynskii* (Bösenberg, 1902) and *T. lyonneti* (Audouin, 1826), which were probably introduced from Europe or from the Mediterranean region (Platnick, 2012).

Spiders of this genus differ from other genera of *Zelotinae* by the presence of a cluster of stiff setae on the anteromedian surface of the chelicerae. Three groups of species are recognized according to the genitalia characteristics (Platnick & Murphy, 1984): 1) *pedestris*, which only has one species, *T. pedestris* (C.L. Koch, 1837). The male of this species has a uniquely elongated terminal apophysis, and fused massive anterior epigynal ducts. 2) *barbatus*, with eight species, including males with distally rounded terminal apophyses and embolar bases, and females with anterolaterally expanded epigynal ducts. 3) *lyonneti*, which includes five species in which the males have obliquely oriented terminal apophysis and embolar bases, and the females have a semicircular anterior epigynal margin.

Specimens of *T. lyonneti* were collected in the Protected Area of Cuatrociénegas, located between 26°45'00" and 27°00'00" N, and 101°48'49" and 102°17'53" W (INEGI, 2011), in the municipality of Cuatrociénegas de Carranza, Coahuila, México. The valley of Cuatrociénegas is located in the ecoregion of xerofitic shrub of the Chihuahua Desert (Garza de León *et al.*, 2007). This protected area consists of a valley that includes a set of underground rivers, marshes, beaches, lakes, canals, ponds and water springs. Limestone Mountains originated from the sediments of the Tethys Sea in the Mesozoic era (SEMARNAP, 1999). The weather is dry, with winter rains that vary between 100 and 440 mm, and fall as scarce downpours. Temperature varies between 4 °C in winter and 40°C during the last months of spring, and summer (INEGI 2011).

Spiders were captured with ramp traps (Bochard *et al.*, 2000). The recipients were filled with 1% water-soap and 70% alcohol solution. Specimens were fixed in 70% alcohol and deposited in the Arachnological Collection of Centro de Investigaciones Biológicas (CARCIB) La Paz, México. Body measurements are given in millimeters according to Platnick & Shadab (1975).

*Trachyzelotes lyonneti* (Audouin, 1826) Fig. 1-3.

MATERIAL EXAMINED. MEXICO: Churince, Coahuila. 11 March 2011, 1♂, 26 July 2011, 1♀; M.Y. Bizuet leg.

Specimens of *T. lyonneti* from this locality are similar in size and

general appearance to those specimens described by Platnick and Murphy (1984) but with some variations in the following characters: Carapace light brown without marks and with very few setae. Sternum oval with numerous setae around the margin and spaced in middle section. Retromargen cheliceral with six small teeth. Opisthosoma grey with two dorsal dark intermittent lines. Legs light brown, apparently without marks, hairy, tarsi darker, tarsal claws with five teeth on ventral surface. Terminal apophysis of pedipalp sharply pointed, median apophysis curved and robust with a tibial apophysis ending in a wide inclined tip (Fig. 1). Female with median epigynal ridge curved and short, anterior epigynal copulatory ducts wide and forming an "M" (Fig. 2-3).

**BIOLOGY.** Specimens of *T. lyonneti* were collected in March and July from the ground in a mezquite (*Prosopis glandulosa*) dominated habitat.

**REMARKS.** This species was originally described from Egypt or Syria with only one male specimen which is apparently lost. Today, it is distributed in Turkey, the ex Soviet Union, Israel, Algeria, Morocco, Madeira Islands and Saint Helen, and in many localities in California, Illinois, Missouri and Texas in the United States (Platnick & Murphy, 1984). In Brazil it has been found in diverse localities of Rio Grande Do Sul, and in Peru (Platnick & Murphy, 1984). As well as *T. jaxartensis* (Kronenberg, 1875) this species seems to have been apparently introduced in México.

### Acknowledgements

We wish to thank Norman Platnick (American Museum of Natural History) for corroborating the determination of this species, to the students and staff of the CBTA 22 "Venustiano Carranza" and Gerardo Hernandez for the photograph edition. This study was supported by the project Alianza WWF-FCS.

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**Fig. 1-3.** *Trachyzelotes lyonneti*: **1.** Male, right palp ventral view. **2.** Female, epigynum ventral view. **3.** Female epigynum dorsal view.

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