A new species of the genus *Enoplognatha* Pavesi, 1880 (Araneae: Theridiidae) from Iraq

Shurook Abdullah Najim¹, Kadhem Salih Al-Hadlak¹ & Osman Seyyar^{2*} ¹Department of Biology, The College of Sciences, Basrah University, Iraq ²Department of Biology, Faculty of Science and Arts, Niğde University, TR–51100 Niğde, Turkey ^{*}Corresponding author e-mail address: osmanseyyar@hotmail.com

Abstract

Enoplognatha iraqi sp. n. is described and illustrated from Iraq. Pictures of the male palp and female epigyne are presented with a description of the new species. Differences between the new species and related species are discussed.

Keywords: Araneae, Theridiidae, Enoplognatha, new species, Basrah, Iraq.

Introduction

The spider fauna of Iraq is poorly studied, and arachnological investigations are still poor (Ahmed & Ahmed, 2013). The spider family Theridiidae, also known as cobweb or comb-footed spiders, is one of the most species-rich families of spiders, with 2461 species in 122 genera (World Spider Catalog, 2015). Only one record of this family is known in Iraq. Bosmans & Van Keer (1999) recorded *Enoplognatha franzi* Wunderlich, 1995 from Amara, Iraq.

Theridiid spiders, including genus *Enoplognatha*, have great variation in shape and colouration, the majority has an abdominal pattern, but some are uniformly greyish or black. Here, a new species of this genus is described from Basrah, Iraq with photographs of the male and female genitalia.

Material and Methods

In this study, the specimens were obtained by manual collection under stones in the surroundings of Basrah, Iraq. Specimens were preserved in 70% ethanol. Examined specimens are deposited in the Niğde University Arachnology Museum (NUAM). Specimens were examined and illustrated using a SZ61 Oympus stereomicroscope. Somatic morphology measurements were taken using a scale reticule in the eyepiece of the stereomicroscope. All measurements are in millimetres. The following abbreviations are used in the text: C: conductor, Fe: Femur.

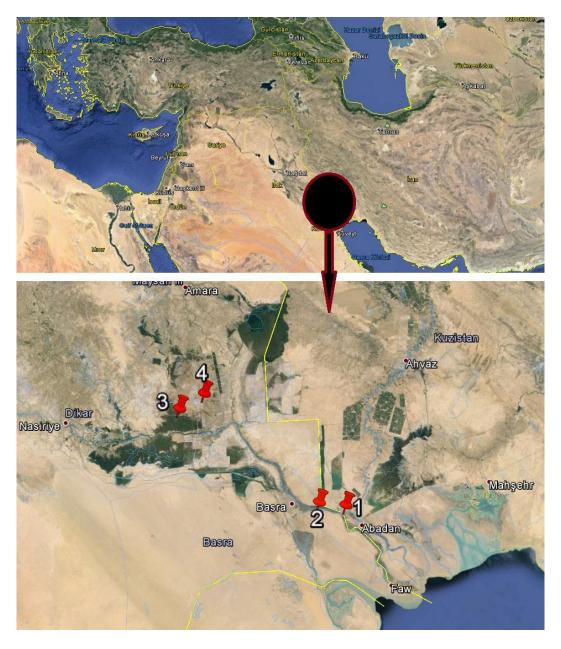


Fig. 1. Map of collecting localities of *Enoplognatha iraqi* sp. n. 1. Shat-Alarab, 2. Abu-Alkhaseeb, 3. Mdaina, 4. Al-Hwair.

Taxonomic treatment

Enoplognatha iraqi sp. n. (Figs. 2-4)

Type material: (1 \Im) Holotype male: Iraq, Basrah, Shat-Alarab (30°24'22.36"N 48°09'06.31"E, elevation 1m), 15 April 2013. Paratypes (1 \Im , 3 \Im) from same locality and date; 2 \Im , 2 \Im , Abu-Alkhaseeb (30°27'14.98"N 47°58'58.78"E, elevation 2m), 16 April 2013; 1 \Im , 1 \Im , Al-Mdaina (31°02'39.19"N 47°01'18.41"E, elevation 2m), 18 April 2013; 1 \Im , 1 \Im , Al-Hwair (31°07'04.83"N 47°13'41.08"E, elevation 3m), 20 April 2013.

Etymology: The specific name is an Arabic adjective referring to the country where it was found.

Diagnosis: The species is related to *E. diversa* and *E. macrochelis* and belongs to the diversa group. It is distinguished by the shape of cheliceral teeth, the bifid shape conductor, the distinctive extra tegular apophysis and the basally rounded triangular TTA (theridiid tegular apophysis) in male that is quite different than in *E. diversa* and *E. macrochelis*, the same for the TTA. The female is distinguished by the shape of the posteromedian depression in the epigyne. The pit of the epigyne seems also different than in *E. diversa* and *E. macrochelis*.

Description: Male (Fig. 2A): Total length 3.4–3.9; cephalothorax 1.46–1.50 long, 1.12– 1.21 wide; Fe I 1.30–2.73 long. Female (Fig. 2B): Total length 3.2–5.2; cephalothorax 0.92–1.82 long, 0.78–1.58 wide; Fe I 1.87–3.58 long. Colour: Prosoma yellowish brown, (female darker than male) with dark median and lateral stripes; sternum yellowish brown, in male with dark grey posteromedian spot, in female with bifurcate stripe; legs yellowish brown, distal part of segments and scattered spots darker; abdomen whitish with dorsal elongate dark grey to black folium, ventrally with dark grey median band, laterally flanked by two relatively wide whitish stripes. Male chelicerae with curved teeth, basally big and curved and upper small one (Fig. 4B). Male palp (Fig. 3A-B, 4A): tibia 0.24–0.26 long, cymbium 0.50–0.58 long; median apophysis large and basally rounded; theridiid tegular apophysis triangular, basally gently rounded and terminally wedge-shaped; extra tegular apophysis small and sharp, conductor large and terminally bifid; embolus short, forming half a circle. Epigyne (Fig. 3C): with small, posteromedian depression, 0.08– 0.10 wide, with only its anterior margin chitinised. Vulvae (Fig. 3D): receptacula large and oval, connected by short and thick copulatory ducts.

Distribution (Fig. 1): Known only from the region of the type locality. *Ecology*: Specimens were collected from September to April.



Fig. 2A-B. Habitus of Enoplognatha iraqi sp. n., dorsal view. A. Male. B. Female.

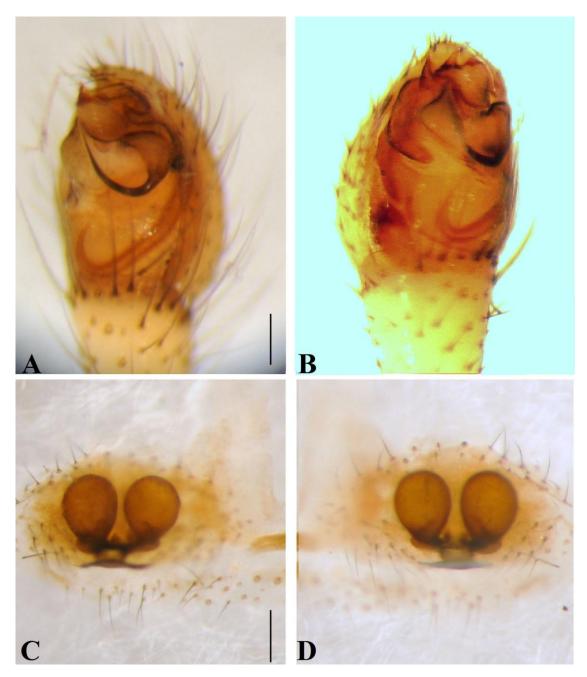


Fig. 3A-D. Genitalia of *Enoplognatha iraqi* sp. n. A-B. Male palp. A. Prolateral view. B. Ventral view. C-D. Female. C. Epigyne, ventral view. D. Vulvae, dorsal view. Scale line = 0.2 mm.



Fig. 4A-B. A. The shape of the bifid conductor of male palp. B. Male chelicerae, anterior view. Scale line = 0.5 mm.

Acknowledgments

We are most grateful to Dr. Johan Van Keer (Kapelle-op-den-Bos, Belgium) and other reviewers who reviewed the manuscript of this paper and their comments and advices helped us to improve our work and we apologize that we could not improve the illustrations more.

References

Ahmed, S.M. & Ahmed, S.T. 2013. First record of three jumping spiders (*Araneae: Salticidae*) in Mergasor (Erbil-Iraq). *Int'l J. Mol. Zoo.*, 3 (6): 20-23.

Bosmans, R. & Van Keer, J. 1999. The genus *Enoplognatha* Pavesi, 1880 in the Mediterranean region (Araneae: Theridiidae). *Bulletin of the British Arachnological Society*, 11(6): 209-241.

Bosmans, R. & Van Keer, J. 2008. Description of the male of *Enoplognatha almeriensis* Bosmans & Van Keer (Araneae: Theridiidae). *Bulletin of the British Arachnological Society* 14: 269-271.

World Spider Catalog 2015. World Spider Catalog. Natural History Museum Bern, online at http://wsc.nmbe.ch, version 16.5, accessed on {October 2015}

Enoplognatha iraqi Najim, Al-Hadlak & Seyyar, 2015 urn:lsid:zoobank.org:act:5161E674-8566-466D-BE4C-818ECBD3C3D9