

A new spider of the genus *Troglohyphantes* (Araneae: Linyphiidae) from a Turkish cave

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Abstract: A new species of *Troglohyphantes* Joseph, 1881 is described from Turkey. Differences between the new species and related species are discussed. The morphological characters to distinguish this species from the closely related species are indicated and illustrated. Notes on the habitat and some SEM photographs of this species are also given.

Key words. Linyphiidae, *Troglohyphantes*, new species, cave spider, Turkey.

The spider family Linyphiidae comprises 56 species in Turkey, with 7 of them inhabiting caves, and we recently started intensive taxonomic and faunistic studies on this family (TOPÇU et al. 2005, 2006). It includes the genus *Troglohyphantes* Joseph, 1881, the members of which inhabit cave environments and neighbouring habitats; some species are true troglolites. Although this genus is represented by 126 species in the Palaearctic region, from the Canary Islands to Iran (PLATNICK 2008), there are only two species known from Turkey, *Troglohyphantes gladius* Wunderlich, 1995 (WUNDERLICH 1995) and *Troglohyphantes pisi-dicus* Brignoli, 1971 (BRIGNOLI 1971). In the present study, we describe a new species from Turkey.

The specimens were hand-collected and preserved in 90 % ethanol. All illustrations were made with an Olympus SZX 16 stereomicroscope with drawing tube. For the SEM photos, male palps and female genitalia were dried with Critical Point Drying (CPD) for 30 minutes and mounted using a double-sided tape on the SEM stubs, coated with Au/Pd, and examined by means of LEO 440 Scanning Electron microscope.

Abbreviations used in the text and in the figures are as follows: Fm, femur; Pt, patella; Tb, tibia; Mt, metatarsus; Ta, tarsus; NUAM, Arachnology Museum of the Niğde University, Niğde (Turkey). The formula for leg spination is 1-2-3-4, 1 dorsal, 2 prolateral, 3 retrolateral, 4 ventral spines.

Troglohyphantes karolianus sp. n. (Figs 1–5)

Material. Holotype ♂ (NUAM), Turkey: Beyşehir Province, Kurucaova District, İnögü Cave (37°40'N, 31°21'E), 1280 m, 18.vii.2007, leg. A. TOPÇU & O. SEYYAR. – Paratypes 2 ♂, 12 ♀ (NUAM), together with holotype, leg. A. TOPÇU, O. SEYYAR & H. DEMİR.

Etymology. The new species is named in honour of the first Turkish arachnologist, Prof. Dr Sevinç KAROL.

Diagnosis. *Troglohyphantes karolianus* sp. n. belongs to the *polyophthalmus* group (FAGE's group IV) (DEELEMEN-REINHOLD 1978b) which has radix provided with a triangular sclerite and embolus with a sperm-duct opening in a terminal claw in male, scape wide and long and