# A NEW SPECIES OF *TEGENARIA* LATREILLE, 1804 (ARANEAE: AGELENIDAE) FROM TURKEY<sup>1</sup>

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ABSTRACT: A new species, *Tegenaria vanensis* sp.n. is described based on males from Van Province in Turkey. The current number of *Tegenaria* species in Turkey is increased to 31.

KEY WORDS: Araneae, Agelenidae, new species, systematics, Turkey

#### INTRODUCTION

The spider family Agelenidae currently constitutes 1169 species in 70 genera and has a global distribution (World Spider Catalog, 2015). There are 55 species belonging to 11 genera of the family in Turkey (Bayram et al., 2014). Agelenidae is a large family of araneomorph spiders commonly referred to as "funnel weavers." In Agelenidae, from *Tegenaria*, 30 species occur in Turkey (Bayram et al., 2014). To date, nearly 114 species have been described in *Tegenaria* worldwide (World Spider Catalog, 2015), (Bolzern et al., 2013). In this study, a new spider has been described from Van, Turkey, on the basis of the holotype male. As a result of investigation it was found that the male's palpal median apophysis, patellar apophysis and tibial apophysis differ from other *Tegenaria* species in the world. The specimen was drawn, and description, habitats and distribution are given and discussed in light of related literature.

## **METHODS**

Specimens were collected during the day by hand aspirator from under rotten logs. Pictures were taken using a Leica S8APO microscope by means of a Leica DC 160 camera. Photographs were taken in dishes of different sizes with paraffin on the bottom. Different size holes were made in the bottom to keep specimens in the right position. SEM microphotographs were made with JEOL JSM-5600 in the University of Kırıkkale. Images have been montaged using 'Combine ZM' image stacking software and 'Photoshop CS6' image editing software. All measurements are in millimeters (mm). All material will be deposited in the collection of the Arachnological Museum of Kırıkkale University (KUAM). Leg measurements are shown as: total length (femur, patella, tibia, metatarsus, tarsus); measurements of leg segments were taken from the dorsal side (Table 1). Details of leg spination for *Tegenaria vanensis* sp. n. are given in Table 2.

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**Material examined:** Holotype, 1♂ *Tegenaria vanensis* **sp. n.** specimen was collected from Van, Turkey, (38° 50' 55" N, 43° 33' 26" E), 17.06.2011. Paratypes, 2♂ Van Province, (38° 50' 55" N, 43° 33' 26" E) 17.06.2011; 1♂ Van Province, Başkale District (38° 05' 25" N, 44° 02' 25" E), 20.05.2012.

**Etymology:** The specific name is a noun in apposition taken from the type locality.



Fig. 1. Habitus and dorsal pattern of Tegenaria vanensis sp. n. male.

**Diagnosis:** The male of the new species differs from all other congeners by the shape of median apophysis. Curled median apophysis outwardly extends. In addition, retrolateral tibial apophysis is hook-shaped.

# RESULTS AND DISCUSSION

Description of male. Total length 6.1. Carapace length 3.0, width 2.6; Abdomen length 3.1, width 2.1. Carapace brownish yellow, with broad, dark margin as well as dark lines (Fig.1). Sternum brown, with broad, bright median part and bright spots. Chelicerae with three promarginal and three retromarginal teeth. Legs yellow, long and strong. Leg formula I, IV, II, III. Anterior eye row slightly procurved and posterior eye row procurved. AME smaller than ALE, PME nearly equal PLE. Abdomen grey, with distinct pattern. Male palpal tibial apophysis is relatively short and hook-shaped. Curled median apophysis outwardly extends. Conductor large, embolus long, its major part is hidden by the conductor flap (Figs. 2-4). According to the palp conformation, this species clearly belongs to the genus *Tegenaria* Latreille, 1804. *Tegenaria vanensis* sp. n. is similar to the *Tegenaria pagana* C. L. Koch, 1840.

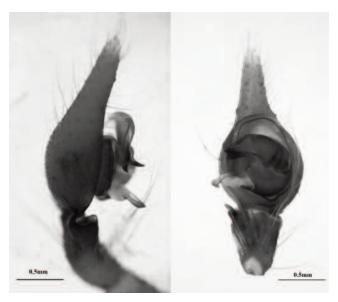


Fig. 2. *Tegenaria vanensis* sp. n. male palp photographs, retrolateral view (left) and ventral view (right).

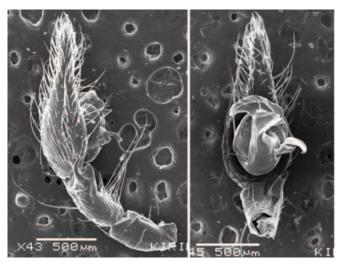


Fig. 3. SEM microphotographs of *Tegenaria vanensis* sp. n. male palp, retrolateral view (left) and ventral view (right).

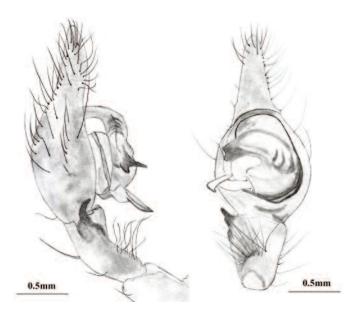


Fig. 4. Drawings of *Tegenaria vanensis* sp. n. male palp, retrolateral view (left) and ventral view (right).

Table 1. Leg measurements of Tegenaria vanensis sp.n., male.

♂: n=4	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg I	4.2	1.2	4.3	2.2	4.6	16.5
Leg II	3.3	1.1	3.5	1.9	3.7	14.5
Leg III	3.2	1.0	2.9	1.5	3.5	12.1
Leg IV	3.9	1.1	3.9	1.9	4.7	15.5

Table 2. Spination of legs of *Tegenaria vanensis* sp.n. The formula gives the number of spines in the following order: Prolateral-dorsal-retrolateral-ventral. The letter 'p' indicates a pair of spines that occur at this position.

♂: n=1	Femur	Patella	Tibia	Metatarsus	Tarsus
Leg I	1+1+1+1-1+1- 1+1-0	0-0-0-0	0-0-1+1-1p	0-0-1+1+1- 1p+1p+1p	0-0-0
Leg II	1+1+1-1+1- 1+1-0	0-1-0-0	1+1-0-0-1	1-0-0- 1p+1p+1p	0-0-0
Leg III	1-0-0- 1p+1p+1p	0-1-0-0	1+1-1+1- 1+1-1	1+1-0-1+1- 1p+1p+1p	0-0-0
Leg IV	0-1+1p-0-0	0-1-0-0	1+1-1+1- 1+1-1+1	1+1-0-1+1+ 1-1p+1p+1p	0-0-0

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