

Dysderocrates tanatmisi sp. n., a new spider species from Turkey (Araneae, Dysderidae)

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Abstract: A new species, *Dysderocrates tanatmisi* sp. n., is described on the basis of both sexes from the Mediterranean region of Turkey. Herein, we present the morphological and diagnostic characters and illustrations of the genitalia of both the male and female members of this species.

Key words: Anatolia, fauna, Mediterranean, spider, Taurus Mountains

Dysderocrates Deeleman-Reinhold & Deeleman, 1988, belonging to the family Dysderidae and subfamily Dysderinae, is represented by six extant species. Three species, *D. egregius* (Kulczyński, 1897), *D. silvestris* Deeleman-Reinhold, 1988, and *D. storkani* (Kratochvíl, 1935), are scattered in the Balkans and Eastern Europe, while *D. gasparoi* Deeleman-Reinhold, 1988 and *D. marani* (Kratochvíl, 1937) are found on the islands of Corfu and Crete, respectively, and *D. regina* is found in Turkey. There is no record of the species from southern Turkey or the Caucasus (Bayram et al., 2017; WSC, 2017).

The aim of this short communication is to describe a new species of *Dysderocrates* from the Mediterranean region of Turkey.

The specimens were collected from Antalya Province, in the Mediterranean region of Turkey, and preserved in 70% ethanol and deposited in the Anadolu University Zoology Museum. Digital images of the copulatory organs were obtained using a Leica DFC295 digital camera attached to a Leica S8AP0 stereomicroscope. Five to 15 photographs were taken in different focal planes and combined using CombineZP image stacking software. All measurements were taken in millimeters. Terminology for the body measurements followed Chatzaki and Arnedo (2006). Terminology for the copulatory organs was adapted from Deeleman-Reinhold (1988). The abbreviations used in the text are as follows: Carapace and abdomen: AL, abdominal length; CL, carapace length; CWmax, maximum carapace width; CWmin, minimum carapace width. Eyes: AME, anterior median eyes; PLE, posterior lateral eyes; PME, posterior median eyes; AMEd, diameter of anterior median eyes; PLEd, diameter of posterior lateral eyes;

PMEd, diameter of posterior median eyes. Chelicera: ChF, length of cheliceral fang; ChG, length of cheliceral groove; ChL, total length of chelicera (lateral external view). Legs: Ta, tarsus; Me, metatarsus; Ti, tibia; Pa, patella; Fe, femur; C, coxa; D, dorsal; Pl, p rolateral; Rl, retrolateral; Pv, proventral; Rv, retroventral; V, ventral.

Taxonomy

Genus *Dysderocrates* Deeleman-Reinhold & Deeleman, 1988

Type species: *Harpactocrates storkani* Kratochvíl, 1935

Dysderocrates tanatmisi sp. n. Figures 1 and 2.

Material Examined. Holotype: 1 ♂ (AUZM), Turkey, Antalya Province, Elmalı District, Göltařla village (36°34'38"N 29°55'49"E), *Cedrus libani* A.Rich. forest, under stones, a.s.l. 1065 m, 24 December 2015, Leg. K.B. Kunt & E.A. Yağmur — Paratypes: 1 ♂, 3 ♀ (AUZM), same data as holotype.

Etymology: The new species is dedicated to the Turkish entomologist Mustafa Tanatmıř, a respected colleague of the authors.

Diagnosis. *Dysderocrates tanatmisi* sp. n. is easily distinguished from any other species of *Dysderocrates* by a pear-shaped bulb, crescent-shaped embolus, and flat, spoon-like apophysis. Bulbs of *D. egregius*, *D. marani*, and *D. storkani* are flatter and more cylindrical than that of *D. tanatmisi* sp. n. in general structure. Embolar apophysis is present in *D. egregius*, *D. silvestris*, and *D. storkani*; it is flat and scalloped; however, there is no embolar apophysis in *D. tanatmisi* sp. n. In all these species and in *D. gasparoi*, the apex of the apophysis is turned to the distal tip while the *D. tanatmisi* sp. n. is turned to the bulb, overly curved.

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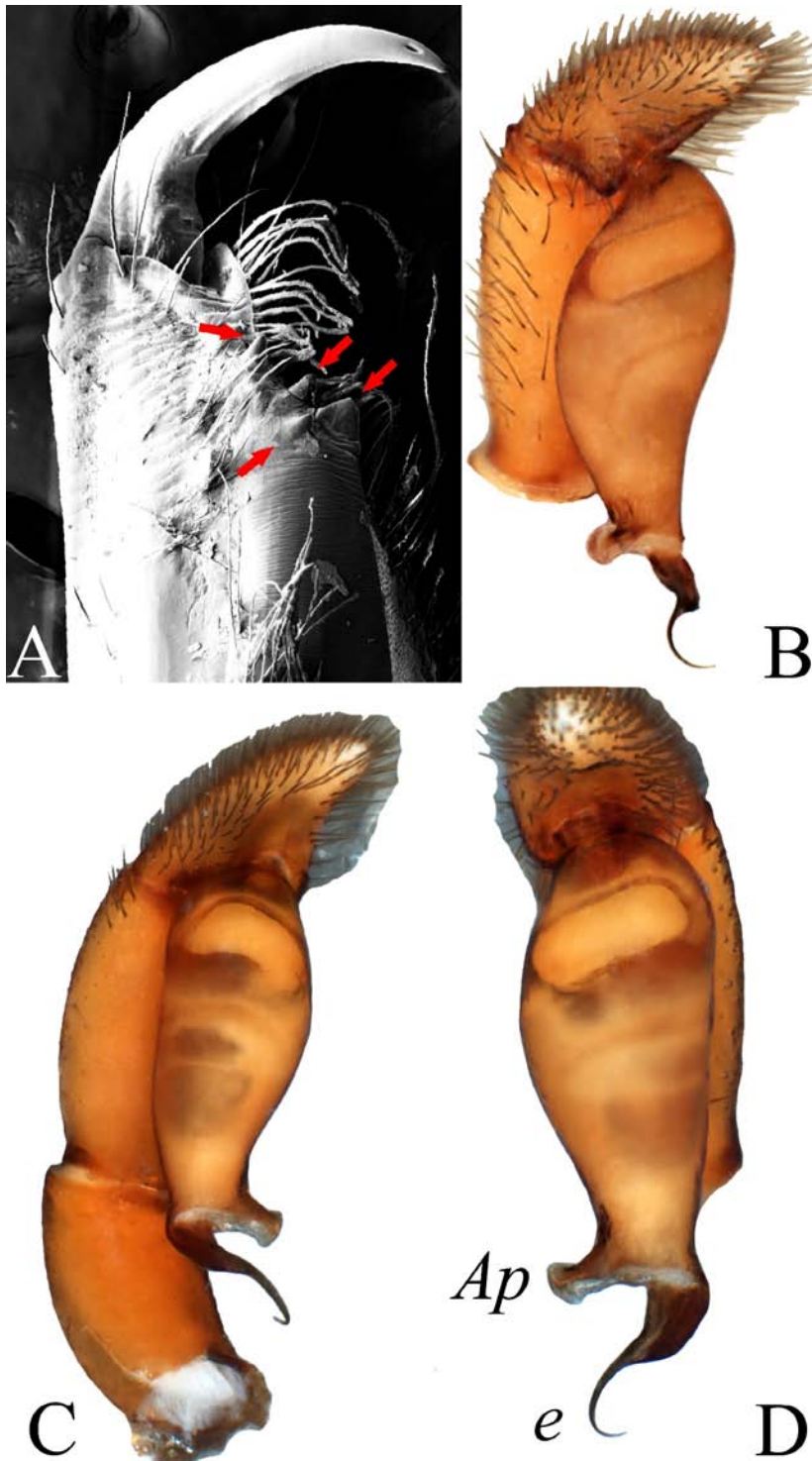


Figure 1. *Dysderocrates tanatmisi* sp. n. (A) Male, cheliceral teeth; (B) Male palp, prolateral view; (C) Ditto, retrolateral view; (D) Ditto, nearly prolateral view. *Ap* apophysis, *e* embolus.

The embolus is very thin, long, curved, and dagger-shaped compared to other species. Female vulva resembles that of *D. regina* also known from Turkey, but the spermatheca

is longer in *D. tanatmisi* sp. n. and has a different form. Likewise, the spermatheca of *D. tanatmisi* sp. n. is easily separated from *D. marani* and *D. storkani* by shape.

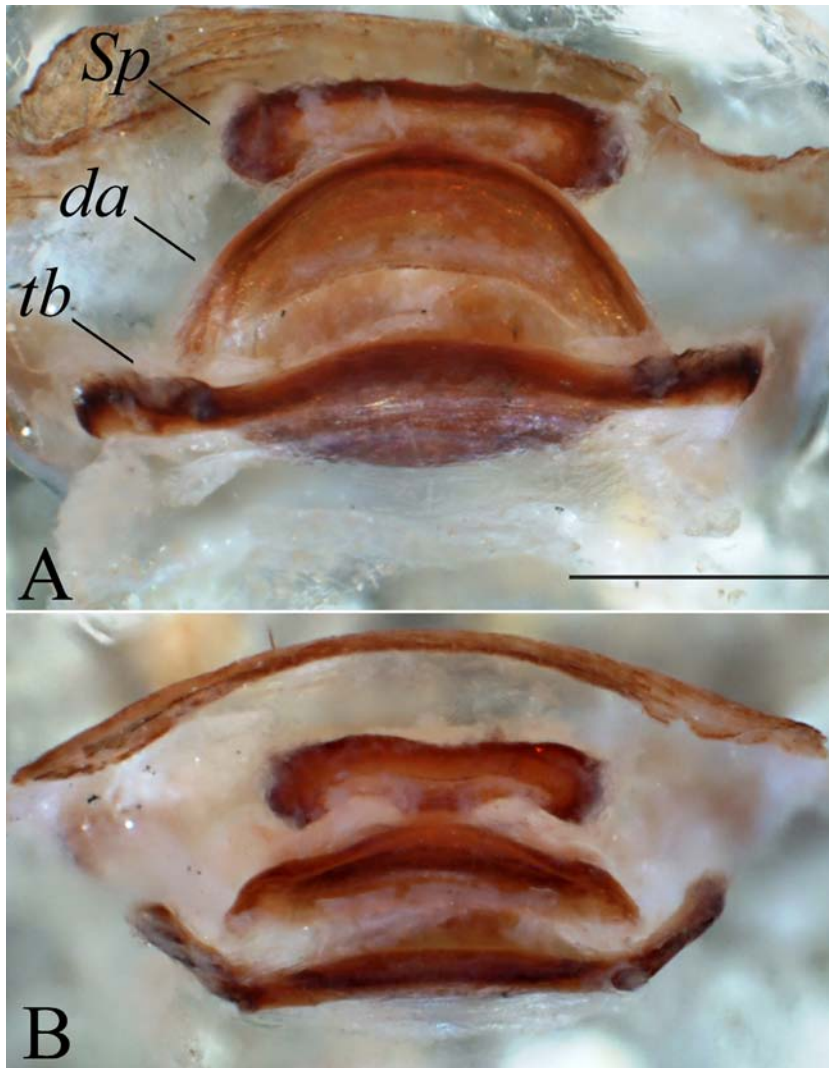


Figure 2. *Dysderocrates tanatmisi* sp. n. (A) Vulva, dorsal view; (B) Ditto, nearly dorsal view. Sp spermatheca, da dorsal arch, tb transversal bar. Scale bar: 0.25 mm.

Measurements [Holotype ♂ / Paratype ♀]: AL 4.20 / 4.40; CL 3.40 / 3.80; CWmax 2.70 / 3.00; CWmin 1.50 / 1.70; AMEd 0.10 / 0.10; PLEd 0.10 / 0.10; PMEd 0.10 / 0.10; ChF 0.60 / 0.80; ChG 0.50 / 0.60; ChL 1.40 / 1.50; **Leg I Co** 1.40 / 1.50 **Fe** 3.10 / 3.00 **Pa** 1.90 / 2.00 **Ti** 2.60 / 2.40 **Me** 2.60 / 2.80 **Ta** 0.60 / 0.70; **Leg II Co** 1.20 / 1.30 **Fe** 2.50 / 2.60 **Pa** 2.00 / 1.80 **Ti** 2.30 / 2.20 **Me** 2.40 / 2.60 **Ta** 0.60 / 0.60; **Leg III Co** 0.80 / 0.70 **Fe** 2.20 / 2.30 **Pa** 1.40 / 1.30 **Ti** 1.40 / 1.40 **Me** 2.10 / 1.90 **Ta** 0.50 / 0.50; **Leg IV Co** 1.00 / 1.10 **Fe** 2.90 / 3.30 **Pa** 1.60 / 1.70 **Ti** 2.30 / 2.10 **Me** 3.00 / 2.70 **Ta** 0.70 / 0.70.

Description of Holotype ♂: Medium-sized dysderid spiders. Carapace dark brown head and gradually lighter towards thorax. Fovea longitudinal and distinct. Six well-developed eyes. Of these, posterior eyes are close to each other and relatively aligned at the same level. Anterior eyes

are localized close to and forming a transverse row with posterior lateral eyes, and distant from each other. Chelicera, gnatho-coxae, and labium are brown. Four cheliceral teeth, in two lines, three promarginal teeth, the one located in the base is largest, and one retromarginal tooth, close to the base and considerably smaller than the others (Figure 1A). Sternum is brown to light brown towards posterior. Legs are yellowish-brown. Abdomen is bulgy and grayish-brown.

Leg spination: Leg I Co 0 Fe 2(3) Pl Pa 0 Ti 0 Me 0; Leg II Co 0 Fe 1(2) Pl Pa 0 Ti 0 Me 0; Leg III Co 0 Fe 1-1 (0) D Pa 1(0) Rl Ti 1-1 Rl, 1 Pl, 1 Pv, 1 V, 1 Rv Me 1-1-1 Rl, 1-1 Pl, 1-1-1 Pv, 1-1-1 Rv Leg IV Co 0 Fe 2(1)-2(1) D Pa 0 Ti 1-1 Rl, 1-1 Pl, 1-1-1 Pv, 1 V, 1-1-1 Rv Me 1-1-1-1-1(0) Rl 1-1-1-1 Pl 1-1-1 Rv 1-1-1(0) Pv.

Bulb pyriform. Embolus is connected to the distal tip of the bulb making a 45° angle and lies above a robust

chitinized embolar roof directed posteriorly. It is crescent-shaped and the tip is directed prolaterally. A flat, spoon-shaped apophysis with the tip directed retrolaterally lies on the counter side of the connection between embolar roof and bulb.

Description of paratype ♀: Females generally have the same somatic characters as the males. There is no important decisive detail except expected size differences and that their females are darker than males.

Leg spination: Leg I Co 0 Fe 2 Pl Pa 0 Ti 0 Me 0; Leg II Co 0 Fe 1(2) Pl Pa 0 Ti 0 Me 0; Leg III Co 0 Fe 1(0) D Pa 0 Ti 1-1 Rl, 1 Pl, 1 Pv, 1 V, 1-1-1 Rv Me 1-1-1 Rl, 1-1 Pl, 1Pv, 1V, 1-1-1 Rv Leg IV Co 0 Fe 1-1 D Pa 0 Ti 1-1 Rl, 1-1 Pl, 1-1-1 Pv, 1 V, 1-1-1 Rv Me 1-1-1-1-1 Rl, 1-1-1-1 Pl, 1-1-1 Rv, 1-1-1Pv.

All parts of vulva are strongly sclerotized. Spermatheca is planar and tips are directed posteriorly on the both sides. Dorsal arch parenthesis shaped. The width is the same as in spermatheca and slightly longer. Transversal bar long, bracket shaped. The tips are directed posteriorly on both sides. Posterior diverticulum has a membranous structure and is indistinct.

Comments: In their revisional study in which they described reproductive organs of the males of

Dysderocrates species, Deeleman-Reinhold and Deeleman (1988) made the following comment: “cylindrical bulb, elongated S-shaped, with a posterior lamellar apophysis”. Undoubtedly, *Dysderocrates tanatmisi* sp. n. will find a unique place among other species of *Dysderocrates* with the flagellum-like shape of the distal embolus.

Nomenclatural acts: This work and the nomenclatural acts it contains have been registered in ZooBank. The ZooBank Life Science Identifier (LSID) for this publication is: zoobank.org/pub:20F5AD0C-4D60-4CDC-B08C-3B9884218DB1.

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