

## A NEW SPECIES AND TWO NEW RECORDS OF THE GENUS *ZELOTES* GISTEL, 1848 (ARANEAE: GNAPHOSIDAE) FROM TURKEY

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*Abstract* - *Zelotes turcicus* sp. n. is described and illustrated from Turkey. Differences between the new species and related species are discussed. *Z. harmeron* Levy, 2009 and *Z. segrex* (Simon, 1878) are recorded for the first time from Turkey. A description of *Z. harmeron* Levy, 2009 is presented based on collected materials. Photographs of its palpal organ are also given.

*Key words*: Taxonomy, Gnaphosidae, *Zelotes*, new species, Turkey

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### INTRODUCTION

Gnaphosidae is one of the big spider families which contains 2069 species from 112 genera (Platnick, 2009) worldwide. This family is at present the largest and the most studied spider family in Turkey. The known gnaphosid fauna of Turkey includes 122 species and 30 genera (Seyyar et al., 2008; 2009, Seyyar & Demir, 2009; Kovblyuk et al., 2009).

*Zelotes* Gistel, 1848 is a genus of the zelotine spiders, with 398 species listed in the latest version (10.0) of the world spider catalogue (Platnick 2009). Four genera of Zelotine spider share the unique characteristic of a preebing comb (a dense cluster of stiff setae found distally on the metatarsi of leg III and IV). The genera *Zelotes*, *Trachyzelotes*, *Setaphis* and *Drassyllus* have been identified in Turkey. *Zelotes* is numerically the largest genus among the Gnaphosidae of Turkey. 23 species of the genus have so far been recorded in the country (Topcu et al., 2005, Seyyar et al., 2009, Seyyar & Demir, 2009).

In the present study, a new species of *Zelotes* is described and two new records, *Z. harmeron* Levy, 2009 and *Z. segrex* (Simon, 1878), are recorded

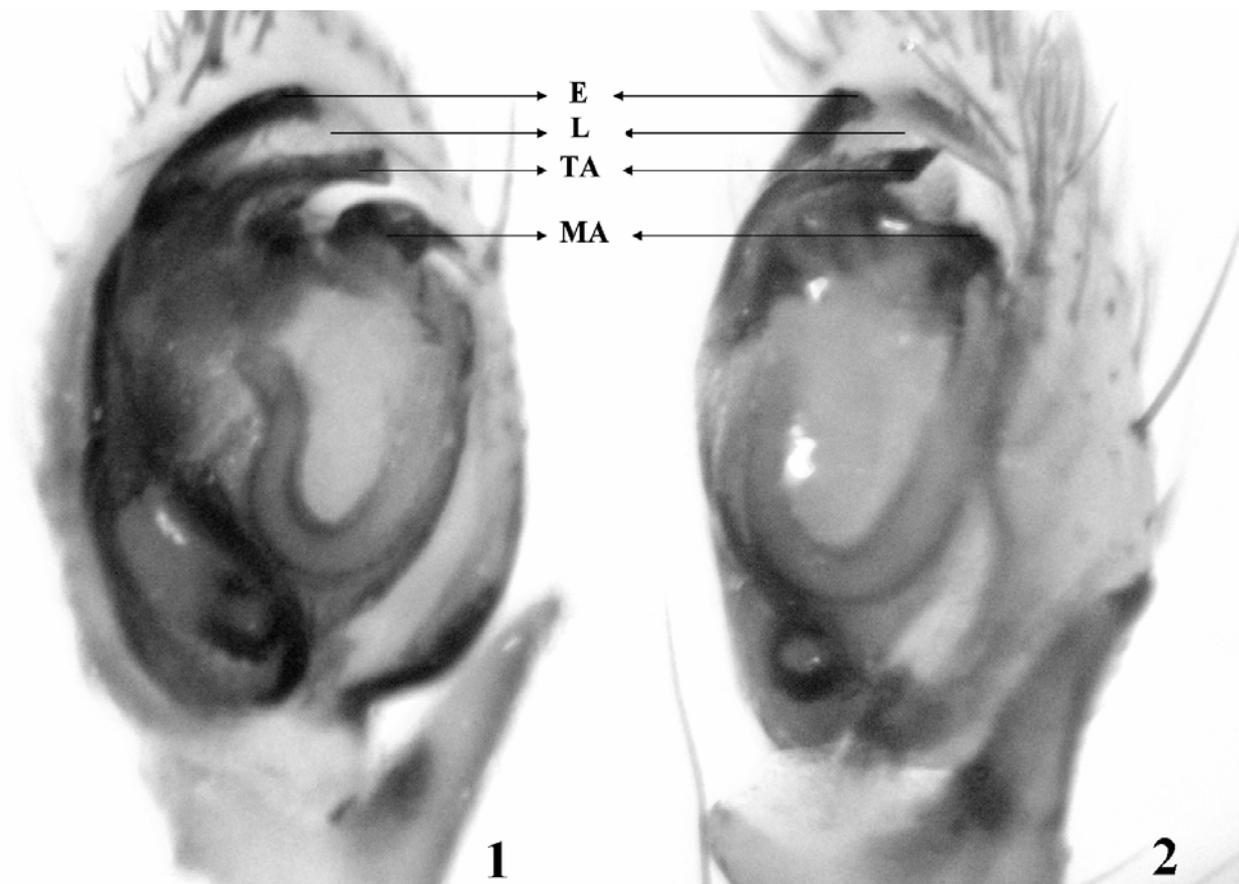
from Turkey. Diagnostic drawings and a detailed description of the new species are presented. Digital photographs of the male palp of both *Z. harmeron* and the new species are also provided. The localities of the material examined and the world distribution of all species are given in the text.

The goal of this paper is to provide new data about the *Zelotes* of Turkey and a description of a new species.

### MATERIALS AND METHODS

In this study, the specimens were obtained by hand collection and were found under stones in south Turkey. The specimens were preserved in 70% ethanol. Examined specimens were deposited in the Zoology Department of Gazi University. The identification and photographs were made using a Olympus SZ61 stereomicroscope.

The following abbreviations are used in the text: TL: total length, PL: prosoma length, PW: prosoma width, OL: opisthosoma length, OW: opisthosoma width, LL: length of legs, AME: anterior median eyes, PME: posterior median eyes, RTA: retrolateral tibial apophysis, TA: terminal apophysis, MA: median apophysis, P: protrusion, L: lamella, E: embolus, EB: embolar base.



Figs. 1-2. Photographs male palp of *Zelotes turcicus* sp. n.: 1- ventral view, 2- retrolateral view.

### TAXONOMY

#### *ZELOTES TURCICUS* SP. N.

(Figs. 1-4)

#### *Material examined*

*Holotype* (♂) TURKEY: Adana Province, Pozantı district, surrounding of Akçatekir, (37° 22' N, 34 49' E), 974m, under stone, 02.VII.2009, leg. O. Seyyar.  
*Paratype* (1♂): same data as holotype, leg. O. Seyyar.

#### *Diagnosis*

Males of *Z. turcicus* sp. n. are very close to *Z. tenuis* (L. Koch, 1866) and *Z. zekharya* Levy, 2009, but easily separated from these species by the shape of

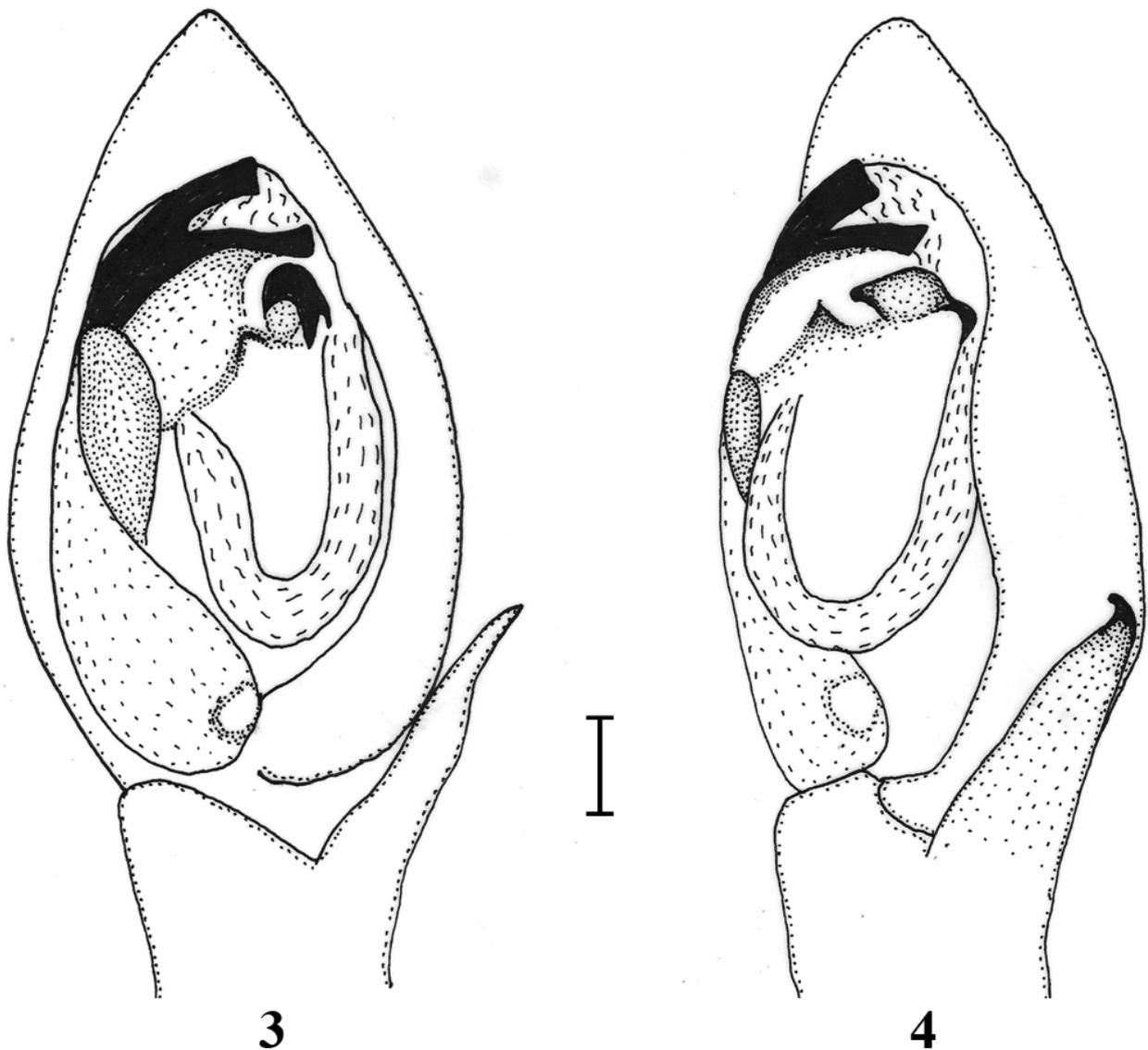
the terminal apophysis and the shape of the embolus (TA is more cylindrical and longer than in *Z. tenuis* and *Z. zekharya*). This new species has a distinct transparent conductor between the embolus and the terminal apophysis.

#### *Etymology*

The specific name is an adjective referring to the country it was found.

#### *Description*

**Male.** Measurements (holotype): TL: 3.45; PL: 2.3; PW: 1.5; OL: 2.15; OW: 1.3; LL: (I) 7.4, (II) 5.4, (III) 4.6, (IV) 7.45. Carapace flattened and light brown, slightly narrowed in front, cephalic area slightly



Figs. 3-4. Photographs male palp of *Zelotes turcicus* sp. n.: 1- ventral view, 2- retrolateral view.

elevated, ocular area darker with few setae. Thoracic groove short and distinct. Eyes in two rows: anterior row of eyes nearly straight, posterior row slightly curved in dorsal view; PME largest and oval shaped, lateral eyes subequal and circular shaped; AME smallest. Chelicerae, labium and endites darker than carapace. Chelicerae with small fang and 4 promarginal and 2 retromarginal teeth. Labium longer than wide. Sternum nearly heart-shaped, same

color as carapace. Abdomen dark grey with short light brown dorsal scutum. Legs light brown. Male palp long with cylindrical terminal apophysis, median apophysis large and swollen. Embolus broad and band shaped. Lamella is membranous shaped, and located between the embolus and the terminal apophysis. RTA large and with blunt tip at its end (Fig. 1-4).

Female. Unknown.

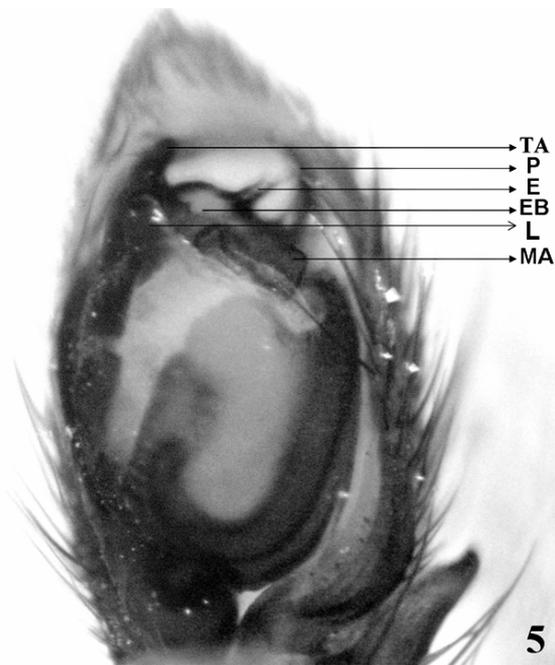


Fig. 5. Ventral view of male palp photograph of *Zelotes harmeron* Levy, 2009.

#### Distribution

Only type locality

*ZELOTES HARMERON* LEVY, 2009

(Fig. 5)

#### Material examined

TURKEY: (3♂♂), *Kahramanmaras province*, Adıran district, Yenicekale village (37°35'N, 36°37'E), 988 m, 21.V.2009, leg. O. Seyyar.

#### Comments

This species was described by Levy 2009 (p. 34, Figs. 73-76) in Israel. Males of *Z. harmeron* were collected from the type locality in Israel by Levy, but females were described based on material loaned from the Natural History Museum of Crete. We found males of this species for the first time from Turkey. The discovery of this species from Turkey is important to its zoogeographical

distribution. Our samples are similar to the type species, but the transparent lamella (L) is more pronounced, the embolar base (EB) and the embolus (E) are slightly different (compare Fig. 5 and Levy (2009, fig. 73). Other characteristic features of our *Z. harmeron* samples are not different from the Israel specimens.

#### Distribution

Greece, Israel (Platnick, 2009).

*ZELOTES SEGREGX* (SIMON, 1878)

#### Material examined

TURKEY: (2♂♂, 3♀♀), *Adana Province*, Pozanti district, surrounding of Akçatekir, (37° 22' N, 34 49' E), 974m, under stone, 02.VII.2009, leg. O. Seyyar & H. Demir; (1♂, 2♀♀) *Mersin Province*, Tarsus district, Karboğazı village, (37° 18' N, 34° 46' E), 1261m, 02.VII.2009, leg. O. Seyyar.

#### Comments

Adult males and females were collected in July. All specimens were collected from under stones. Although this species is very common on Crete and the surrounding islands (Chatzaki et al., 2003), it is rarely found in Anatolia. The morphometric measurements and other characteristic features of our samples are similar to the Mediterranean specimens (Chatzaki et al., 2003; Di Franco, 2002).

#### Distribution

Palaearctic (Platnick, 2009)

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