

## The first record of the family Prodidomidae (Arachnida: Araneae) in Turkey

Aydın TOPÇU\*, Tuncay TÜRKEŞ

Niğde University, Faculty of Science and Arts, Department of Biology, TR-51200 Niğde - TURKEY

Received: 02.01.2009

**Abstract:** *Prodidomus amaranthinus* (Lucas, 1846) is the first record of the family Prodidomidae in Turkey. Its characteristic features, drawings of its genitalia, and general habitats of both sexes and descriptions are presented. Data on the collection and distribution of the species all over the world are also given.

**Key words:** Arachnida, spiders, Prodidomidae, *Prodidomus amaranthinus*, Turkey

### Türkiye'den Prodidomidae (Arachnida: Araneae) familyasına ait ilk kayıt

**Özet:** *Prodidomus amaranthinus* (Lucas, 1846) türü Prodidomidae familyası Türkiye için ilk kaydedilmektedir. Türe ait karakteristik özellikler, her iki cinsiyetin genitalya çizimleri, habitatları ve deskripsiyonları sunulmuştur. Türün dünya üzerindeki dağılımları ve toplanmasına ait bilgiler verilmiştir.

**Anahtar sözcükler:** Örümcek, Prodidomidae, *Prodidomus amaranthinus*, Arachnida, Türkiye

Prodidomidae had been formerly dealt with as a part of the Gnaphosidae due to gross morphological similarities (i.e. enlarged, well-separated spinnerets), but it was revalidated to family rank by Platnick (1990) based on more refined spinneret spigot morphology. The eye pattern almost creates a circle due to the extremely procurved nature of the posterior eye row intersecting with the straight anterior eyes. The anterior median eyes of most prodidomids are darkly pigmented, whereas the other 6 eyes are not (Cooke, 1964). Other characteristics

that help in distinguishing these spiders are protruding, geniculate chelicerae and unarmed tarsal claws (Vetter, 1996).

In Prodidomidae, 300 species belonging to 30 genera have been described (Platnick, 2009). In fact, prodidomid species have not been recorded so far in Turkey (Bayram, 2002).

With this paper, *Prodidomus amaranthinus* (Lucas, 1846), a species of the family Prodidomidae, is reported from Turkey for the first time and the

\* E-mail: aydintopcu@nigde.edu.tr

necessary measures as well as drawings of this species are recorded. Moreover, information on the habitat of this species has been noted. Specimens are gathered from the beneath stones. Having presented the drawings and measures about the species, *Prodidomus amaranthinus* (Lucas, 1846) has been sighted in the Mediterranean region. This species is showing signs of expanding in other Mediterranean countries.

With this paper, *Prodidomus amaranthinus* (Lucas, 1846) has been introduced as the first record of the family Prodidomidae. However, *Anagraphis pallens* Simon, 1893 was recorded from Turkey in 2005. Topçu et al. (2005) pointed out that this species is the first record belonging to the family Prodidomidae. However, *Anagraphis pallens* Simon, 1893 was moved back to the family Gnaphosidae in 2006. Therefore, our recording of *Prodidomus amaranthinus* (Lucas, 1846) for the family Prodidomidae can be considered the first from Turkey.

The present study is based on material deposited in the collections of the Arachnology Museum of Niğde University (NUAM). Two males and 3 females were examined in this study. The specimens were preserved in 70% ethanol. The identification and drawings were made by means of a SZ X 16 Olympus stereomicroscope with a camera lucida. The sketches by Cooke (1964) helped in the identification. All measurements are in millimeters.

**Material examined:** 1♂ and 2♀♀ were recorded from Tekmen district, Mersin province (33°04'E, 36°05'N). They were collected under stones on 15.V.2008; 1♂ and 1♀ Taşağıl district, Manavgat, Antalya, in southern Anatolia, Turkey (32°10'E, 36°30'N). They were collected under stones on 18.V.2007.

**Description:** Body is medium-sized. Carapace of both sexes is brown with a distinct fovea. Compared with that of females, opisthosoma on males is darker. The eyes are situated in 3 rows, anterior lateral eyes are slightly larger than all other eyes or equal to posterior lateral eyes. The teeth in chelicerae are long and dark in color. The legs are yellow-brown but tibia and metatarsus on the front of legs are darker. There are ventral spines on the tibia and fourth metatarsus. Male palp, epigynum, and vulva (Figures 1-3) resemble the description by Cooke (1964).

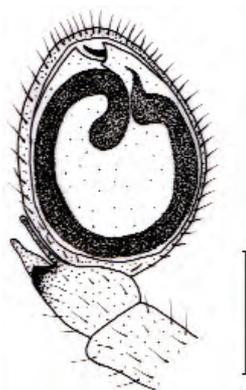


Figure 1. *Prodidomus amaranthinus* (Lucas, 1846) male palp, retrolateral view.

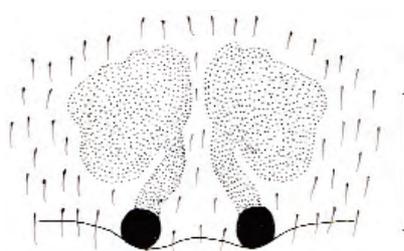


Figure 2. Female epigynum, ventral view (Scale line = 0.25 mm).

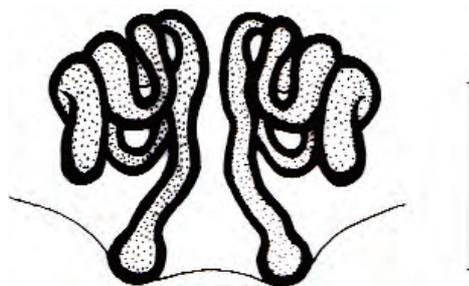


Figure 3. Female vulva, dorsal view (Scale line = 0.25 mm).

**Male** (NUAM 33/0001): Body length 6.35-7.05 carapace length 1.60-1.70, width 1.25-1.30; Diameter of AME: 0.07, eye group wide 0.35, eye group length deep 0.27.

**Female** (NUAM 07/0003 & NUAM 51/0006):  
Body length 6.90-9.80; carapace length 1.70-1.75,  
width 1.30-1.35; Diameter of AME: 0.1, eye group  
wide 0.40, eye group length deep 0.32.

**Distribution:** Mediterranean.

### Acknowledgements

We are very grateful to the Scientific and Technological Research Council of Turkey (TÜBİTAK) for its financial support of this work (Project No. 106T133).

### References

- Bayram, A. 2002. Regional distribution of spiders in Turkey, pp. 887-903. In: A. Demirsoy (Ed.), Zoogeography of Turkey. [in Turkish] 2nd ed. Ankara.
- Cooke, J. A. L. 1964. A revisionary study of some spiders of the rare family Prodidomidae. Proceedings of the Zool. Soc. of London 142: 257-305.
- Platnick, N.I. 1990. Spinneret morphology and the phylogeny of ground spiders (Araneae, Gnaphosoidea). Am. Mus. Novit., 2978: 1-42.
- Platnick, N.I. 2009. The world spider catalog, version 5.5. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog/index.html>
- Topçu, A., Demir, H. and Seyyar, O. 2005. A checklist of the spiders of Turkey. Serket, 9: 109-140.
- Vetter, R.S. 1996. The extremely rare *Prodidomus rufus* Hentz (Araneae, Prodidomidae) in California. J. Arachnol., 24: 72-73.