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İnanç Özgen

Firat University, Engineering
Faculty, Bioengineering
Department, Elazığ, Turkey

Paride Dioli

Museum of Natural History
Milano, Italy

A new and interesting record on miridae (Hemiptera) Fauna of Turkey: *Megacoelum quercicola* Linnavuori, 1965

İnanç Özgen and Paride Dioli

Abstract

In this study, *Megacoelum quercicola* Linnavuori, 1965 is reported as a new record in Turkey. It was found on oaks (*Quercus cerris*). Altogether 19 species have been reported by *Megacoelum* (Miridae) in this country. This record of Turkey is the first occurrence in Asia minor.

Keywords: Hemiptera, Miridae, *Megacoelum quercicola*, New Record, Elazığ, Turkey

Introduction

Worldwide, 61 species belongs to the genus *Megacoelum* Fieber, 1858. So far 18 species, have been reported in the Miridae (Heteroptera) fauna of Turkey. Only two species of them have been reported in the Eastern Anatolia region (Önder *et al.*, 2006, Yazici and Yıldırım, 2016)^[4, 5]. *Megacoelum quercicola* was first described by Linnavuori (1965)^[3]. Its presence was ascertained, till now, only in Tunisia, Greece and Sicily (Kerzhner & Josifov, 1999)^[2]. The first record of its presence in Turkey is given in this article.

Material and methods

Material examined: Elazığ, Palu Baltaşı village., 13.10.2017. 38° 35' 21.4188" N ve 39° 47' 20.8716" E. 1020 m. 3 exx., *Quercus cerris*, leg. Özgen.

The main material of the study was classified as *M. quercicola* species. It was collected with Japanese umbrella under trees. The samples were taken to the laboratory and diagnosed by the second author.

General shape of the body (Fig.1) corresponds to the description given by Linnavuori (1965)^[3]: specimens are elongate and relatively narrow and the colour is pale ochraceous. The head has two red median stripes continuing onto pronotum, but less visible. 2nd, 3rd (and perhaps 4th, which is absent) antennal joints reddish apically, but less in pale specimens. Pronotum few darkened basally.

Scutellum with a broad median dark fuscous band. Elytra ochraceous; clavus dark fuscous along cutellar and commissural margins; a broad transverse fascia at the apex of corium also dark reddish, basis and apex of cuneus reddish; membrane dark smoky, veins reddish.

Under surface and legs ochraceous. Upper surface with erect, long, brownish hairs.

Pronotum shining, microsculpturing only faint. Hind femora dotted with red, hind tibiae with red stripes. They have long, erect hairs; longest hairs twice as long as diameter of tibia. Tibiae in addition with dark bristles. Rostrum extending to hind coxae.

Male genitalis: spiculum of vesica broad, with the apex pointing upwards (Fig. 2a).

Discussion

M. quercicola is very similar to *M. beckeri* (Fieber, 1870.), but morphological characters are different: it is less robust and, in the hind tibiae, hairs are longer than the second species with some doubled black bristles (Fig. 2 a'). Spiculum of vesica (Fig.2b) of *M. beckeri* is different for the shape of the apical part, bent downwards (Linnavuori, 1965)^[3].

Finally *M. beckeri* lives on *Pinus* sp., feeding on small insects (Wagner, 1974)^[6] while *M. quercicola* infestates *Quercus* sp. (Linnavuori, 1965)^[3].

The present records expand the distribution of the species into Eastern Anatolia and is the first for Asia. The ecology and ethology of *M. quercicola* should be given in detail by further studies

Correspondence

İnanç Özgen

Firat University, Engineering
Faculty, Bioengineering
Department, Elazığ, Turkey



Fig 1: Habitus of *Megacoelum quercicola* Linnavuori, 1965 [3]

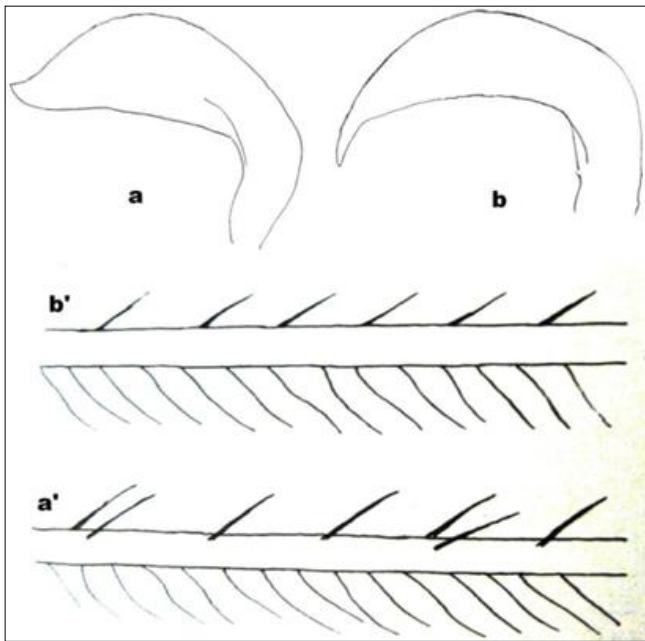


Fig 2: Male genitalis and hind tibia. Spiculum of vesica (penis): a. *Megacoelum quercicola* b. *M. beckeri*. Hind tibia: a'. *M. quercicola* b'. *M. beckeri*

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References

1. AAVV. Fauna Europaea. <https://fauna-eu.org/t/>. Date. 01.11.2017.
2. Kerzhner IM, Josifov M. Cimicomorpha II, Miridae. In: Aukema, B. & Rieger, C. (Eds), Catalogue of the Heteroptera of the Palaearctic Region. The Netherlands Entomological Society; Amsterdam. 1999; 3:577.
3. Linnavuori R. Studies on the South- and Eastmediterranean Hemipterous Fauna. Acta Entomologica Fennica. 1965; 21:26-27.
4. Önder F, Karsavuran Y, Tezcan S, Fent M. Heteroptera (Insecta) Catalogue of Turkey. 2006, 164.
5. Yazıcı G, Yıldırım E. Distributional Data on Mirini (Hemiptera: Heteroptera: Miridae: Mirinae) Fauna of Turkey. Linzer. Biol. Beitr. 2016; 48(1):859-886.
6. Wagner E. Die Miridae Hahn, 1831, des Mitteleuropas und der Makaronesischen Inseln (Hemiptera, Heteroptera). Teil. 1. Entomologische Abhandlungen 37 Suppl. 1974; iii:484.