

First Record of the Genus *Euscorpius* Thorell, 1876 (Scorpiones: Euscorpiidae) in Cyprus

Ersen Aydın Yağmur

Alaşehir Vocational School, Celal Bayar University, TR-45600, Manisa, Turkey; E-mail: ersen.yagmur@gmail.com

Abstract: The scorpion species *Euscorpius italicus* (Herbst, 1800) is recorded for first time from Cyprus. This represents a new scorpion family, genus and species record for the country. Besides, this is first insular record from Mediterranean Sea. The characteristic morphological features, zoogeographical remarks and ecological notes on the species are presented in this study.

Key words: Euscorpiidae, Scorpiones, new record, Cyprus

Introduction

Euscorpius italicus (Herbst, 1800) has a considerably interesting zoogeographical distribution. It is spread in Southern Europe (Albania, Croatia, Greece, Italy, Montenegro, Slovenia, Switzerland), Turkey (Black Sea coast), Georgia, Russia (Krasnodar Region) (FET 2010, FET & SISSOM, 2000), Algeria, Morocco, Yemen (Sanaa Province) (GANTENBEIN *et al.* 2002) and Iraq (An-Najaf Province) (FET & KOVAŘÍK 2003). Among them Algeria, Morocco, Yemen and Iraq records seem extraordinary. FET & KOVAŘÍK (2003) explained these records as they have been introduced by humans.

E. italicus has not been recorded from any of the Aegean and Mediterranean islands. These islands have other *Euscorpius* species but *E. italicus* has not been recorded from them up to now. *E. italicus* have been recorded from the islands near the mainland in the Adriatic Sea (Dalmatian coast of Croatia) and Ionian Sea (Corfu) only (KINZELBACH 1975, FET 2000, STATHI & MYLONAS 2001, GANTENBEIN *et al.* 2002). FET *et al.* (2006) observed that an unexplained absence of *E. italicus* on most of region's large islands (such as Crete, Sicily, Sardinia, Corsica), where other congeneric species are found, could be interpreted as its recent (postglacial) dispersal with humans.

Material and Method

An adult female was collected from Güzelyurt Province, Northern Cyprus (Fig. 1). The specimen was found in a house located in a human settlement. The specimen is kept in the Museum of Turkish Arachnology Society. Identifications of specimens after GANTENBEIN *et al.* (2002)

Material examined: Northern Cyprus, Güzelyurt Province, Lefke Region, Lefke Town, inside a home, 1♀, 23.02.2011, 250 m a.s.l., leg. A. Khashman, det. E. A. Yağmur (MTAS)

Results

It was examined only one dried adult female in this study. The morphological characters of the specimen were evaluated as described in Gantenbein *et al.* (2002). The pectinal tooth count in the examined female specimen was 10-10. In two pedipalps analysed, the number of the trichobothria on ventral surface of pedipalp chela (*V*) was 11-12; the number of the trichobothria on ventral surface of pedipalp patella (*v*) was 12-13. The number of trichobothria on external surface of pedipalp patella was: in the *et* series 7-7; in the *est* 4-4; in the *em* series 5-5; in the *esb_a* series 9-8; in the *esb* 2-2; in the *eba* 6-6, and in the



Fig. 1. Map of the Güzelyurt Province, Northern Cyprus.

eb 4-4. According to the diagnostic characters given by Gantenbein *et al.* (2002), the examined specimen from Cyprus clearly belongs to *E. italicus*.

Discussion

E. italicus is generally distributed in Southern Europe as well as along Black Sea coast of Anatolia and Caucasus. However, its records in Algeria, Morocco, Yemen and Iraq justify that *E. italicus* can be transported easily out of its main distribution range and it can generate reproductive population in suitable microhabitats. The collection site of Cyprus specimen is located close to seashore. This place can have more humid conditions than the rest of the island, and *E. italicus* could find a suitable microhabitat in its location.

Cyprus record is first in Eastern Mediterranean Region, thus the present record significantly extends

the range of this species. *E. italicus* inhabits predominantly human settlements; it is believed that it has been widely introduced by humans due to very low genetic diversity over its geographic range from Italy to Turkey (FET *et al.* 2006). Some records from Istanbul were collected from urban habitats (author's unpublished data). These records show that *E. italicus* can live among human things and transported via them. Cyprus Island have been very important for marine trade since ancient times. FET & KOVAŘÍK (2003) indicated that Yemen and Iraq records can be based on human historical trading activity. Cyprus record supports the suggestion of FET & KOVAŘÍK (2003) about distribution pattern of *E. italicus*. Collection site is close to a harbour. *E. italicus* could have been transported via sea to this harbour and generate a population in human settlement.

Two endemic for Cyprus scorpion species, *Mesobuthus cyprius* and *Buthus kunti* (Buthidae) which are, have recorded from this island until now (GANTENBEIN & KROPF 2000, YAĞMUR *et al.* 2011). *Euscorpis italicus* not only third scorpion species for Cyprus (and second family) but also it is first non-endemic species for Cyprus scorpion fauna.

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