

## Taxonomic revision of the epigeal representatives of the spider subfamily Harpacteinae (Araneae: Dysderidae) on the island of Crete

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### Abstract

Here we review the taxonomy of the epigeal species of the spider subfamily Harpacteinae (Araneae, Dysderidae) on Crete. Along with the endemic cave-dwelling genus *Minotauria*, this subfamily is represented on this island by the genera *Harpactea* and *Stalagtia*, the last of which is reported for the first time. We describe and illustrate the previously unknown females of *Harpactea*

*cressa* Brignoli, 1984 and *Harpactea coccifera* Brignoli, 1984. Furthermore, a new species, *Stalagtia thaleriana* n. sp., is described and a critical appraisal and a re-delimitation of the current definition of the genus *Stalagtia* is provided. An identification key, some notes on the ecology (habitat preferences, activity periods) and the distribution of these species on Crete are also given.

**Key words:** Taxonomy, phenology, haplogyne spiders, *Harpactea*, *Stalagtia*, Greece

## Introduction

Crete is an isolated island formation that dates to the Pliocene (5 m.y.a.) (Meulenkamp et al. 1994; Schule 1993). The geographical isolation of this island has made a great contribution to the evolution of many endemic species, rendering Crete a hotspot of speciation and of zoogeographical interest. In addition to endemism, Cretan fauna includes European, Asiatic and African components.

Until recently, species catalogues on a national or regional level were unavailable for Greece. Bosmans and Chatzaki (2005) provide a critical review of spiders in Greece, which includes a checklist of 856 species. However, this review also illustrates the large gaps present in the distributional patterns of many species and highlights the need for a reliable revision of several genera.

A total of 204 species of spiders have been reported on Crete, but many of the records are dubious and require recheck. Because of recent revisions, Dysderidae is among the most studied families on the island (Brignoli 1984; Deeleman-Reinhold 1989, 1993; Deeleman-Reinhold & Deeleman 1988), together with Gnaphosidae (Chatzaki et al. 2002a, 2002b, 2003), Salticidae (Logunov & Chatzaki 2003; Metzner 1999), and, to a lesser extent, Amaurobiidae (Thaler & Knoflach 1993, 1995), Agelenidae, Pholcidae, Nesticidae, Leptonetidae, Linyphiidae (Brignoli 1976, 1984; Deltshv 1979, and references therein).

The circum-Mediterranean spider family Dysderidae includes 489 species grouped in 24 genera (Platnick 2005) of small to medium-sized nocturnal wandering hunters. These spiders are common in ground habitats, especially leaf-litter, and they prefer warm and humid habitats. They are often found in caves and there are several reports of species adaptation to this environment. To date, 16 Dysderidae species have been described on Crete. These belong to five genera: *Dysdera* Latreille, 1804 (8 species), *Dysderocrates* Deeleman-Reinhold & Deeleman, 1988 (1 species), *Harpactea* Bristowe, 1939 (4 species), *Minotauria* Kulczynski, 1903 (2 species), and *Rhodera* Deeleman-Reinhold, 1989 (1 species) (Deeleman-Reinhold 1989, 1993; Deeleman-Reinhold & Deeleman 1988; Gasparo 2004). With the exception of six species of the genus *Dysdera*, all other Dysderidae species have only been reported from the island. *Minotauria* and *Rhodera* are exclusively known from cave dwelling representatives and are restricted to Crete.