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The larvae of *Gepus invisus* Navás, 1912 and *Solter liber* Navás, 1912, a comparative description (Neuroptera: Myrmeleontidae)

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Abstract

The third instar larvae of *Gepus invisus* and *Solter liber* are comparatively described and illustrated for the first time with a particular emphasis on genus level characters. Larval morphology confirms a close relationship between these genera as they differ only in minor characters.

Key words: Larval morphology, Neuropterida, Myrmecaelurini, Gepini, antlion, Western Palaearctic

Introduction

Gepus Navás, 1912 and *Solter* Navás, 1912 are two closely related genera of Myrmeleontidae, representing a characteristic element of the antlion fauna of the arid and desert environments of the south-western Palaearctic region.

Gepus is a small genus, comprising 6 valid species (Hölzel 1983) distributed in the Sahara desert and Middle East. *G. invisus* Navás, 1912, the type species, is a widespread myrmeleontid reported from Mauritania, Morocco, Algeria, Tunisia, Egypt, Sudan, Israel, Saudi Arabia and Iran (Aspöck *et al*. 2001; Hölzel 1983).

Solter is larger, including 29 species and it has a similar but wider range reaching Europe and India, with a single recently described species from South Africa, however its maximum diversity is localized in Middle East and Arabian Peninsula (Aspöck *et al*. 2001; Mansell 2013; Stange 2004). The type species, *S. liber* Navás, 1912 is a saharo-eremial faunal element whose range encompasses Portugal, Spain, Morocco, Algeria, Tunisia, Egypt, Israel and Turkey (Aspöck *et al*. 2001; Stange 2004); moreover it is even reported from Mauritania and Mali (as Soudan Français) under the synonym *S. neglectus* Navás 1940 (Navás 1940), therefore it is one of the few species in the genus present in the Afrotropical region. In the Iberian peninsula this antlion is mainly reported from southern Spain and it is a characteristic, but seldom encountered, species of xeric and rocky biotopes (Monserrat & Acevedo 2013; Monserrat & Triviño 2013).

Despite Stange (2004) reports the discovery of the larvae of both genera in North Africa and includes them in his diagnostic key, they are actually undescribed to date. The aim of the present contribution is detailing and illustrating the external morphology of the larvae of the type species of both genera for comparative purposes.

Material and methods

The larvae were reared in small plastic containers filled with sand and kept at room temperature; they were fed with various insects: silverfishes (*Ctenolepisma* sp., *Lepisma saccharina* Linnaeus), ants (*Messor barbarus*, Linnaeus),

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