



A new species of sun-spider from sand dunes in Coahuila, Mexico, (Arachnida: Solifugae: Eremobatidae)

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Abstract

A new species of Eremobatinae solifugid, *Eremocosta arenarum* is described from “Dunas de Bilbao”, Coahuila, Mexico. This is the fourth known species of the *montezuma* species-group.

Key words: Taxonomy, Eremobatinae, *Eremocosta*, solpugid, solifugid

Introduction

The North American Solifugae are among the best known in the entire world (Brookhart and Cushing 2002). However, the Mexican fauna has been largely neglected. Most of the literature dealing with the North American fauna focuses on species inhabiting the United States (Muma 1951, 1962, Brookhart, 1965, 1972; Brookhart & Muma, 1981, 1987; Muma & Brookhart 1988, Muma, 1989; Brookhart and Cushing, 2002, 2004, 2005).

Two sun-spider families occur in North America, Ammotrechidae and Eremobatidae. The latter family is widespread in North America and according to the Catalogue of the Smaller Arachnids Orders of the World (Harvey 2003), it comprises two subfamilies, eight genera and 174 species. Six additional eremobatid species have been described since the publication of the catalog, (Brookhart & Cushing 2004, 2005).

The genus *Eremocosta* Roewer has an intricate taxonomic history. Roewer (1934) recognized two subfamilies within Eremobatidae: Eremorhaxinae (with one genus) and Eremobatinae (with 10 genera, including *Eremocosta*). Muma (1951) made several taxonomic changes in Eremobatidae, *e. g.* synonymized Eremorhaxinae with Eremobatinae, and erected a new subfamily, Therobatinae and rearranged the generic taxonomy. For Eremobatinae, Muma recognized three genera, considering *Eremocosta* as a synonym of *Eremorhax* Roewer; and recognized two species groups, the *E. magnus* group and the *E. striatus* group.

Muma (1970) erected the *montezuma* species-group, for a single Mexican species based on the presence of ctenidia and the presence of “normal principal, intermediate and anterior teeth” on the movable finger of the chelicera. Muma, (1987), described a second Mexican species in this group, and offered a formal diagnosis of this species-group, as follows: “a shallow, indistinct, longitudinal mesal groove on male fixed finger, *Eremobates* Banks like cheliceral dentition, *Eremorhax*-like leg length, distinguishable abdominal ctenidia, and angulated female opercula.” It is remarkable that Muma included in this diagnosis “*Eremobates*-like cheliceral dentition” since *Eremobates*, the largest genus within the family, presents different kinds of cheliceral dentitions, and none can be chosen as “typical”.