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Two new scorpion species of genus *Brachistosternus* (Scorpiones: Bothriuridae) from northern Chile

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Abstract

Brachistosternus (*Leptosternus*) *cepedai* **n. sp.** and *Brachistosternus* (*Leptosternus*) *coquimbo* **n. sp.** are described from Coquimbo region, in northern Chile. *Brachistosternus cepedai* **n. sp.** occurs in coastal dunes and is closely related to *Brachistosternus* (*L.*) *sciosciae* Ojanguren-Affilastro, 2002. On the other hand, *Brachistosternus coquimbo* n. sp occurs at high altitudes in the Andes mountain chain and is related to *Brachistosternus* (*L.*) *montanus* Roig Alsina, 1977, and to several Andean species from Argentina and Chile. Adaptative characters of the psammophilous *Br.* (*L.*) *cepedai* **n. sp.** are discussed. 39 scorpion species are now known from Chile, ten of them occur in the Coquimbo Region, being the region with the more diverse scorpion fauna in the country.

Key words: Scorpiones; Bothriuridae; *Brachistosternus*; arid zones; new species; Chile

Introduction

The arid zones of northern Chile possess a very diverse arthropod fauna (Cepeda-Pizarro *et al.* 2005a, 2005b; Jerez 2000; Rau *et al.* 1998). The scorpion fauna of this area is remarkably diverse and is composed mostly of endemic species with restricted distributions; the peculiar topography of the country (*e.g.* Andes mountain range, coastal mountain range, intermedial depressions and littoral plains) together with a wide range of microhabitat allow the presence of several different species within small geographic areas (Agusto *et al.* 2006; Cepeda-Pizarro *et al.* 2005a, 2006).

The coastal dunes of northern Coquimbo region, belong to the coastal desert of Huasco (Gajardo 1993), and are part of the Chilean transitional coastal desert (Agusto *et al.* 2006; Cepeda-Pizarro 1995). In the different habitats of this area, the presence of seven scorpion species has been recorded, i.e. *Caraboctonus keyserlingi* Pocock, 1893, *Bothriurus coriaceus* Pocock, 1893, *B. dumayi* Cekalovic, 1974, *B. pichicuy* Mattoni, 2002, *Brachistosternus* (*Leptosternus*) *artigasi* Cekalovic, 1974, *Br.* (*L.*) *roigalsinai* Ojanguren-Affilastro, 2002 and *Br.* (*L.*) *cekalovici* Ojanguren-Affilastro, 2005 (Agusto *et al.* 2006; Cekalovic 1974; Mattoni & Acosta 2006; Ojanguren-Affilastro 2005b). This system receives water from occasional winter rainfall, but especially from masses of fog from the Pacific Ocean, also called camanchaca or kamanchaca (Cepeda-Pizarro 1995; Paskoff & Manríquez 2004). Members of the genus *Brachistosternus* are the dominant scorpions in these areas, with about a 70 % of the scorpion population (Agusto *et al.* 2006).

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