



Three new Praociini (Coleoptera: Tenebrionidae) from Peninsula Valdés (Argentina), with zoogeographical and ecological remarks

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Abstract

Three new taxa from Peninsula Valdés (Argentina) are described for the tribe Praociini (Pimeliinae): *Calymmophorus peninsularis* **sp. nov.** and two subspecies of *Praocis* (*Hemipraocis*) *sellata* Berg 1889: *P. (H.) sellata peninsularis* **ssp. nov.** and *P. (H.) sellata granulipennis* **ssp. nov.** The first two taxa are endemic to the peninsula and the third one is distributed in and outside the peninsula. Distribution maps, habitat records and habitus photographs for these three new taxa are included, with comparisons to other known species of the genera. An identification key to the five subspecies of *Praocis* (*Hemipraocis*) *sellata* is provided. A discussion is presented on endemism and sympatry of two species of *Calymmophorus* Solier 1840, and non-sympatry of two subspecies of *Praocis* (*Hemipraocis*) *sellata*. The following synonymy is reported and illustrated: *Praocis sellata bruchi* Kulzer 1958 = *Praocis sellata topali* Kaszab 1964 syn. nov.

Key words: Coleoptera, Tenebrionidae, Praociini, new taxa, endemism, sympatry

Introduction

Peninsula Valdés is located on the Atlantic coast of Chubut province, Argentina. It is considered part of different biogeographic provinces by different authors; some include it in Patagonia (Soriano 1956; Morrone *et al.* 2002) while others place it in the Monte (Cabrera & Willink 1980; Roig-Juñent *et al.* 2001; Roig *et al.* 2009). One characteristic of the ground-beetle fauna of Patagonian steppes is the dominance of Curculionidae, Carabidae and Tenebrionidae; the last family is mainly represented by the Neotropical tribes Nycteliini, Praociini and Scotobiini (Kuschel 1969). A recent pit-fall trap study of the ground-dwelling arthropod community in Peninsula Valdés revealed that the most abundant family both in number of individuals and species is Tenebrionidae (43.1 % of the individuals and 43.2 % of the species of Coleoptera) (Cheli *et al.* 2010). Human activities, especially cattle farming and grazing, have caused significant changes in Peninsula Valdés in both flora (Bertiller *et al.* 1981; Elissalde & Miravalles 1983) and soil features (Rostagno 1981; Bouza *et al.* 2008). Despite the inclusion of this natural area in UNESCO's World Heritage List since 1999, these human-induced disturbances continue to this day. Vertebrate and invertebrate fauna have likewise been altered (Cheli 2009; Nabte 2010). In the case of terrestrial arthropods, clear signs of serious alterations have been recorded both in the composition of their species assemblages and in their trophic structure, particularly from grazing (Cheli 2009; Cheli *et al.* 2010). For these reasons, those species inhabiting the soil need to be known to achieve a complete inventory of the biota and to elucidate the species richness and composition of ground-dwelling arthropod communities.

Praociini (Tenebrionidae: Pimeliinae) is a tribe endemic to Southern South America. The tribe includes 14 genera and 148 known species (Flores & Chani-Posse 2005; Flores & Vidal, 2009). Praociini is distributed from central Peru to Southern Argentina and Chile, and beetles from this tribe inhabit arid and semiarid lands. Endemic genera or subgenera to Patagonian steppes are *Platesthes* Waterhouse, *Praocis* (*Hemipraocis*) Kulzer, *Praocis* (*Praonoda*) Kulzer, *Patagonopraocis* Flores & Chani-Posse, and the monotypic *Neopraocis* Kulzer and *Asidelia* Fairmaire (Flores & Chani-Posse 2005). Since 2005 we have conducted several trips to Peninsula Valdés and col-