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## On two South-West Atlantic *Diastylis* (Cumacea: Crustacea), *D. obliquisulcata* n. sp. and *D. geocostae*, with remarks on this speciose genus

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### Abstract

A new species, *Diastylis obliquisulcata* from eastern Patagonia, is fully described and illustrated based on specimens collected in shallow waters. *Diastylis obliquisulcata* shares with 14 other species of this genus an opercular maxilliped 3, a short telson and rudimentary exopods on pereopods 3 and 4 in the females. *Diastylis obliquisulcata* can be easily distinguished from all these species by the females having an oblique groove or *sulcus* on each side of the carapace. The taxonomic position of this group of species in the genus *Diastylis* is discussed. The adult male of *Diastylis geocostae* is described for the first time, the adult female briefly redescribed, and its distribution, up to now known from the type locality only (Cabo Frio, Rio de Janeiro State), is extended to off Rawson, Argentina. Within this species there are reported ontogenetic changes in the carapace ornamentation, in the chaetotaxy of the telson, and in the length ratio between the telson and the uropod peduncle.

**Key words:** taxonomy, Diastylidae, new species, ontogenetic changes

### Introduction

This is the fifth in a series of contributions on the South-West Atlantic cumaceans of the genus *Diastylis* published by both authors jointly and/or in collaboration with other colleagues (Moretti & Roccatagliata 2007; Alberico & Roccatagliata 2008, 2011; Cristales *et al.* 2010). Fourteen species belonging to this genus are known at present to occur in the southwestern Atlantic. Despite having now a more complete knowledge of this fauna, there is still a troublesome species and five incomplete descriptions: *D. manca* is known from a single manca specimen and its taxonomic status is uncertain, and for *D. fimbriata*, *D. araruamae*, *D. geocostae*, *D. racovitzai* and *D. brasilianus* only one sex has been described. Furthermore, drawings of the *habitus* for the latter two species are not available (see Sars 1873; Băcescu & Petrescu 1991; Petrescu & Băcescu 1991).

In the present contribution both sexes of *Diastylis obliquisulcata* n. sp. are fully described and illustrated based on specimens collected in shallow waters from Chubut and Santa Cruz Provinces, Argentina. In addition, the adult male of *D. geocostae* is herein described for the first time, the adult female briefly redescribed, and its range of distribution extended to off Rawson, Argentina. This species was described by Băcescu and Petrescu (1991) based on a few females collected south Cabo Frio, Rio de Janeiro State, Brazil, and no more records have been published since then.

### Material and methods

The samples examined in this study were collected from the Argentine-Uruguayan common fishing zone to Puerto Deseado, between 2 and 58 m depth.

Body lengths of the specimens were measured in lateral view from the tip of the pseudorostrum to the end of the telson (distal setae excluded). In the descriptions of the appendages, the length of single articles was always