



## A review of the genus *Speocarcinus* Stimpson, 1859 (Crustacea: Brachyura: Xanthidae), with a key to its species and the description of one new species

MARIANNA BRANDÃO<sup>1</sup>, PETRONIO ALVES COELHO-FILHO<sup>2</sup> & MARCOS TAVARES<sup>3,4</sup>

<sup>1</sup>Programa de Pós-Graduação em Diversidade Biológica e Conservação nos Trópicos, Universidade Federal de Alagoas.  
E-mail: marianna.brandao@hotmail.com

<sup>2</sup>Universidade Federal de Alagoas, Laboratório de Carcinologia. Av. Divaldo Suruagy, s/n, Centro, Penedo/AL. 57200-000.  
E-mail: petroniocoelho@yahoo.com.br

<sup>3</sup>Museu de Zoologia, Universidade de São Paulo, Av. Nazareth, 481, 04263-000, Ipiranga, São Paulo, SP, Brazil.  
E-mail: mdst@usp.br

<sup>4</sup>Corresponding author: Marcos Tavares.  
E-mail: mdst@usp.br

### Abstract

*Speocarcinus dentatus* n. sp. is described from the southwestern Atlantic. The new species can be easily separated from its congeners by a suite of carapace and appendage characters. *Speocarcinus* Stimpson, 1859, now includes eight extant species, all from the Atlantic or Pacific coasts of the Americas. Additional characters to further differentiate between *S. carolinensis* Stimpson, 1859, and *S. lobatus* Guinot, 1969, and between *S. granulimanus* Rathbun, 1894, and *S. spinicarpus* Guinot, 1969 are documented. The lectotype of *S. granulimanus* is first described and a key to the species of *Speocarcinus* is provided.

**Key words:** biodiversity, taxonomy, new species, Eubrachyura, western Atlantic, eastern Pacific

### Introduction

Stimpson (1859) established *Speocarcinus* for a species from South Carolina (USA), *S. carolinensis*. Since then ten more species have been added to the genus, of which only five still remain: *S. granulimanus* Rathbun, 1894, *S. lobatus* Guinot, 1969, *S. spinicarpus* Guinot, 1969, *S. monotuberculatus* Felder & Rabalais, 1986, and *S. amazonicus* Brandão, Tavares & Coelho-Filho, 2010, all from either the Atlantic or Pacific coasts of the Americas. Five other species previously included in *Speocarcinus* have been removed from the genus: *Eucrate californiensis* Lockington, 1877, first transferred to *Speocarcinus* by Rathbun (1901) and later to the monotypic genus *Malacoplax* Guinot, 1969 (Guinot 1969); *Speocarcinus ostrearicola* Rathbun, 1910, synonymized with *Prionoplax ciliata* Smith, 1870 by Guinot (1969); *S. celebensis* Tesch, 1918 [from Sulawesi, Indonesia; currently ?*Viaderiana celebensis* (Tesch, 1918)]; *S. luteus* McNeill, 1929 [from Australia; currently *Ceratoplax lutea* (McNeill, 1929)]; and *S. laevimarginatus* Yokoya, 1933 [from Japan; currently *Ceratoplax laevimarginata* (Yokoya, 1933)] (Serène 1964; Ng 1987; Ng *et al.* 2008).

It was ultimately recognized that different species were actually being mistakenly identified with *S. carolinensis*. For 108 years the type material of the species was considered to have been lost in the Great Chicago fire, until Evans (1967) found one syntype from the Charleston harbor in the collections of the Natural History Museum, London. Furthermore, adult and young individuals of *S. carolinensis* look very different from each other and for many years the best available illustrations of the species were only those of an adult male, first provided by Rathbun (1918: 39, pl. 159, fig. 6) and much later by Williams (1965: 203, fig. 186). As a result three western Atlantic species, *S. lobatus*, *S. monotuberculatus* and *S. amazonicus*, all resembling small and medium size *S. carolinensis*, were only recognized as separate species much later (Guinot, 1969; Felder & Rabalais, 1986; Brandão *et al.*, 2010, respectively).