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Taxonomic notes on some Brazilian species of *Synalpheus* Spence Bate, 1888, with new records and description of a new species (Decapoda, Alpheidae)

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Abstract

The present report deals with several western Atlantic species of the snapping shrimp genus *Synalpheus* Spence Bate, 1888 occurring in Brazilian territorial waters. Two species, *Synalpheus* cf. *ruetzleri* Macdonald & Duffy, 2006 and *Synalpheus yano* (Ríos & Duffy, 2007), are recorded from the southwestern Atlantic Ocean and Brazil (Ceará) for the first time; *S. yano* is also newly reported from the eastern Gulf of Mexico and USA (Florida). *Synalpheus androsi* Coutière, 1909, a distinctive species previously known in Brazil only from a single unconfirmed record, is confirmed to be present in Brazilian waters based on material from Bahia and Espírito Santo. *Synalpheus tenuispina* Coutière, 1909, a poorly known species from southern Brazil, is redescribed. *Synalpheus ul* (Ríos & Duffy, 2007), previously known from Bahia and Alagoas, is reported from Pernambuco based on older “Calypso” material misidentified as *Synalpheus longicarpus* (Herrick, 1891). A new species from the *Synalpheus paraneptunus* Coutière, 1909 complex is described as *Synalpheus maxillispinus* sp. nov. based on three specimens dredged from moderate depths (15–55 m) off southern Bahia and Espírito Santo, eastern Brazil. Finally, an incomplete specimen that appears to belong to a species presently unknown in Brazil is preliminarily reported as *Synalpheus* sp. *gambarelloides* group. Illustrations are provided for all reported taxa except for *S. ul*.

Key words: Atlantic Ocean, Brazil, Decapoda, snapping shrimp, *Synalpheus*, sponge, new record, new species, redescription

Introduction

The speciose and taxonomically challenging snapping shrimp genus *Synalpheus* Spence Bate, 1888 is represented in the Atlantic Ocean by over 60 species (De Grave & Fransen 2011; Anker *et al.* 2012). Most of them occur in the tropical regions of the northwestern Atlantic, mainly in the Caribbean Sea, where most of the recent taxonomic research on the genus has been done (e.g., Ríos & Duffy 2007; Anker & Tóth 2008; Macdonald *et al.* 2009; Hultgren *et al.* 2010, 2011). In contrast, the synalpheid fauna of the southwestern Atlantic has not studied exhaustively since Christoffersen (1979) and remains comparatively less known. The only noteworthy recent studies dealing with the Brazilian material of *Synalpheus* are Coelho *et al.* (2006), Bezerra & Coelho (2006) and Coelho Filho (2006), all simply listing several species, some of them as new records for Brazil; Almeida *et al.* (2007, 2012) with an illustrated record of *Synalpheus ul* (Ríos & Duffy, 2007); and Anker *et al.* (2012), with additional records (some new) for Brazil and illustrations of several species based on material collected in Atol das Rocas. Anker *et al.* (2012) also commented on some morphologically variable taxa requiring taxonomic revisions, including *Synalpheus minus* (Say, 1818), *Synalpheus brevicarpus* (Herrick, 1891), and *Synalpheus apioceros* Coutière, 1909, all three of which occur in Brazil. These and other examples (Hultgren & Duffy 2012) show that the taxonomy of the American species of *Synalpheus* is far from being settled.

In September–November 2013, the authors were able to study the unsorted caridean material deposited in the crustacean collection of Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (MZUSP). This material contained numerous samples of *Synalpheus*, often in mixed lots together with other alpheid shrimps.

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