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Fennerosquilla heptacantha (Crustacea: Stomatopoda: Squillidae) in South Atlantic Ocean

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Abstract. *Fennerosquilla* is a monotypic genus that belongs to the family Squillidae, which has the highest generic diversity within Stomatopoda. This genus has been recorded in the north Atlantic Ocean, the Gulf of Mexico and Caribbean Sea, between 105 and 458 m depth. The present specimen was collected during the project “Avaliação da Biota Bentônica e Planctônica na porção *offshore* das Bacias Potiguar e Ceará”, in 2011, from the continental slope region of Brazil. In this expedition *Fennerosquilla heptacantha* was found at 178–193 m depth, and represents the first record of the species in the south Atlantic Ocean (Rio Grande do Norte State, northeastern Brazil), expanding the southern limit distribution. The specimen is the largest recorded, measuring 149 mm total length. The pigmentation zone on median region of telson and all diagnostic characters are still preserved and agree with the original description. *Fennerosquilla heptacantha* has a disjunct deep water distribution (more than 100 m) in the tropical western Atlantic, mostly along the continental slope.

Key words: Squilloidea, Baía Potiguar, geographic distribution, new record, deep sea.

Introduction

Squilloidea is the most speciose superfamily within Stomatopoda, comprising 47 genera and more than 180 species (Ahyong 2001, 2005; Ahyong *et al.* 2011; Ahyong 2013). The species are morphologically diverse and mainly distributed in two stocks, Atlanto-East Pacific and Indo-West Pacific (Kemp 1913; Serène 1962; Manning 1972, 1968; Ahyong 2005).

Squillidae is the only family of Squilloidea, with individuals usually found in U-shape soft bottom borrows at depths of less than 50 m (maximum 1250 m) (Ahyong 2001, 2004, 2005, 2013). Within Squillidae the genus *Fennerosquilla* Manning & Camp, 1983, can be highlighted by its distribution in deep western Atlantic waters (mostly in continental slope region). *Fennerosquilla* is a monotypic genus described by Manning & Camp (1983) to separate *Squilla heptacantha* Chace, 1939 from other squillids. The genus *Kempella* Low & Ahyong, 2010, is the morphologically most similar to *Fennerosquilla*, but they are directly distinguished by the single broad lateral processes with sharp apex of thoracic somite 5 (spiniform in *Kempella*) in combination with slightly bilobed lateral process of thoracic somite 7 (strongly bilobed in *Kempella*), and the presence of seven teeth on raptorial claw (instead six in *Kempella*) (Ahyong 2001).

Few studies have reported *F. heptacantha* (Chace 1939; Manning & Camp 1983; Camp 1983; Ahyong 2005), in addition to some checklists (Bullis & Thompson 1965; Gómez & Ortiz 1985; Herrera-Moreno & Betancourt 2003; Perez-Gelabert 2008; Reaka *et al.* 2009), probably due to the depth at which it is found (more than 100 m). Previous studies in the tropical north-western Atlantic from 105–458 m depths reported *F. heptacantha* at a moderate size, usually less than 100 mm total length (Chace 1939; Manning 1969; Manning & Camp 1983; Reaka *et al.* 2009). Therefore, the present work extends the known geographic distribution of *Fennerosquilla heptacantha*, and also expands on the body size and habitat information related to the species.

Material and methods

The specimen was collected in continental slope region, from 178–193 m depth, during a 20 minute trawl by the R.V.