



## **Amaryllididae and Lysianassidae (Amphipoda: Lysianassoidea) from off the central coast of Brazil (11°S–22°S), with descriptions of three new species**

ANDRÉ R. SENNA<sup>1,2</sup> & CRISTIANA S. SEREJO<sup>1</sup>

<sup>1</sup>Museu Nacional/UFRJ, Departamento de Invertebrados, Setor de Carcinologia, Quinta da Boa Vista s/n, 20940-040, Rio de Janeiro, Brazil

<sup>2</sup>E-mail: ar.senna@hotmail.com

### **Abstract**

Material collected on the central Brazilian coast from the REVIZEE Benthos Program was analyzed and three new species were herein described. Knowledge about sexual dimorphism on *Bonassa* is improved. The hypothesis of endemism of the genus *Amaryllis* to Australia is contested with the discovery of a new species of *Amaryllis* in the Southwestern Atlantic Ocean. A new species of *Lysianassa* is described, and its differences to *L. brasiliensis* are commented too. *Lysianopsis concavus* Senna, 2007 is herein described with more details in description and figures. The distributions of the described species are given. Keys to identification of Brazilian Lysianassoidea families and Lysianassidae species are presented in this paper.

**Key-words:** *Amaryllis*, *Bonassa*, *Lysianassa*, *Lysianopsis*, taxonomy, Brazilian province

### **Introduction**

The superfamily Lysianassoidea Dana, 1849 is characterized, in a variable way, by antenna 1 with peduncle short and robust, and flagellum with callynophore; antennae with calceoli; rostrum reduced; gnathopod 2 with a minute dactylus, with article 3 elongate and article 6 mitten-shaped. Hurley (1963) divided the family in two subfamilies, Lysianassinae and the new proposed subfamily Uristidinae. The family Lysianassidae *s. l.* were raised to the superfamily status by Bousfield (1979), including the elevation of the two subfamilies. Barnard & Karaman (1991) didn't recognize the superfamily status of Lysianassoidea and considered the group as a single family. However, recently some authors have been dividing the superfamily in several families. Currently, Lysianassoidea includes more than 12 established families and approximately 700 species.

Some lysianassoid families have been studied and new species described from Brazilian waters. The family Trischizostomidae Lilljeborg, 1865 was recently recorded from the Brazilian deep-sea (Freire & Serejo, 2004), as well as Eurytheneidae Stoddart & Lowry, 2004 (Serejo *et al.*, 2007; Senna & Serejo, in press), and a new species of Uristidae, genus *Stephonyx* Lowry & Stoddart, 1989 (Senna & Serejo, 2007). Two species of *Valettipsis* were recorded from the southeastern Brazilian deep-sea by Serejo & Wakabara (2003); however, Thurston (1989) suggest that this genus must be removed from the superfamily Lysianassoidea Dana, 1849, because of its similarities to the Eusiroidea. As previous records of Brazilian Lysianassoidea from shallow waters, there are *Lysianassa brasiliensis* Dana, 1853, *Shoemakerella nasuta* Dana, 1853 (Wakabara & Serejo, 1998), and *Lysianopsis concavus* Senna, 2007 (Senna, 2007), all included within the Lysianassidae *s. s.*, and *Perrierella audouiniana* Bate, 1857, family Aristiidae, (Wakabara & Serejo, 1998).