The Amaryllididae of Australia (Crustacea: Amphipoda: Lysianassoidea)

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ABSTRACT. Lowry & Stoddart (in press) established the lysianassoid amphipod family Amaryllididae. In the following paper the systematics of the diverse Australian amaryllidid fauna is presented. All amaryllidid genera are revised and rediagnosed and a key to genera is provided. Five genera and 23 species are recorded from Australian waters. Bathyamaryllis is recorded from Australia for the first time and new evidence indicates that Amaryllis is confined to Australia and possibly the New Zealand area. Two subfamilies (Amaryllidinae and Vijayiinae), three genera (Bamarooka, Devo and Wonga) and 20 species are new. The new species are Amaryllis carrascoi, A. croca, A. dianae, A. kamata, A. keablei, A. migo, A. moona, A. olinda, A. philatelica, A. quokka, A. spencerensis, Bamarooka anomala, B. dinjerra, B. endota, B. kimbla, B. tropicalis, Bathyamaryllis kapala, Devo dubuc, D. grahami and Wonga wonga. Distribution, depth and habitat notes are given for all species. Amaryllidids form two natural groups: a presumed free-living deep-water group with a subquadrate mouthpart bundle (Vijayiinae) and a presumed commensal shallow-water group with a subconical mouthpart bundle (Amaryllidinae). Except for Vijaya tenuipes the vijayiines are exclusively found in the deep seas of the North and South Atlantic and South Pacific Oceans. The amaryllidines are found in shallow temperate and tropical seas of the southern hemisphere. The largest diversity of genera and species is currently known from Australian waters, but the African and South American faunas have not been adequately described.

LOWRY, J.K., & H.E. STODDART, 2002. The Amaryllididae of Australia (Crustacea: Amphipoda: Lysianassoidea). *Records of the Australian Museum* 54(2): 129–214.

The amaryllidids have a long taxonomic history. Haswell (1879: 253) originally described the genus *Amaryllis* (in the "sub-family Stegocephalides") for two species, *A. macrophthalma* and *A. brevicornis*, from southeastern Australia. Neither species was well described. Stebbing (1888) synonymised *A. brevicornis* with *A. macrophthalma*, transferred *Amaryllis* to the Lysianassidae and described two new species: *A. bathycephala* from southeastern Australia and *A. haswelli* from the North Atlantic.

Bonnier (1896) described A. pulchellus from the Bay of Biscay in the North Atlantic Ocean. Walker (1904) described

Vijaya tenuipes, a new genus and species of amaryllidid amphipod from Sri Lanka. He based the genus on the fact that the male had a callynophore on antenna 1. Stebbing (1910a) synonymised Vijaya with Amaryllis because males of that genus also have callynophores. However, Lowry & Stoddart (in press) have redescribed Vijaya tenuipes and shown that Vijaya is a valid genus more closely related to Pseudamaryllis and Bathyamaryllis than to Amaryllis. Chevreux (1911) described A. rostrata from the deep sea of the North Atlantic Ocean and K.H. Barnard (1925) described A. conocephalus from southern Africa.