ZOOTAXA



Revision of the Australian Cuninae sensu lato (Bivalvia: Carditoidea: Condylocardiidae)

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ZOOTAXA

Abstract

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Thirty-three species and seven genera are recognised in Cuninae s.l. (Condylocardiidae) in Australia. Ten species are placed in Cuna Hedley, 1902, five being new (C. deltoides n. sp., C. libbyae n. sp., C. microconcentrica n. sp., C. navicula n. sp. and C. ramus n. sp.). Mimicuna n. gen. is monotypic with one new species (M. cuniformis n. sp.). Three species belong in Crassacuna n. gen. one new: C. crassisculpta n. sp. Ovacuna Laseron, 1953 is monotypic and two species are included in Propecuna Cotton, 1931. Fourteen species are placed in Warrana Laseron, 1953, eight of these new (W. brucemarshalli n. sp., W. flexuosa n. sp., W. lunata n. sp., W. pauciconcentrica n. sp., W. pellucida n. sp., W. punicea n. sp., W. triangulata n. sp. and W. westralis n. sp.). Two species are included in Westaustrocuna n. gen., both new (W. keegani n. sp. and W. albanyensis n. sp.).

Several taxa are excluded from Cuninae (and Condylocardiidae). These include: *Hamacuna* Cotton, 1931 (type species *Cuna hamata* Hedley & May, 1908), transferred to Carditidae; *Hamacuna radiata* Laseron, 1953 is synonymised with *Carditella elegantula* Tate & May, 1901 and transferred to *Carditellopsis* Iredale, 1936, in Carditidae; *Saltocuna* Iredale, 1936 (type species *Cuna particula* Hedley, 1902) is transferred to Lucinidae, and *Cuna subrotunda* Cotton, 1930 to *Numella* Iredale, 1924, in Ungulinidae.

Key words: Condylocardiidae, Cuninae, revision, taxonomy, Australia

Introduction

The Cuninae is a group of very small (generally <2 mm) bivalves belonging to family Condylocardiidae in superfamily Carditoidea. They have been associated with Crassatelloidea or Carditoidea based on little evidence. The present revision of Cuninae is a contribution to a complete revision of the Condylocardiidae of Australia, and follows a revision of the Condylocardiinae (Middelfart, 2002). The present revision relies fully on shell characters, because more than 100 years of collecting of condylocardiids around the Australian continent has resulted in few specimens with preserved animals being retained in collections. Further collecting of live material for this revision has not been possible due to time and the logistical constraints imposed by the small sizes and cryptic habitats of the species involved.

Cuna Hedley, 1902 was originally placed in the Crassatellidae and was distinguished from Carditella Smith, 1881 on the basis of the erect beak and a fissure dorsal to the resilifer. Hedley (1902) initially included Kellia atkinsoni Tenison Woods, 1877 and Carditella delta Tate & May, 1900 in Cuna. Lamy (1917) gave a detailed account on the hinge structure, using the hinge formulations defined by Bernard (1897), and listed 14 Australian Cuna species (of which only three are now retained there). Hedley later described three more Cuna species, C. particula Hedley, 1902, C. pisum Hedley, 1908 and C. hamata Hedley & May, 1908. Iredale (1936) acknowledged the morphological diversity of the species included in Cuna and introduced Volupicuna for C. delta, Saltocuna for C. particula, and Cunanax for C. pisum, without any detailed generic descriptions. Cotton (1931)