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Priority of the slipper lobster genus *Crenarctus* Holthuis, 2002, over *Antipodarctus* Holthuis, 2002 (Crustacea, Decapoda, Scyllaridae)

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In revising the Indo-Pacific scyllarine lobsters, Holthuis (2002) proposed a new genus, *Antipodarctus*, for *Scyllarus aoteanus* Powell, 1949 (type locality: Great Barrier Island, New Zealand), and a new genus, *Crenarctus*, for two species, *Scyllarus bicuspidatus* De Man, 1905 (type species; type locality: Flores Sea, Indonesia) and *S. crenatus* (Whitelegge, 1900) (type locality: off Wata Mooli (= Wattamolla), New South Wales, Australia). According to Holthuis (2002), *Antipodarctus* is distinguished from *Crenarctus* only by the presence of an additional carina on the fourth antennal segment. Examination of the male holotype of *A. aoteanus* in 2009 (Auckland War Memorial Museum, registration number MA76171) revealed that the original diagnosis of *Antipodarctus* was incorrect — *A. aoteanus* does not have an additional carina on the fourth antennal segment and is indistinguishable from *C. crenatus*. Moreover, a recent molecular phylogenetic study of the slipper lobsters (Yang *et al.* 2012) showed that *Antipodarctus* and *Crenarctus* are indistinguishable and that *A. aoteanus* and *C. crenatus* are conspecific. Being conspecific, *A. aoteanus* and *C. crenatus* must also be congeneric and so both genera cannot be maintained. In the online appendix to their paper (Appendix A. Supplementary material, doi:10.1016/j.ympev.2011.09.019), Yang *et al.* (2012) assumed that the name *Antipodarctus* had priority over *Crenarctus* on the basis of page priority in Holthuis (2002) (p. 551 for *Antipodarctus*, p. 659 for *Crenarctus*) (see discussion in Nemésio 2007). According to Article 24.2.2 of the *International Code of Zoological Nomenclature* (ICZN 1999), however, priority of taxon names simultaneously published in the same paper is determined by the deliberate choice of the first reviser and not by order of appearance in the original publication. Additionally, the appendix of Yang *et al.* (2012) was only published as online supplementary information, rather than as part of the main printed article. In any case, the ‘action’ in the appendix would not be nomenclaturally valid because it was simply stating what the authors thought to be a Code requirement rather than being a deliberate First Reviser action (Article 24.2, ICZN 1999). The status of *Antipodarctus* and *Crenarctus* thus remains unresolved because no formal (Code-compliant) action has been taken to fix name priority.

Selection of one genus over the other has consequences for nomenclatural stability. If *Antipodarctus* is selected over *Crenarctus*, new generic combinations for both species of *Crenarctus* would be required and *Antipodarctus aoteanus* would be replaced by a new combination, *A. crenatus*. Conversely, giving priority to *Crenarctus* over *Antipodarctus* would require fewer nomenclatural changes: the current combinations, *C. bicuspidatus* and *C. crenatus* would continue to be used unchanged, and the names *Antipodarctus* and *A. aoteanus* would simply fall from use. Priority of *Crenarctus* over *Antipodarctus* would also enable the original diagnosis and composition of *Crenarctus* to remain unchanged (since *A. aoteanus* is a junior synonym of *C. crenatus*) and the revised classification would remain more consistent with the taxonomy used in the main text of Yang *et al.* (2012) in which the *Crenarctus*, *C. bicuspidatus* and *C. crenatus* were used as valid names alongside *Antipodarctus* and *A. aoteanus*. Therefore, in the interests of nomenclatural stability, we herein take First Reviser action and select *Crenarctus* over *Antipodarctus*. The following taxonomic changes are made:

1. *Crenarctus* Holthuis, 2002, as a senior synonym of *Antipodarctus* Holthuis, 2002.
2. *Crenarctus crenatus* (Whitelegge, 1900) as a senior synonym of *Antipodarctus aoteanus* (Powell, 1949).

Although believed lost (Holthuis 2002: 661), the two male syntypes of *C. crenatus* are in the collections of the Australian Museum (registration number G2393).