

## Australian Iphimediidae (Crustacea: Amphipoda)

Ch. Oliver Coleman<sup>a,\*</sup>, James K. Lowry<sup>b</sup>

<sup>a</sup>Museum für Naturkunde, Invalidenstrasse 43, 10115 Berlin, Germany

<sup>b</sup>Crustacean Section, Australian Museum, 6 College Street, Sydney, NSW 2010, Australia

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### Abstract

Australian species of the iphimediid amphipod genus *Iphimedia* are revised. Based on new material from inshore and continental shelf habitats six new species are described: *Iphimedia beesleyae*; *I. filmersankeyi*; *I. kateae*; *I. lisae*; *I. neuweileri* and *I. oetkeri*. Four established species are redescribed: *I. ambigua* Haswell, 1879; *I. discreta* Stebbing, 1910; *I. edgari* (Moore, 1981) and *I. warraina* (Thomas and Barnard, 1991). A key to Australian species of *Iphimedia* is provided.

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### Introduction

The key and full descriptions for all species, including illustrations, are given in the accompanying Organisms Diversity and Evolution Electronic Supplement (<http://www.senckenberg.de/odes/06-09.htm>).

All new type material is deposited in the Australian Museum (AM), Sydney.

efforts in support of Australian taxonomy for many years.

### Type material

*Holotype* (AM P63613): female with ten eggs, 6.4 mm; Australia, New South Wales, Sydney, East of Long Reef, 33°44'S 151°22'E, 42.5 m, Australian Museum Shelf Benthic Survey, 27 April 1973. Paratypes (AM P24210): two specimens of unknown sex, 2.6–3.2 mm, from type locality.

### Taxonomic section

#### *Iphimedia beesleyae* n. sp.

#### Etymology

Named for Pam Beesley (Australian Biological Resources Survey, Canberra) in appreciation of her

#### Diagnosis (based on female holotype)

Eyes reniform; anterior margin without spine. Antenna 1 peduncular article 2 with a posteroventral spine. Gnathopod 1 coxa small, ventrally subacute. Gnathopod 2 coxa small, ventrally acute. Pereopod 5 basis posterodorsal corner with small, straight spine. Pereopod 6 basis posterior margin with one spine. Pleonite 1 with a broadly truncated mid-dorsal carina, dorsodistal margin strongly produced, shield-like. Pleonite 2 dorso-distal margin with two small pointed spines.

\*Corresponding author.

E-mail address: [oliver.coleman@museum.hu-berlin.de](mailto:oliver.coleman@museum.hu-berlin.de)  
(C. Oliver Coleman).

***I. filmersankeyi* n. sp.****Etymology**

Named for Patrick Filmer-Sankey, former Deputy Director of the Australian Museum, in appreciation of his unwavering support for science in the Australian Museum.

**Type material**

*Holotype* (AM P42200): female, 10.3 mm; Australia, Tasmania, D'Entrecasteaux Channel, North side of Scott Point, 43°21.4'S 147°03.5'E, flat red alga, 18 m, R.T. Springthorpe & P.M. Berents, 20 April 1991, TAS-218.

**Diagnosis (based on female holotype)**

Eyes ovate. Pereonite 1 enlarged, slightly produced over head. Pereopod 5 basis posterior margin with one spine, posteroventral corner rounded. Pereopod 6 coxa with posteroventral spine; basis posterodorsal corner with spine. Pereopod 7 coxa with posterodorsal and posteroventral spines. Pereonite 7 with acute mid-dorsal carina and two dorsodistal large, pointed spines. Pleonite 1 with a narrow, apically acute mid-dorsal carina. Pleonite 2 dorsodistal margin with space between spines deeply excavate. Pleonite 3 with a dorsodistal acute carina.

***I. kateae* n. sp.****Etymology**

Named for Kate Attwood in appreciation of her help (to JKL) over many years.

**Type material**

*Holotype* (AM P63600): female (ovigerous), 7.3 mm; Western Australia, Torbay Bay, Port Harding, Rocks near Migo Island, 35°04'S 117°39'E, small branched algae with compound tunicate on underside, 7 m, J.K. Lowry & R.T. Springthorpe, 15 December 1983, WA 152. Paratypes: (AM P63601) three females 4.8–5.5 mm; two males 3.1–4.2 mm, plus three specimens, from type locality; (AM P63602) three specimens, Western Australia, Two Peoples Bay, 2 km southeast of South Point, 34°58'S 118°12'E, mixed algae – coralline, green, sea grass, 12 m, R.T. Springthorpe, 16 December 1983, WA 183; (AM P63603) nine specimens 1.6–4 mm, Western Australia, off southeast corner of Michaelmas Island, 35°03'S 118°00'E, green curly bryozoans, 24 m, R.T. Springthorpe, 17 December 1983, WA 203.

**Diagnosis (based on female holotype)**

Eyes reniform; anterior margin without spine (but with rounded protrusion), anteroventral corner rounded. Antenna 1 peduncular article 1 without

posteromedial spines. Pereopod 3 coxa ventral margin weakly serrate posteroventrally. Pleonite 1 dorsodistal margin not produced shield-like, with one mid-dorsal boss and two dorsodistal rounded spines.

***I. lisae* n. sp.****Etymology**

Named for Lisa Lorbeer.

**Type material**

*Holotype* (AM P63604): female (with setose oostegites), 4.3 mm; Australia, New South Wales, Twofold Bay, Quarantine Bay, 37°04'42"S 149°53'E, airlift, Posidonia beds, S.J. Keable & A.L. Reid, 25 June 1985, stn Q8. Paratypes (AM P63605): four specimens, 1.9–2.5 mm, from type locality.

**Diagnosis (based on female holotype)**

Antenna 1 peduncular article 1 with only two short apical spines; peduncular article 2 with one short posterodorsal spine. Pereopod 6 basis posterior margin with a rounded boss. Pereopod 7 basis posterior margin with one spine, posteroventral corner grossly excised. Pereonite 7 dorsodistal margin not produced, dorsodistal margin with two very short, small, pointed spines. Epimeron 3 posteroventral corner minutely double-notched.

***I. neuweileri* n. sp.****Etymology**

Named for Prof. Dr. G. Neuweiler to thank him for his efforts to improve the structure of the Museum für Naturkunde Berlin.

**Type material**

*Holotype* (AM P63606): female, 5.7 mm; Western Australia, Torbay Bay, Port Harding, rocks near Migo Island, 35°04'S 117°39'E, small branched algae with compound tunicate on underside, 7 m, J.K. Lowry & R.T. Springthorpe, 15 December 1983, WA 152. Paratypes (AM P62986): four specimens, Western Australia, Two Peoples Bay, 2 km southeast of South Point, 34°58'S 118°12'E, mixed algae – coralline and green algae and sea grass, 12 m, R.T. Springthorpe & J. K. Lowry, 16 December 1983, WA-183.

**Diagnosis (based on female holotype)**

Antenna 1 peduncular article 1 without posteroventral spines; peduncular article 2 with a very short posterodorsal and a very short posteroventral spine. Maxilla 1 palp reduced, shorter than outer plate. Pereopod 3 coxa ventrally rounded. Pereonite 7 without mid-dorsal boss or carina, without dorsodistal spines,

dorsodistal margin without spines. Pleonite 1 dorsodistal margin with two small spines. Pleonite 3 dorsodistal margin not produced. Telson entire and truncated.

### ***I. oetkeri* n. sp.**

#### **Etymology**

Named for Dr. Arend Oetker, in appreciation of his support for the first author's projects to promote public understanding of science.

#### **Type material**

*Holotype*: female (ovigerous), 5.4 mm, AM P63607; Australia, New South Wales, Twofold Bay, Munganno Point, 37°06'12"S 149°55'42"E, subtidal wharf pile, erect bryozoan colony, 6 m, S.J. Keable, 10 October 1984, stn M5. Paratypes (all Australia, New South Wales): (AM P63608) two females 4.1–5 mm, three males 3.3–3.6 mm, one juv. 2.3 mm, from type locality; (AM P22446) one? male, 3 mm, East of Long Reef, 33°44'S 151°22'E, 38 m, Australian Museum Party, 24 August 1972; (AM P63609) one male 3.6 mm, one female 5.0 mm, Twofold Bay, Munganno Point, 37°06'12"S 149°55'42"E, wharf

pile, encrusting fauna, 6 m, S.J. Keable & J.T. van der Velde, 10 October 1984, stn M2; (AM P63611) one? male 3.3 mm, Twofold Bay, Munganno Point, 37°06'12"S 149°55'42"E, tunicate, wharf piles, 12 m, S.J. Keable, A.C. Paul & L.M. Walker, 26 March 1985, stn M2; (AM P63610) one female (ovigerous) 5 mm, Twofold Bay, Munganno Point, 37°06'12"S 149°55'42"E, encrusting fauna on wharf pile, ascidians, 4 m, J.T. van der Velde, 10 October 1984, stn M4; (AM P63612) two males 2.8 and 2.9 mm, one female with setose oostegites 3.9 mm, Twofold Bay, Munganno Point, 37°06'12"S 149°55'42"E, sponges, bryozoan, wharf piles, 12 m, S.J. Keable & A.L. Reid, 27 June 1985, stn M9.

#### **Diagnosis (based on female holotype)**

Eyes round. Pereonite 1 enlarged, strongly produced over head. Gnathopod 1 coxa small, ventrally subacute. Pereopod 3 coxa posteroventral corner serrate. Pereopod 4 coxa posteroventral margin serrate. Pereopod 6 basis posterior margin with two rather short spines. Pleonite 1 with a narrow, apically acute mid-dorsal carina. Pleonite 3 with a dorsodistal acute carina.