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New Lysianassoid Genera and Species from South-eastern Australia (Crustacea: Amphipoda)

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ABSTRACT. Two new lysianassoid genera and species (*Gippsia jonesae* and *Thaumodon poorei*) are described from south-eastern Australia. The poorly known genus *Galathella* Barnard & Karaman, 1987, is rediagnosed; two new species (*G. bassiana* and *G. palana*) from south-eastern Australia are described and *G. latipes* (Ledoyer, 1986) from the western Indian Ocean is included. *Galathella* appears to be most closely related to *Centromedon* Sars, 1891, *Gippsia* n.gen. appears to be most closely related to *Ichnopus* Costa, 1853 and *Thaumodon* n.gen. appears to be related to *Concarnes* Barnard & Karaman, 1991.

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As part of our studies revising the world lysianassoid genera we describe two new genera, *Gippsia* and *Thaumodon*, from south-eastern Australia and redescribe the poorly known genus *Galathella* Barnard & Karaman, 1987, based on examination of the original material and new material from deep water near Bass Strait.

Thaumodon belongs in the Lysianassidae. The Lysianassidae comprises taxa with a palp on maxilla 1 and a 6/5 setal-tooth arrangement on the outer plate of maxilla 1. The 6/5 arrangement may be derived from a simple 7/4 arrangement (Fig. 1a) in which eleven distal setal-teeth on the outer plate of maxilla 1 occur in two rows, an apical row of seven setal-teeth (known as ST1 to ST7) and a subapical row of four setal-teeth (known as STA to STD). In the 6/5 arrangement (Fig. 1b) the outer plate becomes slightly narrowed apically so that setal-tooth 1 (ST1) is displaced downwards, which displaces setal-tooth A (STA). This causes STA to be slightly displaced from STB. More than 60 lysianassoid genera in three family groups have this setal-tooth arrangement. The new genus *Thaumodon* has a modified 6/5 arrangement (Fig. 1c). Setal-tooth 7 is displaced from the outer row so that it sits against STD on the inner row. This has compressed the inner row setal-teeth so that STC is touching STA and STB is pushed behind them. To add to their unusual appearance the inner row setal-teeth are large and all of the setal-teeth are cornified, curved and without cusps.

Thaumodon occurs among seagrasses and wharf pilings and although it resembles a typical lysianassid, the simple first gnathopods are modified into a rasping organ and the mouthpart morphology is highly derived. Nothing is known about the ecology or behaviour of this species, but such information would be valuable in helping to interpret the interesting mouthpart morphology.