New Species belonging to the Family Porcellidiidae (Harpacticoida: Copepoda) from Kioloa, New South Wales, Australia

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ABSTRACT. Six new species referred to four new genera and one new species of Porcellidium belonging to the family Porcellidiidae (Harpacticoida: Copepoda) are described from Kioloa, a locality on the southern coast of New South Wales, Australia. Characteristic features defining the following new genera are given together with descriptions of new species: Brevifrons n.gen., B. faviolatum n.sp., Kioloaria n.gen., K. sesquimaculata n.sp., Murramia n.gen., M. magna n.sp., M. bicincta n.sp., Tectacingulum n.gen., T. tumidum n.sp. and T. nigrum n.sp. A new species of Porcellidium, P. londonii n.sp., is described and referred to the ‘Fimbriatum’ group. The structure and taxonomic significance of the hyaline fringe and male antennule are discussed together with other characters that have been used to define new genera.


The family Porcellidiidae has been regarded as monotypic with all species being referred to the one genus, Porcellidium (Lang, 1948). In their description of eight new species from New South Wales, Harris & Robertson (1994) pointed out the need for revision of the family. Using a wider database, built upon a more detailed knowledge of the Australian species, they discussed the most suitable features upon which the family could be defined and new genera created. The taxonomic characters of Porcellidium were redefined and a new genus, Acutiramus, established to take two of the new species.

The present paper deals with a collection of seven new species from Kioloa, a locality on the southern coast of New South Wales. Six of these belong to the southern assemblage (Harris & Robertson, 1994). One species has been referred to Porcellidium; the other six show features which immediately exclude them from that genus. To accommodate them four new genera have been erected and their characteristics defined. None of the previously described species fall into these new genera.

The methods of study, measurement and selection of type material, together with terminology used to describe setae, follows the procedures described by Harris & Robertson (1994). Numbers on illustrations refer to the slide from which they were drawn. On drawings of the whole animal the delicate hyaline border or fringe has been omitted. SEM photographs of formalin fixed material were taken on an Hitachi S225 ON scanning electron microscope after gold coating.

Holotypes, allotypes and paratype material have been deposited in the Australian Museum, Sydney, and paratype material deposited in the British Museum (Natural History). The remaining paratype material and