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Description of Predominantly Arboreal Plateremaeoid Mites from Eastern Australia (Acarina: Cryptostigmata: Plateremaeoidea)

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ABSTRACT. Two new genera of the superfamily Plateremaeoidea, *Labiogena* and *Darthvaderum*, are proposed, and *Novazelandiella* Paschoal rediagnosed. The genera are tentatively assigned to the family Hammeriellidae. Four new species are described from eastern Australian arboreal habitats: *Labiogena convexa* n.sp., *Labiogena walteri* n.sp., *Novazelandiella kellyi* n.sp., and *Darthvaderum greensladeae* n.sp., the type species of *Darthvaderum* n.gen. One new combination is established, *Labiogena queenslandica (Pedrocortesella)* (P. Balogh, 1985) and the species is redescribed and designated the type species of *Labiogena* n.gen. Keys are given to the species of *Labiogena*, and to plateremaeoid genera recorded from arboreal habitats in Australia.

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Oribatid mites have traditionally been regarded as inhabitants of the soil or ground litter but more recently have been recognised as an important component of the acarine fauna of forest canopies (for example, Walter, 1995). The predominantly arboreal genus *Hexachaetoniella* (family Pedrocortesellidae) and some arboreal *Pedrocortesella* species have been reviewed elsewhere (Hunt 1996a;b). The present paper includes descriptions of further arboreal species from eastern Australia which are tentatively assigned to the Hammeriellidae.

Arboreal species typically have a sensillus which terminates in an ovoid or spherical head (Hunt, 1996b) whereas species living on the forest floor usually have a sensillus of more elongate form. Some of the latter species have, however, been recorded from tree trunks and their genera are included in the key below (couplets 2 and 3).

Methods

Descriptions apply to adults only. A Cambridge Stereoscan 120 with Robinson Detector was used for Scanning Electron Microscopy (SEM). The following abbreviations are used to indicate the present location of material: AM—Australian Museum, Sydney; ANIC—Australian National Insect Collection, Canberra; CNC—Canadian National Collections of Insects, Arachnids and Nematodes, Ottawa; FMNH—Field Museum of Natural History, Chicago; QM—Queensland Museum, Brisbane.