

A Revision of the *Yoyetta abdominalis* (Distant) Species Group of Cicadas (Hemiptera: Cicadidae: Cicadettinae), Introducing Eight New Species

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ABSTRACT. This study provides redescriptions of four medium-sized cicada species within the *Y. abdominalis* (Distant) species group, including *Yoyetta aaede* (Walker), *Y. abdominalis*, *Y. denisoni* (Distant) and *Y. kershawi* Goding & Froggatt stat. rev., comb. nov., from southeastern Australia. Eight new species of *Yoyetta*, belonging to this group are described, from eastern Australia. These are: *Y. electrica* sp. nov., *Y. grandis* sp. nov., *Y. regalis* sp. nov., *Y. serrata* sp. nov., *Y. spectabilis* sp. nov., *Y. subalpina* sp. nov., *Y. timothyi* sp. nov., and *Y. verrens* sp. nov. Sections describing morphological distinguishing features, distribution, habitat and behaviour, and calling songs (where available) are provided for each species with illustrations throughout. Additional locational records for *Y. hunterorum* (Moulds) are presented and its song described.

Introduction

Cicadas are conspicuous insects of the Australian summer. Of all cicada tribes recognized in Australia, Cicadettini is by far the most diverse, comprising the majority of smaller, thin-bodied species (Moulds, 2012). The genus *Yoyetta* Moulds was erected to accommodate nine Australian species, previously allocated to the genus *Cicadetta* Kolenati. Emery *et al.* (2015) synonymized one of the species and added an additional four. However, examination of available material in entomological collections has revealed this genus to be highly diverse and it may ultimately contain more than 50 cicada species.

Emery *et al.* (2015) also reported three informal species groups within the *Yoyetta* genus. The *Yoyetta abdominalis* species group is readily identified with hind wing plaga almost entirely white and opaque, and abdominal tergites

2–7 mainly black or dark brown. The *Yoyetta incepta* species group present with hind wing plaga opaque and cream to pale orange-brown along the majority of the jugal fold and outer margin, and abdominal tergites mainly black, while in the *Yoyetta tristrigata* species group, the hind wing plaga is opaque and cream to light brown or orange-brown along majority of jugal fold and outer margin, and abdominal tergites 2–7 are mainly orange to yellow-brown. This study focuses on the *Yoyetta abdominalis* species group.

Following Emery *et al.* (2015), the *Yoyetta abdominalis* species group contains four described species, *Yoyetta aaede* (Walker), *Y. abdominalis* (Distant), *Y. denisoni* (Distant) and *Y. hunterorum* (Moulds); all are small- to medium-sized cicadas. *Yoyetta aaede* was described (as *Cicada aaede*) from a single female specimen from Adelaide, South Australia (Walker, 1850). A small number of additional specimens has been found among older accession material

Keywords: Australia; behaviour; cicada; Cicadidae; *Yoyetta*; distribution; habitat; taxonomy

Taxonomic registration: (LSID publication) <http://zoobank.org/0C138CF3-68E5-4A22-A46E-3DDC57F0FD2E>

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