



Studies in Australian Tettigoniidae: Australian agraeiine katydids, two new genera from northern Australia (Tettigoniidae; Conocephalinae; Agraeiini)

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ABSTRACT

Two new agraeiine genera and five new species are described from northern Australia. Both genera have species that live in mixed woodlands in the tropics. *Armadillagraecia* Rentz, Su, Ueshima, Robinson gen. nov. is known from two species in the Northern Territory and one from Queensland. *Kapalgagraecia* Rentz, Su, Ueshima, Robinson gen. nov. is known from two species, one apparently widespread in the Northern Territory, the other from Groote Eylandt, NT. Cytological data are provided for all *Armadillagraecia* species but not for *Kapalgagraecia*. A table is presented documenting knowledge of the known cytology of all Agraeiini. The calling songs of both *A. mataranka* and *A. yerilla* Rentz, Su, Ueshima, Robinson gen. et spp. nov. are noted and documented by sonograms. Known biological, ecological and distributional data are presented.

Key words: Conocephalinae; Agraeiini; Australian katydids; katydid ecology; katydid cytology

INTRODUCTION

A number of undescribed Australian genera in the conocephaline tribe Agraeiini have been known for years, (see Rentz 1996, for example). The increasing public interest in wanting to know what these species are when they encounter them in the bush and the impending publication by CSIRO of the Guide to Australian Tettigoniidae compels us to provide names for many of these taxa. This is the first in a series of publications dealing with new Australian agraeiine genera.

Among the most bizarre of Australian agraeiines are the genera proposed in this study. At first glance, an orthopterist might think that he's come across the first Australian examples of the wholly African tettigoniid subfamily Hetrodinae. But looks are deceiving. Both genera described here are assigned to the Conocephalinae on the basis of the closed tibial auditory structure, hind tarsus lacking a distinct plantula, fastigium of vertex not being distinctly sulcate. Only one genus has the prosternum armed, a characteristic that seems to be present in other conocephalines. Hetrodines are considered among primitive tettigoniids because among other characters, the antennae are inserted below the ventral margin of the eyes. This is not the case with the genera proposed here. They can be accommodated in the Agraeiini, as presently understood, on the basis of the fastigium of the vertex being produced forward as a spine or knob. As our knowledge of the breadth of the complement of genera placed in what is now the Agraeiini expands, additional tribes may be needed to accommodate these taxa.