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**Taxonomic revision of the longicorn beetle genus *Uracanthus* Hope
1833 (Coleoptera: Cerambycidae: Cerambycinae: Uracanthini)
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DUANGRAT THONGPHAK & QIAO WANG



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DUANGRAT THONGPHAK & QIAO WANG¹

Entomology and IPM Laboratory, Institute of Natural Resources, Massey University, Private Bag 11222, Palmerston North, New Zealand.

¹To whom correspondence should be addressed

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Abstract

A thorough taxonomic revision of the Australian *Uracanthus* is provided, including a redefinition of the scope of the genus, descriptions and illustrations of new and previously known species, and a key to all species. The revised Australian *Uracanthus* includes 39 species, eight of which are established as new to science: *U. pseudogigas* sp. nov., *U. maculatus* sp. nov., *U. griseus* sp. nov., *U. bicoloratus* sp. nov., *U. perthensis* sp. nov., *U. punctulatus* sp. nov., *U. quadristriolatus* sp. nov., and *U. bistrisolatus* sp. nov. Six new synonyms are proposed (senior synonyms last): *U. multilineatus* McKeown with *U. ventralis* Lea, *U. dentiapicalis* McKeown with *U. parvus* Lea, *U. marginellus* Hope and *U. inermis* Lea (not Aurivillius) with *U. bivitta* Newman, *U. fuscostriatus* McKeown with *U. lateroalbus* Lea, and *U. daviumbus* Gressitt with *U. longicornis* Lea. Dorsal views of all species are presented as photographs, terminalia of both sexes illustrated, and distributions mapped. The larvae of this genus are borers of at least 31 genera of trees and parasitic plants in 15 families (Asteraceae, Betulaceae, Casuarinaceae, Cupressaceae, Fabaceae, Loranthaceae, Myrtaceae, Pittosporaceae, Proteaceae, Rhamnaceae, Rosaceae, Rutaceae, Sapindaceae, Sterculiaceae, and Xanthorrhoeaceae), including some economically important crops such as citrus, lychee (or litchi), peach, plum, and apricot. Several species are important pests of orchards. *Uracanthus* adults visit flowers of various tree species and are attracted to the light.

Key words: Cerambycidae, Cerambycinae, *Uracanthus*, Australia, revision

Introduction

The genus *Uracanthus* is a large group of longicorn beetles found in the Australian Region, predominantly distributed on the Australian mainland and Tasmania. The larvae of this genus are borers of at least 31 genera of trees and parasitic plants, including some economically important crops such as citrus, lychee (or litchi), peach, plum, and apricot. Adults visit flowers of various tree species and are attracted to artificial light. As several species are important pests of fruit trees in Australia, this genus may represent a biosecurity risk for countries that trade with Australia.

Uracanthus was proposed by Hope (1833) under the family Stenochoridae with *U. triangularis* as the type species (by monotypy). During the nineteenth century, eleven species were described either in *Uracanthus* or in other genera and later transferred to *Uracanthus* (Boisduval 1835, Hope 1834, 1841a, 1841b, 1844, Gahan 1893, Laporte 1840, Newman 1838, White 1855, Pascoe 1866, 1875, Blackburn 1889, 1894 & Olliff 1892).

The first half of the twentieth century saw a great activity in taxonomic work on *Uracanthus* by Aurivillius (1917), Lea, (1916, 1917), and McKeown (1938, 1940, 1942, 1947 & 1948). Among those workers, Lea (1916 & 1917) made the most significant contribution to the genus. In 1916, he revised the genus, described fourteen new species and provided a key to 22 known species. One year later, he added six new species to the genus. During this period, species descriptions were mainly based on the shape of the elytral apex, and the pubescence pattern on the elytral disc and prothorax.

Duffy (1963) was the first to deal with immature stages of *Uracanthus*. In 1963, he described immature stages of three species and summarised the distribution and biology of twelve species in *Uracanthus*. Rondonuwu and Austin's (1988) work is the most recent taxonomic treatment of this genus, where they described a new species, *U. cupressianus*, from South Australia. In this work, these authors used many more characters including genitalic characters.

Prior to the current study, 37 species were recognized from Australia with a number of variants proposed (Lea 1916 & 1917a, b, McKeown 1947 & 1948, Rondonuwu & Austin 1988), and four from New Guinea (Gressitt 1951 & 1959). However, the taxonomy of this genus is still very unsettled, making species identification, pest management and risk analysis, and biogeographic evaluation difficult. Therefore, a comprehensive taxonomic revision of the Australian species of *Uracanthus* was necessary.

We have examined all available Australian *Uracanthus* species and found five new synonyms and eight new species; we propose these here. We have also seen types of two New Guinean species, *U. daviumbus*