

## Revision of *Zorion* Pascoe (Coleoptera: Cerambycidae), an endemic genus of New Zealand

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### Abstract

The genus *Zorion* Pascoe (Cerambycidae: Cerambycinae), commonly known as flower longhorn beetle, is endemic to New Zealand where it is widely distributed on the main and some offshore islands. A taxonomic revision of *Zorion* adults is given, including a description and illustrations of the genus. The previously known species *Z. batesi* Sharp, *Z. guttigerum* (Westwood), *Z. minutum* (Fabricius), and *Z. opacum* Sharp are redescribed; *Z. castum* Broun is synonymised with *Z.*

*guttigerum*. Lectotypes are designated here for *Z. guttigerum* and *Z. opacum*. Six new species are described, *Z. angustifasciatum* sp. nov. from Three Kings Islands, *Z. australe* sp. nov. from South Island, *Z. dugdalei* sp. nov. from Poor Knights Island, *Z. kaikouraiensis* sp. nov. from the Kaikoura region, *Z. nonmaculatum* sp. nov. from D'Urville Islands, and *Z. taranakiensis* sp. nov. from the Taranaki region. The species *Z. exiguum* Gmelin has been excluded from the study because neither the original description nor the holotype could be located. A key to all ten species is included and diagnostic elytral spot patterns are illustrated. Biological information presented is based on publications, collecting records and our observations. A distribution map for all species is included and species distribution is discussed in relation to New Zealand's biogeographical history.

**Key words:** Cerambycidae, Cerambycinae, *Zorion*, New Zealand, New Species

## Introduction

The New Zealand endemic beetle genus *Zorion* Pascoe 1867 belongs to the tribe Aphneopini (Aurivillius 1912) and is commonly known as “flower longhorn beetle” (Grant 1999, Scott & Emberson 1999). It has been described as perhaps the most strikingly colourful beetle genus in the New Zealand fauna (Klimaszewski & Watt 1997). Adults are 3–7 mm long and are often found in great numbers on flowers. Larvae feed internally on bark or woody material of trees and shrubs and adults were found to lay their eggs in freshly cut or broken branches of *Corynocarpus laevigatus* (Corynocarpaceae), suggesting that the beetles seek out dead wood to lay their eggs (Early *et al.* 1991).

This genus comprises a diverse group, and the systematics is confused as outlined below. The ecological and phylogenetic relationships are also unknown and the species distributions are unclear, with the exception of *Z. opacum*, which is restricted to the Chatham Islands. Examination of specimens for this research showed that the genus is widespread within New Zealand and its offshore islands. Some type localities however, were apparently very broadly interpreted by Broun, Pascoe, Sharp and White. ‘Auckland’ for example, may have referred to the province rather the city (Watt 1977). The available descriptions from the various authors are often very brief, which is reflected in the inconsistent identification of the museum specimens by previous workers. Klimaszewski & Watt (1997) suggested that there could be six or more species. The number of species could, therefore, range from three, as proposed by Blair (1937), to seven based on the number of available names.

The first record of the genus *Zorion* is a specimen collected by Banks during the first voyage of Captain Cook, from 1769 to 1771. Fabricius (1775) briefly described this specimen and gave it the species name *Callidium minutum*. Later, Fabricius (1801) transferred it to the genus *Clytus* as *C. minutus*. A new species *Obrium guttigerum* from Port Nicholson was described by Westwood (1845). At the same time he transferred *C. minutus* to *Obrium* with a new epithet *fabricianum* in the belief that the name *O. minutum* was already occupied.