

The Australian longhorns *Aridaeus thoracicus* and *Didymocantha obliqua* (Coleoptera : Cerambycidae) established in New Zealand

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Abstract

The presence of the Australian longhorns *Aridaeus thoracicus* and *Didymocantha obliqua* in New Zealand is confirmed. Detail of their known distribution and host plants are given.

Aridaeus thoracicus

Gourlay (1954) recorded a single specimen of the Australian longhorn *Aridaeus thoracicus* (Donovan) running over flowers at New Plymouth. On 10 March 1960 the *New Zealand Herald* ran an illustrated story on the discovery by Miss M. Motion of an adult *A. thoracicus* at Thames. The specimen had been sent to Mr K. A. J. Wise of the Auckland War Memorial Museum, who was reported to have said that *A. thoracicus* had never been recorded from this country before.

In March 1976 and January and April 1977 the Forest Research Institute (FRI) received individual adults of *A. thoracicus* from the Thames area that were found by local residents and forwarded by the N.Z. Forest Service District Ranger's office in that town. However, it was not until September 1977 that searches by members of the Forest Biology Survey revealed larvae that were identified as this species. They were found in a dead mangrove (*Avicennia resinifera*) stem near Thames. Adults were subsequently reared from the sample. In January 1977 an unidentified larva had been found in an old *Eucalyptus* sp. log at Thames but at that time was not assigned with any certainty to *A. thoracicus*. Comparison with larvae from the mangrove has shown that it is this species.

In Australia *A. thoracicus* is apparently confined to New South Wales and Queensland where larvae have been recorded from the wood of *Pyrus malus* (= *Malus sylvestris*) and *Cryptocarya glaucescens* (Duffy 1963), and adults are commonly found on *Leptospermum* sp. (Tillyard 1926). The finding of *A. thoracicus* in a *Eucalyptus* log in New Zealand points to a possible means of introduction because, although it has not been recorded from *Eucalyptus* in Australia, it is quite feasible that it does in fact utilize this host there. It seems more likely to have entered this country in *Eucalyptus* material than in either *P. malus* or *C. glaucescens*.

It is unlikely that *A. thoracicus* would ever be confused with any other cerambycid in New Zealand. The beetles (Fig. 1) are 10-20 mm long and strikingly marked with gold and black. To a lesser degree the larvae are quite easily distinguished from other cerambycine larvae known in New Zealand. Ocelli are absent and the prosternum has the same characteristic striations as the pronotum. The only other cerambycine larvae (of the ones that are known in New Zealand) that lack fully formed ocelli are *Ambeodontus tristis* (F.) and *Eburilla sericea* (White), but in both of these the site where each ocellus should be is marked by an indistinct pigmented spot; also, neither species has a striate prosternum. *Oemona hirta* (F.) is the only other cerambycine larva that has been recorded from mangrove (FRI records). For a fuller description of *A. thoracicus* refer to Duffy (1963).

Didymocantha obliqua

The Australian cerambycid *Didymocantha obliqua* Newman was first recorded in New Zealand by Bain (1977) who listed it in an appendix, "Established Bark- and Wood-boring Insects", but gave no details of collection. A member of the Forest Biology Survey

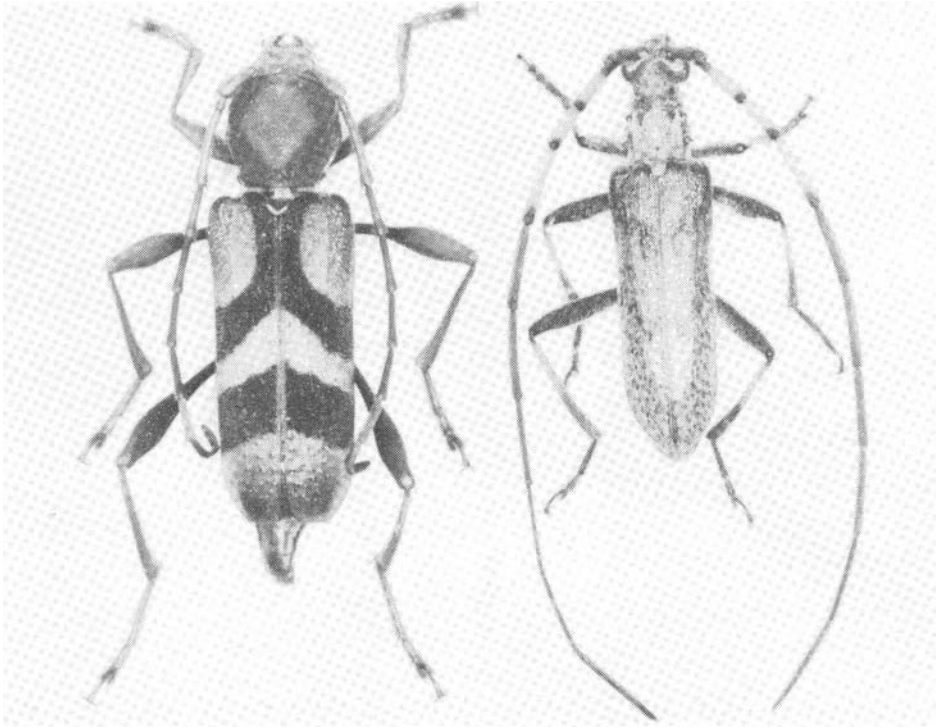


Fig. 1. Left: *Aridaeus thoracicus*. The dark bands are black and the rest of the elytra reddish gold. The disc of the pronotum, the legs, and antennae are reddish brown.
Right: *Didymocantha obliqua*. Light brown with dark marks on the elytra. The larger eyes and the dark binds on the antennae distinguish it from New Zealand species.

discovered a specimen in a house at Katikati on 20 February 1975. As the species could not be found in either the FRI or National Arthropod collections, the specimen was sent to the Commonwealth Institute of Entomology where Mr E. A. J. Duffy identified it as *D. obliqua*. Later two further adults were "unearthed" in the part of the FRI collection housed at Rangiora; one of these had been found in a car at Tauranga in February 1960 by Mr M. H. Lay, a timber inspector of the N.Z. Forest Service, and the other bore the label "A. E. Marsack, ? Tauranga." Mr Marsack, who lived in Tauranga and was the Forest Biology Observer covering the Bay of Plenty/Coromandel region, left the Forest Service in 1966 so the specimen must have been collected before that year.

It would seem that *D. obliqua* has been present but unrecognized in New Zealand for a long time. Its only recorded host in Australia (New South Wales and Queensland) is *Acacia decurrens* (Froggatt 1902) and it is conceivable that the insect reached New Zealand when wattle bark was imported for use in the tanning industry. Searches for larvae of *D. obliqua* have been unsuccessful.

Didymocantha obliqua (Fig. 1) is 13-16 mm long and is superficially similar to the indigenous species of *Didymocantha*, particularly *Didymocantha picta* Bates, but the former's conspicuously banded antennae readily distinguish it. Dr G. Kuschel (pers. comm.) informs me that the New Zealand and Australian species of *Didymocantha* are not congeneric. The latter can be distinguished by having larger eyes and other slight differences.

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