

Observations on the Longicorn Beetle, *Tritocosmia roei* (Hope) (Coleoptera: Cerambycidae)

BY T. J. HAWKESWOOD*

Tritocosmia roei (Hope) is a small, dark brown longicorn beetle 13-14 mm long, with an apparent widespread distribution throughout southern Australia from Western Australia to southern Queensland (McKeown, 1947). The antennae of this species are distinctive in that segments 1 and 2 are long, while the remainder are short — the combined length of segments 1 and 2 are longer than the other 8 segments; in addition, the distal end of segment 1 is enlarged and the distal end of segment 2 bears a prominent, dense, cylindrical brush of black hairs. Nothing previously has been recorded on its biology.

On August 15, 1982, I examined a fallen branch of *Eucalyptus umbra* R. T. Baker (White Mahogany) (Myrtaceae) on the Griffith University campus, Brisbane, Queensland. The widest end of the branch was moist and covered in fungus while the other portion was dead and dry. Most of the branch had been infested with larval cerambycids. Breaking one end of the branch exposed two active adults of *Tritocosmia roei* (Hope). This represents the first published larval host record for the species.

In the laboratory, several adults were extracted from the smaller diameter dry branchlets (13-18 mm diameter). Splitting the timber with a screw-driver revealed larvae, pupae and teneral adults of *T. roei*, resting in pupal chambers 14-17 mm long (15.6 ± 1.3 , $n = 5$), by 3-3.5 mm wide (3.1 ± 0.2 , $n = 5$) by 1.2-1.8 mm high (1.4 ± 0.2 , $n = 5$). The branchlets were cut into small billets about 10-15 cm long and placed in plastic containers. During the following week, most of the adults (total 11) had emerged. Five were transferred to

another container and 6 remained in the original one. Over the next several days observations were made on their general and mating behaviour.

The new adults, after emerging from the wood were slow-moving. Within one to several hours, mating occurred. The male approached the female with the antennae vigorously moving each alternately up and down; when in close proximity to the female, the male touched the apical area of the abdomen with the antennal brushes before mounting and undergoing copulation. Copulation lasted 5-10 minutes. If an intruding male approached close, the copulating male would break away from the female and chase the other male way, with the antennae produced straight in front so that the brushes were prominently displayed and the remaining antennal segments bent backwards. The aggressor male would poke at the offending male with the antennae, and often moved them simultaneously up and down in an offensive manner. From my observations, it does appear that the two basal antennal segments and antennal brushes play an important role in the behavioural biology of this insect. These notes are provided since little is known on the biology of Australian Cerambycidae and the role of antennal modifications.

REFERENCES

- McKeown, K. C. (1947). Catalogue of the Cerambycidae (Coleoptera) of Australia. Memoir X. Australian Museum, Sydney, pp. 1-190.

*49 Venner Road, Annerley, Brisbane, Queensland, 4103.