

**A SPECIES OF JEWEL BEETLE (COLEOPTERA:
BUPRESTIDAE) NEW TO TASMANIA**

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The late David Cowie's *Jewel Beetles of Tasmania: a Field Naturalist's Guide* was published by the Tasmanian Field Naturalists' Club in 2001 to wide acclaim. It covered the fifty species of beetles in the family Buprestidae that David or others had recorded from Tasmania. To this list, we now add a further species, in the unusual subfamily Polycestinae. It is almost certainly *Helferella frenchi* (Théry, 1928), a species originally described by Théry from Victorian material but with more recent records from New South Wales (Williams and Weir, 1987). Its identity (Figure 1) was kindly confirmed on examination by Australian jewel beetle experts Dr Shelley Barker (South Australian Museum) and Dr Geoff Williams (Australian Museum).

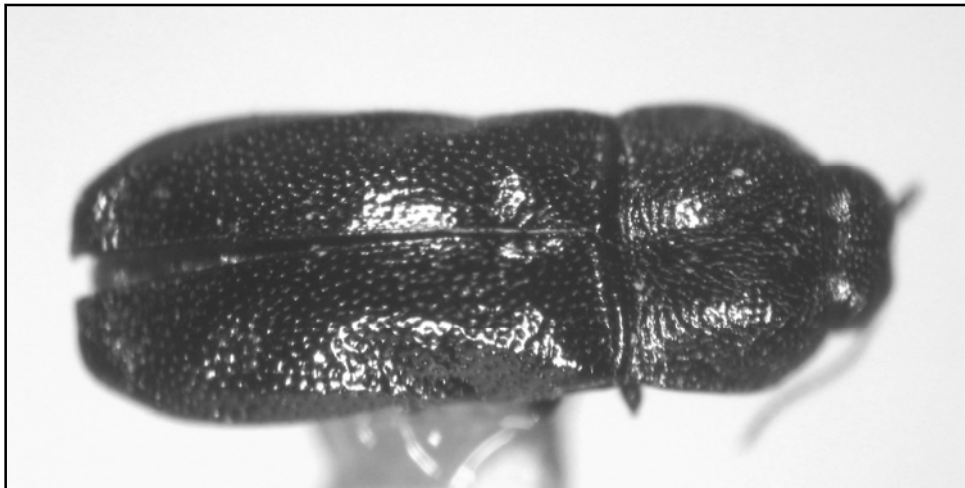


Figure 1. The specimen of *Helferella frenchi* collected by the authors in NE Tasmania. Body length about 2 mm.

The record arose out of a study of wildlife habitat strips and nearby continuous native State Forest in northeast Tasmania in 2003 (Grove and Yaxley, 2004), in which beetles were sampled with arrays of pitfall traps. These were operating

from 24th February and were collected on 24th March 2003. Only one jewel beetle was caught in the entire study, out of 2434 beetles collected in total. It was collected from a pitfall trap 100 m into continuous native forest in the Retreat forest block (FT coupe number RT216, approximate location 41.1236S x 147.165E). The forest here was classified as 'damp sclerophyll', and was dominated by *Eucalyptus amygdalina*, with a fairly extensive shrub layer and with a herb layer dominated by *Hypolepis amaurobachis* and *Gonocarpus teucroides*.

Since jewel beetles are not known for their propensity to fall into pitfall traps, it seems likely that more targeted collection in this part of Tasmania might reveal further specimens. Geoff Williams reports that other Australian *Helperella* records tend to be associated with rainforest and vine scrub communities, so more heavily vegetated gullies in damp sclerophyll forest might be the place to look. The larval foodplant is unknown, but Dr Williams suggests that the larva is likely to be a leaf-miner of small stems or vines. At a mere 2 mm long, *Helperella* is tiny by jewel-beetle standards. The only other known Tasmanian jewel beetle with which it could be confused is the equally diminutive *Germanica lilliputana* (Thomson, 1879), which is illustrated in *Jewel Beetles of Tasmania*. Given these characteristics, it is possible that further specimens remain undetected in material collected in other studies.

The specimen has been lodged in the Tasmanian Forest Insect Collection, at Forestry Tasmania in Hobart.

REFERENCES

- Cowie, D. (2001). *Jewel Beetles of Tasmania: a Field Naturalist's Guide*. Tasmanian Field Naturalists' Club Inc., Hobart.
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- Williams, G. A. and Weir, T.A. (1987). Four new species and new records of Australian Mastogeniinae (Coleoptera: Buprestidae). *Journal of the Australian Entomological Society* **26**: 153-159.