

## On the quest to locate an endemic chrysomelid species for host testing a potential biocontrol agent (*Eadya*) for the eucalyptus tortoise beetle (*Paropsis charybdis*)

Carl Wardhaugh <sup>\*1</sup>, Andrew Pugh <sup>1</sup>, Matt Scott <sup>2</sup>, Toni Withers <sup>1</sup>

<sup>1</sup> Scion, 49 Sala Street, Rotorua

<sup>2</sup> Scion, 10 Kyle Street, Christchurch

The endoparasitoid wasp *Eadya* sp. 3 (Braconidae) from Tasmania is being investigated as a potential biocontrol agent for the invasive eucalyptus tortoise beetle (*Paropsis charybdis*; Chrysomelidae). In order to elucidate the potential impact of this wasp on non-target species in New Zealand, we have been undertaking host testing trials with other pest species, beneficial weed biocontrol agents, and native species of chrysomelids at Scion's quarantine facility in Rotorua. Here we report on our expeditions to Kahurangi NP under DoC permit to locate a native chrysomelid species for host testing against *Eadya*. Our target species was either *Chalcolampa speculifera* or a large species of *Allocharis*. In December 2017, we located relatively large numbers of chrysomelid larvae feeding on the leaves of *Veronica albicans* in the Mt Arthur area. Adult specimens reared from these larvae were identified by Rich Leschen of Landcare research as *Allocharis* nr. *tarsalis*, and are likely to be an undescribed species. Subsequent searches in the Mt Peel region in January 2018 were also successful in finding what is likely to be the same species on a closely related *Veronica* species. These larvae are black in colour, and feed on the upper sides of leaves during the day. Their feeding damage is quite distinctive and resembles the larvae in shape and colour, which may function as camouflage against visual predators such as birds. Approximately 150 larvae were transported to Rotorua, where they were tested against *Eadya* in a series of trials. The outcomes of those trials are also briefly reported here.

