

Investigating *Eadya paropsidis* (Braconidae) as a potential biocontrol agent for the eucalypt tortoise beetle (*Paropsis charybdis*) in New Zealand

Carl Wardhaugh ¹, Toni Withers ^{*1}, Andrew Pugh ¹

¹ Scion, 49 Sala Street, Rotorua

The introduced eucalypt tortoise beetle (*Paropsis charybdis*, Chrysomelidae) is a major pest of eucalypt trees and plantations. The solitary endoparasitoid *Eadya paropsidis* (Hymenoptera: Braconidae) from Tasmania is under investigation as a potential biocontrol agent to target the larval life stage. Species selected for non-target range-testing have diurnal, exposed, leaf-feeding larvae that are active during the summer. Potential non-target chrysomelid species, including two other exotic pests, six introduced biocontrol agents on weeds, and at least one endemic species, were determined to be high priorities for host range testing with *Eadya*. So far host range testing has been undertaken in containment in Rotorua on all non-target species, with the exception of endemic chrysomelinae species. The parasitism rate on exotic non-target species was generally very low, ranging from 0-2.85% following 24 hour no-choice tests, and parasitoids have only emerged from *Trachymela sloanei* (another exotic pest beetle from Australia). Locating, and learning more about the biology of the endemic chrysomelinae species is a priority for the summer of 2017/2018.

