# Chrysomelid beetles

**Other names:** leaf beetles, eucalypt beetles, tortoise beetles, chrysomelids
**Scientific name:** *Paropsisterna agricola, Paropsisterna variicolis*, *Paropsisterna m-fuscum*, *Paropsisterna* spp., *Paropsis* spp., *Trachymela* spp., *Faex* spp
**Order:** Coleoptera
**Family:** Chrysomelidae

Chrysomelids are commonly found on species of Myrtaceae. Both, chrysomelid adults and larvae, feed on leaves. Most species prefer soft expanding or newly expanded adult leaves.

Chrysomelid feeding damage; damage by weevils can also look like this

Damage by larvae and adults can occur from October to April. However, most damage is caused by later instars and emergent adults in late summer to early autumn (February to April). Adults leave characteristic feeding marks in the shape of shallow half moons. This can sometimes be difficult to distinguish from larval feeding damage and or adult weevil damage, especially when all are present.

Eggs are small (ca 1 -2 mm long), typically yellow, red or pink in colour and elongate oval in shape. For most species, different larval stages can vary greatly in colour and appearance. Each larval instar is larger than the preceding one. When disturbed, larvae of *Paropsisterna* spp. exude sticky substance with hydrogen cyanide from near the tip of abdomen. The pupa is generally soft and yellow coloured. Adult beetles have colourful, shiny and apparently smooth upper surface. In some species newly emerged adults, have slightly different colouration from older adults. Other species have a melanistic form, being generally darker or entirely shiny black. Dead beetles lose their colour and shine, and upon close examination, one can see many rows of tiny dimples on the upper surface. *Trachymela* beetles are typically smaller than *Paropsisterna* beetles. They are dull brown in colour, and newly emerged adults are covered in wax.

Adult chrysomelids are present throughout the year; however, they become inactive and hide in leaf litter or clumps of grass during winter. Newly hatched larvae of most species feed only on soft new leaves, therefore timing of egg-laying coincides with the seasons for new leaf production (spring and autumn). This results in two generations being produced per year. Depending on the species up to 60 eggs are laid and emerging larvae consume their egg shells before feeding on foliage. They undergo four instars or moults and take 1-2 months to complete development. Prior to pupation, larvae become less sticky, fall from the tree and begin burrowing into the leaf litter and soil. Larvae burrow up to several centimetres to pupate depending on the soil and litter layer. The pupal period lasts approximately one month, after which the next generation of adults emerges.

Matsuki M, Tovar F (2010) IPMG Pests Notes - Chrysomelids. Industry Pest Management Group, Western Australia.
Online: http://plantationhealth.com.au/pestnotes_pests/ pdf/pestnotes/chrysomelids.pdf

# Chrysomelids


***Paropsis agricola***

- October – April.
- 9 – 10 mm long
- New growth of adult and juvenile leaves


Clockwise, from top left: *P. agricola* eggs on underside of leaf; first instar larvae; second instars; third instars; fourth intars; Colour variant

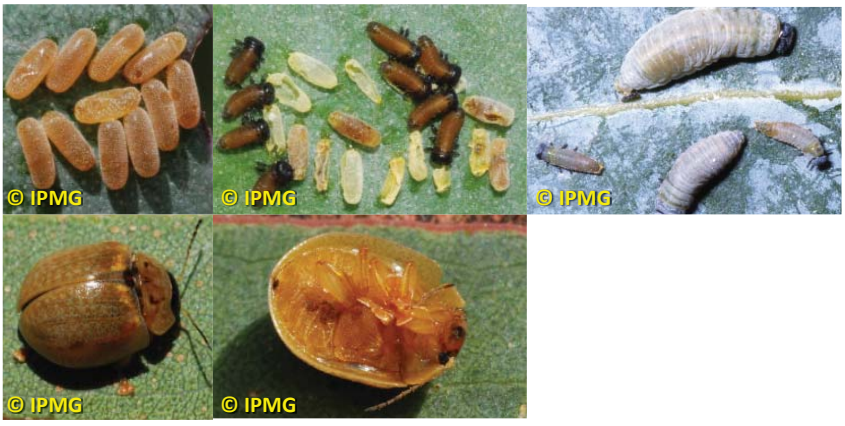

***Paropsisterna variicolis***

- August - June
- 9 – 10 mm long
- New growth of adult and juvenile leaves, seedlings


Clockwise, from top left: *P. variicolis* eggs on underside of juvenile leaves; first instar larvae; second, third and fourth instars; dark underside; Colour variant


***Paropsisterna m-fuscum***

- October – April.
- 5 – 8 mm long
- Juvenile leaves, seedlings




Clockwise, from top left: *P. m-fuscum* eggs; first instar larvae consuming their egg cases; second, third and fourth instars; yellow/cream coloured underside; newly emerged adult with colour not fully developed