# Red shouldered leaf beetle (Monolepta australis)

The Red shouldered leaf beetle Monolepta australis Jacoby (Chrysomelidae: Coleoptera) is an increasingly important insect pest with impacts on numerous horticultural industries throughout Queensland, northern NSW, and subcoastal parts of the Northern Territory.

It is a native pest that affects avocado, cashew, citrus, macadamia, mango, longan, and lychee. In addition, significant damage has been reported in recent years across additional crops including Rubus, blueberries, ornamental plants, and nurseries.

Impacts of Monolepta australis on berry production is yet to be estimated.

# **Lifecycle & Feeding Habits**

Swarms of adult beetles feed on the growth flushes of young plants, resulting in wilting and shoot dieback, and significant growth impairment

The infestation of flowering plants can cause reduced fruit-set, while epidermal scarring of fruit renders it largely unmarketable

The adults are yellow to orange-coloured beetles that have red patches over the shoulders and near the distal end of elytra

Generally, females oviposit in the soil surface, mainly in pastures

Following egg hatching the larvae feed on the grass roots and pupate in the soil

In dry conditions it takes approximately 2 months to complete the life cycle

3 to 4 generations can be produced in a year

Adults usually emerge from the soil after heavy rainfall in spring through to autumn

Availability of suitable weather conditions and host grasses can generate multitudes of aggregating beetles that swarm into tree crops at any time of the year

### **Monitoring**

Currently, there is no efficient semiochemical-based commercial tools for monitoring adult beetles. Usually, growers rely on intermittent scouting specifically following the first substantial rain after a dry period.

Yellow sticky traps across the periphery of the orchard can serve as early monitoring tool for detecting the adult beetle.

Eucalyptus torelliana used as a windbreak can also be deployed for early detection as they are highly attractive to these beetles.

# **Management Options**

There is limited knowledge about the potential of natural enemies for managing this pest.

Spot application of synthetic insecticides where adults are feeding serves as the primary control approach for this pest.

Early detection before they swarm throughout the farm can provide effective control.

Currently synthetic products like Bifenthrin, Pyrethrin, and Methomyl are registered for use against this beetle in Australia.

Check the APVMA website for more information and always use products in accordance with the label.

Access the APVMA website at www.portal.apvma.gov.au/pubcris



**1 & 2.** Adult Monolepta australis (L) and feeding on blackberry flowers (R). Photo credit: Brisbaneinsects.com and Saleh Adnan, NSW DPI

- **3. Yellow sticky traps can be used to detect the presence of the adult beetle.** Photo credit: AlSimonov
- **4. Eucalyptus torelliana can be planted as a windbreak hedge to attract the beetles** Photo credit: Wikicommons Media: Dinkum



Department of Primary Industries This Pest Spotlight has been prepared by Dr Saleh Adnan, Research Horticulturist Entomologist, NSW Department of Primary Industry.

#### References

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