# **Pests**

- Follow NZ Avocado's AvoGreen Monitoring Programme for pest identification and monitoring.
- Follow the AVOCO Pest Control Options document for pest control.

The main pests of concern for avocado fruit and mature trees in New Zealand are Leafroller, Greenhouse Thrips and Six Spotted Mite. Armoured scale and Long-tailed Mealybug are minor pests of market access concern. Fullers Rose Weevil and Flower Thrips are not considered pests on mature orchards, however they are also of market access concern.

#### **LEAFROLLER**

Leafrollers (LR) includes a range of species:

- brown-headed leafroller Ctenopseustis obliquana and Ctenopseustis herana
- black-lyre leafroller Cnephasia jactatana
- green-headed leafroller *Planotortrix excessana* and *Planotortrix octo*
- light brown apple moth Epiphyas postvittana

Both leafroller caterpillars and eggs are quarantine pests, however only caterpillars damage fruit and leaves, as only these feed by chewing. Caterpillar feeding results in obvious fruit scarring in the form of shallow oval gouges.



Figure 17: Leafroller caterpillar and damage to fruit

## **GREENHOUSE THRIPS (GHT)**

Heliothrips haemorrhoidalis - Feeding by both larval and adult greenhouse thrips causes severe damage to avocado leaves and fruit resulting in fruit being downgraded or rejected for export. Damage is in the form of fruit scarring with/without tarry residue.

## SIX SPOTTED MITE (SSM)

Eotetranychus sexmaculatus - Six spotted mite primarily feed on the underside of leaves, concentrating its activity adjacent to leaf veins. Infestation can cause leaf drop and impact the health of the canopy and tree. Control requires targeted chemical, cultural or biological measures. Temperature extremes (hot or cold) as well as a range of natural enemies often maintain these mite species at low levels. Six spotted mite is not associated with fruit.



Figure 18: Thrips damage and juvenile thrips

#### **MAMMALIAN PESTS**

Rats and possums can bite or chew avocados. Damage is often seen on the neck of the avocado, close to the stem. Management of mammalian pests is often required on orchard.



Figure 19: Adult Six Spotted Mites