LEAFROLLERS

Brown headed leafroller *Ctenopsestis obiquana*, Black-lyre leafroller *Cnephasia jacatana*, and Light brown apple moth *Epiphyas potvittana*

- So called because of the tube like shelters they can roll and web out of leaves
- Most damaging pest in kiwifruit, chewing leaves fruit scars and minor leaf damage
- Quarantine pests in many markets

Life Cycle Stages

- Adult leafroller vary from light to dark brown and are around 12-18mm.
- Eggs are laid on the upper surface of leaves in batches of up to 150.
- The caterpillar has a distinct stripe down the centre of its back with side stripes.
- Four to six generations per year depending on climatic conditions.
- Activities such as hatching, moulting, pupation and emergence in insects have a pronounced circadian rhythmicity

Stages of Crop Growth Susceptible to Damage

- Fruit is most susceptible to damage in the eight weeks following fruit set.
- A second infestation can occur around harvest time.

Life Cycle Stages and Control

A number of different leafrollers, all with their unique life-cycle stage exist on New Zealand kiwifruit.

Brown headed leafrollers are prevalent throughout New Zealand but mainly in the Northern half of the North Island.

Black-Lyre leafrollers are more common in the Bay of Plenty, particularly at the higher altitudes.

Sprays such as Prodigy, Comic and Steward can be used in the three weeks before flowering starts.

Post flowering selective sprays can be used and monitoring for damage occurs five weeks post fruit set.

There are biological parsites which feed on all life stages of leafrollers. Braconid wasps and tachinid flies parasitize caterpillars and may contribute to reducing populations in bush, shelter and kiwifruit.

Typical Symptoms of Plant Damage

- Fruit is scarred when the caterpillers feed directly on the fruit.
- Silk webbing on leaf and fruit indicate presense, also caterpillars can be present.
- Damage usually occurs where fruit touch each other or where fruit and leaf are touching.