

Current and emerging arthropod pests of avocados in New Zealand

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New Zealand
Avocado

NZ Avocado Growers' Association Inc.
NZ Avocado Industry Ltd

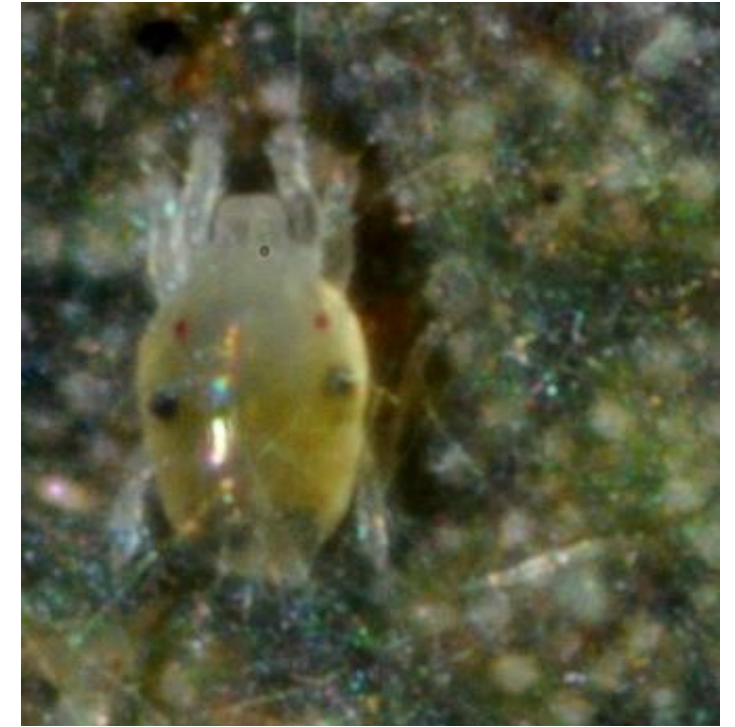
Production pests of NZ avocados



Leafroller



Greenhouse thrips



Six-spotted mite



Market access pests of NZ avocados



Armoured scale



Flower thrips



Long-tailed
mealybug



Fuller's Rose Weevil

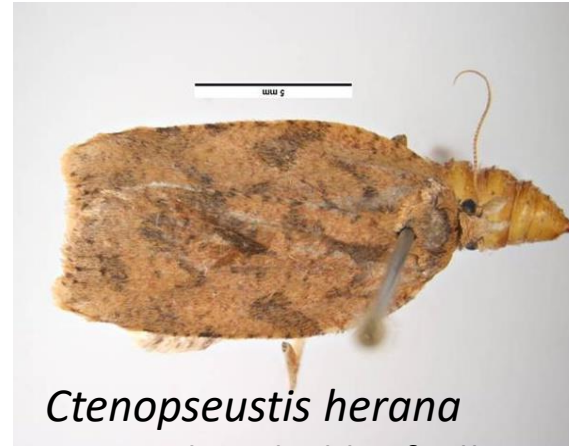


Leafrollers

Four main species – all polyphagous and native to New Zealand



Ctenopseustis obliquana
Brown-headed leafroller



Ctenopseustis herana
Brown-headed leafroller



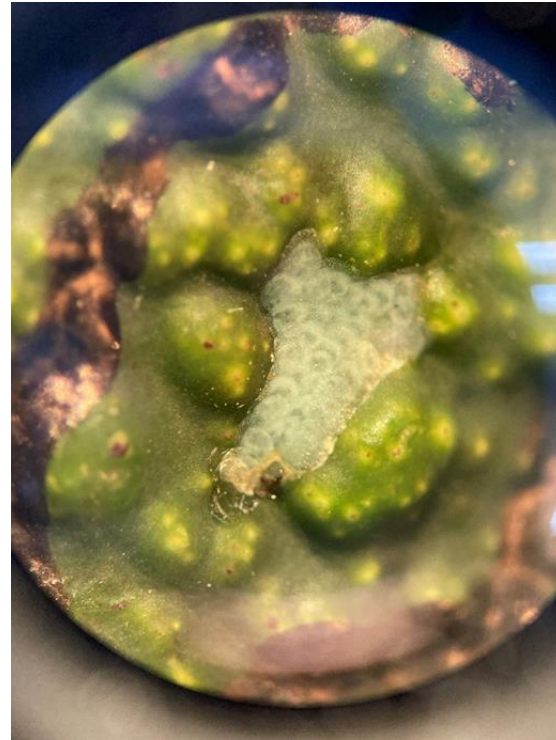
Planotortrix excessana
Green-headed leafroller



Planotortrix octo
Green-headed leafroller

Leafrollers

Damage by larval grazing on fruit surfaces



Leafrollers - beneficials



- Parasitoids: Braconids, ichneumonids, tachinids
- Predators such as earwigs

Leafrollers

Mating disruption

A dispensing product containing the pheromones of the four main leafroller species.



Thrips



Flower thrips
Thrips obscuratus

- Market access pest
- Only present during flowering



Greenhouse thrips
Heliothrips haemorrhoidalis

- Production pest
- Damaged fruit is downgraded

Greenhouse thrips

Heliothrips haemorrhoidalis

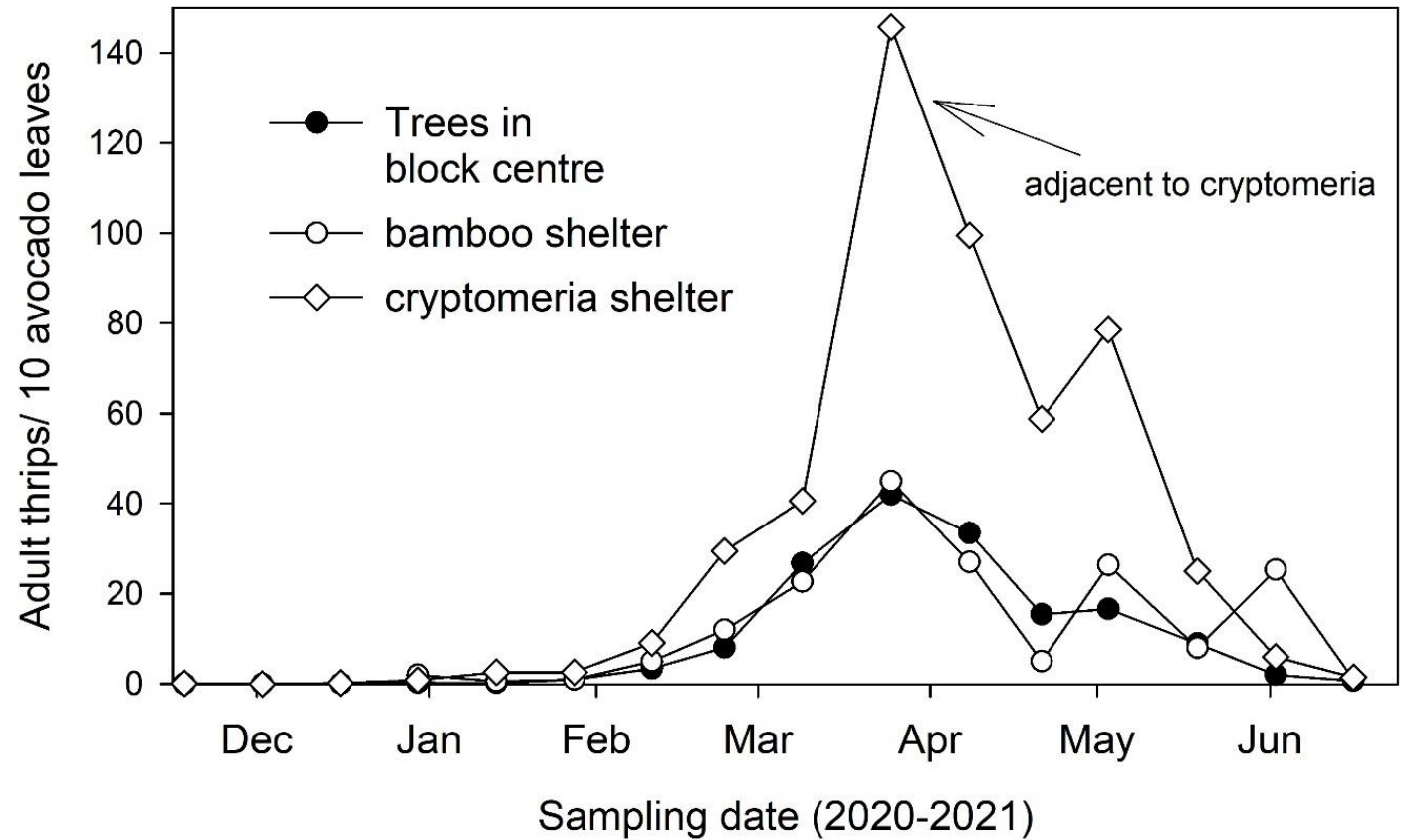
Lifecycle

- All stages occur on leaves and fruit. Emerging juveniles cause fruit damage.
- Most rapid generation takes 5-8 weeks
- A follow up spray 14 to 21 days after initial spray application is crucial to control emerging juveniles



Greenhouse thrips

Risk is highest in autumn and next to cryptomeria and pine shelter trees



Six-spotted mites

Eotetranychus sexmaculatus

Increasing leaf densities are associated with increasing risk of complete leaf drop

Increasing use of miticides for control – resistance raised as a possibility



Six-spotted mites

Biological control

Phytoseiid mites (most common *Amblyseius herbicolus*) and *Stethorus* ladybirds are widespread but control may be disrupted by thrips sprays



Flower thrips



Flower thrips
Thrips obscuratus

- Market access pest
- Only present during flowering

Armoured scale

Latania scale: *Hemiberlesia lataniae*

Rapax scale: *Hemiberlesia rapax*



Long-tailed mealybug

Pseudococcus longispinus



Fuller's rose weevil

Pantomorus cervinus

- Nocturnal
- Adults cannot fly
- Damages low leaves
- Mainly affects young trees



Emerging pests



Mirids

Diomocoris sp.



Granulate ambrosia beetle

Xylosandrus crassiusculus



NEW ZEALAND

- AvoGreen® Pest monitoring
- Set thresholds for each pest
- Provides justification to spray



Questions



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Thank you



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