

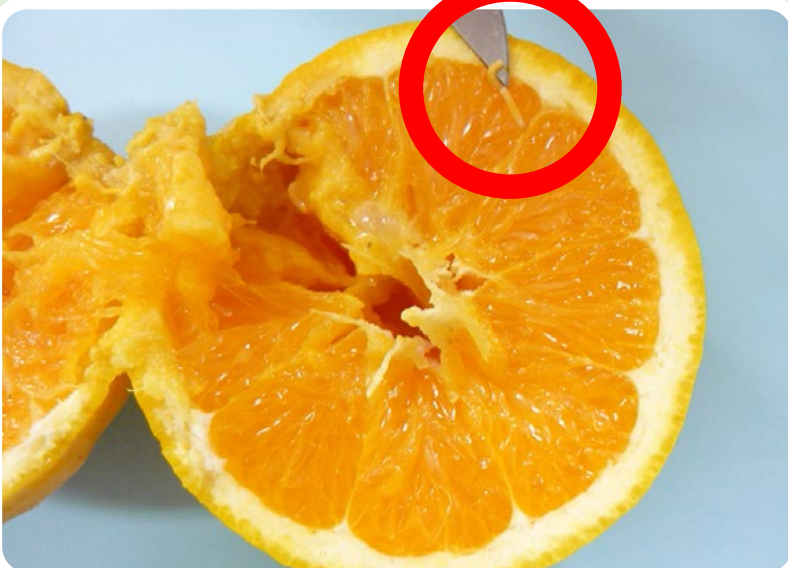
Pests of southern citrus

Queensland fruit fly

Bactrocera tryoni
Eggs laid in fruit. Larvae feeding damages fruit. Premature fruit drop. Monitor traps from September to May. *Is a quarantine pest of concern in SA and WA at the time of publication.



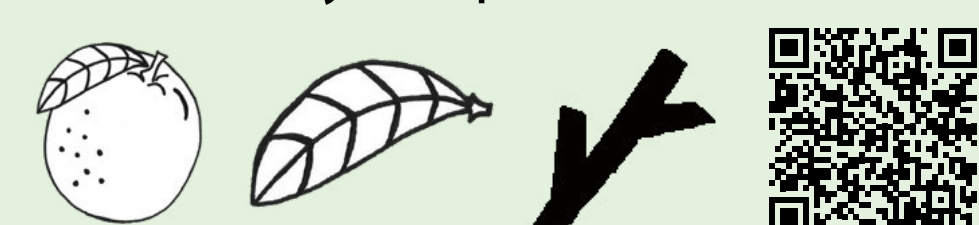
Queensland fruit fly adult



Queensland fruit fly larvae

Two-spotted mite

Tetranychus urticae
Yellow spotting on leaves and fruit. Mites are difficult to see with the naked eye. Premature leaf drop. Monitor leaves and fruit for yellow spotting from January to April.



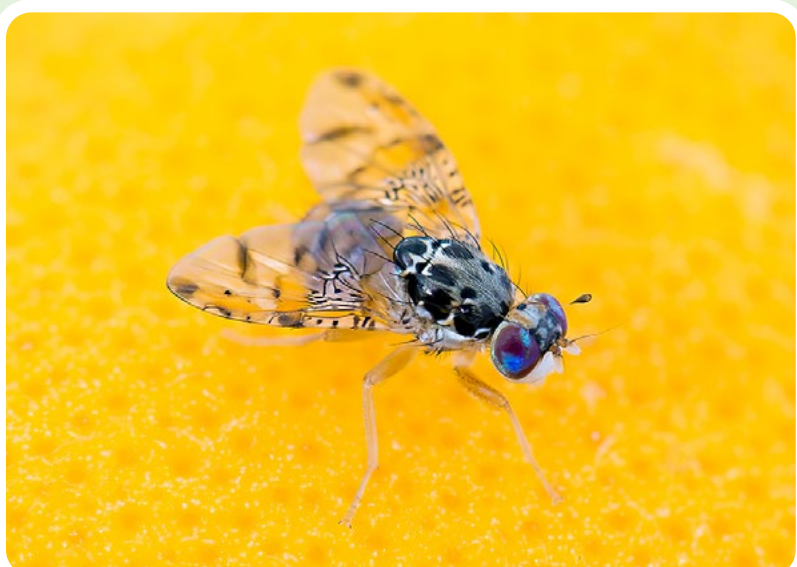
Two-spotted mite adult



Yellow spotting on leaf

Mediterranean fruit fly

Ceratitis capitata
Eggs laid in fruit. Larvae feed inside fruit, causing rots. Monitor traps from September to May. *Is a quarantine pest of concern in NSW, Qld, Vic, SA and NT at the time of publication.



Mediterranean fruit fly adult

Image © State of Western Australia (Department of Primary Industries and Regional Development, WA).

Citrus bud mite

Eriophyes sheldoni
Feeding causes distorted and blackened flowers, reduced fruit set, fruit deformation, leaf and twig distortion. Mites are difficult to see with the naked eye. Monitor young shoots and fruit for distortion from November to May.



Adult citrus bud mites. Photo: Smith et al. (1997)



Lemon deformation

Citrus gall wasp

Bruchophagus fells
Branches have galls. Tree vigour, fruit size and yield are reduced. Monitor for galls annually in late autumn.



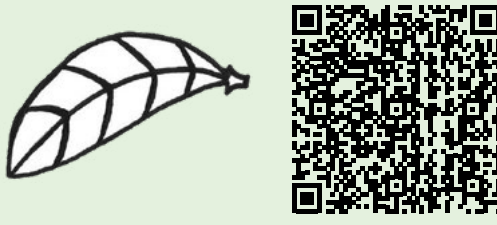
Citrus gall wasp adult



A gall before wasp emergence

Citrus leaf-miner

Phyllocnistis citrella
Feeding larvae mine young leaves and twigs causing silvery trails, distortion and curling. Problem in young trees. Monitor from January to March.



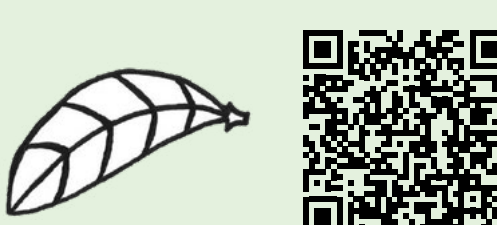
Larva feeding on leaf



Damage to young leaves

Crusader bug

Mictis profana
Pierces and sucks young shoots causing wilting, browning and dieback to new flush. Monitor from October to April.



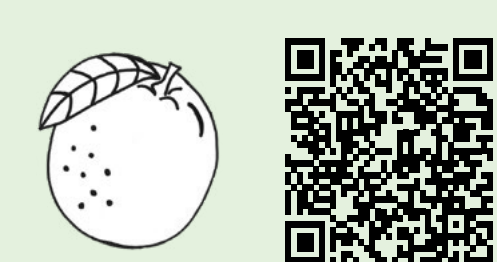
Crusader bug



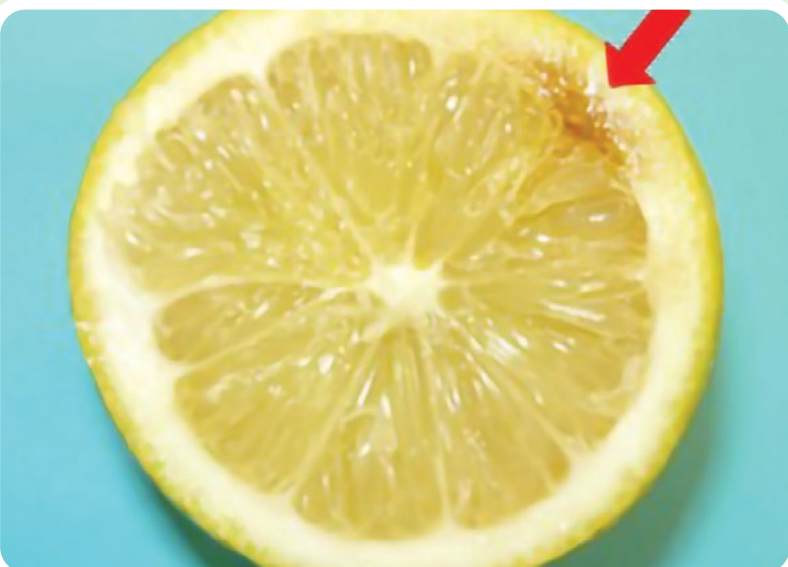
Dieback to new flush

Spined citrus bug

Biprorulus bibax
Feed on fruit, causing internal dry patches, skin gumming and lesions that blemish fruit. Premature fruit drop. Favour lemons and mandarins. Monitor from October to March. *Is a quarantine pest of concern in WA at the time of publication.



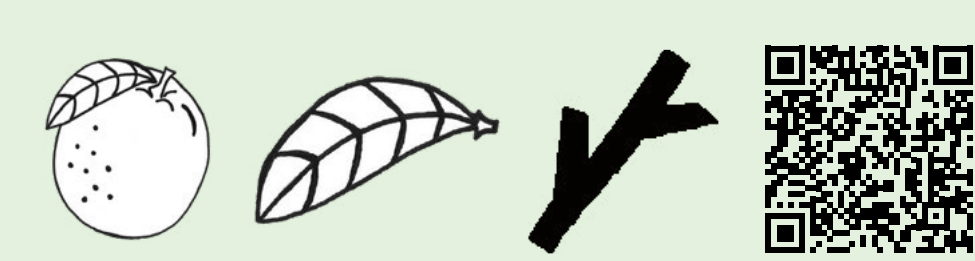
Spined citrus bug



Internal dry patch

Red scale

Aonidella aurantia
Infests leaves, fruits and branches. Monitor from November to April.



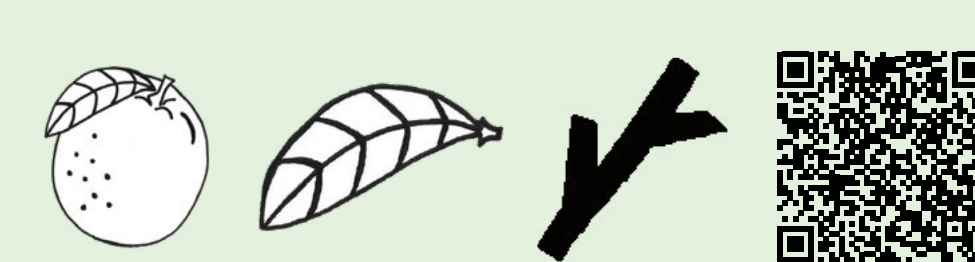
Red scale



Red scale on fruit

Soft scales

Soft brown, citricola, cottony cushion scale, black scale
Coccus spp., *Icerya* spp. and *Saissetia* spp.
Promote sooty mould growth and downgrade fruit. Problem in young trees. Ants actively protect soft scale from natural enemies for their honey-dew secretions. Monitor October to December and February to March.



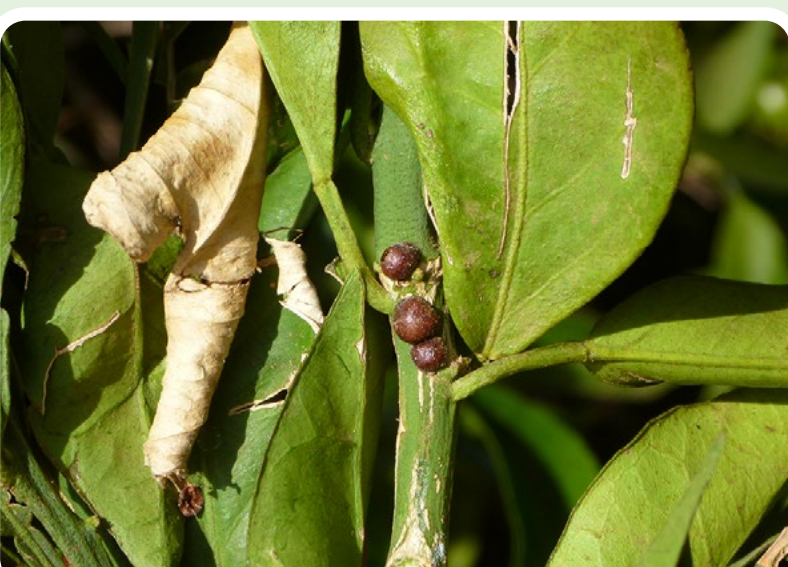
Soft brown scale



Citricola scale



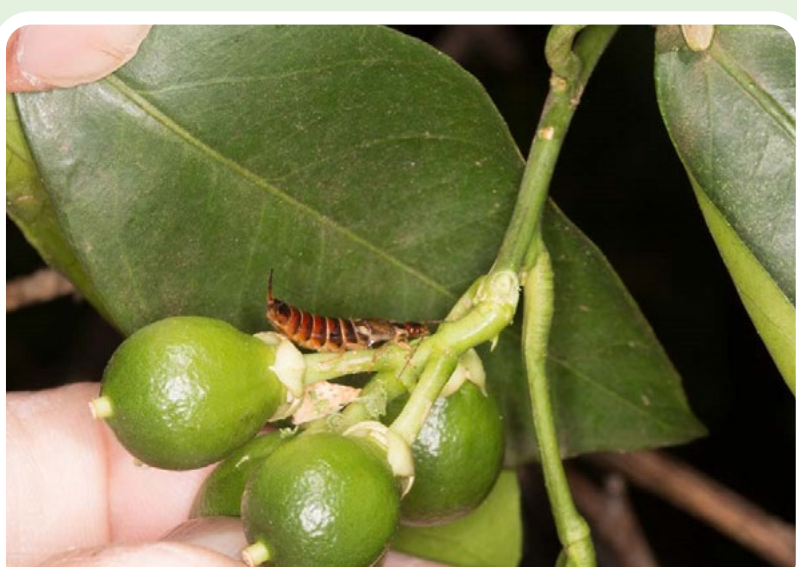
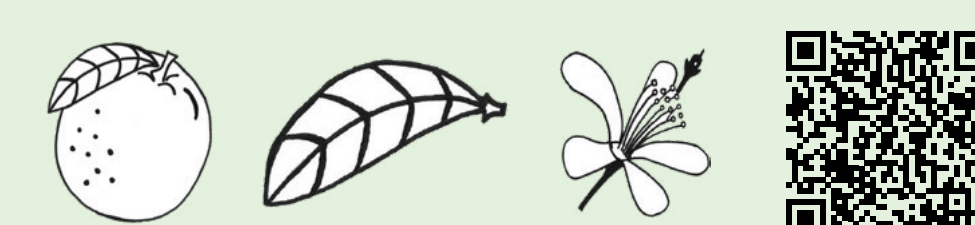
Cottony cushion scale



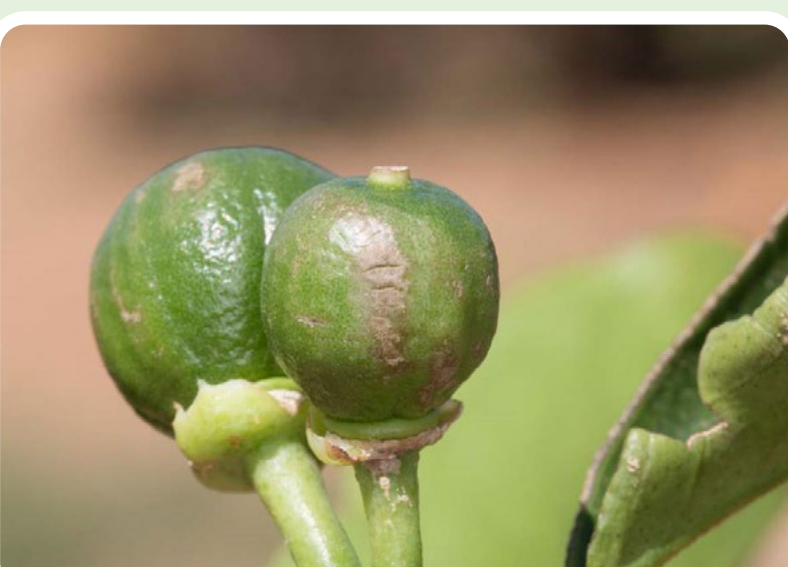
Black scale

European earwig

Forficula auricularia
Feeding damages flowers, leaves, young shoots and rind of young fruit. Leaf edges become scalloped and fruit display scarring. Earwigs are nocturnal, feeding at night. Monitor from June to November.



European earwig



Feeding scars on young fruit

Elephant weevil

Orthorhinus cylindrirostris
Adults chew twigs, branches and leaves. Larvae tunnel throughout the trunk and roots. Monitor from September to February.



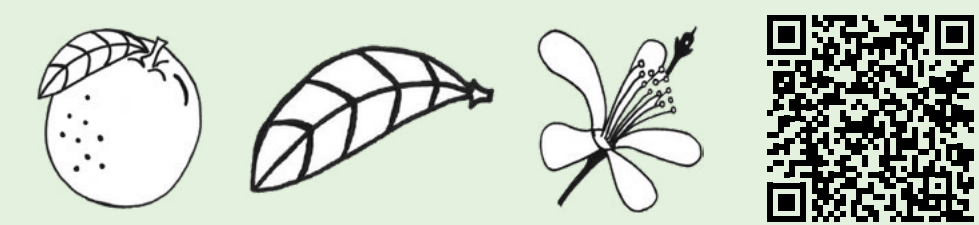
Elephant weevil adult



Adult weevil exit holes

Katydid

Caedicia spp.
Feeding on leaves, flowers, and young fruit causes scar damage to the fruit. Monitor young fruit from October to December.



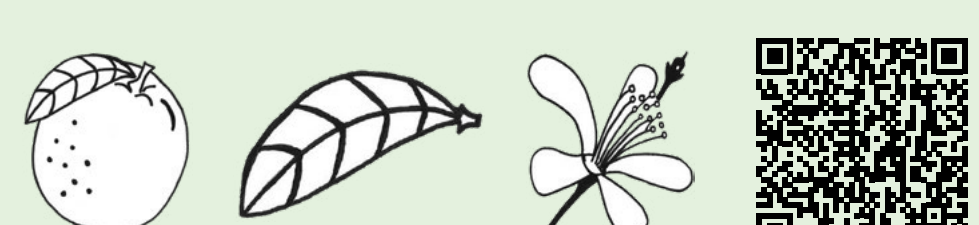
Katydid adult



Feeding scar on young fruit

Light brown apple moth

Epiphyas postvittana
Larvae feed beneath fruit calyx causing a halo-like scar. Monitor from October to December and April to July.



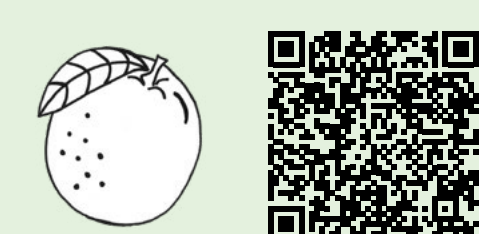
LBAM larvae



Halo-like scar around fruit calyx

Kelly's citrus thrips

Pezothrips kellyanus
Damage appears as fruit scurfing and halo scarring around fruit calyx and rind blemish where fruit touch. Thrips species can be easily confused and are difficult to see with the naked eye. Monitor young fruit for larvae and scurfing around the calyx from October to December.



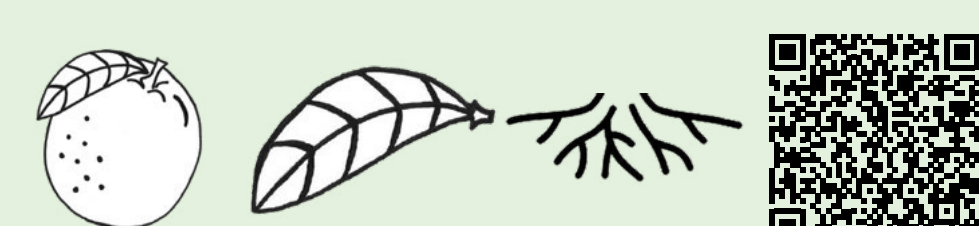
Kelly's citrus thrips adult



Scurfing around fruit calyx

Fuller's rose weevil

Asynonychus cervinus
Chew coarse serrations on leaf edges. Eggs laid under fruit calyx. Larvae feed on leaves and roots. *Is a quarantine pest of concern to many Asian export markets. Monitor fruit from December to August.



Fuller's rose weevil adult



Leaf damage



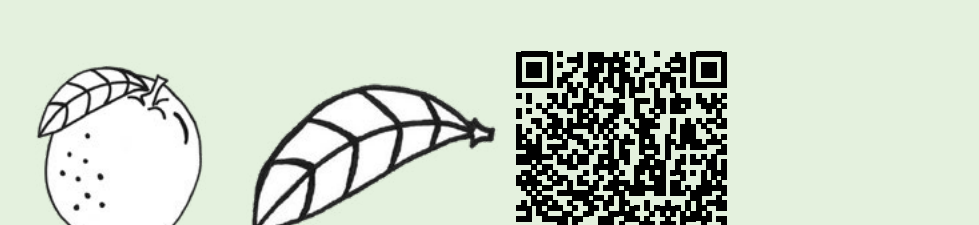
Egg mass



Egg mass with calyx removed

Mealybugs

Citrophilous, long-tailed
Pseudococcus spp.
Secrete honey-dew promoting sooty mould growth on fruit and leaves. Juveniles and adults seek out sheltered sites. Monitor from November to June.



Citrophilous mealybug



Long-tailed mealybug



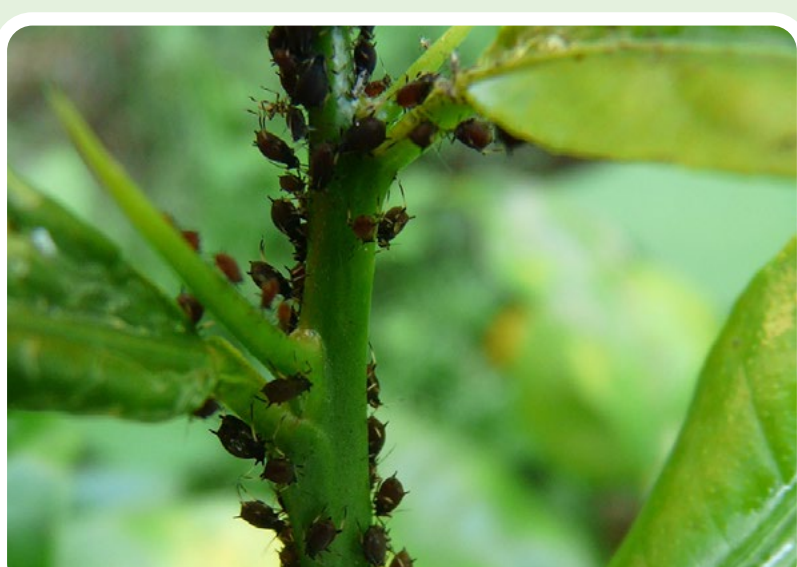
Black sooty mould growth



Sheltered site where fruit touch

Aphids

Toxoptera spp. and *Aphis* spp.
Deform leaves and shoots and transmit viruses by their piercing-sucking mouth parts. Secrete honey-dew promoting sooty mould growth on fruit and leaves. Monitor from September to October and February to April.



Adult aphids



Honey-dew secretions

Icons indicate damage to:

flowers, fruit, leaves, twigs, roots



Reference

Smith D, Beattie GA and Broadley R (1997) *Citrus pests and their natural enemies*, Queensland Department of Primary Industries.

Lead author: Alison Fattore, NSW Department of Primary Industries and Regional Development. *September 2024.

IPDM for the citrus industry



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