

Sweet Orange Stem Pitting

Caused by an Australian Isolate of Citrus Tristeza Virus (CTV)

What is it?

Sweet orange stem-pitting strains are found only in Queensland where they are under official control.

CTV is spread in infected budwood (but not seed).

It is illegal to transport citrus budwood or trees from Queensland to the other Australian states.

See Condition 3 of the [Plant Quarantine Standard for South Australia](#).

There are many different strains of CTV — some are mild and may have no visible effect on citrus plants, while other strains can be severe and destructive.

In Australia, some strains of CTV can cause stem pitting in lime, grapefruit, and in some rootstocks. Trees with stem pitting have poor growth, brittle branches, and reduced yield and fruit size.

The mandarin stem-pitting strain of CTV is not present in Australia but has been reported from Indonesia, Japan, Malaysia, Taiwan and Thailand.

What do I look for?

Tree decline and reduction in fruit size and yield of affected citrus trees. Stem-pitting symptoms can occur on trunks, on all sizes of limbs, and on the twigs where fruit are produced. Various sized pits or grooves in the wood often contain a yellow gum. Irregular growth of the phloem occurs in the area of these xylem pits.



Deep depressions in the stem can be seen when the bark is removed – Photo Credit: M. Manners, FSC

How is it spread?

Long-distance spread can occur by the movement of CTV-infected citrus planting material.

Aphids also spread CTV, and the most efficient aphid vector is the brown citrus aphid (*Toxoptera citricida*) which is found in Australia.

What can I do?

There are no cures for virus infections.

Growers can put on-farm biosecurity measures in place to reduce the chance of pests and disease getting onto their properties.

These include:

- Establish new plantings with healthy propagating material from reputable nurseries or suppliers who source their budwood from Auscitrus or who routinely test their seed and budwood for a range of diseases including CTV.
- putting up farm biosecurity signs on gates and fences to manage visitors coming onto your property
- avoiding sharing equipment
- keeping equipment and vehicles clean and free of plant matter
- wearing clean clothing before visiting other growers' properties
- teaching farm workers on-farm hygiene practices, what to look for and how to report unusual pests and diseases
- report suspect symptoms to the Exotic Plant Pest Hotline

