

# Updates on Tomato Yellow Leaf Curl Virus Outbreaks

Industry Notice: September 2021

AGRICULTURE VICTORIA

**Industry is encouraged to report any Tomato Yellow Leaf Curl Virus (TYLCV) symptoms in tomatoes following a detection of the virus in north east Victoria.**

## BACKGROUND

TYLCV is a significant disease complex of tomato and can infect many other host species. It has been present in Australia since 2006, first detected in Queensland. It is reported to cause severe damage to plant leaves resulting in an eventual reduction in crop yield. **TYLCV is a declared exotic disease in an Order made under the Plant Biosecurity Act 2010, and reporting a suspect detection is mandatory under this Act.**

## HOST PLANTS

Hosts of TYLCV include tomatoes (*Lycopersicon esculentum*), beans (*Phaseolus vulgaris*), lisianthus (*Eustoma grandiflorum*), lobed croton (*Croton lobatus*) and all species from the genus Capsicum, Euphorbia and Physalis.

## SYMPTOMS OF TYLCV

TYLCV is most obvious in the foliage of the plant. Typical symptoms include leaves curl and discolouration, and necrosis around the veins in the leaf's surface (Figure 1).

More information about the disease can be found on the Agriculture Victoria website <https://agriculture.vic.gov.au/biosecurity/plant-diseases/vegetable-diseases/tomato-yellow-leaf-curl-virus>.



Figure 1 Tomato plant infected with TYLCV and showing leaf curl, yellowing and stunting

## TYLCV VECTOR

TYLCV can be transmitted from diseased to healthy plants by silverleaf whitefly (*Bemisia tabaci*), which feeds on a wide range of hosts (Figure 2).

The virus is not known to be seedborne or to be transmitted mechanically. It also is not moved through fruit and seeds.



Figure 2 Silverleaf whitefly (*Bemisia tabaci*)

## WHAT ACTIVITIES ARE OCCURRING

In response to the detection of TYLCV, Agriculture Victoria will be contacting host plant producers to undertake surveillance over the next 3-6 months. Surveys will occur across the state to investigate potential distribution. Inspections will involve the collection of leaf samples for diagnostic analysis and installation of insect traps. Inspections will start with protected cropping growers and may move to field grown crops as the program continues. This activity will be undertaken on a voluntary basis at no cost to the producer.

## IF YOU FIND SYMPTOMS OF TYLCV

Report any TYLCV or other unusual plant pests or diseases immediately to the Exotic Plant Pest Hotline (1800 084 881). Alternatively, you can make a report via email with a photo (where possible) to [plant.protection@agriculture.vic.gov.au](mailto:plant.protection@agriculture.vic.gov.au). Early reporting increases the chance of effective control and eradication.

## FURTHER INFORMATION

For further information regarding movement and treatment requirements or to volunteer to be part of the program, please contact your local Agriculture Victoria Plant Standards Officer by telephone on 136 186 or via [market.access@agriculture.vic.gov.au](mailto:market.access@agriculture.vic.gov.au)

## ACCESSIBILITY

If you would like to receive this publication in an accessible format, please telephone Agriculture Victoria on 136 186.