

# Biosecurity Alert

## Tomato Brown Rugose Fruit Virus

Tomato Brown Rugose Fruit Virus (ToBRFV) (*Tobamovirus fructirugosum*) is a highly contagious plant virus that affects tomato, capsicum and chilli. It can cause yield losses of up to 70% and reduce marketable fruit yield by 10-15%.

ToBRFV was detected in South Australia (SA) in August 2024 and the SA government is actively responding to the detection. ToBRFV is not known to occur in Western Australia. Early detection and reporting will help protect the Western Australian horticulture industry.

### What plants are affected?

- Major hosts include tomato, capsicum and chilli.
- Weeds can act as reservoirs for ToBRFV without showing obvious symptoms. ToBRFV was found in Israel on black nightshade (*Solanum nigrum*) and nettle-leaved goosefoot (*Chenopodium murale*)..

### What to look for

- Symptoms of ToBRFV in fruits include yellowing, marbling, deformation, uneven ripening and brown rugose (wrinkled) patches.
- Symptoms of ToBRFV in leaves include yellowing, mosaic, mottling, crumpling and deformation.



• Image 1: Symptoms on fruit



• Image 2: Symptoms on leaves

Images: Luria et al. via PLOS One - CC BY 4.0

## How does it spread?

ToBRFV is easily spread through

- infected propagative material (seeds, plants for planting, grafts, cuttings)
- direct plant to plant contact
- contaminated tools, hands, clothes, trellis wires, greenhouse benches and planting trays

- seed, plant debris and contaminated soil for months or even years

Infected weeds can act as reservoirs allowing the virus to remain viable between growing seasons.



## Report your observations

MyPestGuide® Reporter  
via app or online  
[mypestguide.agric.wa.gov.au](https://mypestguide.agric.wa.gov.au)

Pest and Disease Information  
Service  
08 9368 3080  
[padis@dpird.wa.gov.au](mailto:padis@dpird.wa.gov.au)

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