

Pest Alert: tomato brown rugose fruit virus (ToBRFV)



Figure 1. Tomato fruit discolouration caused by ToBRFV infection © Neil Giltrap



Figure 2. Malformed tomato leaf infected with ToBRFV © Neil Giltrap



Figure 3. Uneven ripening of fruit on tomato plant infected with ToBRFV © Neil Giltrap

- **Tomato brown rugose fruit virus (ToBRFV)** is a plant pathogenic virus, which was first found infecting tomato crops in Israel in 2014. It has subsequently spread to other tomato growing regions around the world, including some outbreaks in the UK.
- Long distance spread is via **contaminated seed, infected fruit and plants for planting**. Within a crop, the virus is spread by contact transmission.
- The major hosts of ToBRFV are **tomato** and **pepper**, and whilst weeds are recognised as being potential reservoirs little is known about their susceptibility. It is likely that other solanaceous plants could be susceptible to the virus.
- Fruit symptoms of ToBRFV include **brown, wrinkled (rugose) patches, discoloration, uneven ripening, deformation, reduced size, and necrotic patches or spotting**. Infection can lead to **yield losses of up to 70%**.
- Leaf symptoms of ToBRFV include **mosaic patterning, deformation such as puckering, narrowing and blistering, reduction in leaflet size and wilting**. Necrosis may develop on pedicels (stems), calyces, petioles and flowers.

If you suspect the presence of the pest, please inform the relevant authority (see over for details).

For finds at garden centres, plant nurseries or private gardens in England and Wales, contact your local APHA Plant Health and Seeds Inspector, or the PHSI headquarters, in York:

Tel: 0300 1000 313 (please select option 3 when calling)

Email: planthealth.info@apha.gov.uk

For Scotland, contact the Scottish Government's Horticulture and Marketing Unit:

Email: hort.marketing@gov.scot

For Northern Ireland, contact the DAERA Plant Health Inspection Branch:

Tel: 0300 200 7847 Email: planthealth@daera-ni.gov.uk

Web: <https://www.daera-ni.gov.uk/topics/plant-and-tree-health>

For additional information on UK Plant Health please see:

<https://planthealthportal.defra.gov.uk/pests-and-diseases/uk-plant-health-risk-register/>

<https://planthealthportal.defra.gov.uk/>

<https://www.gov.uk/plant-health-controls>

<http://www.gov.scot/Topics/farmingrural/Agriculture/plant/PlantHealth/PlantDiseases>

<https://www.daera-ni.gov.uk>