N.B: Farmers, community members and the entire South African citizenry are encouraged to report any suspected detections of this pests to the Department of Agriculture, Land Reform and Rural Development (DALRRD).

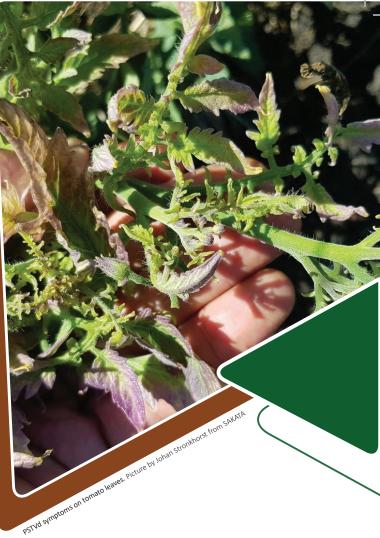


#### Reference

Government of Canada, 2018. Potato spindle tuber viroid (PSTVd). [viewed 02 March 2020]. Available from: https://inspection.gc.ca/plant-health/plant-pests-invasive-species/plant-diseases/pstvd/eng/1517949934628/1517949935371







# **POTATO**SPINDLE TUBER

(Potato spindle tuber viroid - PSTVd)



## What is **Potato spindle tuber** viroid?

 Potato spindle tuber viroid (PSTVd) is an important pathogen of solanaceous crops.

#### Distribution and status in South Africa

- PSTVd has a worldwide distribution and is present through much of Europe and Australia.
- There are isolated reports in Asia, Africa, and South America.
- It is not known to occur in South Africa

### Host range

 PSTVd affects crops such as potato, tomato, pepper, eggplant, pepino and sweet potato, as well as many ornamental plants in the Solanaceae family, and several species of wild plants.



#### **Symptoms**

PSTVd infected tomato plant Picture by Johan Stronkhorst from SAKATA





PSTVd-infected potatoes Picture by CFIA

- In potato, severe infections can result in low yield with small tubers that are characterised by having an elongated, spindly shape and many prominent eyes.
- Tubers can have an abnormal skin appearance and often crack with growth.
- The foliage of infected potato plants may be upright and stunted with small, rough leaflets.
- In tomato, infection is characterised by stunted growth and leaves that may be mottled, rough, yellowed, and downturned.
- Infected tomatoes may have reduced yield, and fruit may abort or remain hard and unripened.

#### **Pathway**

PSTVd can be transmitted through:

- contact or sap transfer between infected and uninfected plants.
- the use of contaminated tools and equipment
- seed and pollen
- by the green peach aphid (Myzus persicae), if the source plant is also infected with Potato leafroll virus.

#### **Control measures**

There are no products to prevent PSTVd infection, and control is achieved through strict implementation of biosecurity measures, including the destruction of infected plant material and sanitation of tools and facilities.



#### Scouting

 Scouting is part of pest management practices, and it means inspecting or monitoring your fields for the presence of pests and diseases, or any potential issues that could obstruct crop growth.

#### Legislative and policy implications

 According to the Agricultural Pests Act, 1983 (Act 36 of 1983), it is an offence to import plants and plant products into South Africa without authorisation. Furthermore, it is an offence for land user to keep plants and plant products infected with regulated pests, without reporting to the Executive Officer.