

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).



Pictures by Johan Stronkhorst from SAKATA

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>



CONTACTS

To report occurrence or suspected occurrence of the pest, contact:

Directorate: Plant Health

Division: Early Warning Systems

Tel: 012 319 6384/6104

Email: JanHendrikV@dalrrd.gov.za

For awareness and promotion enquiries, contact:

Directorate: Food Import & Export Standards

Division: Plant Health Promotion

Tel: 012 319 6295/6475

Email: Info.sps@dalrrd.gov.za



PSTVd symptoms on tomato leaves. Picture by Johan Stronkhorst from SAKATA



POTATO SPINDLE TUBER

(Potato spindle tuber viroid - PSTVd)



agriculture, land reform & rural development

Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

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.

