

Sweetpotato feathery mottle (258)

Summary

- Worldwide distribution. On sweetpotato and wild relatives. Several strains. An important virus disease.
- Occurs either alone or with other viruses.
- Difficult to identify on symptoms alone. Symptoms variable: yellow or purple spots, or purple bordering veins, sometimes only on a few leaves before recovery. One strain causes cracks around storage roots.
- Spread by aphids. Spread is fast: aphids pick up the virus from diseased leaves and can straight away pass it to healthy leaves next time they feed. Ability to spread virus quickly lost.
- Cultural control: difficult – symptoms unclear; use pathogen-tested planting material (see SPC CePaCT); avoid planting near older crop; weed.
- Chemical control: none recommended. Impractical to control aphids using insecticides to prevent spread by viruses. Spread occurs before insecticide kill the aphids.

Common Name

Sweetpotato feathery mottle virus, internal cork disease of sweetpotato

Scientific Name

Sweetpotato feathery mottle potyvirus; the abbreviation is SPFMV; there are different strains: ordinary (O), russet crack (RC), East African (EA), and severe (S).



Photo 1. Yellow spots on leaves, similar to those from infection by *Sweetpotato feathery mottle virus*.



Photo 2. Ring spots, possibly from *Sweetpotato feathery mottle virus* alone, or in combination with other viruses.



Photo 4. Purple feathery-like patterns along veins typical of infection from *Sweetpotato feathery mottle virus*.



Photo 5. *Sweetpotato feathery mosaic virus* (russet crack strain) causing a narrowing and fissures around the storage root.



Photo 3. Similar to Photo 2, except spots are fading on this older leaf, and there is more 'feathering' along the veins.



Photo 6. Aphids on the youngest leaves; these are the insects that spread *Sweetpotato feathery mottle virus*.

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Information from CABI (2015) Sweet potato feathery mottle virus (internal cork disease of sweet potato). Crop Protection Compendium. (<https://www.cabi.org/cpc/datasheet/50963>); and from Dennien *et al.* (2013) Growing healthy sweetpotato: best practices for producing planting material. ACIAR Monograph no. 153. Australian Centre for International Agricultural Research, Canberra. 176 pp. Photo 2 Sandra Dennien, Gatton Research Facility, DAF, Queensland. (<https://www.aspg.com.au/wp-content/uploads/2015/02/Sweetpotato-virus-detection-review-2018.pdf>).

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