

Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Sweetpotato feathery mottle (258)



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



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



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



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

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).

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Information from CABI (2015) Crop Protection Compendium Sweet potato feathery mottle virus (internal cork disease of sweet potato). (www.cabi.org/cpc); and from Dennien et al. (2013) Growing healthy sweetpotato: best practices for producing planting material. ACIAR Monograph no. 153. Australian Centre pofr International Agricultural Research: Canberra. 176 pp. Photo 2 Sandra Dennien, Gatton Research Facility, DAF, Queensland.

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