Pacific Pests, Pathogens and Weeds - Online edition

Sweetpotato weevil (029)

Summary

- Worldwide distribution. On sweetpotato and wild *Ipomoea* (morning glory). An important pest.
- Adults lay eggs in base of the stem ('crown') and in storage roots, and larvae tunnel through them. Adults eat the leaves and surface of the vines.
- Damage is the same as done by West Indian weevil. Worse in dry times, and in light sandy soils.
- Spread by adults on the wing, and in cuttings and storage roots.
- Cultural control: early, deep rooting varieties; plant only tip cuttings; remove wild morning glory; hill-up, covering cracks during dry times; ideally, make one-time harvest; 3-4-year crop rotation; after harvest, collect and destroy vines and infested storage roots.
- Chemical control: treat vines (bifenthrin); treat plants in field every 3-4 weeks (bifenthrin or fipronil).

Photo 1. Larvae or grubs of sweetpotato weevil, *Cylas formicarius,* damaging a vine at the crown where the stem enters the ground.

Photo 2. External damage to the base of the vine - called the crown - by the sweetpotato weevil, *Cylas formicarius.* Holes used by the adults to exit the stems can be seen.

Common Name

Sweetpotato weevil

Scientific Name

Cylas formicarius

Photo 3. Crown area of the vine, just above soil level, heavily infested by sweetpotato weevil, *Cylas formicarius*, and rots have developed.

Photo 4. Larvae or grubs of sweetpotato weevil, *Cylas formicarius,* in a storage root.

Photo 5. Adult sweetpotato weevil, *Cylas formicarius*.

Photo 6. Adult sweetpotato weevil, *Cylas formicarius*, caught in a sticky trap.

Photo 7. Sweetpotato weevil, *Cylas formicarius*, on the outside of a storage root left on the soil. Note the small feeding pits made by the weevil.

Photo 8. A pheromone trap attracting large numbers of male sweetpotato weevils, *Cylas formicarius*. Note the trap is a plastic bottle with the top 1/3 cut off and inverted. The pheromone has been absorbed onto rubber tubing which is held in place by wire.

AUTHORS Helen Tsatsia & Grahame Jackson

Information from Brookes D, *et al.* (2019) Origins, divergence, and contrasting invasion history of the sweet potato weevil pests *Cylas formicarius* (Coleoptera: Brenttidae) and *Euscepes batatae* (Coleoptera: curculionidae) in the Asia-Pacific. Journal of Economic Entomology XX(XX): 1-9. (https://www.researchgate.net/publication/334747037_Origins_Divergence_and_Contrasting_Invasion_History_of_the_Sweet_Potato_Weevil_Pests_Cylas_formicarius_Coleoptera_Brentidae_and_Euscepes_batatae_Coleoptera_Curculionidae_in_the_Asia-Pacific); and CABI (2020) Cylas formicarius (sweet potato weevil). Invasive Species Compendium. (https://www.cabi.org/isc/datasheet/17408); and from O'Sullivan *J et al.* (undated) Sweetpotato DiagNotes: A diagnostic key and information tool for sweetpotato problems. (https://keys.lucidcentral.org/keys/sweetpotato/key/Sweetpotato%20Diagnotes/Media/Html/FrontPage/FrontPage.htm). Photos 1,4,5,6 & 8 Russell McCrystal, Bundaberg, Queensland.

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