Pacific Pests, Pathogens and Weeds - Online edition

Sicklepods (Senna species) (465)

Summary

- Widespread. Asia, Africa, North, South and Central America, Caribbean, Europe, Oceania. In many Pacific islands.
- Invasive, continuous expanses in disturbed sites, waste areas, roadsides, waterways, pastures, agricultural crops (cotton, peanut, soybean, sugarcane), including plantations (coconut, sugarcane). Sicklepods thrive in many soil types. Alternative hosts of *Tobacco mosaic virus* and *Colletotrichum capsici*, anthracnose of Solanaceous crops.
- Relatively small, 50-150 cm, multiple-branching, erect shrubs, with strong tap roots. Leaves, alternate along the stems, with 2-4 pairs, oval, opposite leaflets, with elongated rod-like gland between the last pair. Flowers, on short stalks, mostly near tips of branches, with five yellow petals. Fruits, sickle shaped, brown when mature, curving downwards. Seeds, shiny, flattened, many per plant, lasting up to 20 years
- Spread: seed, by animals (pass through the gut), water; mud on animals, footwear, vehicles; contaminant of fodder and pasture seeds.
- Biosecurity: high risk of introduction; contaminant of pasture seed. Among 10 worst weeds in American Samoa, Tonga, Vanuatu. In Australia, 'restricted invasive plants': *do not release into environment, give away or sell.*
- Biocontrol: *Alternaria cassiae* used as a mycoherbicide in USA.
- Cultural control: hand weeding; slashing; cultivation; mulch; control movement of cattle to prevent spread; vehicle hygiene.
- Chemical control: in Australia: 2,4-D; 2,4-D + picloram; dichlorprop-p; triclopyr + picloram; dicamba. Treat seedlings and new growth. In Fiji, glyphosate.

Photo 1. Extensive ground cover of sicklepod, *Senna tora*.

Photo 2. Close-up of Photo 1, sicklepod, *Senna tora*.


Photo 3. Individual plant, sicklepod, *Senna tora*, showing structure of the leaves.

Common Name

Sicklepod. There have been many common names given to these two species, and this has caused some confusion. However, commonly *Senna tora* is called foetid cassia, or sickle senna, whereas *Senna obtusifolia* is called sicklepod, or Chinese senna. CABI prefers sicklepod for them both!

Scientific Name

Senna tora and *Senna obtusiflolia*. They were known previously as *Cassia* species. The two species are closely related, regarded by some as the same; however, others separate them by slight differences in shape and size, and the fact that seed between the two is mostly infertile. They are members of the Fabaceae.


Photo 4. Close-up of single leaf, sicklepod, *Senna tora*, showing the shape of the leaflets, and the gland on the stem between them.

Photo 5. Flowers and fruits, sicklepod, *Senna obtusifolia*.

Photo 6. Close-up of a flower, sicklepod, *Senna obtusifolia.*


Photo 7. Long thin fruits, sicklepod, *Senna obtusifolia.*

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Information from CABI (2019) Senna obtusifolia (sicklepod). Invasive Species Compendium. (https://www.cabi.org/isc/datasheet/49593); and DAF (2020) Sicklepods. Queensland Government. (https://www.daf.qld.gov.au/__data/assets/pdf_file/0013/51052/IPA-Sicklepod-PP18.pdf); and Waterhouse DF, Norris KR (1987) *Cassia tora* Linnaeus & *Cassia obtusifolia* Linnaeus. *Biological Control Pacific Prospects.* Inkata Press, Melbourne; and *Senna tora* (2020) Wikipedia. (https://en.wikipedia.org/wiki/Senna_tora); and Java bean *(Senna tora)* and Sicklepod *(Senna obtusifolia)* (2018) Weeds of SE Qld and Northern NSW. Lucidcentral. (https://www.lucidcentral.org/editors-pick-animal-and-plant-identification-keys/key-to-weeds-of-se-qld-and-northern-nsw); and from *Senna obtusifolia* (2019) Wikipedia. (https://en.wikipedia.org/wiki/Senna_obtusifolia). Photos 1&2 Joseph LaForest, University of Georgia, Bugwood.org. Photo 3 Nikitakamka Cassia_Tora_(young_plant). Photo 4 Dr. S. Soundarapandian Cassia tora. Photo 5 Nikitakamka Cassia_Tora (the seeds) (Wikipedia). Photo 6 Johnny N. Dell, Bugwood.org. Photo 7 Rebekah D. Wallace, University of Georgia, Bugwood.org.

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