

Tobacco flea beetle (355)

Summary

- Restricted distribution. Americas, Caribbean, Europe, Oceania. Present in Guam and Fiji.
- On eggplant and tomato, primarily, but also other members of nightshade family, including weeds.
- Damage by larvae and adults chewing small, irregular holes in leaves giving a 'shot-hole' effect. Damage worse on seedlings, especially during droughts.
- Eggs laid at base of stems; larvae feed on roots. Adults brown with black markings, long antennae, and well developed hind legs for jumping. Spread on the wing.
- Survival on weeds and remains of plants in the field.
- Cultural control: monitor twice weekly; weed - especially those in nightshade family; do not plant new crops next to old; mulch; use protective covers; crop rotation (maize, brassicas, legumes); collect trash and burn after harvest.
- Chemical control: use biorational pesticides (i) PDPs - derris, chilli, pyrethrum, (ii) biopesticides - spinosad or abamectin, or (iii) synthetic pyrethroids or neonicotinoids, remembering they will kill natural enemies.

Common Name

Tobacco flea beetle

Scientific Name

Epitrix hirtipennis



Photo 1. Adult tobacco flea beetle, *Epitrix hirtipennis*. Note, the long antennae.

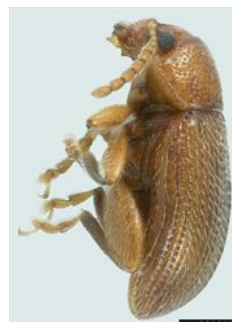


Photo 2. Adult tobacco flea beetle, *Epitrix hirtipennis*. Side view.



Photo 4. Adult tobacco flea beetle, *Epitrix hirtipennis*, and holes eaten in a tomato leaf.



Photo 3. Tobacco flea beetle, *Epitrix hirtipennis*, feeding on tomato



Photo 5. Severe damage on eggplant by the tobacco flea beetle, *Epitrix hirtipennis*.



Photo 6. Severe damage on eggplant by the tobacco flea beetle, *Epitrix hirtipennis*.



Photo 7. Large swarm of tobacco flea beetle, *Epitrix hirtipennis*, on eggplant.



Photo 8. Irregular patches on leaf of tobacco where surface layers have been chewed by the tobacco flea beetle, *Epitrix hirtipennis*.



Photo 9. Symptoms of tobacco flea beetle, *Epitrix hirtipennis*, on capsicum.



Photo 10. Symptoms of tobacco flea beetle, *Epitrix hirtipennis*, on potato.

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Information from Peppers, Flea beetles, UC IPM. (<http://ipm.ucanr.edu/PMG/r604300611.html>); and Cuthbertson AGS (2015) Chemical and ecological control methods for *Epitrix* spp. *Global J. Environ. Sci. Manage.* 1(1): 95-97 (http://www.gjesm.net/pdf_9553_82f0576dbd1b7d6b6e59eed9b003d41.html); and from Flea beetles, Colorado State University Extension. (<http://extension.colostate.edu/topic-areas/insects/flea-beetles-5-592/>). Photos 1&2 Natasha Wright, Cook's Pest Control, Bugwood.org. Photos 3-6 Mani Mua, SPC, Sigatoka Research Station, Fiji. Photo 8 R.J. Reynolds, Tobacco Company Slide Set, R.J. Reynolds Tobacco Company, Bugwood2.org

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