

Vegetable leaf miner

What is it?

Vegetable leaf miner (*Liriomyza sativae*) is a major international insect pest, mining leaves of many crop and ornamental plants. It can be found hosted on most *Allium* species, including onions and garlic, as well as a diverse and large range of common horticultural crops.

Foliage punctures caused by females during the acts of oviposition or feeding may cause a stippled appearance on foliage, but this damage is slight compared to the leaf mining activity of larvae. Multiple mines on individual leaves, during infestations, can seriously injure and even destroy both seedlings and older plants.



Adult *L. sativae* (dorsal view)

PaDIL

What do I look for?

Adult: small, greyish-black, compact bodied fly, 1.3-2.3 mm in body length, 1.3-2.3 mm in wing length, females slightly larger than males. The scutellum, face, 3rd antennal segment and femora are bright yellow, whilst the mesonotum is shiny black.

Egg: white, elliptical and measure about 0.23 mm in length and 0.13 mm in width. Eggs are inserted into plant tissue just beneath the leaf surface and hatch in about three days. Flies feed on the plant secretions caused by oviposition, and also on natural exudates.



Leaf miner tunnelling damage on pea pods

Whitney Cranshaw, Bugwood.org



Adult *L. sativae* (lateral view)

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L. sativae larval leaf mining damage to green onion

Whitney Cranshaw, Bugwood.org



L. sativae larvae and pupae in mine

Whitney Cranshaw, Bugwood.org

Larvae: attain a length of about 2.25 mm. Initially the larvae are nearly colourless, becoming greenish and then yellowish as they mature.

The mines can vary in form with the host-plant but when adequate leaf area is available they are usually U-shaped, long, linear, and narrow but widening towards the end; they are usually white. In very small leaves the limited area for feeding often results in the formation of a secondary blotch. The frass (larval excrement) is deposited in conspicuous black strips alternately at either side to the end of the mine.

Where is it found?

Originally described from South America, it has spread across the world into North and Central America, parts of Africa (Cameroon, Sudan, Zimbabwe), Asia (China, India, Oman, Thailand, Yemen), the Pacific Islands, and has been found in shipments in Europe. It is probably more widespread, but unreported, and may have been mistaken for other *Lyriomyza* species.

How can I protect my farm from vegetable leaf miner?

Check your property frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common vegetable pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline on 1800 084 881.

**EXOTIC PLANT PEST HOTLINE
1800 084 881**

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Want more info?

If you would like more information, or to download a copy of the Industry Biosecurity Plan for the Vegetable Industry, visit www.planthealthaustralia.com.au, email admin@phau.com.au or phone (02) 6215 7700.