



# PEST ALERT: serpentine leafminer

**Serpentine leafminer (also known as Pea leafminer) *Liriomyza huidobrensis* has recently been identified infesting field-grown vegetables in western Sydney.** It was likely introduced through infested plant material brought into the country illegally.



*Serpentine leafminer (Liriomyza huidobrensis)*<sup>1</sup>

**Response:** NSW Department of Primary Industries and Greater Sydney Local Lands Services are mounting a response to determine the distribution of the pest, with an eye to eradication or containment and control.

A project conducted by AusVeg has identified potential control measures for leaf miners and made contingency plans to expedite the registration of control agents should the need arise.

**Priority:** This insect is a high priority pest in the Tomato Industry Biosecurity Plan and has the potential to cause significant damage to tomato crops should it become established in the region.

**Host Plants:** Wide host range, covering many flower and vegetable crops and some weed species.

**Spread:** Leafminers are wind-borne, and eggs, larvae and pupae can be moved through plant material, soil, clothing and equipment.

**Potential Impact:** Damage is caused primarily by larvae feeding under the surface of leaves, causing narrow, serpentine 'mines' which appear as white or grey lines on leaves with dampened black and dried brown areas.

High levels of infestation affect the plant's ability to photosynthesise, reducing plant growth and crop yields.



*Leaf mines from feeding larvae*<sup>2</sup>

**Origin:** Originating in South America, serpentine leafminer is thought to be a classical secondary pest, brought to prominence when heavy chemical use to control another pest (potato moth) led to leaf miners, resistant to most pesticides, becoming a problem. These insects subsequently spread to many parts of the globe.

**Temperature:** While research suggests these insects may not survive daily mean temperatures above 30°C, risks remain in the cooler months of the growing season.

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It is critical that we quickly identify and eradicate this pest if it appears, so please be on the lookout for any suspect infestations and report any signs of leaf mining in crops to the Exotic Plant Pest Hotline on [1800 084 881](tel:1800084881). Instructions will be given on how to collect and submit samples for identification.

More information can be found at <https://www.planthealthaustralia.com.au/wp-content/uploads/2013/03/Serpentine-leaf-miner-FS.pdf> and in the paper by Weintraub et al (2017), which is available on the industry website.

\*1, 2 Images from the Australian Department of Agriculture and Europepmc.org.