

Serpentine leafminer

What is Serpentine leafminer?

Serpentine leafminer (*Liriomyza huidobrensis*) is a small fly whose larvae feed internally on plant tissue, particularly the leaf. Feeding of the larvae disrupts photosynthesis and reduces the quality and yield of plants. This pest has a wide host range, including many economically important vegetable, cut flower and grain crops.

What does it look like?

The black flies are just visible (1-2.5 mm in length) and have yellow spots on the head and thorax. Leaf mines caused by larval feeding are usually white with dampened black and dried brown areas. These are typically serpentine or irregular shape, and increase in size as the larvae mature.

Damage to the plant is caused in several ways:

- Leaf stippling resulting from females feeding or laying eggs.
- Internal mining of the leaf by the larvae.
- Secondary infection by pathogenic fungi that enter through the leaf mines or puncture wounds.
- Mechanical transmission of viruses.

What can it be confused with?

Australia has a large number of Agromyzidae flies that look similar to the Serpentine leafminer, however these rarely attack economically important species.

What should I look for?

A Serpentine leafminer infestation would most likely be detected through the presence of the mines in leaf tissue. Adult flies and larvae are not likely to be seen due to their size.



The small adult fly is predominately black with some yellow markings

Central Science Laboratory, Harpenden Archive, British Crown, Bugwood.org



Serpentine mines on an onion leaf caused by the feeding larvae

Merle Shepard, Gerald R. Camer, and P.A.C. Ooi, Bugwood.org



Pupae of the Serpentine leafminer

Merle Shepard, Gerald R. Camer, and P.A.C. Ooi, Bugwood.org



Plant Protection Service Archive, Bugwood.org

Typical symptoms of underleaf mining in a Chrysanthemum

How does it spread?

Adult flies can spread throughout a crop by flight, but most long distance transport occurs when plant material containing larvae is transported.

Where is it now?

The Serpentine leafminer is now widespread through Africa, America, Europe, Asia and parts of Oceania.

How can I protect my production nursery from Serpentine leafminer?

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

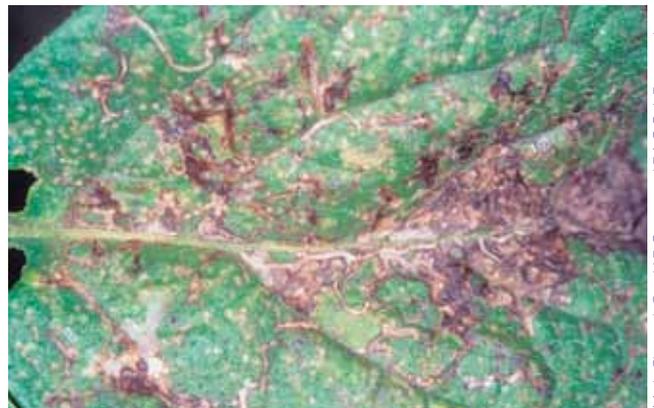
If you see anything unusual, call the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE
1800 084 881**



Plant Protection Service Archive, Bugwood.org

Side view of a Serpentine leafminer showing lighter underside colouring



Merle Shepard, Gerald R. Carner, and P.A.C. Ooi, Bugwood.org

Damage to a potato leaf caused by larval feeding

Disclaimer: The material in this publication is for general information only and no person should act, or fail to act on the basis of this material without first obtaining professional advice. Plant Health Australia and all persons acting for Plant Health Australia expressly disclaim liability with respect to anything done in reliance on this publication.

For more information visit www.planthealthaustralia.com.au