



Cesar Australia

Identification of serpentine leafminer in Victoria

The once exotic serpentine leafminer (also known as pea leafminer) (*Liriomyza huidobrensis*) is now considered established in NSW, Queensland and, most recently Victoria, with the tiny fly detected on a vegetable farm in Werribee in winter 2022.

The serpentine leafminer is a major horticultural pest; the larvae tunnel through leaves, feeding and creating thick white trails, called 'leaf mines'. Most damage occurs at the larval stage.

Through a Hort-Innovation funded project, led by QDAF, Cesar Australia, as part of a multi-agency team of collaborators, is offering a 'free' identification service for Victorian growers who suspect they may have serpentine leafminer on their farm. This service utilises genetic diagnostic capability allowing identification directly from leaf mines evident on leaves.



Typical leaf mine - trails or 'mines' on the leaf surface (Image: Elia Pirtle – Cesar Australia).

Collecting & sending samples for identification

Collecting leaf mine samples

- Collect 5-10 individual mined leaves per crop. Aim for leaves that are fresh and heavily mined if possible.
- Place the leaves in a plastic container or Ziplock bag. A piece of tissue paper or paper towel can be placed into the container to absorb excess moisture.
- Leafminer species can be associated with certain host plants. It is therefore important to sample of leaf mines from each plant species in order to determine all species present.
- Adequate collection data including host plant and location are essential for successful testing. To assist us, please print the below form '**Cesar Australia leaf mine testing service – sample information**', fill out all the details and include this when posting your sample.

Sending samples

- Samples should be sent via overnight express post on Monday - Wednesday. Do not send samples towards the end of the week or over the weekend.
- Once samples have been posted, please notify us via email at avanrooyen@cesaraustralia.com This will ensure samples are processed in a timely manner.
- Samples should be addressed to:

Cesar Australia leaf mine testing service

**Anthony van Rooyen
Cesar Australia
Level 1, 95 Albert St
Brunswick, VIC 3056**

Acknowledgement: This service is supported through the Hort-Innovation funded project MT20005, using the vegetable, potato, melon and onion research and development levies and contributions from the Australian Government. This project is led by QDAF, with project partners including Cesar Australia, AUSVEG, The University of Melbourne, NSW DPI, NT DITT and WA DPIRD.



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Cesar Australia leaf mine testing service – sample information

Collection date:

Collector name:

Mobile:

Email:

Grower Details

Grower name -

Paddock name -

GPS details / road address -

Paddock Details

Crop type -

Crop growth stage -

Pesticides used -

Other notes

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