

Fact sheet

Carrot rust fly

What is Carrot rust fly?

Carrot rust fly (*Psila rosae*) is primarily a pest of carrots, but it also affects parsnip, celery and parsley. The larvae channel into the roots of host plants, where feeding activities impact on plant vigour and tap root quality. Under ideal conditions, the Carrot rust fly can have up to three generations per year.

What does it look like?

The mature fly has a black body, reddish head, yellow legs and transparent wings. These flies are about 8 mm in length and can be spotted on the leaf surfaces of host plants.

The larvae are 8-10 mm long and white or yellowish in colour. They have a pair of prominent black feeding hooks at the front end. Pupae are shiny brown and about 5 mm in length.

What can it be confused with?

The small fly may be hard to distinguish from other fly pests in the field, while the Carrot rust fly damage can be confused with nutritional deficiencies or water stress. However, host symptoms in combination with the presence of flies or larvae should be reported.

What should I look for?

Host plant symptoms are the easiest way to detect the presence of the Carrot rust fly.

Seedlings can be killed or injured by larvae feeding on tap roots. Look for gaps in the crop, but also yellowing and reddening of the leaves. In more mature carrots, the larvae attack the tap roots creating channels, distorting them and making the crop unfit for market.



EPPO Rosemary Collier, Warwick HRI

The small fly has a black body with transparent wings



EPPO Rosemary Collier, Warwick HRI

Distorted carrots with deep channelling as a result of larval feeding



EPPO Rosemary Collier, Warwick HRI

The cylindrical larvae of the Carrot rust fly



Whitney Canshaw, Colorado State University, Bugwood.org

Larvae feed on tap roots, resulting in unsaleable products



EPPO Rosemary Collier, Warwick HRI

The adult fly is about 8 mm in length



Rasbak

The white to yellow larvae can grow up to 10 mm in length

How does it spread?

The pest can be spread as larvae in bulbs, tubers, corms or rhizomes, and also by the transportation of pupae in infested soil. The adult fly is a weak flier and is not a significant spread risk.

Where is it now?

Carrot rust fly is widespread in Europe, Canada, USA and New Zealand.

How can I protect my farm from Carrot Rust Fly?

Check your farm frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common pests of the vegetable 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**



Know-how for Horticulture™

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