



Brook Road Allotment Association

BRAA Members General Information sheet



Carrot Fly (*Psila Rosae*)

This pest damages the roots of carrots, parsley, celery, celeriac and parsnips. However, attacks can be prevented by taking action early in the season.

What is carrot fly?

Carrot fly is a common pest of carrot-family crops all over Britain. Carrots are worst hit, but celery, celeriac, parsnips, parsley and some other carrot family herbs are all attacked by the Larvae, which burrow into the roots. The roots can be destroyed, and sometimes the whole plant is killed. Affected roots are hard to store, as the wounds left by the grubs let in diseases such as bacterial soft rots and parsnip cankers.

When do attacks develop?

There are two attacks a year. Where last year's crops were infested, the flies overwinter as pupae. The pupae are tiny, yellowish cylinders with dark ends, and their small size and colour make them hard to spot. The first fly generation emerges from May. They lay eggs near susceptible plants, which hatch into white maggots. These tunnel into the roots and feed there in mid-summer. They in turn pupate and hatch into the second generation. The second generation then lays their eggs. The Larvae tunnel into these in the autumn, and sometimes continue to feed all winter. However, they will all have pupated by late spring, and will be ready to hatch.

How do I recognise the adult?

Carrot flies are black, glossy and 5mm Long, with a red/brown head. To tell them apart from other flies is really a job for an expert, but you usually only notice them in and around carrot family crops.



Is there anything I could confuse it with?

Distorted and red-tinged carrot foliage is a sign of motley dwarf virus, but the roots are undamaged. It is spread by aphids (greenfly).

What early warning signs should I Look out for?

Sadly, the first sign you will see is when the plant dies or you pull up an infested, damaged root. Commercial growers use a trap to detect the insects, so they can time their sprays for maximum effectiveness, but these are not available to amateurs. Since the pest is damaging every year, it is worth taking preventative action before you see any sign of attack.

What do affected plants look like?

Carrot plants look stunted and 'rusty'. The leaves develop a reddish tinge and are reduced in size, turning yellow and dying. In allotments and gardens the plants often die. The carrot fly thrives in these habitats as it prefers sheltering trees, shrubs and hedges. Allotments tend to be full of carrot-family crops, grown close together year after year, so the flies don't have far to go to their host plants. When you pull the roots up, blackened surface tunnels, often containing maggots, can be found all over the roots. Parsnips are similarly mined by the larvae, especially the 'shoulders' of the root. Young seedlings can be attacked in the Leaf stems, as well as the root. This usually kills the seedlings. Celery stems are mined particularly where the stems grow from a crown at soil level. Larvae also mine celeriac roots. Parsley is affected by the Larvae killing the thin tap root. If plants die, Look for mines with Larvae in the crown of the plant.



Can affected plants be saved?

Once the Larvae are inside the roots, nothing can control them. Dig up the affected roots to prevent the larvae pupating. Damaged roots can be eaten, but will tend to rot in storage.

Can I re-sow in affected sites?

Re-sowing where there are still pupae from a previous crop guarantees a severe problem. However, where an early crop has to be scrapped before the larvae have pupated, it may be safe.