

Garden Organic answers



Members have been asking for advice and information on the leek moth. This pest, along with another relative newcomer, the *Allium* leaf mining fly, is an increasing problem in allotments and gardens in certain parts of the country.



The culprit – a leek moth

O Wadsworth

to move northwards, where it could meet the *Allium* leaf mining fly. The latter pest was first spotted near Wolverhampton in 2003, and it is now widespread in the Midlands on allotments and in gardens.

Leek moth *Acrolepiopsis assectella*

Description

The moth caterpillars, which grow up to 13mm long, are yellow-green with grey-brown patches and a yellowish-brown head. The pupae are reddish brown, and are found in silken cocoons within the foliage.

Symptoms

Leaves develop whitish-brown patches. Young caterpillars tunnel into the leaves; older ones tunnel down into stem and bulb causing extensive damage. A brown, slimy, secondary rotting may develop within areas of the stem. Leaves turn yellow with brown patches as damage spreads.

Life cycle

Adult moths and pupae overwinter in crop debris.

1st generation: moths lay eggs on host plants in April and May. Caterpillars feed within the leaves in May and June.

2nd generation: moths lay eggs in July. Caterpillars feed from August to October. This generation usually causes the most damage to leeks.

What can you do?

- Use crop rotation: don't grow susceptible crops in the same spot more than one year in four.

- Raise transplants under cover.
- Delay planting out until after May, which avoids the first generation, or late July to avoid both generations. Or grow crop under a fine mesh cover, such as Enviromesh, which must be in place from planting out.
- Water leeks well in dry weather in summer; larger plants are more tolerant of damage.
- Dispose of severely infested plants and crop debris after harvest in your council's green waste collection bin.
- Dig over the ground after harvest to expose overwintering adults and pupae for birds, bats, hedgehogs, frogs, and beetles to eat.

Leek moth traps are now available for amateur gardeners. These use a moth pheromone to attract male leek moths, and prevent them breeding. Traps can be used to confirm that leek moth is the problem. They may also help to reduce the number of moths.

Coping with leek moth – members' experiences

“I sow leeks in the spring/early summer in a pot. I keep the seedlings, usually transplanted into the soil, in a tunnel/greenhouse/cold frame all summer. I might feed them a bit as they are in a bunch, but basically I leave them till late September when I plant them out. That's it – no leek moth. If you've picked a late variety, they have plenty of time to grow on and give you leeks in winter and spring. Even in colder areas of the country, planting leeks late in final positions will be viable if they are top dressed with compost and given a temporary period under a cloche/fleece to bring them on.”

Andrew Burnett, Plymouth

The damage caused by leek moth caterpillars and the larvae of the leaf mining fly can look quite similar. Both can render plants inedible, and can cause complete crop failure. But so far, these pests are not active in the same areas of the UK. They are mostly pests of leek and onions, but garlic, chives, and other members of the *Allium* family can also be attacked.

Until 20 years ago, leek moth was not regarded a real problem in the UK. It was found only along the south and east coasts of England. But recently, probably as a result of climate change, it has been able to move away from the sheltered coastal areas. It may continue



Adult leek moths lay their eggs and, after hatching, the caterpillars tunnel into the leek's leaves and stem causing considerable damage. Sometimes an entire crop can be ruined

“ We have terrible problems with leek moth caterpillar. The only way to grow leeks successfully is to use a cover of Enviromesh. Don't use fleece as this doesn't allow sufficient air circulation. The big problem was moving the mesh to weed: not an easy job. Three years ago we tried planting through a weed suppressing membrane – rather time consuming to start with, cutting a series of crosses to plant the leeks through. It has worked extremely well with healthy leeks and not a weed in sight. We bought a roll of “weed stop” membrane that is designed to plant through; it is brown so blends with the soil and does not fray when cut. Both membrane and micromesh are wearing well despite being in use for nine months each year. ”

Lynda Niccolls, Worcester

“ I grow leeks successfully on an allotment where leek moths have been around for a number of years. I just cover the leeks, once in final position, with a fine mesh cover such as Enviromesh, either a ready-made

tunnel or a rectangle of mesh, freestanding hoops and some bricks. I leave the leeks to grow and there's no sign of the moth. Last year I sowed leeks in seed trays (in a different place from my allotment) starting in late March and planted out on 8th and 22nd July. I netted the leeks immediately and was cropping them from late October onwards. The netting is not a problem even with weeding. I tended not to bother throughout the summer only occasionally removing big stuff in September. I am not being over cautious about this. In 2008, the grubs burrowing into the leeks ruined my complete crop. In 2009, I had perfect leeks! ”

Colin Hendy, Bristol

Allium leaf mining fly *Phytomyza gymnostoma*

Description

The white/creamy fly larvae (not caterpillars) are 5-8mm long and feed inside the plant tissue. The pupae are 3-4mm long, brown/orange, and may be found in the leaves.

Symptoms

Distorted leaves.

Life cycle

Pupae overwinter in host plants and emerge in spring. Flies lay eggs at the base of host plants. The larvae feed in the plants, emerging as adults to lay eggs in leeks and other alliums in autumn.

What can you do?

- Delay planting until May, and harvest before October.
- Use crop rotation: don't grow susceptible crops in the same spot more than one year in four.
- Grow crops under a fine mesh cover, such as Enviromesh, which must be in place from planting out.
- Dispose of severely infested plants in your council's green waste collection bin.

If any more members have experiences to share, please do let the editor know.



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