Allium Leaf Miner Information Sheet

The allium leaf miner is causing allotment holders problems!

With the arrival of the allium leaf miner (and the leek moth) it looks like we may need to consider netting leeks, onions, garlic, chives and shallots to prevent significant pest damage.

Q- What is allium leaf miner?

A- The adult allium leaf miner is a small fly, only 3mm long, and inconspicuous. The damage is done by the maggot-like larvae, which tunnel into the leaves. Allium leaf miner can feed on leeks, onions, chives, shallots, garlic and ornamental alliums.

Q- Where does allium leaf miner occur?

A- Allium leaf miner came originally from Central and Eastern Europe, where it's a serious pest on leeks, onions and chives. It has been spreading outwards in the last 20 years and is now found throughout Europe. It was first identified in Britain in 2003 on leeks in a garden in Wolverhampton. It has now been recorded in Cheshire, London, Shropshire, Staffordshire, Warwickshire and Worcestershire. So far it has only been found in gardens and allotments, not in commercial crops.

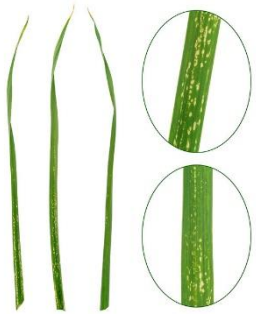
Q- What plants does allium leaf miner attack?

A- This pest can affect leeks, spring-sown onions, chives, garlic, salad onions, shallots and ornamental alliums.

Q- What damage does allium leaf miner do?

A- The first sign of attack is often rotting towards the base of the leaves caused by fungi or bacteria invading the wounds caused by the maggots. If visible, the mines themselves are narrow and linear. With onions, the leaves may become deformed, curled or wavy. If left unchecked, secondary rotting can soon destroy the whole plant.

Female adult flies feed by puncturing the leaves, and this produces a row of white spots towards the tips of the leaves in spring and autumn. This is easier to see in onions and chives than in leeks but is still not very distinctive.



Q How do I recognise allium leaf miner?

A The larvae are off-white maggots around 5mm long. They often go undetected, and, by the time the damage is spotted, they have turned into orange-brown pupae, 3-4mm long. These pupae can be found towards the base of the leek or onion either embedded in the bulbs or wedged between the leaves - you need to peel back the outer layers to see them.

Q When do allium leaf miner attacks occur?

A Leaf mining takes place mostly from April to May and from October to November. However, the damage is most obvious later, once rotting has set in, so is usually seen in overwintering leeks between December and February, and in onions in June.

Q How serious is allium leaf miner?

A Commercially, allium leaf miner would probably be controlled by pesticides already routinely used to control other pests, but for gardeners and it can be very damaging.

Q Do I need to tell anyone about allium leaf miner?

A No. When it first appeared, allium leaf miner was a notifiable pest, but now the Food and Environment Research Agency (FERA) has concluded it's not practical to try to control it.

Q Could I mistake allium leaf miner for anything else?

A The rotting and disintegration that follow leaf-miner damage can also appear following damage caused by leek moth or onion fly, both of which can also attack the whole allium family. Leek moth caterpillars are yellow-green, and have legs and a distinct dark head. The pupae, found on the leaves, are 10mm long, cream with a silk covering. Onion fly maggots reach about 8mm long and cluster in the base of the bulb. Damage occurs between June and September and is usually first noticed when the leaves turn yellow. They pupate in the soil.

Q What should I do with plants affected by allium leaf miner?

A Once rotting sets in, the plants won’t recover. Undamaged parts can still be eaten, but affected onions can't be stored. If they're too badly damaged to be used, affected plants are best consigned to your local council's composting scheme, which will destroy the pest, or buried deeply so the adults can't emerge from the pupae.

Q How do I control allium leaf miner and prevent future attacks?

A Once the miners have burrowed into the crop, there's little you can do. There are no insecticides approved for treating the pest, even if you knew it was there. Timing your crops can help avoid attacks. The flies lay their eggs between the end of February and the end of April, and again from the end of September to the end of November. This means crops raised between May and September should escape damage. **At other times, the best approach is to use a physical barrier to keep the flies at bay. In winter and early spring you can use horticultural fleece and in summer insect-proof mesh.**