

Fungus gnats

GWF260
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These tiny black flies are more of a nuisance than a pest. Although difficult to control, they can be discouraged by careful watering and other measures.

Q What are fungus gnats?

A Fungus gnats are small black flies, also known as sciarid flies, mushroom flies and mycetophilids. They are a very common pest, especially when plants are grown in pots of soil-free compost. In fact, the less soil there is and the more artificial compost additives (perlite and vermiculite, for example) the more sciarid flies there appear to be.

Although most kinds do no damage, a few may be a menace at times. They can be hard to clear up, but you can avoid or at least minimise their numbers with careful watering and other measures.

Q Where will I find fungus gnats?

A Fungus gnats are most commonly found on or near the surface of the compost around houseplants. It is the white semi-transparent maggots of some species of these gnats that can cause damage to seedlings, cuttings and other young plants by eating the roots and shoots of seedlings or boring into the stems of slow-rooting cuttings.

Q How do I recognise the flies?

A The gnats are dark insects, 2.5-3.5mm long, and tend to

flutter weakly. They can also be seen running over the surface of plants and compost, as well as flying. When they are not flying you have to look closely to spot the wings as they are folded against the body.

Q What about eggs and larvae?

A The female lays several hundred eggs which hatch in a day or two. Egg-laying commences soon after the adult hatches. The larvae or maggots eventually grow to about 6mm in length, after passing through four larval stages, over about three weeks, during warm weather or in buildings. Out of doors the process takes longer. They are white, with segmented bodies and shiny black heads. Look closely and you can see the dark guts inside the translucent bodies of the maggots. When fully grown, they form pupae in the compost or soil. The adult flies develop in these pupae and hatch out after approximately one week.

Q How do I recognise an infested plant?

A Growth slows and the plants develop a thirsty look, eventually wilting and even dying. Seedlings and cuttings are most likely to die outright, but even larger plants can be checked in their growth.

Q Which plants are most at risk from damage?

A Carnations, chrysanthemums, cyclamen, freesias, orchids, pelargoniums, primulas, saxifrage, sempervivum and sweet peas are susceptible.

Other likely targets are cucumbers and cultivated mushrooms. When conditions are favourable - in houses or warm greenhouses - breeding can take place all year round.

Q What attracts fungus gnats?

A Fungus gnats are attracted to composts that are high in organic matter, such as peat-based composts, decaying plant tissue and compost that is kept constantly damp, such as pots containing insectivorous plants. They feed mainly on plants, but are also partial to any form of decaying organic matter.

Q How can I deter fungus gnats?

A Allow the surface of peat-based composts to dry out a little before watering the plant again. Remove dying leaves and dead flowers regularly, so that they do not begin to decay and so attract fungus gnats. Adults are less likely to lay eggs on dry surfaces with no decaying plant tissue for the newly hatched maggots to feed on. Covering the compost

with grit or pebbles can help.

Fungus gnats are also very fond of stored compost, especially if it is freshly sterilised or contains animal-derived fertilisers. Keep all your spare compost bags tightly closed. Even better, buy in new compost as you need it and avoid storing it altogether. Loam-based John Innes composts tend to be less attractive to fungus gnats than soil-less composts.

Pot-bound plants are also thought to be more susceptible, so pot on frequently.

Q Are there any methods of attracting fungus gnats away from plants?

A Sticky yellow plastic sheets can be suspended over susceptible plants, attracting the gnats and trapping them in glue. Brushing the plants regularly will disturb the gnats and encourage them to fly towards the yellow sheets.

Q Where can I get sticky yellow traps?

A They are available from garden centres or many mail order biological control suppliers.

Q Is there a biological control method for fungus gnats?

A There is a predatory mite, *Hypoaspis miles*, that lives in the surface layers of compost and will feed on the maggots if the temperature is kept at around 21°C.

Q Where can I get the predatory mite?

A *Hypoaspis miles* can be obtained by mail order from the suppliers given below.

Q Are there any suitable chemicals I could use?

A Chemicals for controlling this pest are not especially effective and need to be reapplied regularly. You will have better results with cultural or biological controls.

Suppliers of biological control

Biowise

Hoyle Depot, Graffham,
Petworth, West Sussex GU28 0LR
01798 867574
www.biowise-biocontrol.co.uk

Defenders Ltd

Occupation Road, Wye, Ashford,
Kent TN25 5EN
01233 813121
www.defenders.co.uk

Harrod Horticultural

Pinbush Road, Lowestoft,
Suffolk NR33 7NL
0845 402 5300
www.harrodhorticultural.com

Just Green

Unit 14, Springfield Business Park,
Burnham-on-Crouch, Essex
CM0 8UA
01621 785088
www.just-green.com

Scarletts

Nayland Road, West Bergholt,
Colchester, Essex CO6 3DH
01206 240466
www.scarletts.co.uk

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In-depth information - A closer look at a range of topics

Soil facts - All about different soil types and dealing with deficiencies

How to do it - Covers the basics in a step-by-step or illustrated format and advice on creating features to enhance your garden

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Plants from pips - Encourage children to get gardening

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Chemical information

Brand names of garden products change frequently, whereas the active chemical ingredient in them usually doesn't. Because of this, we list the active chemical ingredient recommended for a given problem, rather than the brand name of the product. The only exception is when we have tested a brand and chosen it as a **Best Buy**. If you need any more information on chemicals, please ask for our factsheet GWF281