

Mealybugs

GWF278

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Mealybugs mostly attack greenhouse plants. The key to dealing with them successfully is to tackle infestations the moment they appear.

Q What are mealybugs?

A Mealybugs are small, oval, sap-sucking insects up to 4mm long. They look like tiny, pinkish or grey woodlice close up, but are usually covered with a fluffy layer of protective wax. Colonies resemble blobs of sticky cotton wool and may be accompanied by sooty mould.

Q Which plants do they affect?

A There are three main groups:

Glasshouse mealybugs

(*Pseudococcus*, *Planococcus* and *Nippaecoccus*) mostly come from the tropics and only survive here in protected environments (though one mealybug from Northern Europe can be found outdoors on shrubs in favourable districts). They attack a wide range of houseplants and greenhouse ornamentals, plus vines. Cacti and succulents, African violets, ferns and orchids are particularly vulnerable.

Root mealybugs (*Rhizoecus*) build up into dense colonies on the roots of greenhouse ornamentals. They are 1-2.5mm long, greenish-yellow and surrounded by white wax. They tend to be most troublesome when the potting compost is kept on the dry side, so vulnerable plants include cacti and succulents as well as

abutilon, African violet, begonia, ficus, hoya, hippeastrum, dracaena, ferns, fuchsia, palms and pelargonium.

Phormium mealybugs (*Trionymus diminutus*) attack phormiums and cordylines. They are 4-5mm long, grey or dark red, with a white wax covering. Unlike other mealybugs, they can survive low winter temperatures.

Q Tell me more about them.

A In warm greenhouses, or in the house, mealybugs can feed and reproduce all year round. Females lay batches of 100-150 eggs, protected by wax. These hatch out in a few weeks and the nymphs crawl around on the plant for a few hours before they settle to feed. Once they become adults they can still move but rarely do. Colonies of mealybugs tend to congregate in leaf axils, at the base of cactus spines or underneath leaves.

Q What damage do they do?

A Glasshouse mealybugs suck the sap of their host plants which weakens and can kill them. The colonies of mealybug with their associated wax, honeydew and sooty mould can be very disfiguring to specimen plants.

Root mealybugs prevent the roots from operating properly and

the plants may appear stunted, or wilt, especially in pots. Damage is usually worse if the plants are in dry compost or soil. With phormiums, heavy mealybug infestations will weaken the plant and eventually kill it.

Q When do mealybugs attack?

A Mealybug infestations can appear at any time, though they are likely to be worse in late summer and autumn.

Q Could I mistake it for anything else?

A An infestation of mealybug is often mistaken for a fungus, but if you squash a colony, it will be wet and sticky. Woolly aphids, which also hide under fluffy white protective wax, look similar but attack a different range of plants. They are hardy and most commonly found outdoors on apples, pyracantha or cotoneaster. See *Gardening Which?* factsheet GWF224 for more information.

Q How do I prevent mealybug infestations?

A Check new plants thoroughly before bringing them home. If you have a precious collection of, say, cacti, African violets or orchids, it is worth quarantining new plants for a month or so

before mixing them with the others. Stripping old bark off indoor vines in winter helps to dislodge incipient mealybug colonies. Keeping the compost moist will deter root mealybug, though unfortunately this will not suit some of the most vulnerable plants.

Q How do I treat them?

A Eradicating mealybug requires persistence and it may be better to discard badly infested plants. Quarantine any pot-grown plants you are going to treat and put them outdoors if it is mild enough. In fact, leaving plants outdoors over winter is a good way to destroy colonies on plants that are hardy enough, such as camellias. Scrape, hose or brush off as many adults as you can, or cut out badly affected shoots. Adults are largely immune to spraying, but the nymphs are susceptible. Use *fatty acid* soap-based sprays and spray fortnightly until no more adults appear. If you suspect root mealybugs, tip the plant out of the pot and check the roots. If you find colonies, remove as much as you can, then dip the roots in spray-strength insecticide and repot in fresh compost. However, badly

infested plants are best discarded. Phormium mealybug is virtually impossible to control even by spraying, and once a colony gets going the plant is likely to die.

Q What about biological control?

A If mealybug gets established in a heated greenhouse or conservatory, biological control using *Cryptolaemus montrouzieri* beetles or *Leptomastix dactylopii*, a parasitic wasp should do the trick. *Cryptolaemus* is a black and orange ladybird from Australia. Its larva looks rather similar to a mealybug but is twice as big. An adult will consume about three mealybugs a day, and a larva nine. They only search a small area so you need to release at least one on each plant.

Leptomastix dactylopii is a wasp about 3mm long that kills mealybugs by laying their eggs in them. They are much better at finding small colonies than *Cryptolaemus* but only attack citrus mealybugs.

Screen opening doors, windows and vents with fine netting so the adults won't escape. Both controls thrive only in the summer as they need good light and temperatures above 21°C.

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

Green Gardener

Brook Hill, Brundall Road,
Blofield NR13 4LB
01603 715096

www.greengardener.co.uk

Harrod Horticultural

Pinbush Road, Lowestoft,
Suffolk NR33 7NL
0845 402 5300

www.harrodhorticultural.com

Just Green

Unit 14 Springfield Industrial
Estate, Burnham-on-Crouch,
Essex CM0 8UA 01621 785088

www.just-green.com

The Organic Gardening Catalogue

Riverdene Business Park, Molesey
Road, Hersham, Surrey KT12 4RG
0845 130 1304

www.organiccatalog.com

Scarletts

Nayland Road, West Bergholt,
Colchester, Essex
CO6 3DH 01206 240466

www.scarletts.co.uk

Free factsheets

Gardening Which? factsheets provide detailed information on a wide range of topics:

Pests and diseases - Common problems in the garden and the greenhouse.

Welcoming wildlife - Encouraging wild plants and animals in the garden.

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.

Legal - Know your rights in and around the garden.

Plants from pips - Encourage children to get gardening.

Factsheets are free to *Gardening Which?* members. For a full list, ask for Which? factsheet GWF424

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.