

# Leatherjackets

GWF247

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These common soil pests can be a real menace in lawns. They also cause damage in flower beds, borders and vegetable plots, and they can affect greenhouse soil.

## Q What are leatherjackets?

**A** These pests are the grubs or larvae of crane-flies (*Tipula* species) better known by their common name, daddy-long-legs. They have long thin legs, narrow bodies and slender wings. Although several different kinds of crane-fly produce damaging leatherjacket grubs, they are hard to distinguish. They all do similar damage and are dealt with in the same way.

## Q What damage do they do?

**A** Leatherjackets eat the underground parts of plants, including seeds. Sometimes on warm humid nights, they come up to the surface to feed, cutting through plant stems at soil level and munching holes in the foliage. Where plants are close together, as in lawns, bare dead patches can result. Where plants are further apart - in borders or the vegetable garden, for example - the first you know of an attack is the sudden wilting and death of the plants. The cause of this damage can be confirmed by scraping away the soil or lifting turf. The culprits will not be far away.

## Q How do I recognise them?

**A** Look for grubs 2.5-4cm long. They are greyish brown or even black, with tough leathery skins

enclosing a soft body.

Leatherjackets do not have a distinct head or legs. Their colour makes them difficult to spot.

## Q Could I mistake leatherjackets for anything else?

**A** You are most likely to mistake them for cutworms. These are caterpillars with true legs at the head end and fleshy, sucker-like legs at the back. Unlike leatherjackets, the head of the cutworm is clearly recognisable.

Chafer grubs are bigger, comma-shaped, with a bulbous cream abdomen and a brown head with true legs at the other end. Wireworms are long and thin and have true legs at the head end.

Often you will also find other fly-type larvae in the soil. These belong to *Bibionid* flies that feed on organic matter in the soil. They are usually harmless; they're thinner and smaller than leatherjackets, with a distinct black head. If present in large numbers they may do a little local damage. In pots you may find sciarid fly larvae. See *Gardening Which?* factsheet GWF260.

## Q When do leatherjackets usually turn up?

**A** They really get going in the spring. At this time they are about 10mm long and big enough to cause a lot of damage in a short time. They are most numerous

after a warm, wet and mild autumn, which favours survival of the tiny, newly hatched leatherjackets. When these first hatch in autumn, they often fall victim to drought.

The good news is that leatherjackets become inactive from midsummer onwards, when they start to pupate.

## Q Are they a problem in containers?

**A** Soil used in soil-based composts should come from turves stacked until they have rotted into good soil. Although these are prime leatherjacket sites, soil is sterilised by reputable manufacturers and this finishes off any pests. If you are making your own container compost from soil, sterilise it by heating in an oven (15 mins at 120°C/250°F).

Soil-free compost should be safe. However, leatherjackets have been known to enter pots from infested soil beneath the container. If this could happen with your pots, try standing them on black polythene sheets.

## Q Can I tell if leatherjackets are present before planting?

**A** If daddy-long-legs are numerous and the autumn is mild, be suspicious. If you suspect that leatherjackets are present, you can use the trapping method described below to flush them

out. However, this check is only worth doing when the ground has recently been covered by grass, including grass weeds. You will probably spot them when you dig the site over in spring. Pay special attention to clumps of weeds, especially grassy weeds, and grass edges.

Birds pecking at the soil in winter, and at lawns in spring and early summer are another sign of leatherjackets' presence.

### **Q Can you tell me more about them?**

**A** Crane-flies are on the wing in late summer, often in large numbers. They lay up to 300 eggs in the soil at this time. Their eggs are like minute oval seeds and hatch in two weeks. If conditions are dry, many leatherjackets will perish, but if they survive they will feed on plant roots. When they are small, however, their appetites are too meagre to cause significant damage. When the weather becomes cold, they feed very slowly. In spring, they are larger, feed more and soon reach their full size. In summer, they retreat deeper into the soil to pupate, or form chrysalids. When the crane-fly is ready to emerge, the pupa pushes nearer the surface.

### **Q How can I control them?**

**A** There are no chemicals approved for amateurs against leatherjackets. A biological control (*Steinernema*) is available though.

In smaller lawns the best method is to flush leatherjackets out by saturating the soil with water in the evening and covering the surface with a tarpaulin or a black plastic sheet. By morning the leatherjackets will be lying on the surface and can be

collected and destroyed or left for the birds.

In beds and borders, pick out any leatherjackets while digging and weeding. Eradicate grass weeds and if all else fails, replant after midsummer when the leatherjackets become inactive.

In fact if they are very numerous, don't plant until midsummer and keep the ground weed-free until then to starve them out. Grass weeds have a habit of growing vigorously in late summer and autumn, which provides ideal leatherjacket conditions.

### **Q Is it worth killing the adults?**

**A** Not really - there are so many in favourable seasons that you would have to spray them, and this would be likely to kill helpful insects as well.

### **Q Are there any other ways I can avoid them?**

**A** Getting plants off to a flying start will help them withstand mild attacks. Raise transplants in pots and cell trays. Sow in warm moist soil and use fleece to boost early growth. Also don't thin the seedlings too early.

Spread over lots of plants, attacks can be tolerated. Where they pick on just a few plants, damage can be fatal.

Top-dressing lawns and other plants with nitrogen fertiliser will help plants grow away from vulnerable stages and recover from any damage.

### **Q Are there any resistant plants?**

**A** Potatoes are generally regarded as immune.

### **Q Once I have got rid of them, will they come back?**

**A** No. As long as you keep grass

weeds under control, beds and borders should remain free of this pest. However, leatherjackets may sneak back in grass edges. If you sow grass after a season of leatherjackets, you may find that they return more quickly.

### **Q Can't I just leave it all to nature?**

**A** Often you can get away with ignoring minor infestations. Birds eat many leatherjackets and you can help them by forking over the soil in spring to expose the grubs. Beneficial parasites and diseases also destroy many leatherjackets.

## **Suppliers of biological control**

### **Biowise**

01798 867574

[www.biowise-biocontrol.co.uk](http://www.biowise-biocontrol.co.uk)

### **Green Gardener**

01603 715096

[www.greengardener.co.uk](http://www.greengardener.co.uk)

### **Harrod Horticultural**

0845 402 5300

[www.harrodhorticultural.com](http://www.harrodhorticultural.com)

### **Just Green**

01621 785088

[www.just-green.com](http://www.just-green.com)

### **The Organic Gardening Catalogue**

0845 130 1304

[www.organiccatalog.com](http://www.organiccatalog.com)

## **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