Broad-bean problems

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Broad beans are subject to several pest and disease problems, but if they are growing in fertile, well-drained soil, they are likely to resist serious damage.

Pea and bean weevil

Q What is it?

A It is a common weevil (*Sitona lineatus*) that is found on peas and broad beans. The adults feed on leaves and the grubs or larvae feed on the roots. Sometimes related garden plants, such as goat's rue (*Galega*), will also be attacked.

Q Does this pest cause serious damage?

A If very young plants are attacked, or if a plant's growth is checked through lack of water or poor soil, the adult weevils and their root-eating larvae can cause significant damage. Usually, however, the plants will grow out of the vulnerable stage with little loss of crop.

Q How can I tell if the pea and bean weevil is damaging my crop?

A The adult is seldom seen – it is a brown beetle with creamy stripes, 5mm long.

You know it is present when you see the characteristic U-shaped notching all round the leaf edges in spring. This is done by the adults, who only feed on the edges of the leaves. Although they do spread virus diseases, they do not usually do significant damage in the garden. The larvae feed on the roots of the plant and are only noticeable when the crop is pulled up. They are small (up to 5mm long) white grubs with no legs and brown heads, that look very like vine-weevil grubs. They can sometimes be seen feeding on the nitrogen-fixing nodules.

Q What could I mistake it for?

A Damage done by birds, which peck and tear the leaves of beans and peas, or by mice, which dig up and eat seedlings, could be mistaken for signs of the pea and bean weevil. The bean-flower weevil also makes puncture marks on bean leaves, but is not a troublesome pest.

If you find similar larvae on other plants' roots, they could well be vine-weevil larvae. The pea and bean weevil only feeds on peas and broad beans.

Holes in French and runner bean leaves are likely to be caused by slugs, as pea and bean weevils do not touch these beans.

Q When should I expect attacks?

A Adult weevils overwinter in vegetation and old plant debris; in fact, gardens make an ideal habitat or them. As soon as it warms up in spring, they start feeding. If this coincides with the emergence of seedlings, the damage can be severe. Eggs are laid around plants from April until July. The grubs hatch after about three weeks and feed on the plant roots. By late June they pupate about 5cm deep in the soil, and about two weeks later the adults emerge. Because the older beans and peas have tough leaves at this stage of the season, the weevils seldom do much damage. In fact, they feed on clover until the cold weather comes, when they find their overwintering sites.

Q What can I do about pea and bean weevils?

A Prepare the soil well, making a fine tilth. If the soil is poor, boost the seedlings' growth before sowing by adding extra fertiliser, such as growmore (rake in 70g a sq m). Peas, especially, will benefit from such treatment as they suffer badly from this pest.

After seedlings emerge, remember that spring droughts are especially damaging, so water the young plants if necessary. Cold conditions can be countered by using a covering of garden fleece. In fact, if you put this over the rows before the seedlings emerge and bury the edges, you will exclude not only pea and bean weevil, but also blackfly and birds too.

Keeping the rows well hoed will also reduce the chances of damage. There is no realistic physical way of controlling the root-eating larvae. If the plants are not growing well, adding extra fertiliser will often help – sprinkle 70g a sq m of growmore, for example.

There are no chemical controls available for adults or larvae.

Chocolate spot

Q What is it?

A This foliage disease (*Botrytis fabae)* of broad beans is caused by a close relative of grey mould, *Botrytis cinerea*. However, grey mould will also sometimes be found on the plant following an infection of chocolate spot.

Q How do I recognise it?

A Chocolate spot causes reddish-brown blotching of broad-bean leaves, stems and pods. It can spread rapidly, becoming brown-black, joining up and covering leaves. In addition, the leaves are covered with a grey mould in wet weather. The flowers and young pods are quickly ruined, and the disease will penetrate older pods to discolour the seeds inside.

Q When is chocolate spot likely to occur?

A Chocolate spot may appear from mid-winter onwards. Wet weather is needed for the disease to spread. Autumn-sown broad beans are most likely to be infected, but even in spring the disease can be troublesome when the weather is wet.

Q What can I do about it?

A Broad beans grown in fertile, well-drained soils resist attacks. Make sure your soil has plenty of phosphate and potash. If your soil lacks these nutrients, add 30g a sq m each of superphosphate and sulphate of potash to the bean plot in winter. If in doubt, *Gardening Which?* provides a high quality, cost-effective soil-analysis service for members.

To improve the drainage in your plot, consider making raised beds for vegetable growing. In wet or cold districts, raising overwintered broad beans under cloches may help to prevent disease. It's also a good idea to plant autumn-sown beans at wide spacings, so airflow through the plants is enough to keep the humidity down. When you sow, leave 50cm between the rows and 10cm between the plants.

Q Can chocolate spot be treated by spraying?

A There is no chemical control for this problem.

Broad bean rust

Q What is it?

A Broad beans are often attacked by a rust (*Uromyces fabae*) which covers the leaves with tiny yellow spots. Red-brown powdery spots develop later on the underside of leaves, and stems and pods can be affected.

Q Is it serious?

A Usually it develops too late to affect the yield of beans. However, late-sown spring beans can suffer badly in July, when the warm days and dewy nights favour the disease. There are no chemical controls available to gardeners. Picking off and destroying infected leaves may slow the disease down. Tiny mites often feed on the spores in the pustules – these are harmless.

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