



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

(4-5 mm long)

Quick Facts: This is one of several different species of *Sitona* that feed on cultivated plants. The beetles eat small, semi-circular pieces out of the edges of pea and bean leaves in spring and summer, producing a characteristic

scalloped or notched effect. Small, brown, short-snouted weevils, about 4 mm long, may be seen on affected plants, but often drop off when disturbed. The pea and bean weevil is a common pest throughout Europe, North Africa and parts of Asia, and it has been spread through commerce to North America and Australia.

The adult weevils overwinter in plant debris and coarse vegetation and move onto peas, beans and other leguminous plants in early spring. Females lay eggs in the soil during warm weather and the larvae, which hatch about two weeks later, feed for about a month on the nodules found on the roots of pea and bean plants, before pupating in the soil. Adults appear in June or July and feed on various plants until the autumn, when they seek hibernation sites. Some virus diseases of broad beans are transmitted by these and other weevils.

Specific Questions & Answers

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 for 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 – for example sprinkle 70g a sq m of pelleted chicken manure (for organic growers) or Growmore (for non organic growers),

There are no effective chemical controls available for adults or larvae.