

Leafhoppers

GWF246

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Leafhoppers are very common in the garden, but only a few types cause severe damage. Roses, potatoes and greenhouse crops are most at risk.

Q What are leafhoppers?

A They are sap-sucking bugs, 3-7mm long, generally pale green or yellow, though some are more brightly coloured. Leafhoppers can be troublesome, but are rarely noticed until the damage is done. There are up to 2000 kinds that infest garden plants.

Q What do they look like?

A Their overall shape is a narrow wedge, a bit like an elongated aphid or greenfly, often with a frog-like front with large eyes. When disturbed, adult leafhoppers can leap up to two feet, after which they can fly to escape. Juveniles can leap but cannot fly.

Q How do I know if they are present?

A Leafhoppers feed by piercing the leaves to reach the sap. Where this happens the leaf becomes speckled with pale, even white, spots. Sometimes the leaves are totally bleached, and may be distorted. Small plants, seedlings for example, can be killed, and larger plants can shed their leaves if badly attacked. Leafhoppers exude a sticky liquid called honeydew which, in severe attacks, can cover the foliage. Sooty moulds can colonise this

coating, turning leaves black.

Another sign is the cast-off skins of the immature forms. These pale, empty skins are sometimes referred to as ghost flies.

Q Can I confuse them with anything else?

A Froghoppers are very similar plant bugs. The commonest is cuckoospit, which is easily recognised by its frothy covering. It can be dealt with by squashing or hosing away.

Aphids or greenfly and capsid bugs could all be mistaken for leafhoppers at a glance, but they do not have the distinctive wedge shape, and do not leap clear when disturbed.

Mottled leaves may also be caused by spider mites. To find out if they are to blame, check out the underside of the leaves for the tiny, slow-moving mites and their fine webbing.

Thrips, also known as thunder flies, can cause leaf mottling too. In this case look for them on the leaf undersides, in buds and flowers and under leaf sheaths. Hold a sheet of paper beneath the leaves and tap the foliage; the tiny insects will fall on to the paper.

Q When should I expect to see leafhoppers?

A In a warm greenhouse they will breed all year round. Outdoors, leafhoppers are most active in summer.

Q Which plant types are most at risk?

A Roses commonly suffer from leafhoppers, and they often plague greenhouse plants such as fuchsias, chrysanthemums, calceolarias and primulas. Deadnettle family plants can also suffer badly. Among vegetables, potatoes are often attacked. Beech and hornbeam hedges seem vulnerable. Several kinds of leafhopper are pests of fruit.

Q Do they spread disease?

A They can spread viruses, but in this respect they are much less significant, in this country, than aphids or greenfly. They can also spread mycoplasma diseases. Mycoplasmas are mid-way between bacteria and viruses in size and complexity. Green-petal disease of strawberries, for example, is caused by a mycoplasma. Rhododendron leafhoppers spread bud-blast disease, caused by a fungus.

Q Which ones am I likely to come across?

A There are three common leafhoppers that attack garden plants.

Rose leafhopper (*Edwardsiana rosae*). Look out for mottling of rose leaves in May, June and July. When the weather is dry the pale-yellow larvae or nymphs can build up to large numbers. Often you don't know they are there, as they live beneath the leaves. By the time you see that the leaves are severely affected, they have moved on. The pale-yellow adults have wings, and when disturbed they jump to escape. They lay eggs in the foliage which hatch in late summer. The resulting adults lay the eggs that persist over the winter to give rise to the nymphs next spring. Rose leafhopper often turns up on fruit trees and bushes along with many other kinds of leafhopper. Fortunately, it is seldom a serious pest, although it may spread diseases.

Greenhouse leafhopper (*Hauptidia maroccana*). The highly agile, pale-yellow, winged adult is a common greenhouse

pest. It is easily seen when the foliage is disturbed. The immature, paler and wingless nymphs are less conspicuous, but can be very numerous beneath the foliage.

Rhododendron leafhopper (*Graphocephala fennahi*) is a small, colourful insect about 9mm long with a blue-green body, red stripes on the wings and a red head. The adults lay eggs in the flower buds, wounding the bud and allowing the fungus responsible for bud-blast disease to enter. Yellow nymphs hatch from the eggs and feed on the undersides of the leaves between May and August. While the leafhopper itself causes little damage, the bud-blast disease it transmits can severely restrict the flowering of rhododendrons.

Q How do I deal with them?

A Most general-purpose contact insecticides containing bifenthrin, pyrethrins or rotenone will help deal with them. Make sure you spray under the leaves to catch all the leafhoppers. The adults will leap away when the spray falls near them, so repeated sprays

may be needed to destroy the survivors.

Q What can organic growers use?

A Natural insecticides containing fatty acids or soap, and those containing pyrethrum, will deal with leafhoppers. They are contact insecticides and do not persist, so you'll have to ensure that all parts of the plant are covered, and several sprayings may be needed to give good control.

Q Can they be trapped?

A The yellow sticky traps used indoors for whitefly will also catch leafhoppers. In fact, if you use enough they stand a good chance of keeping these pests under control in most circumstances.

Q Are there any biological controls?

A We don't know of any biological controls.

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