



Bulletin of the RHS Members' Advisory Service

“Acting on
pests and
diseases as
soon as they
are noticed,
saves much
time and effort
later on...”

The purpose of this seasonal bulletin is to alert you to some of the pests and diseases that may appear in your garden this summer, and how to resolve them.

*For any further assistance please call us on the Advice Line:
quoting your RHS membership number on 0800 260 8000
or email us at: gardeningadvice@rhs.org.uk*

If you are a non-member and value the service we are providing, you may wish to join and take instant advantage of the many benefits RHS membership offers by ringing 0845 0621111 or 0845 1304646

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The double threat from Vine Weevil

The adult produces these characteristic notches on foliage in the summer, in this case (left) a rhododendron. Adult vine weevils (centre) are usually active at night and although their damage is unsightly, it is not as serious as that caused by their larvae (right) that feed on the roots of the host



plant during autumn and winter. The damage they are able to inflict on the roots can sometimes be so extensive that the plant collapses and dies. The damage usually is more concentrated in plants grown in containers than the open ground but favourite food plants such as *Heuchera*, Strawberries and *Primula* can still be badly affected. Non chemical controls include picking off the adults at night or trapping with Agralan Insect Barrier Glue, while the larvae can be treated with microscopic predatory nematode worms available from biological control mail-order companies. Nematodes are totally harmless to other wildlife. Chemical control is by using Scotts Bug Clear Ultra Vine Weevil Killer) or thiacloprid (Provado Vine Weevil Killer 2) as a liquid drench applied to the compost in containers in mid to late summer, however the chemical treatments cannot be used effectively when applied to open garden soil.

The strange fungal growth that is Azalea Gall

The fleshy growths that appear on azalea leaves in late spring and early summer look disturbing but fortunately, this fungus disease is not fatal.

The galls particularly appear on the indoor azalea, (*Azalea simsii*) first as light green fleshy growths after which their surfaces turn white. (see left). The white covering on the galls are the spores of the fungus, by which means it propagates itself.

There is no chemical control for the fungus so affected leaves need to be manually removed from the plant so that the spores do not have the chance to spread to other leaves, which is exacerbated in humid or wet weather.





Blossom Wilt and Twig Blight on fruit trees

In stone fruit this is caused by the fungus *Monilinia laxa* which also causes brown rot on their fruit later in the season. In apples a close relative, *Monilinia laxa* f. sp. *Mali* is responsible. The flowers and leaves on infected spurs wither and die and in wet weather buff coloured pustules can appear on the petals. The fungus sometimes extends from the spur into the branch where it forms a small canker. Infections in subsequent seasons are from spores from these sites if they are allowed to remain on the tree,

so it is essential to cut out the diseased spurs and if whole branches are affected, to remove these also. This is best carried out in the summer when the dead foliage indicates the diseased areas more easily. There is only one fungicide labelled to treat Blossom Wilt in stone fruit and that is difenoconazole (Plant Rescue Fungus Control, by Westland). For apples and pears, there is nothing specifically labelled, but growers may use myclobutanil (Systhane Fungus Fighter) or Bordeaux Mixture for treating apples at their own risk.



Dealing with Bacterial Canker in Prunus cultivars

This disease, caused by two closely related bacteria is particularly troublesome for cherries and plums but also extends to other species and cultivars in the *Prunus* genus. The bacteria attack young stems and leaves in wet conditions in spring and summer, moving into the stems in autumn and winter, usually through leaf scars in cherries and wounds in plums. While on the leaves they produce spots which die and fall out leaving a shot-hole appearance (left). When

established in the stems it produces flattened lesions that exude an amber coloured gum (see right), which is a common trait of infection in cherries, but less so in plums. Diseased stems and branches can be pruned out in summer and spraying infected trees with a copper-based fungicide in late summer will help to prevent bark infection through leaf scars. The first application should be given in mid-August, the second in mid-September and the last one in mid-October. The timing of the sprays is not critical, but three applications are necessary and it is essential to cover the leaves, branches and trunk with the chemical as thoroughly as possible.





Is Lichen killing my shrub?

Although it may look sinister, lichen is entirely harmless and does not feed on, or damage the shrub or tree upon which it perches. As it often appears on plants that are not in good health, this leads to the false conclusion that it is in some way responsible. More accurately, it becomes established on a plant that is already ailing simply because it is lacking in vigour rather than being the cause of it. Healthy plants prevent lichen from getting a foothold as they grow and so its presence can be a good indicator that the plant needs tending to or rejuvenating. Lichen is also common in areas of high rainfall and clean air, rather than in the polluted air of city centres.



Controlling Apple Scab

Apple scab or *Venturia inaequalis* first appears in late spring causing brown spots and patches on the leaves (right) which yellow and then fall. In heavy infections it can reduce the tree's vigour and crop-bearing as a result of the defoliation it causes. It overwinters in small ring like scabs on the stems of the tree which release spores in the spring to start the process off all over again. Fruit can also be affected (see below). Apple scab can be controlled to a certain extent by raking up and destroying the fallen leaves in autumn and by cutting out cracked and scabby shoots when

pruning, so removing the over-wintering stages, but the best control is to combine this with a spraying routine through the growing season using either Systhane Fungus Fighter, (myclobutanil) or Plant Rescue Fungus Control (difenoc onozole) by Westland. The amount of spraying applications required would be determined by the severity of the infec-





Sooty mould and cushion scale

The leaves of Camellias and Trachelospermum are often blackened with a thick, black mould in winter and spring (see below). This is not a disease affecting the leaf, but rather the first indication that the plant is suffering from a sap-sucking insect pest. The sooty mould itself is harmless to the plant and instead merely feeds on the sugary secretions produced by the insect.



On closer inspection, the under-sides of the leaves and stems have small oval limpet-shaped organisms attached to them, particularly along the central mid vein of the leaf (see above). These are called cushion scale insects. They derive their name from the cushion-like

egg masses produced in early summer. The young nymphs become active in late June—July and disperse to other areas on the shrub at this time. It is preferable to spray at this time with a systemic insecticide such as thiacloprid (Bayer Provado Ultimate Bug Killer concentrate), or acetamiprid (Scotts Bug Clear Ultra) which poisons the young insects as they suck the sap. Sooty mould will eventually flake off the leaves in the summer after the insect problem has been dealt with. Smaller plants can have their foliage wiped clean by hand



Will Pear blister mite kill my tree?

The blisters are first noticed as whitish-green swellings on the leaves as they unfurl in spring, gradually turning reddish in the sunlight. (left) They are caused by toxic substances in the saliva of microscopic mites as they feed on the young leaves. These mites would have previously overwintered in the bud-scales of the pear, emerging in the spring to feed and reproduce. The blisters afford protection to the mites which burrow into them, feeding on the soft tissues within. As the season

progresses, these blisters become black and necrotic (right) and in autumn the mites migrate back to the buds once more to over-winter. The infestation usually does not cause the leaves to drop and so the pest does not reduce vigour or cropping to any great extent. There is no chemical control available to amateur gardeners for blister mite; in light infestations, the affected leaves may be picked off and destroyed, although in a severe infestation this would cause more damage to the tree than the mite itself and is best avoided.





Leading a double life: the European pear rust

Pear rust is readily identified by the presence of one or more bright orange blotches on the upper leaf surfaces of pears. (left) In the late summer/ autumn gall-like sporangia appear on the underside of the leaves from which the spores are distributed. (below)

Pear rust is a relatively new disease in the UK. It has two hosts and infects pears in the summer and autumn, and then moves on to *Juniperus sp.* in the winter and spring where it produces orange galls. For the cycle to be complete, the two host plants

need to be in the vicinity of each other to allow for the transfer of spores. The spores produced by the gall on the Juniper are unable to reinfect the Juniper and can only infect pears and vice versa. In light infections on small, trained trees such as espaliers and cordons, the leaves can be picked off and destroyed as soon as the disease is noticed; however on larger trees where this is impractical the use of a fungicide is recommended to control the disease. Difenconazole by Westland ('Plant Rescue Fungus Control') is labelled for use in treating Pear rust. It is also necessary to prune out any galls that are growing on the nearby Juniper to break the cycle of infection and also to

spray the Juniper with the above fungicide.

The rust can overwinter as resting spores on the dead leaves of the pear once they have fallen, and can be continued a source of reinfection to Junipers, so it is important to sweep up the dead leaves and to bin or burn them rather than composting them.



Controlling Powdery Mildew

Powdery mildew is a fungal disease that occurs on the surface of foliage, stems and occasionally flowers and fruit. Many edible and ornamental garden plants are affected and each plant group usually has a specific species of fungus affecting it. For example, the powdery mildew affecting peas is a different species from the one attacking apples. Powdery mildew produces microscopic air-borne spores that are dispersed from the fungal growth on the plant surface. Promptly pruning out infected shoots will reduce subsequent infections. The fungus either spends the winter as dormant infections on green tissues, or as resting structures on fallen leaves and then releases spores the following spring. Therefore destroying fallen infected leaves in autumn will minimise the incidence of infection.

As most of the growth of powdery mildew is found on the plant surface they are easily targeted with fungicides and any of the brands recommended for powdery mildew will be suitable. Plants are more prone to infection after becoming dry at the roots and so regularly watering and mulching the plants helps minimise this.



Avoid chemical sprays and use fine gauge netting against Insect Pests

Where non chemical control is used against insect pests, caging susceptible plants such as Brassicas using a fine grade insect mesh will keep out all of the problem insects i.e cabbage white butterfly and their caterpillars, cabbage whitefly and cabbage rootfly. Birds such as wood pigeon will also be excluded, although the netting does need to be securely fixed at ground level or they will often find a way in. Carrot rootfly can also be excluded using a fine mesh cage and this is often more reliable than the 60cm high open top barrier that is sold specifically to prevent carrot rootfly from reaching the carrots. This is based on the insects' habit of not flying more than 60cm from the ground, however wind currents can often be unpredictable and carry them over. Many growers also use horticultural fleece against carrot rootfly, placing a layer on the ground over the carrots and simply securing it along the sides with bricks. The fleece is soft enough to be pushed up by the carrots as they grow. The cages mentioned above can be purchased in a variety of sizes or can be DIY constructed using canes and corner joints. All are available from Harrod Horticultural online at www.harrodhorticultural.co.uk

Causes of distorted new growth on tomatoes

When distorted growth appears on tomato plants (right) there are two possible causes. Virus infection, for which there is no treatment and the plant affected needs to be destroyed to prevent the virus from being spread to neighbouring plants or weed killer damage.

If Weed killers containing clopyralid (e.g. Vitax Lawn Clear 2 and Scotts Verdone Extra) have been used to treat broad-leaved weeds in lawns and the mowings of the lawn have subsequently been composted, the resulting compost can still contain



active weed killer and will adversely affect sensitive plants such as tomatoes if this compost is used as a component of the soil mix in which they are grown. For this reason it is essential that the label recommendations are followed concerning disposal of mowings. Typically this will involve **avoiding composting the first mowings after treatment or using them as a mulch**. The ideal way to dispose of such mowings is to mow frequently or with a mulching mower so that clippings fall back into the sward. If this is not possible we suggest composting mowings separately and later applying composted material only to turf. Where only light contamination has occurred to the tomato plants they may grow out of the problem with time, but with heavier more permanent damage, the plants are best destroyed.