



Peter Beales[®]

World Leaders in Classic Roses

Pests and Diseases



Pests and Diseases -

It used to be that you could look along rows upon rows of chemicals to kill or cure all manner of plant ills. This was a hangover from the second world war when anything that hindered the nation's food supply had to be got rid of at any cost. Today thankfully we have woken up to the possible long term effect of indiscriminate use of chemicals and so our choice of product has been greatly reduced. If our arsenal of weapons against the onslaught of marauding pests and diseases has been so depleted you may well ask yourself what hope is there to have a healthy garden.

Let us go back a step and think about dealing with the cause rather than the symptoms of plant health issues. First let us agree on the principle that nature abhors a void, so as one species or variety is displaced another comes in, sometimes more problematic to take its place. That would suggest that the compromise would be to have a balanced approach and to work towards creating a harmonious situation between our desires for perfection and nature's vagaries.

Why do plants suffer from pests and diseases? We might apply the same logic as we would do to ourselves. Sometimes it can be a genetic disposition to a certain illness but often in less severe cases it can be due to stress or failing to take adequate care of ourselves. So let us look at some possible causes before we reach for the chemicals.

Stress

Right from the onset are we working with nature or trying to persuade a plant that it must grow in a particular spot rather than considering whether it is suitable for such a growing position. Getting the right plant for the right place, to coin a phrase should be the first thing we think about and there is no substitute for research before buying or checking with a member of the plant area team.

Okay we have done our homework and decided upon a particular plant the next thing is, how do we plant it and make provision for its long term and short term happiness. There is no point whatsoever in spending money on buying a plant and then haphazardly digging a hole and plonking it in and that's it. The soil or compost, if growing in a pot, needs to be of an adequate structure to meet the plant's needs. This could

vary from very free draining for alpines to moisture retentive in the case of astilbe's. These conditions, if not already available can be achieved by the addition of either grit in the first case or heavy organic matter in the second. Next the planting depth, as a general rule drought tolerant plants do not want to be planted too deep or rotting of the crown might well ensue. On the other hand plants such as clematis and roses need to have the union between roots and the start of the stems at least 2" below the soil surface. This is to ensure the possibility of potential young growth coming from the base of the plant thus creating a stronger structure, and to safeguard against failure of the top growth through predator attack or disease.

Always ensure the root ball of the purchased plant is thoroughly saturated before planting, especially in dry conditions and then water it in from the top directly after planting. From then on the water requirements of the plant are in your hands and should not necessarily be left up to the vagaries of the English climate. As we would suffer from various problems if we did not take in adequate amounts of liquid so to would our plants. Inadequate amounts of water can lead to stunted growth, inability to produce flower or fruit and more importantly increase its susceptibility to disease such as mildew. On the other side of the coin, over watering can be just as injurious as it suffocates the roots and encourages rot and fungal attack not to mention perfect conditions for slugs and snails. Irregular watering also can be detrimental to healthy plant development as the delicate root hairs near to the soil surface can so easily be destroyed through inadequate watering and are then subsequently killed by drying out. The best way to help maintain even moisture content in the soil is to mulch at least twice yearly with "well-rotted" organic material. You might consider if planting up a sizable new area to install a seep hose which would save a lot of hand watering.

Now on to feeding, when doing your initial planting make sure you either use a long term feed such as blood, fish and bone meal or a product such as roots boost but it is not recommended that you combine the two. Mycorrhizal fungi are essential to soil life, continually growing out from the roots of a treated plant into the soil, finding new sources of nutrients and water. This huge secondary root system increases the nutrient flow to the plant over its entire lifetime, resulting

in stronger and healthier plants. The use of a mycorrhizal fungi product is good planting practice, improving establishment, natural vigour and ultimately flowering and fruiting. This does however need to be followed up with correct balanced feeding throughout the life of the plant. As we possibly all have felt the effects of over indulgence at Christmas time so to over feeding of plants comes with its own health problems. Forced lush growth due to the over use of a high nitrogen content fertilizer is a magnet for aphids and plant sucking insects and such plants are unlikely to be able to tolerate any shortage of water and will readily succumb to wind damage. On the other hand poor feeding leading to mineral deficiency will show up in poor growth and various leaf discolourations. Lack of iron and nitrogen can be detected by a distinct yellowing of the leaf leading to chlorosis and the inability of the plant to photosynthesise efficiently. Magnesium often seen on light or acid soils is seen as interveinal chlorosis. On clematis this is often seen on the older leaves due to the over use of a high potassium feed but can be easily rectified with the use of Epsom salts. Potassium deficiency is seen by yellowing of the leaf edges which then display a scorched appearance. All these problems can be rectified by correct and balanced feeding, please do not go with the old adage that if a little does good then a lot must.

If as is often the case we have done all we can to provide the plant with the correct growing conditions and a problem occurs, we have to decide if the problem is not going to ultimately lead to the death of the plant, do we live with it, or can we manually remove the problem or do we resort to a chemical or biological solution. As far as of the shelf products, the bug killers will deal with any aphid problems, make sure you spray early morning or late evening to avoid harming bees. Organically, soap based products are very effective. To deal with fungus problems a good fungicide will do the job. However good hygiene, that is removing infected material, will go a long way to prevention and avoiding reinfection especially in the case of black spot and rust.

One major problem which the nursery business has introduced into our gardens is vine weevil. To my knowledge this can no longer be controlled by off the shelf chemical products but a new arsenal of nematode products are available from specific suppliers (please ask for details).

Hopefully this has not deterred you from enjoying what must be one

of life's great pleasures, a beautiful garden. My advice would always be to live with the natural world rather than fight against it and try to hold everything in balance.

A note about Clematis Wilt

This is evident by a sudden “wilt” of young growth downwards. If no other cause is seen, cut down affected stems to first leaf joints above ground. Drench soil around stems with fungicide twice, 1-2 weeks apart. Not all cultivars are prone to wilt – especially species or viticella groups. Slug or snail damage can give similar symptoms.



Pests and diseases that affect roses

As with all plants, roses can become infested with pests or damaged by disease. This should not however be a reason for not including them in the garden, as Peter used to say ‘what are a few black spots among friends?’

Good husbandry is really a matter of common sense, a little bit of logical thinking in relation to the choice of variety and it's situation, its care coupled with preventative measures will go a long way in maintaining a healthy rose.

Pests

Pests can include a range of creatures that often feed off of the plant and can, if left untreated, cause serious damage to your roses. These can include Aphids, Caterpillars, Leaf Rolling Sawfly, Rose Slug Sawfly, Red Spider Mite and Thrips. Whilst traditional methods of control such as spraying with insecticides are often effective in controlling an outbreak of these pests, natural alternative forms of pest control are also available. These are much kinder to the environment and can include introducing natural predators and parasites to your gardens. Many of these beneficial predators can also be encouraged into your garden naturally by introducing bug boxes and by planting certain companion plants, such as marigolds.



Aphids

Aphids, including the well-known green-fly will soon spoil a crop of flowers if the infestation is bad enough. They settle in large numbers and multiply rapidly on buds and young tender shoots from where they will suck the sap and cause distortion of the rose. They leave behind a secretion called honeydew, which is very sticky to touch and attracts a

revolting blackish grey fungus called sooty mould.

Organic pest sprays are available that work by coating the aphids with a sticky substance thus rendering them motionless. Alternatively another method of control, also less damaging to the atmosphere is a solution of washing up liquid and water, although sadly neither of these seem to be as effective as chemical control. Encouraging lady-birds and small birds into the garden is always a good plan as they are the natural predator to the aphid, do this by planting lots of colourful bedding plants such as marigolds and put up nesting boxes.

A contact spray can be used which will kill the insect immediately but this type of spray will need to be used each time there is an invasion. Many of today's insecticides are designed to kill only harmful insects and will leave the natural predator of the aphid, the ladybird, unharmed.

Caterpillars

These little creatures will crawl up the stems of roses and with abounding enthusiasm, enjoy a meal of rose leaf. Often they will have been present on the plant since the mother moth laid her eggs on the underside of a leaf and as she will not remain around it is likely that the presence of



the damaging caterpillars will go unnoticed until suddenly large chunks of leaf disappear. As and when one is seen, it should be removed and destroyed. When too many are present for this, sadly the only alternative is to spray with insecticide. Ensure that both sides of the leaf receive an application.

Cuckoo Spit (The Froghopper Beetle)

Cuckoo-spit is more unsightly than damaging. It is the unsightly foamy white substance sometimes found nestling in leaf joints or around flower buds.

Enclosed within it will be found a young frog-hopper beetle, which when fully grown will hop around roses dining on the sap found in young shoots and buds. It is unlikely to cause any great amount of devastation other than the occasional wilting bud and seldom are they to be found in great quantity. The best method of control is to give the cuckoo spit a blast from the hose-pipe before the young frog-hopper becomes mature.



Deer

If you reside in a rural situation where both rabbits and deer cohabit, your roses are doubly at risk. When there is snow on the ground deer become braver in their search for food and will stray into the garden. In the USA where the deer are less timid this is a bigger problem than that faced by us in the UK. Perimeter fencing will help but the temptation is to cover this with climbing and rambling roses, thus placing them at the deer's height. If a little extra pruning on the outside of the perimeter can be tolerated then the problem is solved but by planting the thorniest varieties, such as some Rugosa you may deter the deer even more.

Leaf Rolling Sawfly



This insect can cause alarm for the devastation caused after a sawfly has laid her eggs on the leaves of roses can be visually alarming in a bad attack. The parent actually injects the leaf with a chemical secretion that causes it to curl and protect the eggs. When the grubs hatch they will feed on the leaves rendering them totally useless to the plant. This is a very difficult problem to overcome because the grubs are protected by the furled leaves and will

not be reached in the process of spraying. The best control is to remove the leaves and burn them. The long-term health of the plant will not be badly affected but in the immediate year it may be slightly more prone to disease than usual.

Rabbits

Pretty little bunnies are not as innocent as they appear and they particularly enjoy feasting on roses. Young rabbits relish the young tender shoots that are within their reach and will systematically find them all as they sprout in spring. Older rabbits will cause major destruction, especially in winter by stripping the plants of their bark often standing on their hind legs to reach the higher stems. If you live in an area inhabited by these creatures some measures will need to be taken to protect your roses. A wire mesh fence can be used to keep them out but be sure there are none in the garden when you put this up, otherwise you will compound the problem, rabbits produce offspring like roses produce leaves. The alternative way to protect them is to erect individual fencing around the base of each rose at least while they are young, although unsightly this will allow the roses a head start against the rabbits. There are chemicals, which can be sprinkled on the ground designed to keep rabbits away, but these are never completely successful.



Red Spider Mite

This tiny mite loves warm airless conditions and will thrive in the greenhouse or conservatory but is also becoming more prevalent in the garden, especially in hot dry periods. The mite is extremely small and will not often be spotted even though it infests in great numbers. It is the fine web that it weaves between the leaves and the damage it causes to them that is the giveaway. The

leaves will become pale and limp, sometimes almost dirty with a bronze discolouration before they fall helplessly. The obvious solution is to spray the undersides of the leaves but by this time much of the damage has been done. If the plant is in a pot under glass, move it outside for a while and spray it with water occasionally; the spider mite will not enjoy its new habitat and will move away to a more appropriate area or die. Plants in the garden should be washed down on a daily basis until the mite has left but try to do this in the morning or evening when the sun is not too powerful or the leaves will scorch.

Rose Slug Sawfly

These little slug like creatures, the larvae of black fly, are the culprits that eat away the flesh of a rose leaf, leaving behind only a skeleton of veins. They will finish one leaf completely before moving to the next and sadly the only successful form



of control is spraying with insecticide. I cannot vouch for the success of organic pest sprays as far as this culprit is concerned.

Thrips

Thrips will nibble around the edges of petals and carve out sections of tightly furled rose buds. It is often the damage that is noticed before the insect, and by this time it is too late. Control is difficult and as with every thing prevention is better than cure. A regular spraying programme with an organic spray or a weak solution of an environmentally friendly washing up liquid is helpful. If the attack is really bad only a systemic chemical will prevent this little insect from making too much of a nuisance of himself.

Diseases

Black Spot

As the common cold is to humans, this must be the most common rose disease and there are very few cultivars totally resistant to it, although some fair better than others. A few black spots are not that unsightly and the fact that a rose may get black spot should not be a reason for not growing it.

The disease is usually most noticeable from mid-summer onwards although the odd variety may succumb badly before this, especially after a mild winter as Black spot spores can be air borne and are occasionally carried from one plant to another on the blades of secateurs. When they find a suitable leaf to settle on they will not be seen until small round-ish patches of black or dark brown appear, these will soon multiply; the areas not spotted will become yellow and eventually the leaf will fall.

Fallen leaves should be collected and burnt where possible, as the spores will over-winter in shallow soil where they will remain ready to begin their destruction the following year. In the worst scenario the spores will infect branches and unless tackled this is when the whole plant is at risk. Cut away what you can and apply a winter wash with a mild sterilant, there are now several available that will successfully deal with fungal diseases such a black spot. A regular wash with the hose is also recommended as this will wash the spores away from the plant on which it is harbouring. Some say that black spot can be deterred by spraying the plant with a solution of skimmed milk, but we have never tried doing so.



Mildew (powdery mildew and downy mildew)

There are two forms of mildew 'downy' and 'powdery'. Downy mildew is more likely to occur on roses grown under glass and is far less common than powdery mildew. Extreme differences between day and night time temperatures can be contributory, as can poor ventilation. Unlike powdery mildew, downy mildew is more brown or blue in shade

and will attack the mature leaves first. Use a proprietary fungicide to prevent it spreading and remove any affected leaves. Mildew is difficult to control organically, the only advice to offer is that a well-tended rose will be less susceptible than a neglected one and that if it does appear ensure that the affected leaves are removed and destroyed.

Powdery mildew is the most prevalent in the garden and is most likely to occur in situations that are dry and airless. A grey to white coloured powder will appear initially on young leaves and succulent shoots, causing them to become distorted and therefore inhibiting the growing process. If it is not checked, it will then spread on to older leaves and stems and, eventually, on to flower buds where it will prevent them from opening, thus causing them to drop off. Because it is not often seen until after the first flush of flowers when the summer heat is more intense, a degree of prevention can be assumed from a regular spraying regime earlier on. Once in place powdery mildew is difficult to cure although fungicides will prevent it from spreading, it is best to cut the infected wood away and destroy it.

Stem Canker

Canker is seldom seen on younger well-tended roses, occurring most frequently on mature plants with a high percentage of old wood. It

manifests itself in the form of gnarled, swollen lesions, often with surrounding dead and furling bark. Canker will usually appear where there has been exposed tissue at sites of previous damage, such as at the union where the plant was originally budded. If the stem on which it appears is expendable simply remove it. Frequently however, the canker will appear in awkward places that are impossible to prune away. If the plant is important to the garden the only solution is to carefully cut away the damaged tissue. Use a sharp knife for this and keep on removing layers until only clean pith is left. Cover the scar with grafting wax to prevent other infections entering. If the rose is not important the easiest solution is to dig it up and burn it.

Rust

Rust enjoys warm and damp conditions and can totally destroy a rose if infestation is bad enough. Symptoms first appear in early summer in the form of small bright orange pustules on the undersides of leaves. They often go unnoticed until the disease spreads when they become larger, changing colour to brown and then to black.



In a bad attack the spores will kill the leaves and eventually spread to the stems, which will start to die back. Control is almost impossible at this stage when the only real option is to dig up the plant and burn it. If it is caught early enough however, pick off and burn the infected leaves and keep an eye out for re-infection. As in the case of black spot, rust spores will lie dormant on dead leaves or in the soil during the winter, so gather up any fallen leaves and wash the plant and surrounding soil with a fungicide whilst it is dormant. The following season ensure that a spraying regime is started early and repeated regularly.

Other rose ailments

Pests and diseases are not the only ailments to affect roses but by and large the majority of others are cosmetic and will do no real harm.



Balling Flowers (sticking petals)

In wet summer weather the outer petals on a freshly opening flower often become fused together, the flower is then referred to as being 'balled'. This is most often found on the many petalled varieties with naturally tight buds, particularly some of the Bourbons and the Hybrid Teas. If full sun follows prolonged rain the petals that

are congealed together then dry out to become a crisp shell which will prevent the flower opening. If this happens the bloom will rot within its cocoon and fall away or remain on the plant in a revolting brown state. In larger gardens this has to be lived with until the roses are dead headed, when the unsightly specimens can be removed, but in less time consuming smaller gardens, or where specimen roses in prominent positions are affected, the outer petals can be carefully teased away to allow the flower to open naturally.

Proliferation

This is one of the weirdest phenomena of the rose. In early summer a bloom will appear to be opening quite normally, then it will be noticed that another bud is appearing from the centre of the unfurling flower.

This is proliferation and no one knows exactly why it happens. Some experts believe it to be viral, and it does tend to occur repeatedly in the same varieties although not consistently on every plant in that variety, but the general consensus is that it is genetic, with parts of the reproductive area over producing.



Rose Replant Disease (specific replant disease)

Unfortunately roses should never be planted where they have been before, unless the ground is given adequate rest or is treated. Therefore, if you are replacing roses with new roses you must change the soil, sterilise it, or give the soil a rest from roses before re-planting. This avoids the effects of 'roses replant disorder'.

The old fashioned method of treatment was Jeyes fluid but there are other sterilants available that are less harmful including a tar based product. If leaving the ground to rest a period of two or more years will be required. In the meantime plant the area with other plants such as begonias which, it is said, have cleansing properties.

The alternative is to dig out and replace the soil from elsewhere in the garden, or import fresh soil.

You could also dig a hole large enough for a bio-degradable cardboard box, no smaller than 1 cubic foot in size and fill with fresh soil. The box should be sunk into the ground in the position where you wish to plant your new rose and filled with good virgin soil or compost. Plant your rose in the centre of the box at normal planting depth.

Rose replant disease or rose sickness as it is sometimes known, is the result of Allelopathy, which is the effects of one plant on another. In this case it is thought to be the chemical secretion from one rose that is left in the soil, to which a new rose will object. Planting a new rose in another's shoes will result in a rose that is stunted and unwell, never producing abundant bloom and a flower that, by and large is smaller than it should be.

If you are interested in purchasing our Rose Replant Boxes please click [here](#)

Spray Damage

If regular spraying is a common practice in the garden, make sure that two sprayers are kept, one aside specifically for weed killers. If inadvertently used without thorough cleaning traces of weed killer from the knapsack or pump up sprayer can be positively poisonous to roses. Likewise should a neighbour or farmer spray herbicide when it is windy it is possible for the spray to drift with similar outcome.



We see many questions from customers who have some of the symptoms of other diseases but not quite enough to point to another disease and more often than not a neighbour or nearby farmer has sprayed and the spray has drifted in the wind onto their

roses. We have also seen similar damage near fences and structures that have been recently painted/creosoted where the roses climbing up seem to object to close proximity to the chemicals.

Viruses

Viruses can appear in many plants and mosaic is by far the worst of the viruses that can affect roses, manifesting itself as wavy yellow lines or white blotches on leaves, and although there are others, they are of less significance. Viruses are usually carried through vectors such as aphids and once a virus has been contracted the only way to really control the spread is to remove the vectors or destroy the affected plants. Therefore, it is always best to avoid plants which are showing any sign of viruses.

Notes
