How to deal with Blackcurrant reversion

Reversion builds up gradually, leading to declining crops. Once your blackcurrant bushes are infected, it’s best to dig them up and burn them in the spring, but instead of the heavy crop you might expect from large buds, nothing develops. Instead, they dry up and may form a gall. Sometimes leaves at the tips of branches are attacked in summer and become distorted.

**Q** What is blackcurrant reversion?

**A** It’s a serious, debilitating disease that only affects blackcurrants. Although the bushes continue to grow adequately, the fruit yield falls greatly. Once your bushes have got the disease, you should start again, with disease-free stock.

**Q** What causes this disease?

**A** Blackcurrant reversion is a virus which is spread by mites. The mites (*Cecidophyopsis ribis*) infest the buds, causing them to swell to an abnormal spherical shape known as ‘big bud’. To see the actual mite you need a microscope as they are tiny (0.25mm). They look like a minute, white grub.

**Q** Can you tell me more about the mites?

**A** They breed in the buds in summer and autumn, feeding beneath the bud scales. The number of mites found within buds runs into thousands. From April until July they venture out, in order to infest more buds; so it’s advisable to remove big buds in winter or early spring.

When the mites move outside the buds, they crawl away or leap off the bud. Although they are not very mobile, they are so tiny that they are transported by wind, rain or flying insects such as bees, aphids or capsid bugs. As a result bushes and branches nearby stand a good chance of becoming infected by the virus. The mites continue to lay eggs from June until spring, with only a brief winter break. The mites occasionally attack red- and whitecurrants, and also gooseberries. This does not, however, result in the characteristic big-bud symptom - the buds simply die. It is not certain whether they actually breed in these alternative host plants. Luckily, these other fruits are not susceptible to reversion.

**Q** How do I spot the big buds?

**A** Look for big buds in the dormant season, once the leaves have fallen. They begin to swell in summer and, by autumn, are round and twice the size of normal pointed buds. They go on swelling in the spring, but instead of the heavy crop you might expect from large buds, nothing develops. Instead, they dry up and may form a gall. Sometimes leaves at the tips of branches are attacked in summer and become distorted.

**Q** How do I recognise the disease?

**A** The other symptoms of reversion are more subtle. The clearest indication is in the flowers; inspect them while they are still in bud, as the symptoms are less obvious once the flowers open. Infected flowers appear bright magenta and virtually hairless. Healthy flowers are covered in down and appear greyish-pink. Some varieties have hairier flowers than other kinds, so check what the normal flowers look like. Don’t forget that reversion can affect just one bush, one branch or even one truss, so check out the plants thoroughly - later, when the bushes are covered in leaves, it is much harder to spot the disease.

If there are no flowers, check the leaves on new basal shoots. The main leaf lobes on plants with reversion tend to be...
narrower and more pointy than normal, with fewer teeth. There are also fewer veins, with a yellow marking along the edge of the veins in some cases. A healthy leaf has at least five veins on each side of the midrib, and at least 14 teeth on each leaf edge. You will need to find a few leaves from a healthy plant for comparison.

Different varieties have different leaf shapes, and, just to complicate matters further, the leaves near the fruits are often different from those on the main branches. Suspect reversion only if the leaves on the main branches are abnormal. In fact, recognising the disease from the leaves alone is difficult. Consider sending or taking a generous sample of normal and infected leaves to a fruit expert.

Q How serious is this disease?
A Infected bushes may not appear diseased, but the virus gradually weakens them and fruiting declines. Infected bushes seem better adapted to supporting the mites, which reach very high numbers. These often spread to all the other bushes, taking the disease with them.

Q How do I control blackcurrant reversion?
A Reversion cannot be treated. Ideally, dig up and burn infected bushes as soon as the disease is identified. Do this in spring, before the mites spread in the summer to uninfected bushes. Because reversion is so widespread and difficult to spot, it is a good idea to replace all blackcurrant bushes every 7-10 years with plants that are certified healthy.

Q Where can I buy some disease-free stock?
A You might be able to get bushes certified free from disease in your garden centre. However, they are not usually labelled as such, so ask. Alternatively, you can usually get certified bushes from specialist fruit nurseries. There are specialist fruit growers who maintain disease-free stock by rigorous counter-measures, backed up by careful inspection before sale. Keep an eye out for recommended suppliers listed in our fruit reports. Blackcurrants from other sources may be carrying the disease and mites, so beware of introducing these into your garden.

Q Can I tell if they are present before I plant?
A Unless you spot them when digging in spring, they are hard to detect. The small, immature ones are especially easy to miss. Be prepared to take preventative action where grass or weeds were present in the preceding year or where attacks occurred in the previous season.

Q What happens if I ignore the disease?
A The yield of fruit will decline gradually, but you may feel you can put up with this until they need replacing with new ones.

Q Are there any resistant kinds?
A No. It seems that all commonly available blackcurrant varieties are susceptible to reversion to a greater or lesser extent.

Q Can I spray the mites with a pesticide?
A None of the chemicals available to gardeners will have any effect on big-bud mites. Virus diseases like reversion cannot be treated with pesticides.

Q Can I prevent reversion?
A As the mites can be carried long distances, most gardens are at risk from blackcurrant reversion. If you notice symptoms, removing the mite-infested buds will help to keep the population down, reducing the risk of infecting other bushes.

When planting new stock, burn your old bushes first, so that the disease and mites cannot infect the new stock. You will lose a year’s crop, but your new bushes will get off to a good start.