

## Pests and Diseases

It would be easy to get paranoid about the possibility of pest and disease attack, but the following are the ones you are most likely to come into contact with. Don't assume that an unknown bug is a pest, as most insects are not. Prevention is better than cure, so pick off mouldy leaves and caterpillars to prevent them getting out of control.

Growing a wide variety of plants, and dressing the soil with compost and seaweed goes a long way to preventing problems, because the plants grow more strongly.

Attracting beneficial insects by growing flowers eg pot marigolds (*Calendula*) and poached egg plant (*Limnanthes*) solves aphid problems by attracting hoverflies.

Choose resistant varieties when ordering your seeds. Eg "Marian" swedes are resistant to club root

**Slugs.** Enemy number one. The best approach is to attack on as many fronts as possible. Plants most susceptible are nice soft leaved things like lettuce, and anything young. I find them a particular problem on French and Runner beans, and courgettes at the young stage.

- Set traps of slates, tiles, grapefruit skins. Slugs shelter under them by day, then can be removed and squashed or dropped in a bucket of salty water.
- Beer traps also work – the slugs find the smell of beer irresistible, then they drown. Use aluminium cans with dregs in the bottom, buried almost up to the rim. I warn you though, emptying the traps is revolting.
- Eggshells broken up, ash, sharp sand sprinkled round susceptible plants is supposed to keep them off
- Bran sprinkled round plants, is irresistible to them, but supposedly kills them.
- Biological control – very effective, but very expensive. It only works for 6 weeks as well, so can only feasibly be used either early or late in the season.
- For potatoes, choose a resistant variety eg Kestrel. Also, early potatoes are unlikely to be damaged by slugs
- Try keeping them off choice plants with a 'bait' of something they really like (eg lettuce leaves)
- Pellets should be used with care, following the instructions closely. Most people use far more than are necessary.

**Aphids** come in numerous different colours and all suck the sap of plants. In the process they can spread virus diseases, and moulds grow on the honeydew excreted by the aphids

- Wipe off colonies with your fingers
- Spray with soft soap
- Attract hoverflies (whose larvae are voracious aphid hunters) by growing *Calendula* and *Limnanthes*

**Caterpillars** of different butterflies and moths attack different plants. The one you're most likely to see is the large or small cabbage white, whose caterpillars are pale green or green with lots of tiny black spots. Pick off and squash any caterpillars seen on brassicas. Gooseberries and redcurrants are sometimes attacked by sawfly caterpillars which can defoliate the bush almost overnight, so keep a close eye on them.

**Cabbage root fly** larvae tunnel into the stems of brassicas and kill the plants. When transplanting brassicas, place a 10cm square of carpet underlay with a slit cut to the middle around the stem to prevent the fly from laying her eggs.

**Carrot fly** larvae tunnel into the roots of carrots and ruin them. Cover the crop with fleece or fine mesh as soon as the seed is sown to keep the adults off.

**Big bud mite** is a microscopic creature that feeds inside the winter buds of black currant, making the buds swell up and become rounded. The buds then don't open, and worse, the mite can transmit a virus that renders the bush unproductive. If there are only a few swollen buds on the bush over winter, pick them off and destroy them. If nearly all the buds are affected, destroy the bush, as it will be no good.

**Mildews, rusts and moulds.** Fungus disease attacking plants should be picked off as soon as it's seen, and burnt. In practice, many can be composted, but to be on the safe side, get rid of them until you are more experienced. Powdery mildew is white and powdery and is the least damaging fungus. Water the plants well if this is seen (peas, courgettes) Downy mildew is grey or purple/brown and fluffy looking and can decimate a crop of onions. Cut the leaves off and burn. Rusts are rust coloured streaks or spots, often seen on leeks and garlic. In a bad year it can cause lower yields, but on the whole it is not too damaging. Grey mould is a felt-like grey growth and is often found on debris as well as growing plants, particularly on strawberries. Pick off and burn affected bits.

**White rot** is a very serious disease of onions caused by a fungus in the soil. If you find white, cotton-wool like growths on the bottom of your onions or garlic at harvest, possibly with little black lumps in, the chances are this is white rot. Burn all affected plants, and try to remove some of the soil from round them too (ie lift them with a trowel). You won't be able to grow onions there again, (or not for about 20 years) but the chances are it is confined to one area of your plot. Make sure you don't spread it around accidentally on tools etc – clean everything.

**Club root** is a very serious disease of brassicas caused by a fungus in the soil. It makes big club-like growths on the roots, preventing decent growth. It is not preventable, and even with long rotations is very difficult to control. Some brassicas are less susceptible (oriental greens will usually produce a decent crop), and some are immune (see seed catalogues) If you have very bad club root on the plot, you won't be able to grow good cabbages etc. (although you might find it is confined to a single area). Transplanting seedlings into big (15cm) pots before planting out can help, because the roots get a large volume of nice clean potting compost. Club root is worst in wet, acid soil, so attention to liming and improving structure can help. Burn the affected roots if you find it.

**Blight** is the last big baddie of diseases, and in a humid summer can devastate potato crops. Early and second early potatoes are almost always ok, it's those that are in full growth during summer storms that get it. It is preventable by using Bordeaux mixture early enough (organic gardening catalogue), but I think this is about to be taken off the list of organically acceptable chemicals. Incidentally, don't panic if your second earlies start looking a bit manky in July – a lot of people (even experienced allotment holders) throw up their hands in horror, but it's not blight, the plants are just finishing. It's probably a good idea to cut them off anyway as the tubers are fully formed and ready to dig. If you leave the manky tops there, some of the old boys are sure to say the blight (when it does come) has come from you! Real blight causes lush green growth to turn yellow, then brown, and slimy in wet weather, really quickly (like 48 hours). The first signs are little brown blotches, but it takes hold very rapidly. Some varieties of potato are less susceptible to blight, check out the seed catalogues.