

Fruit-tree twig and blossom diseases

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These fruit-tree diseases are all caused by the same fungus. Unfortunately there are no spray treatments available and prevention is extremely difficult.

Q What diseases are we talking about?

A Blossom wilt, twig blight, spur blight, wither tip and brown rot, which are all caused by the same fungus. It's a menace to fruit-tree blossom and in wet years to twigs, going on to rot the fruit.

These diseases are all much the same - the fungus damages new growth early in the season. It gets into flowers, causing them to wilt within two weeks of opening. Shoot infections follow and cankers form on shoots, twigs or spurs, girdling the bark and causing leaves above the damaged area to die.

Q How do I recognise these diseases?

A Blossom wilt On apple, peach and cherry, especially 'Morello' cherries, the blossom wilts within two weeks of opening. Pears are much less affected. Look out for grey pustules on the flower stalks. From there, the fungus enters the shoots and infects the twigs. Cankers result, cutting into the bark so that the whole shoot wilts. It looks as if the affected parts have been scorched. Often the whole tree becomes covered with browned shoots.

Twig blight This refers to the death of twigs after the blossom-wilt phase.

Wither tip This mostly affects plums. First, leaves are infected, then the disease spreads back into the shoot, causing the whole tip to wither after wilting. It seems likely that the plum-leaf-curling aphid lets the fungus into leaves by puncturing the leaf surface as it feeds - the two often occur together. Cherries and almonds have also been known to suffer from wither tip.

Spur blight The same happens to the short, flower-bearing side-shoots or spurs of plums and related ornamental trees. Here, the fungus grows into the main branch and forms a canker round the base of the spur, causing it to die.

Q Can I mistake them for anything else?

A Bacterial blossom blights of pears and, less often, of stone fruits can produce similarly wilted young shoots. In wet weather this disease can be widespread. It results in limp, water-soaked flowers hanging on the twig, and damage to twigs and spurs.

Fireblight scorches whole leaves and is more extensive than flower and shoot blights, affecting mainly pears and relatives such as pyracantha. Frost can also scorch back blossom and shoots.

Q What causes these diseases?

A The fungus *Sclerotinia laxa* is responsible. The very similar *S. fructigena* is much less likely to be involved, although it is also a cause of brown rot in fruit. They are sometimes referred to as *Monilinia fructigena* or *M. laxa*.

Q Can you tell me more about this fungus?

A The fungus overwinters in cankers on the shoots, in mummified fruits still on the branches or in fallen fruit. In fact, the mummified fruit seem able to persist as sources of infection for several years. In the spring, spores are released which go on to cause blossom infections - they get to new sites on the breeze, by rain splash or carried by insects. The spores multiply quickly in the floral parts when the weather is wet, releasing more spores which go on to infect additional flowers.

At the same time, the fungus spreads from the afflicted flower on to the shoots and spurs, where cankers develop. Look out for tufts of fungal growth on these cankers, about 3mm across and yellow (*Sclerotinia fructigena*) or grey (*S. laxa*). The disease spreads from the cankers to the fruit when the fruit is fairly large.

This usually occurs only when there has already been bird, insect, hail or wind damage.

Q How do I control this fungus?

A Cut out and burn or consign to the dustbin all cankers and infected shoots, both during the summer and when doing the winter pruning. Cut out affected flowering shoots or spurs as soon as you see them wilting in spring.

Q Can it be sprayed?

A There are no fungicide treatments available to gardeners. However, spraying plums to keep down aphids should help avoid wither tip.

Q Can it be prevented?

A Remove all infected fruit as soon as you spot it to reduce the spread of the fungus. In winter, cut out and burn cankered twigs to reduce the number of disease spores that overwinter. Even if

there has not been much brown rot that year, it is still worth being vigilant, as the disease can quickly become troublesome if the weather favours it next year. Pick up fallen fruit, and remove shrivelled, mummified plums to reduce the number of fungal spores released into the garden.

Unfortunately, it is questionable how effective this type of control really is, as any source of infection missed will produce large amounts of light, easily dispersed spores, further spreading the disease.

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