

Just about every plant in the garden has a fungus associated with it. Many are beneficial mycorrhizas, others break down plant waste. But with over 70 per cent of plant diseases caused by fungi, they aren't always a gardener's friend.

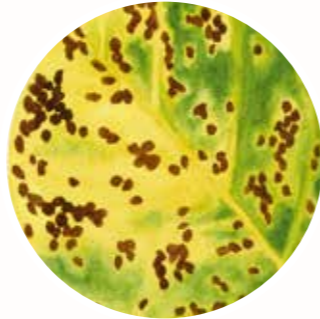
THE GARDENER'S NIGHTMARE

HONEY FUNGUS There are several species of honey fungus (*Armillaria*), named after their honey-coloured mushrooms. With a faintly acidic aroma, the mushrooms are bioluminescent and glow in very dark conditions. Some of these fungi attack living trees and shrubs and feed off the dead wood.

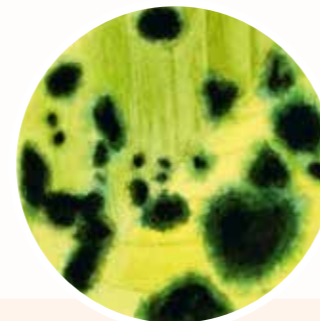
Honey fungus spreads from one susceptible plant to another via mycelia of thick black or brown bootlace-like structures (called rhizomorphs, pp.118–119), which can spread over great distances. These fungi are a gardener's nightmare – not least because there is no way to control them other than digging up the infected plant root, all rhizomorphs, and other colonized material, and disposing of it, and then selecting plants that display some degree of resistance.

MILDEW AND ROTS Powdery mildew disease is caused by several fungi, forming a white, dusty coating on leaves, stems, and sometimes flowers. With a smaller area for photosynthesis, yield is severely affected. The host range of powdery mildew fungi is narrow. For instance, powdery mildew on *Acanthus* plants is caused by a different fungus to powdery mildew on cucumber. Unfortunately for gardeners, there are many different powdery mildews affecting many different plants.

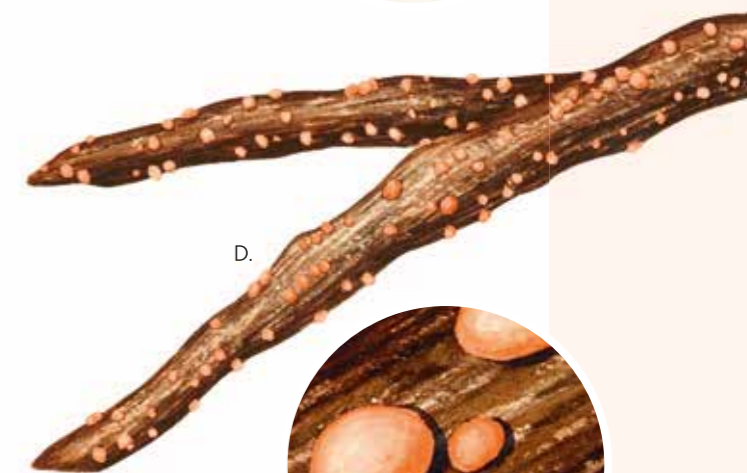
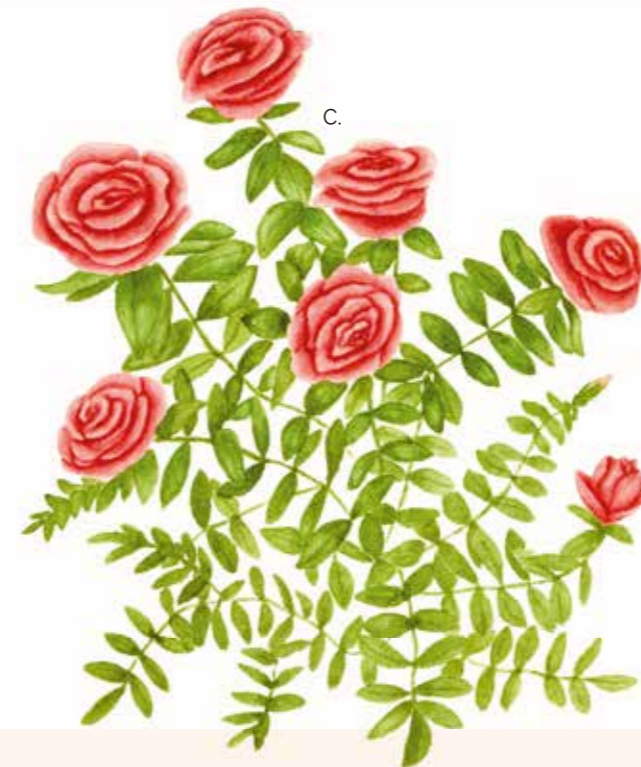
A. Cherry leaf spot is widely known in the USA and Europe but became problematic in the UK in the 1990s as a result of international travel, including travel of plant material that wasn't sufficiently screened for the fungus. Caused by the fungus *Blumeriella jaapii*, the disease is recognized by purple spots on the cherry's leaves, which often turn yellow and fall prematurely.



C. Any gardener with a rose plant will come across black spot, caused by the fungus *Diplocarpon rosae*. It produces black or purple spots on the upper side of leaves and can cause them to fall prematurely. Tar spot, caused by *Rhytisma acerinum*, is also fairly common, usually affecting sycamores (pp.122–123). The large black spots look a little unsightly but cause minimal damage.



B. Cherries, apples, pears, and plums are susceptible to a range of rot fungi, especially *Rhizopus stolonifer*, *Penicillium expansum*, and *Monilinia* species. Brown rot, caused by *Monilinia*, is common in gardens and orchards in early autumn. Once the fungus has entered the fruit through a wound in the skin, it spreads rapidly through the flesh, causing it to fade and turn brown.



D. Coral spot, caused by *Nectria cinnabarina*, gets its name from its coral-pink pustules, which are full of spores. Its presence usually indicates that the host plant has underlying problems.

