

Onion  
Downy Mildew



There have been numerous instances of this disease on the site in recent years. It is often confused with powdery mildews, but is in fact unrelated. It is caused by the fungus, *Peronospora destructor* and also affects shallots.

The earlier in the season it appears the greater reduction in bulb size. This disease can remain in the soil for at least five years.

A rapidly spreading disease. During damp conditions, the spores from infected material can be transported by the wind.

## WHEN

Usually strikes in early to mid spring

It is common in mild wet weather and encouraged by humid growing conditions.

## WHAT TO LOOK FOR

Leaves turn yellow, die off from the tip downwards, wither and collapse. A slightly fluffy, white mould may also appear on the dead parts; however this is often masked by a secondary infection which shows as a darker mould growth. Rotting leaves can allow the disease to spread into the bulbs, which if harvested will then shrivel in store. The fungus will remain dormant in the bulbs which will produce spores in spring to further spread the disease.

## PREVENTION/TREATMENT

There is now no effective chemical treatment available.

The disease can be slowed by the prompt removal of infected leaves.

Promptly remove and dispose of affected plants.

Do not compost affected plants

Practice crop rotation

Do not replant onions or shallots in the same place for at least five years.

Avoid planting in damp or sheltered places.

Improve air circulation between the plants by controlling weeds and increasing the planting distances.

There is some evidence that overwintering onions will fare better. This is probably because they will have reached maturity before mildew strikes.

There are no cultivars that are totally resistant.