## **CERCOSPORA LEAF MOULD**

## (also called Cercospora Leaf Spot, Cercosporiosis or Cercosporiose)

**Caused** by the fungus *Pseudocercospora cladosporioides* 

## **Biology and damage**

It is very common in Australian olive groves but rarely causes significant losses, particularly if tree health is maintained by optimising nutrition and irrigation. It is a slow degenerative disease often taking several years for trees to significantly decline. It can cause delayed fruit ripening and decreased oil yield. Initial infections occur during late winter with rainy weather – younger leaves are most susceptible. The optimum temperature for spores to germinate is between 15-25°C (average 22°C). There can be a long latent period before symptoms develop – up to 11 months! – it depends on the weather – a wet spring favours disease development. Rainy weather in late summer and throughout autumn favours spore formation and further spread to leaves and fruit. Leaves turn yellow and may have dead brown areas – mostly in the inner or lower parts of the canopy. Infected leaves may drop. A diffuse lead-grey mould develops on the leaf under-surface – mostly visible on young leaves. It can rarely cause a fruit infection – small (<5mm) sunken grey-brown spots – although spots may be larger in some varieties, darker and not sunken.



Yellow infected leaves are easily dislodged when touched



Lead-grey fungal growth on leaf undersurface

## Management

Remove or cover dropped leaves with compost, or shred leaves and apply N fertiliser to hasten breakdown in winter. Prune branches to open the tree canopy to air/sun. Timing is important for fungicide applications in winter & spring and when rain expected in late summer. Recent research in Europe found the biocontrol bacterium *Bacillus subtilis* was effective (various strains of this and similar bacteria were sprayed on trees at regular intervals through the year). Some olive varieties are more tolerant to this disease – e.g. *Arbequina* and *Picual*. Some olive varieties are very susceptible – e.g. *Hojiblanca*.

