

Angular leaf scorch and Rotbrenner

What is Angular leaf scorch and Rotbrenner?

Angular leaf scorch is caused by the fungus *Pseudopezizicola tetraspora*. Angular leaf scorch is the American counterpart of the European fungus Rotbrenner, which is caused by *Pseudopezizicola tracheiphila* which occurs in the cool grape growing regions of Europe.

Both pathogens attack *Vitis vinifera* and its hybrids, however, cultivars can vary greatly in their susceptibility. Both can seem absent in most years but then become severe in seasons with several prolonged rains, with the ability to cause severe crop losses.

What should I look for?

Symptoms of both Angular leaf scorch and Rotbrenner are very similar because symptoms are predominantly found on the leaves. Lesions first appear as faint, yellowing spots which enlarge, changing from yellow to reddish-brown before the tissue eventually dies. The lesions are typically confined by the major veins and the edge of the leaf and may be several centimetres wide.

On white-fruited cultivars the lesions are initially yellow. On red and black-fruited cultivars lesions are typically bright red to reddish-brown. Late season infections may look like freckled spots. Infected leaves frequently fall from the vine prematurely.

Both pathogens may attack flowers before or during bloom, causing them to rot and dry out. Only the fruit stalks (pedicels) are attacked because both pathogens do not seem to invade the bunch stem (rachis). In severe cases, the berries are destroyed, leaving the rachis of the cluster bearing only a few individual berries or none at all.



Lesions first appear as faint yellowing spots

Agrscope ACQW, Werner Siegfried



Angular leaf scorch on grapevine leaf, changing from yellow to brown as the tissue gradually dies

M. Sosnowski, South Australian Research and Development Institute



Angular leaf scorch on a white fruited cultivar

M. Sosnowski, South Australian Research and Development Institute



What can they be confused with?

Both the symptoms of Angular leaf scorch and Rotbrenner are very similar. Laboratory identification is required to separate the two species.

How do they spread?

Both Angular leaf scorch and Rotbrenner are spread through water and airborne spores. Heavy rainfall and prolonged wetting periods favour pathogen spread and infection. Both species can overwinter in dead leaves on the ground, and in early spring fungal spores are produced that can infect the new season's growth.

Where are they now?

Angular leaf scorch is currently only known to occur in North America, while Rotbrenner is only known to occur in Europe, particularly France and Germany.

How can I protect my vineyard from Angular leaf scorch and Rotbrenner?

Only source high health status (preferably certified) plant material from reliable and accredited suppliers. Check your vineyard frequently for the presence of new pests and investigate any sick grapevines for unusual symptoms. Make sure you are familiar with common grapevine pests so you can tell if you see something different. Keep records of anything unusual and ensure all staff and visitors adhere to on farm biosecurity and hygiene practices.

If you see anything unusual, call the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE
1800 084 881**



Rotbrenner on a red fruited cultivar

Agroscope ACW, Werner Siegfried



Rotbrenner infected tissue changes from yellow to reddish-brown before the tissue eventually dies

Agroscope ACW, Werner Siegfried



Infected grape berries and pedicels which have rotted and dried out

Agroscope ACW, Werner Siegfried

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