



Factsheet

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Bacterial blight *Xanthomonas ampelina*

Exotic threat to Western Australia

By Chris Stansbury, Simon McKirdy and Greg Power, Hortguard™ Initiative AGWEST



PHOTO: ARC - NIETVOORBIJ SOUTH AFRICA

CANKERS ON BUNCH STALKS CAUSING PARTIAL OR TOTAL DEATH OF A FRUIT BUNCH.

Distribution

Bacterial blight is known to occur in Asia, Africa, Europe, South America and the Canary Islands.

Potential impact

Bacterial blight is a chronic, systemic disease of significant economic importance and is widely distributed in grape growing areas in Europe, South Africa and South America. Losses arise from reduced productivity and shortened life of diseased vines. Some cultivars are more susceptible than others and no control measures are known. Spread can occur via propagating material, grafting and pruning. Illegally imported plants pose the greatest risk and if such material is infected it is likely to lead to the establishment of the disease.



DISTRIBUTION



Plants affected

The primary host of Bacterial blight is *Vitis vinifera* (Grapevine).

Season of occurrence

The bacterium overwinters in the vines, emerges in spring and is carried to healthy shoots mainly by rain splash. Shoots are susceptible to infection during the autumn and winter months and non-susceptible during spring and summer.



PHOTO: ARC - NIETVOORBLJ SOUTH AFRICA

LONGITUDINAL NECROTIC CRACKS AND CANKERS ON YOUNG SHOOTS.

Symptoms

Initially, linear reddish-brown streaks appear, extending from the base to the shoot tip; then, more or less lens-shaped cracks and cankers develop, sometimes as deep as the pith. Shoots subsequently wilt, droop and dry up. On very young shoots discoloration is less common and the whole shoot dies back. In cases of severe infection, a large number of adventitious buds develop, but these quickly die back. Infected shoots are shorter, giving the vine a stunted appearance. Cross-sections of stems will reveal browning of the tissues. Grape bunch stalks exhibit symptoms similar to the shoots on infection.

Leaves may be penetrated via the petiole and then the veins, in which case the whole leaf dies. Alternatively, leaves are penetrated directly via the stomata, with development of angular, reddish-brown lesions. When infection occurs through the hydathodes, reddish-brown discolourations develop on the leaf tips. Light-yellow bacterial ooze may be seen on infected leaves when humidity is high. Flowers that have not reached maturity turn black and die back. Roots may also be attacked, resulting in retardation of shoot growth, whether the plant is grafted or on its own rootstock.

