

Texas root rot

What is it?

Texas root rot, caused by the fungus *Phymatotrichum omnivora*, is one of the most destructive fungal plant diseases. It causes sudden wilt and death of affected plants, usually during the warmer months. It is a soil-borne fungus that attacks the roots of susceptible plants.

Texas root rot affects over 2000 species of plants including fruit and nut trees, oleander and roses. This is an important disease of cotton, alfalfa, grapes, fruit trees, and many ornamentals. All varieties of grapes are susceptible, but *Vitis vinifera* varieties seem to be exceptionally susceptible.

What do I look for?

As the damaged roots are unable to take up enough water to maintain the plant in warm weather, symptoms only become obvious during the summer. The leaves wilt and the plant dies. The dead leaves usually remain attached to the plant. At this stage, the roots are dead and their surface is covered with a network of tan fungal strands. Affected areas expand to form circular areas of dead plants.



Grapevines affected by Texas root rot

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Mycelial strands of Texas root rot

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Phymatotrichopsis omnivora spore mat on lucerne

S.D. Lyda, Bugwood.org



Strands of *Phymatotrichopsis omnivora* on cotton root

S.D. Lyda, Bugwood.org

How does it spread?

Locally, the disease spreads from infected to healthy roots via fungal strands which grow through the soil. Long-distance spread most often occurs through the movement of soil or roots of infected host plants. The fungus does not spread readily from one location to another.

Where is it found?

Texas Root Rot is found in the southwest U.S.A, Mexico, Brazil and Venezuela.

Control options

Eradication or control of the Texas Root Rot is difficult. It is known to thrive in moist and alkaline soils. It can survive for long periods in the soil, sometimes lying dormant for decades, and can penetrate to depths of up to twelve feet.

How can I protect my vineyard from Texas root rot?

Check your vineyard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common viticulture pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline on 1800 084 881.

**EXOTIC PLANT PEST HOTLINE
1800 084 881**

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If you would like more information, or to download a copy of the Industry Biosecurity Plan for the Viticulture Industry, visit www.planthealthaustralia.com.au, email admin@phau.com.au or phone (02) 6215 7700.