Exotic Pest Alert: Grapevine leaf rust

January 2013  Primefact 1270  first edition
Plant Biosecurity Orange

*Phakopsora euvitis* is an exotic plant pest causing grapevine leaf rust. This disease is a serious threat to Australia’s *viticulture industry*. If found it must be reported promptly to the Exotic Plant Pest Hotline 1800 084 881.

Grapevine leaf rust

This is a fungal disease caused by *Phakopsora euvitis*.

Grapevine leaf rust was detected in 2001 in Darwin the Northern Territory. An eradication program was conducted between 2003 and 2007. On 1 July 2007 the Northern Territory was declared free of grapevine leaf rust.

Symptoms

Grapevine leaf rust appears as angular brown spots on the topside of the leaf. The affected leaf tissue dies (Figure 1). On the underside of the leaf the spots correspond to a yellow-orange mass of powdery spores (Figure 2). Infection of leaves by grapevine leaf rust can be found throughout the canopy.

Damage

Grapevine leaf rust can cause premature defoliation of the grapevine during the growing season. This results in poor shoot growth and a reduction in the quantity and quality of the fruit.

Disease cycle

Grapevine leaf rust can infect vines all year round but is most noticeable in northern Australia during the dry season.

Hosts

Grapevine leaf rust only appears on the leaves of cultivated grapevines and two closely related plant species which are native to northern Australia (*Ampelocissus acetosa* known as wild grape and *A. frutescens* known as native grape).
Exotic Pest Alert: Grapevine leaf rust

Distribution
Grapevine leaf rust is endemic and widely spread throughout Southeast Asia.
Grapevine leaf rust has spread to Central America.

Spread
Spores of *Phakopsora euvitis* can be transported by wind and air currents.
People travelling to South-East Asia particularly Bali or East Timor should be aware that fungal spores such as grapevine leaf rust can adhere to clothing and other possessions.
Should you visit overseas areas where grapevines are present, wash your clothes before you go anywhere near grapevines back in Australia.

Actions to minimise risks
Put in place biosecurity best practice actions to prevent entry, establishment and spread of pests and diseases:
- practice “Come clean, Go clean”
- ensure all staff and visitors are instructed in and adhere to your business management hygiene requirements
- source propagation material of a known high health status from reputable suppliers
- monitor your vineyard regularly
- keep records

Reporting
If you suspect grapevine leaf rust:
- Call the Exotic Plant Pest Hotline on 1800 084 881
- Take photos not samples to minimise the risk of spreading this disease
- Email clear photos with a brief explanation and contact details to biosecurity@dpi.nsw.gov.au

Resources
Northern Territory Government (February 2009) Agnote No. 171 How to Control Grapevine Leaf Rust
Queensland Department of Agriculture, Fisheries and Forestry (2011) Grapevine leaf rust

More information
NSW DPI Primefact 1119 (August 2011) Come Clean Go Clean: a step by step guide to vehicle wash down

Acknowledgments
Figures 1 and 2 courtesy of Andrew M. Daly DPIFM, PaDIL

© State of New South Wales through the Department of Trade and Investment, Regional Infrastructure and Services 2013. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the NSW Department of Primary Industries as the owner.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2013). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user’s independent adviser.

Published by the NSW Department of Primary Industries.

An exotic plant pest is a disease causing organism or an invertebrate not present in Australia and which threatens agricultural production, forestry or native and amenity plants.