

BLUEBERRY RUST

Thekopsora minima

What is blueberry rust?

Blueberry rust is a plant disease caused by the fungus *Thekopsora minima*, which affects a range of plants in the Ericaceae family, including blueberries, cranberries and rhododendrons.

Blueberry Rust is not known to occur in South Australia and early detection and reporting of blueberry rust will help protect the South Australian blueberry industry. Entry of all host material into South Australia is prohibited unless it complies with Condition 1 of the Plant Quarantine Standard.

What do I look for?

The initial symptoms of blueberry rust are reddish spots on the upper surfaces of young leaves. These lesions darken with age, often surrounded by a yellow halo, and may merge as the disease progresses. Infected leaves may curl.

On the undersides of the leaves, yellow pustules develop to release spores capable of infecting other leaves and spreading the disease.

In severe cases, leaves can turn brown and drop prematurely. Rust spores may be found on other parts of the plant (such as fruit and stems) if they become dislodged from the pustules



Underside of leaf with blueberry rust pustules



Top side of leaf with blueberry rust

How does it spread?

Blueberry rust produces spores during five life stages. The disease can overwinter on evergreen blueberry leaves in milder climates, but is more prevalent in warm, wet conditions.

New pustules can be produced and release spores every 10-14 days, with more rapid spore production occurring under favourable climatic conditions. The optimum temperature for spore production is around 21°C, but new infections are unlikely when the temperature is over 30°C.

The millions of spores released from the pustules are very easily and quickly transported by wind (up to several hundred metres), but can also be spread via infected plants and fruit, packaging, equipment, clothing and hands.

The spores are able to re-infect the original host plant as well as other blueberry plants and other host species.

What plants are affected?

Blueberry rust is a fungal disease of a range of plants in the Ericaceae family, including the genera:

- *Vaccinium spp.* (blueberries and cranberries)
- *Gaylussacia spp.* (huckleberries)
- *Rhododendron spp.* (azalea)
- *Lyonia spp.*

To date, blueberry rust has only been reported on blueberries (*Vaccinium spp.*) in Australia.

Where is it found?

Blueberry rust has been reported in Europe, Argentina, Asia, Mexico, Canada, the United States and Australia.

Blueberry rust has been present in parts of NSW and Queensland for many years and more recently in Victoria and Tasmania.



Blueberry rust restricted areas in NSW and QLD

What to do

Growers can put on-farm biosecurity measures in place to reduce the chance of pests and disease getting onto their properties.

These include:

- using pest-free propagation material and seedlings, sourced from a reputable supplier
- putting up farm biosecurity signs on gates and fences to manage visitors coming onto your property
- avoiding sharing equipment
- keeping equipment and vehicles clean and free of plant matter
- wearing clean clothing before visiting other growers' properties
- teaching farm workers on-farm hygiene practices, what to look for and how to report unusual pests and diseases.
- report suspect symptoms to the Exotic Plant Pest Hotline



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