

# Fact sheet

## Lupin rust

### What is Lupin rust?

Lupin rust (*Uromyces lupinicola* and *U. renovatus*) are major fungal pests of lupins (both narrow-leaved lupin *Lupinus angustifolius* and sweet/albus lupin *L. albus*) in many overseas countries. Lupin rust would have a serious economic impact if established in Australia. *Uromyces lupinicola* and *U. renovatus* are not found in Australia, the world's largest lupin producer.

### What does it look like?

Lupin rust symptoms are similar to rust infections on other hosts. The first sign of infection are small light coloured spots that grow and become brown in colour, often surrounded by a lighter coloured halo. Heavy infestations can lead to partial crop defoliation. Lupin rust can build up rapidly when conditions are wet.

### What can it be confused with?

The symptoms of brown spots on lupin leaves can potentially be confused with other diseases, such as Brown spot (*Pleiochaeta setosa*) however, Brown spot does not have the pale coloured halo. The symptoms of *U. lupinicola* and *U. renovatus* are very similar and can only be distinguished using a microscope. However as neither are found in Australia, any rust symptoms on lupins should be reported.

### What should I look for?

You should look for the development of rust symptoms on any lupin plants, with the characteristic brown spots and rust spores surrounded by lighter coloured halos. These occur mostly on the leaves. In severe infections defoliation may also occur. In certain conditions 'hot spots' within a crop may develop.



Mark Sweetingham – DAFWA

Brown spots surrounded by pale halo are signs of Lupin rust



Mark Sweetingham – DAFWA

When infection is severe the leaves get a wilted appearance and defoliation follows



Mark Sweetingham – DAFWA

Check both sides of leaves. This photo shows a Lupin rust infection on the underside of a lupin leaf



Mark Sweetingham – DAFWA

Lupin infected paddock (note defoliation and leaf colour)



Mark Sweetingham – DAFWA

Healthy paddock (note leaf colour and volume compared to an infected paddock)

## How does it spread?

Rust spores are small, light and can survive for several days depending on weather conditions. Lupin rusts like cereal rusts can be spread over large distances by wind and easily attach to clothing, machinery and tools, allowing movement and spread between farms and regions. They may be transported across the world on travellers clothing so care should be taken if visiting overseas farms.

## Where is it now?

Lupin rust is currently a problem in Europe and the Mediterranean, with occurrences in Germany, Italy, Egypt, Morocco, Spain, Portugal, Austria and Finland. There has also been one recorded occurrence in the United States. It is not found in Russia, Poland or Australia.

## How can I protect my farm from Lupin rust?

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

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

**EXOTIC PLANT PEST HOTLINE  
1800 084 881**



**Disclaimer:** The material in this publication is for general information only and no person should act, or fail to act on the basis of this material without first obtaining professional advice. Plant Health Australia and all persons acting for Plant Health Australia expressly disclaim liability with respect to anything done in reliance on this publication.