



Stem rot

Stem rot is caused by the fungus *Sclerotium oryzae* and has recently been found causing some damage in isolated areas. Stem rot occurs in very low levels across all regions in most years, for some reason the stem rot is severe in some years in isolated areas. As part of our investigation into what causes this, we are asking for your help with monitoring and reporting of what you see when out and about.

The fungus causes blackening of the leaf sheaths (Fig. 1) and under severe disease pressure can rot the stem causing lodging and/or yield loss (Fig. 2).



Figure 1. Disease seen at PI, black lesions on leaf sheaths



Figure 2. Severe stem rot at harvest, infected rice (Sherpa) on right uninfected rice on left. Grain of infected rice was less than half the weight of uninfected rice grains.



Black lesions on the leaf sheaths eventually rot the stem causing tiller death and lodging.

Small black sclerotia can be found inside the stem at the point of infection in the later stages under the microscope. This is how the disease is identified.



Management

Avoid intensive rice crop rotations – rice-on-rice, as sclerotia can survive from year to year.

Infected stubble is the source of new infections so a hot burn will reduce stem rot. If burning is not possible, then incorporation of the stubble after harvest is better than leaving it on the surface.

Fungicides may slow the progress of the disease; however, none is currently registered for this purpose in Australia. Fungicides are likely to be of only limited benefit at this late stage of crop development. A permit application for a stem rot protectant fungicide has been lodged with the APVMA. Spraying cannot occur unless a permit is in place and withholding periods will need to be strictly observed.

Warning: Australia does not currently have a permit for spraying fungicide on rice for stem rot. Do not spray until the permit is in place.

Monitoring and reporting

Infected plants have prematurely dying leaves due to the lesions on the stem at water level and the leaves are noticeable in the field. The sclerotia float, so inspect the bottom bays first and look for lesions just below the water line. As the water is dropping at draining, the black lesions may be easier to see.

Please take samples from suspected sites of healthy and unhealthy plants, wrap in wet newspaper and put in a plastic bag. Call Anna Jewell or Troy Mauger, they will get the samples to Andrew Watson at NSW Department of Primary Industries for disease identification.

They will also wish to record the location of all suspected sites and crop management information.

Reporting suspected cases will help us map the spread of the disease and identify what is causing the worst infections.

Anna Jewell: 0409 567 429
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Biosecurity

The infection is spread through transport of the sclerotia, so wash boots thoroughly after entering an infected field. Clean down harvesters between paddocks of stubble material. Be aware that drainage water may transport floating sclerotia.