STOP THE SPOT CONT…

I have yellow spot, what do I do now?
Please visit www.stopthespot.com.au for sampling instructions. Besides helping researchers develop new genetic tools that improve wheat yields, you will also receive feedback on your sample, confirming if it is yellow spot or not.

For information on how to manage the disease visit:
GRDC Yellow Spot Fact Sheet: www.grdc.com.au/GRDC-FS-YellowSpotWest
GRDC Cereal Foliar Fungal Diseases Supplement: www.grdc.com.au/GCS110

RHIZOCTONIA – I SEE PATCHES, SO WHAT SHOULD I DO NOW?

DANIEL HÜBERLI, PLANT PATHOLOGIST, DEPARTMENT OF AGRICULTURE AND FOOD, WA

Rhizoctonia bare patch, caused by the fungus *Rhizoctonia solani* (AG8), continues to be the biggest fungal root diseases risk for WA cereal growers with 37% of the 367 grower samples sent this year for PreDicta B testing having medium to high level of inoculum.

Image 1: Plant pathologist, Daniel Huberli, examines *Rhizoctonia* trials evaluating the efficacy of new in-furrow fungicides to control the pathogen.

In paddocks with *Rhizoctonia*, distinct patches with stunted plants often with yellow leaves usually start to become evident 6-8 weeks after sowing. All crop and pasture species can be affected to some degree, however, the worst impacted crop is barley, followed by wheat and then oats. As is the case with all root diseases, there is very little that can be done to control the disease once the crop has been sown although an application of N post-sowing may aid recovery, but does not prevent root damage.

It is important to know that patches are not unique to *Rhizoctonia*. There are other diseases including root lesion nematodes (RLN) and take-all as well as other non-disease issues that can cause them. In particular, patches caused by *Rhizoctonia* or RLN are difficult to distinguish without close inspection of the plant roots and often requires further laboratory tests to extract any nematodes or *Rhizoctonia*. Paddocks can have both *Rhizoctonia* and RLN present.

Before the next crop is planted it is important that the disease or issue causing the patches is confirmed in order to put the right management plan in place for 2016. For diagnosis, carefully dig up symptomatic plants from the edge of the patch (not the centre) as well as healthy plants from outside the patches. The DAFWA video 'How to take a plant sample' (https://youtu.be/_hqjXWEkByg) shows the correct method to use.

Suspected *Rhizoctonia* or RLN problems in-crop can be confirmed by laboratory analysis of soil and/or roots by AGWEST Plant Laboratories. Send fresh samples of plants with intact roots in an undisturbed soil ball (not washed roots) using sampling guidelines (Form 102 on the Plant disease diagnostics page, https://agric.wa.gov.au/n/1801). Soil samples can be sent to SARDI for testing for the main root diseases through the PreDicta B service.

If you have confirmed your paddock has high levels of *Rhizoctonia*, the best option would be to place the paddock into a grass-free break crop, such as canola, pulse or pasture. Canola has been shown to reduce the level of disease in the following cereal crop. If you plan to put in cereals, then do as many of the following as possible to reduce the level of disease:

- Control summer weeds and ensure autumn weeds are controlled within 3 weeks of seeding.
- Sow into warm soil to allow roots to develop before the pathogen becomes active during the cooler conditions.

RHIZOCTONIA – I SEE PATCHES, SO WHAT SHOULD I DO NOW? CONT…

Image 2: Spear tipping caused by *Rhizoctonia solani* on the primary roots of a barley seedling.

- Use knife points that disturb the soil 5-10 cm below the seed which disrupts the pathogen and facilitates root growth.
- Use a seed treatment and/or in-furrow fungicide registered to suppress/ control *Rhizoctonia* (in the presence of disease, seed treatments can improve yield up to 5%, while in-furrow up to 15%).
- Adequate nutrition at seeding and tillering, especially N, P, Zn and other micronutrients.
- Consider seeding more tolerant cereals. Oats are the least susceptible, while barley is the most susceptible. Wheat and triticale sit between the two.
- Minimise herbicide damage; avoid sulfonylureas.

For more information and pictures of disease symptoms refer to the diagnosing *Rhizoctonia* root rot in cereals (https://agric.wa.gov.au/n/2143) and root disease under intensive cereal production systems (https://agric.wa.gov.au/n/2276) on the DAFWA website and tips and tactics - *Rhizoctonia* Western Region fact sheet on the Grains Research Development Corporation website.

For more information contact Daniel Hüberli, Plant Pathologist, South Perth on 9368 3836 or daniel.huberli@agric.wa.gov.au.

PHENOXY TIMINGS

JESSICA SMITH, AGRONOMIST, LANDMARK DALWALLINU

As some of the crops out there are just coming up in those seemingly bare patches and the rest is jumping ahead we find ourselves in a crop stage dilemma. Do we use Jaguar, Jag+LVE/Tigrex mixes, MCPA LVE or Ester 680?

Product	Chemcial	Cereal Growth Stage							
		2 leaf	3 leaf	4 leaf	5leaf - early till	Mid till	Late till	Full till-jointing	Booting
	Zadok Cereal Code	12	13	14	15-21	25	29	30	40
LVE MCPA	440ml								
Ester 680	800ml								
Estercide	700ml								

Recommended and preferred timing

Figure 1: Phenoxy Timing Guide (Source: Nufarm)