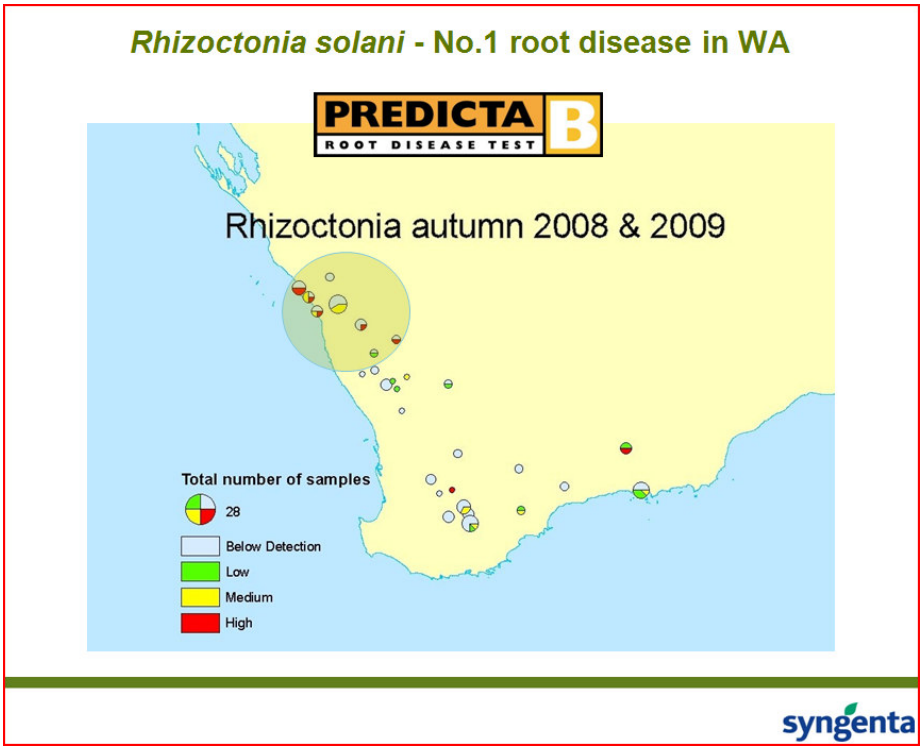
Results of Syngenta Predicta B Root Disease Survey

A very big thank you to Rachel and Kathryn and all those growers who participated in our Predicta B Root Disease survey this season. We have combined the results we received with other Predicta B tests carried out throughout WA and the results are shown in the map below:



The survey showed *Rhizoctonia solani* (Bare patch) to be the most prevalent of all the diseases covered by the Predicta B test, especially in the Mingenew-Irwin and surrounding areas with more than 50% of all paddocks tested there showing medium to high levels of Rhizoctonia. Below is a list rating the main diseases in order of number of positive test results:

1. *Rhizoctonia solani* (AG8)
2. Take-all
3. Crown Rot
4. *Pratylenchus thornei*
5. Cereal Cyst Nematode

According to SARDI, who provide the Predicta B testing service, a medium level of Rhizoctonia could potentially cause a yield loss in the range of 5 – 20% while a high level of Rhizoctonia could cause yield losses in the range of 10 – 50%. Even at the lower range, that should be enough to make most growers sit up and take note.

Managing *Rhizoctonia* Root Rot & Bare Patch

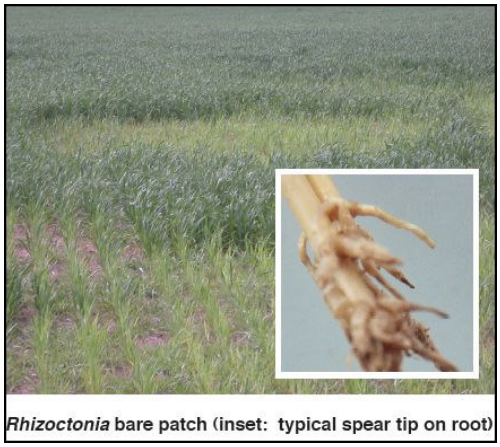
Recognising Rhizoctonia (*Rhizoctonia solani* AG8)

Rhizoctonia Root Rot and bare patch is a debilitating disease that occurs in winter cereals, pulses, oilseeds and pastures. It is estimated that this disease affects some five million hectares throughout Australia.

The most dramatic evidence of Rhizoctonia is the development of clearly distinct patches of affected plants. This is the classical bare patch syndrome. The disease also causes less distinct chronic root rot outside the patches and in paddocks where bare patches do not occur. Severely affected plants are stunted with narrow rolled leaves, fewer tillers, reduced root development and, on removal from soil, spear points on roots are evident where they break.

The loss in potential yield from Rhizoctonia is proportional to the total area of the patches and an average of up to 50% is clearly evident in the bare patches.

There may also be losses of up to 20 percent in the chronically-affected plants between patches and even in paddocks where patches are not evident.



Rhizoctonia **bare patch (inset: typical spear tip on root)**

An integrated approach

The fungus survives in infested residue and in infected grass weeds and is most active between 10$_{o}$C and 15$_{o}$C. Thus, management of the disease involves reduction of inoculum and promotion of early & rapid plant growth. Implementation of an Integrated Disease Management program, incorporating the practices below, will minimize the economic impact of Rhizoctonia.

1) Improved plant nutrition
2) Cultivation to disrupt the growth of the fungus no more than two weeks before sowing
3) Avoid use of pre-emergent SU herbicides
4) Early control of grass weeds and prevent seed set in the year prior to sowing
5) Use high quality, vigorous seed
6) Treat seed with DIVIDEND
7) Sow on time
8) Rotate between seasons to non-cereal crops
9) Use robust non selective herbicide rates for fast knockdown

It may not be possible to implement all management tools, but the use of **DIVIDEND seed treatment** is arguably the most cost-effective and reliable method of **suppressing Rhizoctonia and enhancing yield potential.**

For further information please call the Syngenta Technical Product Advice Line on 1800 067 108 or visit www.syngenta.com.au