TAKE-ALL ROOT DISEASE

In 2017 Take-All had a significant impact on yields in wheat and barley.

White heads in wheat crops may be the first indication there is an issue but many other plants in the crop will also be affected.

With the loss of Jockey seed treatment Latitude is the only alternative seed dressing with no new products in the pipeline. The points below provide some useful preventative measures to consider.

- The disease is soil borne and the primary infection of plants usually occurs in the autumn with the secondary root to root infection occurring in the spring.
- Increased levels are seen in early sown crops and in light puffy seedbeds
- More severe symptoms are seen in patches of low pH where roots are already poor
- Poor drainage and sub optimal nutrient status also encourages the disease (stress conditions)
- The disease is usually most severe in 2-4\textsuperscript{th} wheat then generally declines but also occurs in barley.
- Oats are affected by a different strain so do provide a better Take-All break for wheat, triticale and barley
- Spring crops can also be affected, although it is rare for yield losses to be significant

Strategy to reduce levels:

- Avoid early sowing of 2\textsuperscript{nd} – 4\textsuperscript{th} wheat crops
- Apply a seed dressing Latitude to crops at risk to reduce the autumn infection of plants. Latitude treated seed also requires a single purpose seed dressing.
- Roll after sowing to ensure firm seedbed especially on lighter soils
- Ploughing after 1\textsuperscript{st} wheat can reduce primary source of infection in 2\textsuperscript{nd} wheat
- Select varieties that perform well as 2\textsuperscript{nd} wheat e.g. Grafton, Leeds, Consort and newer varieties KWS Barrel, Savello, LG Motown & LG Sundance.
- Cover or green manure crops which exclude triticale and barley.

Further information can be found in the AHDB technical note: Take-All in Wheat – management guidelines 2006