To: Local News
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White Heads in Wheat

There are numerous situations causing white wheat heads. Obviously with the wetter spring, low areas, terrace channels, can show a large area of whole plants that are dead, just due to saturated soil. Probably the two I have seen the most of are wheat freeze and head scab fungus.

Head Scab fungus causes white chalky kernels. In wetter conditions the heads usually are attacked during flowering. Depending on growth stage, parts or all of the head can be affected. White patches can be seen in areas. You may find traces of pink coloring to heads and lower stalk.

Wheat freeze: obviously the timing of the freeze can usually be seen as the stage of plant development. Wheat pollen and ovary development towards flowering is very sensitive to near freezing temps. The wheat head will pollinate in the mid-section and move upward and down. Thus, the effect of frost conditions will show at that stage no kernels or small shriveled dry berries or both.

Wheat Stem maggot infects the central stalk and feeds on upper nodes of stem as head elongation starts. By pulling the head it should separate with the upper stem from the plant. The base of stem will show brown decay and chewing marks. Individual heads are affected and there is no real need for treatment.

Common Root Rot causes premature death of the wheat leaving white heads. With examination of sub crown internode, the space between the seed remnant and crown should look creamy and firm. Infected will be shriveled, brown and dark lesions on the internode stem. Poor root development often seen in continuous fields with high residue.

Take all Root Rot usually in periods of wetter weather. Seen as white patches, irregular areas, or along field edges where fungus survives in thick grasses. The lower stem will show a shiny blackened lesion. Roots are weakened and pull easy.

Sharp eye spot causes weakened roots, seen as lower stem lesions with oval dark brown margins and lighter tan center. Not a significant problem in Kansas also associated with some seedling blights.

For more information check out our S84 'Wheat production Problems in KS' brochure, our MF2994 'Wheat Disease Identification' brochure and our C-646 'Spring Freeze Injury to Kansas Wheat' brochure. Also Fact sheet MF3458-Fusarium Head Blight.

Sprayer Cleaning

Sprayer cleaning is a critical component of maintenance that prolongs the life of the sprayer, prevents unnecessary repairs and downtime, and prevents crop injury caused by equipment contamination. Thorough sprayer cleanout is important following all pesticide applications but is even more critical after use of certain herbicides. Serious crop injury can result from small amounts of herbicides. Without proper cleanup, crop injury from sprayer contamination can occur several months after using the sprayer and following several subsequent applications.

A K-State Research and Extension publication, ***MF1089 – Cleaning Field Sprayers***, has been recently updated and is available online at https://bookstore.ksre.ksu.edu/pubs/MF1089.pdf.

This helpful resource guides readers through a common procedure for cleaning sprayer equipment, outlines the best cleaning agents for different herbicides, and discusses crop injury caused by sprayer contamination. It lists various compounds to add to water to help cleaning and procedures to get a good effective rinse. Listing also the sensitive crops following the use of certain herbicides.