

August 4, 2015

WHEAT WOES AND OPPORTUNITIES

The 2015 wheat crop was a disaster. The open hard winter season killed about 15 percent of the fields (as we look bad these were the lucky ones). Striped rust and rain damaged the crop and lowered test weights. The rain during pollination allowed the Fusarium fungus, or wheat scab to attack the wheat kernels. The combination of low test weight and scab or vomitoxin resulted in lowering the wheat price by more than half. For many farmers the wheat check will not pay the taxes on the land they raised it on.

It could get worse. If any of the wheat which could not be sold is fed to livestock, it could result in problems. The combing process removes the seed and chaff, leaving only the straw and stem of the seed head. When this is done, I would be pretty sure that use of the straw for bedding and as a low level feedstuff will be okay. This would NOT be true if the wheat was swathed and baled with the head or parts of the head intact. Beware!

Will the wheat left in the field result in any problems? Do fields need to be tilled? The answer is that the scab kernels passed through the combine will pose no risk to the field that isn't already there in the natural environment. Loss of valuable wheat residue only costs us moisture and adds to soil erosion problems, bad on top of bad!

Wheat is still an opportunity crop for us. It gives us an open field for summer manure applications. It provides straw for livestock bedding and or high fiber feed. It provides time to complete conservation measures like tile outlet terraces. On poorer soils it increases to probability of getting a corn crop. It opens a field for fall alfalfa, cover crops or added livestock haying and grazing areas. You have to look at the whole return on the farm to evaluate the success.

This year's wheat situation does open the gate for some added concerns. We will likely see more volunteer wheat because of the light kernels passing through the combine. Volunteer wheat within a half-mile of a field that will be planted to wheat should be completely dead at least two weeks before wheat planting. This will help control wheat curl mites, Hessian fly, and greenbugs in the fall. The most important threat from volunteer wheat is the wheat streak mosaic virus complex. These virus diseases cause stunting and yellow streaking on the leaves. In most cases, infection can be traced to a nearby field of volunteer wheat, although there are other hosts. Control of volunteer is the main defense against the wheat streak mosaic virus complex.

Wheat streak mosaic virus is carried from volunteer to newly planted wheat by the wheat curl mite. These tiny, white, cigar-shaped mites are too small to be seen with the naked eye. The curl mite uses the wind to carry it to new hosts and can travel up to half a mile from volunteer wheat. The wheat curl mite is the vector for wheat streak mosaic and High Plains virus.

Volunteer wheat is a host of barley yellow dwarf virus, and the greenbugs and bird cherry oat aphids which carry it.

Another reason to control volunteer is that volunteer and other weeds use up large amounts of soil moisture. When water storage is important, such as in summer fallow, volunteer must be destroyed. Be sure wheat seed for fall planting is cleaned and treated. Seed treatment in wheat is very important and the scab situation only adds to the importance by protection the germinating seed.

Paul C Hay, Extension Educator

University of Nebraska-Lincoln Extension in Gage County • 1115 West Scott Street, Beatrice NE 68310

(402) 223-1384 • FAX: (402) 223-1370 • email: phay1@unl.edu

