

News Column

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SEED WHEAT CARE

I don't always practice what I preach,...but I sure think others should!

I have to admit that I didn't always clean and treat my seed wheat when I made my living as a farmer many years ago. If the wheat came out of the combine clean enough to go through the drill without plugging the seed feeding mechanisms, then I might have planted it without cleaning.

My logic may or may not have been sound. I'm still confused, even though I have searched for research to prove me right, or to prove me wrong. My thought at the time was that I could either pay someone to clean the light stuff out and throw it away, or I could just kick my seeding rate up 10% and plant the light stuff too.

While I often planted bin-run seed wheat, I never planted what I thought was poor seed. This year – because I think there was a lot of poor seed wheat coming out of combines in eastern Kansas – I am switching sides and recommending that producers clean and treat their seed wheat.

Fusarium head blight (head scab) was prevalent in eastern and central Kansas this summer, with many producers reporting light test weight wheat. In addition to light test weight, Fusarium infected kernels will also have a lower germination percent.

The most severely diseased kernels were likely removed by combines during harvest, but in many cases the seed still isn't of high enough quality to plant. Seed should be cleaned to

remove damaged and light kernels, with a goal of having seed wheat that tests 57 pounds per bushel or better.

Low test weight wheat usually germinates well when the low test weight was caused by dry weather, but when the low test weight is caused by Fusarium, the percent germination could be well below the acceptable level. Seed wheat should have at least 85% germination and should not be shriveled. Large seeds though, have little, if any, advantage over normal, plump seeds when planted at the same weight or volume.

Because there is a lot of lower quality wheat seed in farmer bins, I think it is prudent to go for “the works” this year. I would have my seed wheat clean and treated, and I would also have it tested for germination.

Fungicide seed treatments are recommended when seeding conditions aren’t ideal. Normally, if we think conditions are such that seed might not emerge immediately, then a fungicide seed treatment is recommended. Seed treatments may also improve germination or seedling vigor when low test weight seed is planted, and they will protect against seed-borne diseases like bunt and smut.

It may be tempting to increase the seeding rate when planting low test weight seed wheat, but that hasn’t shown to improve stands or yield. When planting pounds per acre, it isn’t necessary to adjust the seeding rate. Because of the low test weight, you will plant more seeds per acre, but have lower emergence, and will end up with about the same stand as you would have had with higher test weight seed.

Now, if low test weight is caused by Fusarium, and germination is a problem, then the seeding rate could be increased to make up for the poor germination. Therefore, a germination test is a really smart move this year.

The turnaround time for germination testing is generally 7 to 14 days once the seed-testing lab receives the sample. Sampling usually takes longer earlier in the summer because of the need for pre-chilling to get an accurate test. The need for pre-chilling typically ends around Labor Day weekend.

The cost for a standard germination test at the Kansas Crop Improvement Association lab is \$17. You can contact KCIA by phone at 785/532-6118, or by e-mail at kscrop@kansas.net.

If you have questions, you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to gmclure@ksu.edu.

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