

# Post Rock Extension District Column

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## **“Gearing up for the 2023 wheat crop!”**

It soon will be time for drilling of the 2023 wheat crop in northcentral Kansas! Producers are busy preparing for the crop and are rounding up their seed along with getting the ground ready.

The wheat crop was definitely a challenge in 2022, including low test weights and drought conditions, which can affect the quality of the seed for the next growing season. While many of the shriveled kernels are usually removed by the combine during harvest, seed producers in Kansas may be needing significant cleanout this year to bring seed wheat to acceptable test weight standards (seed wheat should have a test weight above 57 lbs./bu. for adequate germination under a wide variety of conditions). This means that producers who stored grain on-farm and are planning to simply plant seed straight out of the bin may want to obtain a germination test. Especially this year, there is a need to pursue appropriate seed cleaning, and also to consider a fungicide seed treatment. K-State research conducted at seven locations during 2018-19 and it showed that improving seed quality through different seed cleaning methods leads to better stand establishment and grain yield.

Producers will want to take certain steps when sowing the next wheat crop to help increase the chances of getting a good stand. Low-test-weight seed usually germinates well, but seedlings tend to have lower vigor than seedlings from seed with higher test weights. Therefore, producers should take special care to try to get a good, uniform stand.

Other things to remember include drill speed, seeding depth, seeding rates, seed treatments, seed cleaning and germination testing.

Using a drill speed of 5 mph or less will help ensure that the seed is placed down in the seed slot, and that the seed slice is closed and firmed properly, making for good seed-soil contact. Getting good seed-soil contact will help the seedlings develop a good primary and secondary root system. Also, when drill speeds are too fast, the openers tend to “ride up” at times, resulting in a planting depth that is shallower than intended.

All wheat should be planted at the proper depth for best stands paying close attention to the coleoptile length of the variety. But it is especially important that low-test-weight seed is not planted too deeply, since this seed has low emergence vigor to start the growing season. It is especially dry right now and producers may feel they need to plant the wheat deeper, but certain varieties do not tolerate deep planting because of their coleoptile length. It is equally important not to plant too shallow. Shallow-planted wheat often has more difficulty establishing a good root system in the fall than wheat planted at the proper depth, and this can be an even greater problem when using low-test-weight seed. Plant low-test-weight seed 1 to no more than 1.5 inches deep.

Usually, the lower the test weight, the more seeds there are per pound. Producers who use a planting rate

based on pounds per acre should not adjust their seeding rate when planting low-test-weight seed. They will end up planting more seeds per acre, but emergence is often somewhat lower with low-test-weight seed, so the stand should come out about normal.

Fungicide seed treatments may improve germination or seedling vigor of low-test-weight seed, and protect against certain diseases. K-State Research and Extension has an excellent publication, “Seed Treatment Fungicides for Wheat Disease Management” that provides information on the different options available. This is available either online for at any of our Post Rock District Offices.

This year, it would be desirable to have the seed germination evaluated by a seed-testing lab to ensure a proper stand. The turnaround time for this type of testing is generally 10 to 14 days once the seed-testing lab receives the sample. The variation in the turnaround time depends on the need for pre-chilling treatment prior to the germination test. The need for pre-chilling typically ends around Labor Day weekend. The cost of testing at the Kansas Crop Improvement Association (KCIA) is about \$19.00 for the standard warm germination test. Growers or others can contact KCIA by phone at 785-532-6118, or by email at [kscrop@kansas.net](mailto:kscrop@kansas.net). On-farm germination tests may be an option for growers who do not have time to have seed evaluated by a seed-testing lab.

If you have further questions on wheat management, give me a call at any of our Post Rock Extension District Offices in Beloit, Lincoln, Mankato, Osborne or Smith Center.

*Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at [swick@ksu.edu](mailto:swick@ksu.edu) or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” or sign up for our weekly “Ag News Roundup”. Also remember our website is [www.postrock.ksu.edu](http://www.postrock.ksu.edu) and my twitter account is @PRDcrops.*