



**Germination Testing This Year's Wheat Seed#**

Some producers may be anxious this year to find out the germination percent of the wheat they harvested, to see if it will make suitable seed. If you do a home germination test too soon after harvest, you will be shocked to see a low germination percent. That's because wheat has a post-harvest dormancy requirement (some varieties more so than others). Even high quality seed won't germinate right after harvest, in most cases.

For the first several weeks after harvest, it's important to make sure the wheat is pre-chilled before taking a germination test. Any reputable lab will do that on a routine basis. Producers testing their seed at home should also pre-chill their wheat. This is done by placing the seed on a moist paper towel, placing the paper towel with the seed in the refrigerator at about 40 degrees for 5 days, and then move it to room temperature for an additional 5 to 7 days. By placing it on the moist paper towel, the seed begins to imbibe water at the beginning of the chilling process. If the seed is not pre-chilled, producers should wait a month and a half before germination testing.

There is some difference among varieties regarding how long their summer dormancy requirement is and even that can vary from year to year. Hard white wheats with poor sprouting tolerance, for example, have almost no summer dormancy requirement. They will germinate almost as soon as the seed is harvested. Other varieties have a relatively long summer dormancy requirement, and may not germinate well for five or six weeks after harvest unless the seed is pre-chilled. Unfortunately, there is no routine testing of varieties for their summer dormancy requirement. So we have no way of knowing which varieties will germinate shortly after harvest and which will take a longer rest period.

By Labor day, all varieties will have lost their summer dormancy and should germinate unless the seed is defective in some way. In addition, if seed is tested too soon after harvest, it would still be a good idea to test again prior to harvest to be sure the germination has not been compromised due to heating or insect damage.

If there is any question about the viability of the seed, it is well worth the \$15 (\$17 for non members of Kansas Crop Improvement) it costs to have the seed tested for

germination by a professional seed laboratory. This is especially true in areas where was freeze damage, severe drought, a rain delay at harvest or head scab (it seems like we had all of these!). To the untrained eye, seeing some amount of shoot and root development would seem to be sufficient proof that the seed is in good condition. But that alone does not always mean you have a seedling that will develop into a healthy plant. A trained laboratory analyst evaluates each seedling to be sure that all the essential plant parts exist and have sufficient development at the end of the test to, in fact, establish a normal and healthy plant.

**Collection of wheat samples for testing at Kansas Crop Improvement**

You can drop off samples at the K-State Extension Offices in Sharon Springs, Goodland and St. Francis to be delivered to the Kansas Crop Improvement

Please have your samples to the Extension offices by August 10.

The sample needs to be a two pound sample and can be in a gallon zip lock baggie or other container. If you put it in a gallon zip lock baggie, please double bag it.

Here are the costs for the tests

Germination	\$17
Seed Count (# seeds/lb)	\$4

Information to include with the sample are:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Variety/ Field ID: \_\_\_\_\_

Tests be completed:

- Germination
- Seed Count (# seeds / lb)

How do you want to receive results:

- Mail
- Email \_\_\_\_\_

Make checks payable to: *Kansas Crop Improvement Assoc*