

February 22, 2019

CHECK SOYBEAN SEED TAGS CAREFULLY THIS YEAR

This past week I had encouraged a report to be published in CropWatch on how germination tests on soybeans are doing for the Nebraska Crop Improvement Association. Basically, the germination on soybeans is falling below the normal germination rate. While a few lots came in at or above 95% germination, results are averaging in the mid 80% range. Farmers are urged to check the germination rate for their soybean seed this year and adjust planting rate accordingly and use fungicide treatments under certain circumstances. Seed treatment fungicides might be recommended when growers are planting early into cold soils or have had chronic problems with seedling diseases.

We can blame disease and wet weather last year for the germination rates on seed this year. The biggest player was environmental conditions and we had a lot of fungal growth and anytime you get fungi on seed, you start getting deterioration as they start feeding on the seed. In a typical year, soybean seed lots tested by the Nebraska Crop Improvement Association (NCIA) range from 88% to 98% germination. This year samples ranged from 43% to 98% germination. The minimum germination for certified soybean seed is 80%.

In uncleaned samples submitted to NCIA there were a lot of dead, moldy seeds this year. These were cleaned out before germination testing, similar to what would happen in commercial seed production. Concerns over soybean seed quality issues are widespread across the U.S. production area due to an unusually wet fall that delayed harvest in seed-producing areas of Iowa, Illinois, and Indiana, the sources for much of Nebraska's seed. Wet fall conditions contributed to the development of several seed diseases: Phomopsis seed decay and purple seed stain. In fall 2018, purple seed stain was reported at above-normal levels in Nebraska. (There are no known sources of resistance for purple seed stain.) NCIA testing has shown little or no reduction in germination in purple stained seed in its tests this year.

The bottom line is growers should check soybean bag tags carefully for germination rates, calculate seeding rates appropriately and pick the right fungicide seed treatments. If the germination rate for your seed is lower than normal, consider adding one or more fungicide seed treatments and increasing your seeding rate. Various seed treatment classes and active ingredients do not work equally well against all pathogens. Efficacy ratings are provided for soybean seed treatments in the 2019 Guide for Weed, Disease, and Insect Management in Nebraska on page 255, including for Phomopsis seed decay.

A fungicide treatment won't improve germination of dying or dead seeds, but it can help protect seedlings under stress and thus help ensure a better stand. A fungicide application should be considered for soybean, especially when the seed germination rate is below normal, you're planting early into cold soils that may delay germination, or you're reducing your soybean seeding rate. For more information go to <https://cropwatch.unl.edu/2019/soybean-seed-germination-concerns>

**SOUTHEAST NEBRASKA SOIL HEALTH CONFERENCE MARCH 6**

We have a growing list of sponsors on board now for the Soil Health Conference in Beatrice, March 6 from 8:30 a.m. to 3:30 p.m. The conference is at the 4-H Building in Beatrice. Go to <https://go.unl.edu/soilhealth2019> to sign up or call 402-821-2151 by March 4. The program is sponsored and includes a noon meal. Table displays include the Southeast Nebraska Corn Growers Association, Fontanelle, NRCS, SARE, Crete Lumber and Farm Supply, Ward Lab, Green Cover Seed, Farm Credit Services, Nebraska Corn Board and Prairie State Seed. I expect additional table displays too. We have an excellent speaker lineup. Please go to: <https://saline.unl.edu> to see the program flyer. CCAs are available.

Randy Pryor, Extension Educator

University of Nebraska-Lincoln Extension in Saline County · 306 West 3rd Street, Wilber, NE 68465

Phone (402) 821-2151 · Fax (402) 821-3398 · e-mail: randy.pryor@unl.edu