



The North Dakota Seed Journal

SEPTEMBER 2012

Newsletter of the North Dakota State Seed Department

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Label Bins to Prevent Varietal Admixture

Joe Magnusson, Field Seed Program Director

During the 2011-12 final certification process ten seed lots of wheat failed the variety ID test. Six of these lots originated from bins that were not labeled and the growers delivered seed from the wrong bins to be conditioned for final certification. Fortunately, this seed was not commingled with seed from other growers who delivered the correct variety, which obviously would have made all that seed ineligible for certification as well.

According to North Dakota certification rules, all seed must be properly identified, whether conditioned or unconditioned. Conditioned seed must be labeled with kind, variety, lot number and class of seed. Unconditioned, field-inspected seed must also be identified with the field inspection number(s) of all fields that make up each bin.

Pre-conditioned samples may be submitted for germination and disease testing to assess the quality of a seed lot before conditioning. Field inspection numbers must be included so we can maintain identification at final certification. If bins are properly labeled, you will know which field numbers should be included on the Sampler's Report. Test results from samples submitted without the correct field identification will not be valid for final certification and testing will need to be done again.

Like last year, we will provide an adhesive bin label for each lot of seed that completes final certification. These will be mailed with the bulk certificates. It is your responsibility to complete them and place them on the correct bin. If you need more they are available for \$1.00 each.



Adhesive bin label for certified seed.

We also have bin tags available for field-inspected seed that has not been certified yet. These are available at no cost. If you would like some please call the Seed Department.

Remember, properly labeling your seed is required and may save you from big problems later.



Bin tag for field-inspected seed.

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Seed Department

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REALLY IMPORTANT REMINDER

No certified seed tags or bulk certificates will be issued until all lab tests required for certification are completed. This includes tests for seed-borne pathogens, purity exams, germination tests and variety id tests. Please plan ahead!

From the Commissioner's Desk

I don't want to be the only person in the country that fails to pen something about the overriding issue facing agriculture this year: drought. The topic is dominating every conversation and weekly/monthly crop report.

Actually, I would prefer to avoid the issue completely since it brings back bad memories. The 1988-89 drought was my impetus to do something for a living that didn't depend on rainfall. I learned during that two-year period that the lack of control/dependence on weather was not to my liking ... despite the fact that I really enjoyed the production side of our industry.

Nonetheless, here we are again with what is being called the worst regional/national drought since the late 80's. Looking at the mid-August U.S. Drought Monitor map issued by USDA, the midsection of the country looks like a burning coal; with deep red (exceptional drought) in the middle, red (extreme), orange (severe) and yellow radiating nearly border to border in all directions.

Before anyone from a hard-hit drought area thinks "what does anyone in North Dakota have to complain about", let me say this: we don't have much to complain about. Is it dry? Sure, most of the state is fairly dry ... especially in the east-central counties where we are anywhere from 2.5" to 4" behind normal precipitation and considered to be in a moderate (tan) category. Nowhere in the rest of North Dakota will you find anything beyond abnormally dry (yel-

Ken Bertsch..... State Seed Commissioner
Steve Sebesta..... Deputy Seed Commissioner
Willem Schrage..... Director, Potato Program
Joe Magnusson..... Field Seed Program Manager
Mark Hafdahl..... Seed Laboratory Manager
Jeff Prischmann.. Diagnostic Laboratory Manager
Kris Steussy..... Administrative Officer
Mike Oosterwijk..... Potato Program Supervisor

low). I almost feel guilty for admitting that many areas received some timely and decent rainfall in the past week, further improving the outlook for late season crops.

There is a point, and it's this: what happens to seed supplies in a drought that extends nearly nationwide?

In general, North Dakota and the northern plains should be fine. Our primary crops (cereals, pulses, oilseeds) fared pretty well and certified seed production acres are up. Soybean? The jury is still out, but again, we've been blessed with better conditions than most and recent precipitation should help. Corn? There's your wild-card. Corn seed companies seem to believe that irrigation and winter production can help mitigate what must be a tough situation in corn production areas. From a supply standpoint, I hope so, given the expansion of commercial corn production in much of the state.

Lastly, what if these conditions linger through fall? Southern wheat states are in the extreme to exceptional drought classification, while much of northern tier has adequate moisture for fall planting. I can't imagine that, given these conditions, winter/spring wheat price and early 2012 harvest, winter wheat production won't increase in the northern plains including North Dakota.

We ought to have some interesting crop reports over the next few months.

Best wishes for a safe and profitable fall season.



REMINDER

Seed Conditioner and Bulk Retailer Applications

2013 applications for approved conditioners and bulk retailers were mailed out to facility managers in early August. If you intend to handle certified seed again in 2013 please complete the agreement and return to the office before October 1. Facility inspections will begin in late October.

Does Anybody Read This?

Mark Hafdahl, Seed Lab Manager

Judging by the number of spray rigs operating across North Dakota in nearly-ripe fields, it is easy to conclude that the application of chemical harvest aids has increased recently. Over the last several years I have written many articles warning of the consequences of using glyphosate in a pre-harvest application to seed crops. However, these warnings seem to have fallen on deaf ears.

Originally, I only saw damage on wheat, but lately flax, lentil and field pea samples are showing evidence of damage also. If these lots are used for seed there could be expensive consequences. For your own sake, don't spray glyphosate on any seed crop that is not tolerant to glyphosate.

By the time this is published only soybeans and corn will remain in fields. I expect the soybean seed quality to potentially be very good. They should be mature well before a normal first frost so the biggest threat to quality will be mechanical damage. If the beans are dry they are very susceptible to impact damage either during harvest or subsequent handling. Harvesting soybeans for seed is best done at higher moisture levels, as the beans are somewhat rubbery and can take a little more abuse.

Our busiest time of year is January until planting. If possible get your samples in early. You will get more prompt service and we will benefit from a more even workload.



Clark Earns Lab Analyst Certification

Ciara Clark successfully completed the national examinations required to achieve recognition as a Certified Seed Analyst. Ciara passed both the written and the practical exams for germination. Examinations are administered by the Association of Official Seed Analysts. Ciara joined the department as a lab analyst in 2009.

Research fees are due September 15. If you have not already done so, please remit payment promptly to the Seed Department for seed labeled in your name, sold through June 30, 2012. Do not pay your county crop improvement or ag association. The only way we can correctly reconcile your account is if the report form and check are sent directly to the Seed Department. Research fee reports must be returned even if no sales occurred. Thanks to those of you who have already paid your fees.



Variety ID Testing Compliments Seed Certification

Jeff Prischmann, Diagnostic Lab Manager

Variety ID testing is a certification requirement for spring wheat, field pea, and barley. Spring wheat certification samples are tested using wheat seed protein and polyacrylamide gel electrophoresis (PAGE). Seed proteins are extracted and tested to differentiate spring wheat varieties from each other based on a specific seed protein banding pattern or fingerprint. Barley and field pea certification samples are tested utilizing seed DNA. This test uses PCR (polymerase chain reaction) in combination with specific markers to identify the correct variety. This test involves multiple steps which include: DNA isolation, a PCR, and a gel electrophoresis step. This test is also very specific depending upon the DNA markers used and is able to distinguish barley and field pea varieties from one another.

Due to the number of samples that we are testing and the steps involved in these tests, wheat samples are generally completed in 3-7 days after receiving samples. DNA tests of barley and field pea generally are completed in 7-10 days. Growers should keep these time frames in mind when submitting samples for testing. In general, these tests are completed in about the same time as a germ test is completed or slightly before, depending upon the crop. Also, samples that request only a seed purity or seed count may have those tests completed prior to the completion of a variety ID test.

These tests provide benefits to the seed producer. Problems with seed lots can be identified early in the process, providing additional time to correct. In a vast majority of samples, no problems will be found. However, there are a small number of problem samples that are usually discovered each year. The most likely problems that can be found include: 1) incorrectly labeled bins/seed lots and 2) mixture of two or more varieties in the same bin/seed lot.

In addition to variety ID testing for seed certification, variety ID testing is also available for spring wheat, oat, barley, and field pea as a service test for a fee that growers can utilize. These tests start at \$120 for wheat/oat and \$180 for barley/field pea. Growers are required to submit at least a 100g sample for this test and request a variety ID test. Please contact the department with any questions regarding variety identification testing.

Tips for Completing Seed Sampler's Reports

Joe Magnusson, Field Seed Program Manager

While grading seed for final certification, we often run into recurring problems that, if addressed properly on the Sampler's Report, would prevent some of those issues from becoming problems. The most common are listed below.

Labeler: use the correct name of how the seed is to be labeled. Don't abbreviate. Use the name as it is listed in the Seed Directory or, ask the grower how he wants the seed labeled. Our computer system has several different contact names for growers, farms, and seed retailers.

Class of Seed: if you downgrade a seed lot from Registered to Certified, make a note indicating your intent below the class or write in the instructions that you are downgrading this lot of seed.

Field Inspection Application Numbers: only use the field numbers that are associated with the bin of seed you are conditioning. Do not look in the Seed Directory and simply write down all the fields that passed inspection for that grower. When growers send seed in for preliminary testing, they must include the fields that are associated with that bin of seed and if they want to use that sample for labeling, the field numbers on their sample and the field numbers on the samplers report must match.

Bulk Seed: each bin is a separate and unique lot and a representative sample and Sampler's Report is required for each bin that is to be certified.

Bulk Certificates and Fees: make it clear who is to receive the certificates or tags sent and who is to receive the bill for certification.

Preliminary Testing: if the grower is using a previously tested sample for labeling, the sample number you indicate on the report must contain the same field number(s) you put on the Sampler's Report. Verify with the labeler that he included the field numbers on his pretest sample. If he did not include them or the numbers do not match, new testing is required.

Interagency Certification: if you are conditioning and labeling seed in North Dakota that was purchased from a grower in another state, the grower must supply you with a Transfer of Seed Pending Certification form that was approved by the certification agency in that state. The form must accompany the sample submitted for final certification.

Grower's Declaration: if North Dakota field-inspected seed is to be labeled by someone other than the applicant for field inspection, the applicant grower must sign the grower's declaration before the seed will be certified. Please try to get this information at the time of conditioning to avoid delay in testing and final certification.



Volk Joins Department

Mary Jane Volk joined the Seed Department on June 1, 2012. She is the new voice at the end of the phone and will handle many other administrative duties formerly done by Char Larson who retired in June. While answering the phones comes easy, she is eager to learn Seed Department procedures. Mary Jane has a farm background and has lived in the Fargo-Moorhead area since 2000. She has experience in customer service and looks forward to getting to know everyone.

Seed Conditioning Facility Fined for Illegal Seed Sales

Steve Sebesta, Deputy Commissioner

The North Dakota State Seed Department settled another case concerning state and federal seed law violations against an approved certified seed conditioning facility for an illegal sale of a protected variety.

The violation was discovered when a sample submitted by the conditioner for final certification failed the variety ID test. During follow-up communication with the conditioner, we discovered that the conditioner had already sold seed to three customers and two of them had already planted the seed.

As it turns out, the conditioner had purchased seed from a seed grower who unfortunately failed to remember that they had moved seed into a different bin at their farm and consequently delivered seed of the wrong variety to the conditioner who subsequently cleaned and sold the seed. Properly labeling bins would have helped prevent this problem. It was an unfortunate mistake, but the violations occurred when the sales were made before final certification was completed and the seed was properly labeled. The variety ID test caught the problem and had the conditioner not sold the seed before completing the certification process, they would have known that the variety was not correct.

According to Section 501 of the Federal Seed Act, it is illegal to sell or offer for sale, seed of a variety protected by Title V that has not been certified by an official seed certification agency.

Additionally, it is a violation of state seed laws to offer for sale or sell agricultural seed that is not labeled. Since certification had not been completed before the sales were made, the seed was obviously not labeled properly.

The facility was fined a total of \$11,000 for violations of PVP Title V (sale of non-certified seed), and state labeling laws. The facility was also placed on one year probation. Part of the fine was suspended because the facility self-reported the sales after they learned the result of the variety ID test, they had no prior regulatory violations and they cooperated fully with the Seed Department investigation.

We encourage everyone involved in the seed industry to closely read and understand seed laws. Links to pertinent regulations may be found on our website.

This case underscores the importance of conditioning eligible seed early enough to allow for all testing to be completed before a sale is made. Certification rules and seed laws are in place for a purpose. Variety ID testing (required for hard red spring wheat, barley and field peas certified in North Dakota) protects the labeler and the buyer from improper labeling.



The Farmers Yield Initiative, or FYI, promotes legal seed trade, research, education, seed certification, and the enforcement of intellectual property rights authorized under the Plant Variety Protection Act (PVPA) and patent laws. The purpose of the initiative is to educate the public and encourage compliance with existing state and federal seed laws embodied in the PVPA and state seed certification regulations.

If you suspect illegal seed activity please consider submitting a strictly confidential tip to help put a stop to illegal seed trade. You need not identify yourself during the phone call. The caller can remain anonymous, and it is toll-free.

Phone completely confidential tips using the toll free number: **(877) 482-5907**

Email tips to:

tips@farmersyieldinitiative.com

Mail tips to: Farmers Yield Initiative
PO Box 8850
Fayetteville, AR 72703

New Certification Rules in Effect October 1

Steve Sebesta, Deputy Commissioner

New seed certification regulations were approved by the Attorney General's office in August and will go into effect on October 1 pending final approval by the Legislative Administrative Rules Committee. Most of the changes involved reorganization of existing rules into a more logical format and a clarification of confusing language, but there were a few specific changes that should be noted.

There has been confusion in the past about official sampling so there is now a new section dealing with official samples drawn by the Seed Department which specifies the minimum quantity of seed that must be withdrawn from a storage bin.

Labeling language has been clarified and reorganized to make it easier to follow the intent of law. The length of time required for sample retention has been changed from two years to one year after final disposal of the seed lot.

We removed from rules the requirement to report unconditioned carry-over seed by October 1. That seed must be reported to remain eligible for final certification but the October 1 deadline was an internal date to ensure reporting in order for publication of carry-over seed in the Seed Directory. We encourage growers to take advantage of every opportunity to promote and market their product, but they need not be obligated to do so by rule.

We removed from rules the requirement for approved conditioners to condition and complete final certification on at least one lot of certified seed every two years. We better defined interagency certification because this language was inadequate previously and labelers sometimes struggled to understand how the procedures work.

There were also a few changes in certification requirements and standards for specific crops. We added a statement in the small grain and field pea seed standards indicating that variety identification testing was required for hard red spring wheat, barley and field peas since some labelers still don't know this is a requirement for certification in North Dakota.

We added an entirely new section for hybrid canola seed production which now specifies new requirements for seed testing including new AOSCA standards for minimum hybridity.

Finally, we tightened the requirement for seed testing in field beans to reduce the labeler's risk of losing a large lot of seed due to seed-borne diseases.

Remember, these rules go into effect October 1. We encourage everyone involved in certified seed production, handling and labeling to read and understand the rules. They are available on our website www.ndseed.com in the Field Seed Program section under Standards.

New Carry-over Reports

In early August, seed growers, conditioners and retailers were mailed the 2012 Carry-over Report form. You may have noticed that the form is different this year. At the suggestion of several seed growers we decided to include an additional part to the old form to allow for reporting of carry-over certified seed.

Use **Part A** on the front side to report **carry-over unconditioned seed** that is still eligible for final certification. Carry-over unconditioned seed must be reported in order to maintain eligibility for certification.

Use **Part B** on the reverse side of the form to report **carry-over certified seed**. Remember that carry-over certified seed needs to have a new germination test done to ensure it meets labeling requirements. New bulk certificates or tags will be issued once testing is completed.

It is our intent to include a new section in the 2013 Seed Directory listing carry-over certified seed to assist in your marketing efforts.

The report must be returned to our office by October 1 to ensure publication in the Seed Directory.

Department Managers Elected to National Leadership Positions

Two North Dakota State Seed Department managers were elected to leadership positions in their respective national organizations during recent annual meetings.

Deputy Seed Commissioner Steve Sebesta was elected by the board of directors to serve as president of the Association of Official Seed Certifying Agencies (AOSCA) at the recently-concluded annual meeting in Sun Valley, Idaho. Sebesta, who served as vice president last year, was re-elected by northern region directors to a third term on the board of directors in April. He has held numerous committee assignments in AOSCA since joining the Seed Department in 2003.

Diagnostic Laboratory Manager Jeff Prischmann was elected to the executive board of the Association of Official Seed Analysts (AOSA) at their annual meeting in Des Moines, IA. Prischmann also holds leadership roles in several other AOSA committees dealing with cultivar purity and genetic testing.

The North Dakota State Seed Department is the state's designated authority for seed certification and the largest certification agency in the U.S., in terms of acres in certified seed production.

North Dakota State Seed Department

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NDSSD Calendar

- Sept. 11-13 ..** Big Iron Farm Show, Fargo
- Sept. 15** Research fees due
- Oct. 1** Carryover Seed Report due
- Oct. 1** Applications due for approved seed conditioners and bulk retailers
- Nov. 27-28....** NDAA Northern Ag Expo, Fargodome
- Dec. 5** SW District Crop Improvement Association, Mandan
- Dec. 6** NW District Crop Improvement Association, Minot
- Dec. 7** NE District Crop Improvement Association, Lakota
- Dec. 10** SE District Crop Improvement Association, Casselton