



# The North Dakota Seed Journal

SEPTEMBER 2007

Newsletter of the North Dakota State Seed Department

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## Become Engaged

Steve Sebesta, Deputy Commissioner

District meetings for the North Dakota Crop Improvement and Seed Association are scheduled for early December. See the calendar on the back page for details. Everyone interested in growth and promotion of the North Dakota seed industry is strongly encouraged to attend their district meeting. Among other business, each of the four districts will be electing directors.

North Dakota usually leads the nation in the number of acres in certification on an annual basis. In comparison to some states, North Dakota growers should feel blessed that there are a great number of crops and varieties grown in the northern plains. Such diversity increases your profit potential greatly. Like any other business, the seed business requires a certain level of engagement. Engagement with your contract growers, your Foundation or Registered seed supplier, your genetics supplier (public or private), conditioners and retailers, and finally, your customers.

It has crossed my mind on a number of occasions that, as the leading certified seed producer in the U.S., our state doesn't have a more dynamic crop improvement association. There could be many reasons but perhaps there is simply not enough awareness of the organization's objectives.

The NDCISA, organized January 1929, is a non-profit organization funded by membership dues and a check-off on new varieties increased through the county

associations. Membership consists of county crop/ag improvement associations. Each member of a county crop/ag improvement association is automatically a member of the state association.

Today, the NDCISA works in cooperation with the NDSU Extension Service, ND Agricultural Experiment Station, Foundation Seed Stocks Project, NDSU Research Foundation,

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North Dakota State

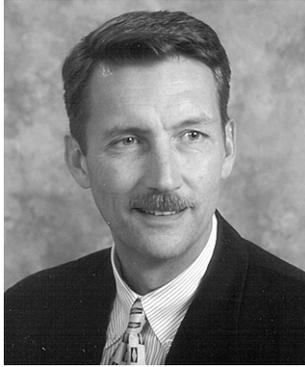
**NDSSD**

Seed Department

*The North Dakota Seed Journal is published and edited by the Seed Department, State of North Dakota, under the provisions of Chap. 258, S.L. 1931, as administrative and instrumental matter required for effective transaction of the Department's business and for properly fostering the general welfare of the seed industry in the state.*

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## From the Commissioner's Desk

Further into this edition of Seed Journal you will find an announcement that Willem Schrage has joined our staff as Director of Potato Programs. Mr. Schrage brings a wealth of experience to our agency in his role as program director, adding to a program and agency already well-staffed with experienced people.

Here is a rundown of all the talent and experience at work for our growers and customers. I'm forced to do it by program rather than individual for space limitations, but you will get the point.

Kris Nicklay leads our Support Services area, with a team of great people you probably talk to by phone frequently. Rhonda, Char, Laurie and Deb are well-known to our customers and have provided excellent service for a combined total of 78 years. Do the math, that's a lot of customer contact.

Steve Sebesta directs a group in our Field Seed/Regulatory/Lab Services programs that average nearly 14 years of experience each with this agency

alone. The number would be higher if not for two lab analysts hired within the last three years, and Steve's tenure at NDSSD of only four years. Add some experience with other areas in the seed industry, and this group brings nearly twenty years of experience each to work every day on behalf of seed certification, regulatory and lab testing clients. Add educational degrees at bachelors and masters level to the practical experience in these areas and you have some serious expertise at your disposal.

You will read that Willem Schrage brings over thirty years of background to our Potato Program. What you may not know is that our field staff averages an astounding twenty-six years with State Seed doing certification and

shipping point inspection work. Adding Deb Baer's seven years in seedstocks at NDSSD, and twenty or so years at NDSU working with pathology and testing issues makes ours (I suspect) the most experienced potato certification program in the country.

Please excuse me if this appears immodest, it is intended to be prideful of our staff. As important as expertise is, they are all great people with wonderful families that we all hear of or know personally. My hope is that you enjoy your personal contact with our team, and appreciate their work as much as I do.

Best wishes for a safe and profitable harvest season.

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

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the North Dakota State Seed Department, commodity groups and other trade organizations within the state to promote general crop improvement practices, develop and increase seed of varieties best adapted to the state, and to make supplies of seed easily available to the farmers of the state.

NDCISA is instrumental in the development, production, and distribution of new varieties. It coordinates with the NDSU Foundation Seedstocks project and county crop/ag improvement associations during new variety releases and increases. It supports research, extension and educational programs at NDSU and throughout the state. It sponsors youth activities such as 4-H crops judging contests and sponsors scholarships to the NDSU College of Agriculture.

NDCISA provides active involvement in identification of agricultural research and educational needs and the identification of facilities, personnel and equipment necessary to fulfill these needs. It also provides active support for these proposals through the legislative process.

We encourage you to become engaged in your seed industry...become involved with your crop improvement association. We look forward to seeing you at the district meetings in December.

## New Anthracnose Race Reported In Manitoba

A new race of bean anthracnose has been reported in Manitoba. According to the Spring/Summer 2007 Manitoba Pulse Growers Association publication *Pulse Beat* ([www.manitobapulse.ca/index.html](http://www.manitobapulse.ca/index.html)), a new race of bean anthracnose was discovered on the variety 'Envoy'. Envoy is resistant to the only race of bean anthracnose found in North Dakota (race 73). This new anthracnose race has been labeled as race 105. With the movement of seed between Manitoba and North Dakota, it is possible that this race of anthracnose could be introduced into North Dakota. This could mean that previously resistant varieties may now be susceptible to anthracnose.

Growers need to be alert for anthracnose in their fields as weather conditions favorable for its development have occurred in some areas of the state. Anthracnose is primarily spread by the movement and planting of infected seed. **The department has taken measures to ensure certified bean seed produced in North Dakota is free of anthracnose. North Dakota certification rules require that harvested seed from each field be tested for anthracnose and blight.** The bean anthracnose test is a pass or fail test. Any amount of anthracnose found in a sample will result in a failed test. Please feel free to contact the department for additional information regarding anthracnose.

## Reminder

**Seed samples submitted for a pre-germ test must include the field application number.** This will allow us to associate the proper germination result with the conditioned sample when it is submitted for purity analysis.

## Reminder

**Research fees** are due September 15. If you have not already done so, please remit payment promptly to the Seed Department for seed you sold through June 30, 2007. **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.

## Notes from the Seed Lab

*Mark Hafdahl, Seed Lab Manager*

We are starting to get samples of cereal grains in now. We have observed some scab in winter wheat and to a lesser extent in spring wheat. We have also seen a few samples of spring wheat that have moderate sprouting. These samples can be a problem if they are tested for germination prior to conditioning as the conditioning process will damage the embryonic axis and reduce germination. If you have sprouted wheat, be sure to test the germination after conditioning.

Bean harvest will start soon so I will repeat my yearly warning. Low moisture beans are very susceptible to mechanical damage. Generally, hand harvested beans would have a germination of about 95%. If you treat your beans gently you could have 95% germination also, but rough handling during harvest and conditioning could drastically reduce the germination of your seed.

The seed lab looks forward to serving your needs. If you have any questions give us a call.

## Seed Analyst Training

Jeanne Mueller and Danilo Martinez attended a four day seed school at the Federal Seed Laboratory in Gastonia, North Carolina. Training included structure, general purity separations, and identification of similar species.

Analysts from ten states were present so our analysts also got a chance to learn how other states operate and what their specific problems are. Jeanne and Danilo noted that most labs only deal with a few species whereas we deal with a broad range of species. The contacts made there will be valuable in their careers as seed analysts.

## Completing Final Certification

Steve Sebesta, Deputy Commissioner

Every year we encounter situations where seed growers incorrectly think that the field inspection is the only step required for seed certification. Passing the field inspection alone does not mean the certification process has been completed. Field inspection is just the first step in producing a quality certified seed product. In order to be labeled as certified seed, all field-inspected seed must be cleaned to remove impurities and then tested at the department's seed lab to determine whether the seed meets the minimum seed standards for the crop and class.

### Testing prior to conditioning

In order to determine whether additional investment in conditioning is justified, growers should submit a sample of their field-inspected seed for germination and disease testing. Samples should be cleaned with a hand sieve or mini mill to approximate the quality after conditioning. Remember to include the field number on the sample envelope. The results of the pre-germ and disease tests may be used for final certification or another sample may be submitted following conditioning. Pre-germ tests cannot be used for final certification on fragile crops such as soybeans, edible beans, and field peas due to their susceptibility to damage from handling. Germination tests on these crops must be done following conditioning.

### Conditioning, testing and labeling

Growers have a number of conditioning and marketing options available to them, depending on their marketing skills and the level of management and handling they desire.

- (1) The grower may condition their own field-inspected seed on their own premises with their own equipment. The grower must then complete a Sampler's Report and submit a representative sample of cleaned seed to the Seed Lab for testing. If the seed meets the minimum requirements for the crop and class, it may then be labeled as certified seed.
- (2) A grower that does not want to clean, label the seed in their own name and market that seed, may sell their field-inspected seed "in the dirt" to an *approved conditioner* or *approved bulk retailer* who will assume the responsibility for conditioning the seed, completing final certification and marketing. An approved conditioner is one that has been inspected by the State Seed Department, possesses the proper equipment and has demonstrated the ability to clean and handle certified seed properly. Approved conditioners must have a current permit issued by the department. Only facilities approved to condition and handle certified seed may condition field-inspected seed. Likewise, an approved bulk retailer is set up to handle and retail seed at their facility.

If ownership of the seed is transferred to an approved conditioner or bulk retailer, the grower must complete a Grower's Declaration when the seed is delivered for conditioning. Transfer of unconditioned seed to other growers is not permitted.
- (3) A grower may utilize an approved conditioner to clean their field-inspected seed and then label that seed in their own name. The conditioner will submit a representative sample along with the Sampler's Report to the Seed Lab for analysis. The conditioner will indicate on the Sampler's Report that the seed is to be labeled in the grower's name. Providing the sample meets the minimum requirements for the crop and class, bulk certificates will be issued in the grower's name, and the grower may then sell that seed legally.

### Approved conditioners and retailers are listed on our website ([www.ndseed.com](http://www.ndseed.com)) and in the North Dakota Seed Directory.

Complete procedures and requirements governing the production, conditioning, and labeling of certified seed are published in Bulletin 51, North Dakota Field Seed Certification Standards. If you need a copy, please call the department. They are also available on our website under the Field Seed Program.

## Seed Regulatory Report

Joe Magnusson, Regulatory Manager

All seed exposed, offered or transported for sale to the public must be truthfully and properly labeled and represented. The Regulatory program is responsible for collecting samples from seed dealers and vendors, analyze the seed and compare the results to the label claim. If a discrepancy is found, a “stop sale” order is issued and the product must be relabeled or removed from sale.

The Regulatory inspection team drew 1,619 samples for truth in labeling testing. “Stop Sale” orders were issued on 110 seed lots that were improperly labeled or found to be out of tolerance with label claims. The following is a breakdown of the “Stop Sales” issued:

Out of date labels .....	42	Incomplete labels .....	6
Excess inert matter...	30	Excess noxious weeds...	4
Low germination .....	20	Wrong variety .....	1
Excess other crop.....	7		

The following is a breakdown of the crops analyzed:

Alfalfa.....	14	Field bean ...	116	Rye .....	1
Barley .....	126	Field pea .....	42	Safflower.....	3
Buckwheat.....	2	Flax .....	30	Sorghum.....	3
Canola .....	34	Grass.....	27	Soybean .....	474
Chickpea.....	3	Millet.....	4	Sunflower.....	65
Corn.....	117	Mustard .....	2	Sweet clover .....	4
Durum.....	37	Oat .....	19	Wheat.....	496

The Seed Labeling Fee Permit system requires that any person or business that labels seed must have a permit, report seed sales and submit a fee annually to the State Seed Department. **There are still a number of certified seed growers and nonresident seed dealers that do not have a permit to sell seed in North Dakota.** An application for a permit and a reporting form for seed sales will be sent to these individuals or companies to bring them into compliance.

The annual reporting form for seed sales was sent to permit holders June 29 and was to be returned by August 1. A late fee applies on reports returned after the August 1 deadline. If you have not returned your form, please do so as soon as possible. The reporting form must be returned even if no sales were made in the reporting period. If you do not sell seed and wish to cancel your permit, check the appropriate box at the top of the form and return to our office.

## Schrage Joins NDSSD

Mr. Willem Schrage has assumed the position of Director of Potato Programs with the North Dakota State Seed Department. Many of you are familiar with Mr. Schrage and his extensive background in the potato industry. He currently serves as Supervisor of Minnesota Department of Agriculture Potato Program, providing oversight and leadership to certification, shipping point and testing services for the past 13 years. From 1985 to 1994 he served as the manager of the New Brunswick Potato Agency with duties associated with promotion of the provincial potato industry, immediately following a three-year assignment as Seed Potato Specialist with the province. Prior experience included stops in Tunisia, Turkey and Peru focused on development and extension work in seed potato certification and research.

Schrage holds a Masters Degree from Agricultural University, Wageningen, the Netherlands. He is active in a number of national and international associations, and serves as Secretary of the Seed Certification Section of the Potato Association of America (PAA), and various committees of the National Potato Council and US Potato Board. He also serves the UNEC as a multilingual representative in discussion involving potato pests, trade and phytosanitary issues, and has spoken extensively regarding aspects of potato pathology and seed production.

We are pleased to have someone with Willem's experience and knowledge of such a wide variety of potato programs join our agency. His knowledge of the seed industry, our agency and grower base will allow Willem to integrate rapidly into his position, and greatly enhance our program's quality and credibility. His background in leading staff, interacting with growers and representing seed potato producers at state, national and international levels will be a great benefit to our state's seed industry.

## All Wheat Varieties are Not Equal

Wheat varieties may look similar on the outside, but they all perform differently under the kernel. Raising producer awareness of these end-use performance differences is the goal of the North Dakota Wheat Commission's Hard Red Spring Wheat & Durum Performance Contest. Now in its third year, the contest aims to reward producers for raising high quality wheat that takes not only yield, but performance into consideration. Cash prizes of \$400, \$250, and \$150 will be awarded to producers submitting the top three samples of hard red spring and durum. Cash prizes are sponsored by the NDWC and industry partners: U.S. Durum Growers Association, U.S. Milling Industry, and the Wheat Quality Council.

Samples will be judged on physical traits and protein content with the top 10 advancing for milling, dough mixing and end-use testing: bread baking for hard red spring, pasta processing for durum.

Elevator drop points for samples are located throughout the state. Contest brochures, sample bags and entry forms are available at elevator drop points or directly from the NDWC office. Producers are asked to submit an 8-pound farm sample of a single wheat variety from the 2007 harvest. **Samples must be delivered to participating elevators or mailed to the NDWC by September 30, 2007.**

Finalists and winners will be recognized at the Crop Outlook & International Durum Forum, Nov. 6 in Minot, and at the National Hard Spring Wheat Show in mid-February in Williston.

For more information contact the NDWC at 701-328-5111 or visit [www.ndwheat.com](http://www.ndwheat.com).

### Contest Elevator Drop Points

- Arthur — Arthur Companies
- Beach — Beach Co-op Grain Co.
- Berthold — Berthold Farmers Elevator
- Cavalier — Farmers Co-op Elevator Co.
- Colfax — Colfax Farmers Elevator Inc.
- Crosby — New Century Ag
- Devils Lake — Lake Region Grain
- Dickinson — Southwest Grain
- *Also main terminal at Gladstone*
- Edgeley — Dakota Prairie Ag
- Falkirk — Falkirk Farmers Elevator
- Fessenden — Fessenden Co-op Assoc.
- Hazen — Falkirk Farmers Elevator
- Milton — CHS Inc.
- Northwood — Northwood Equity Elev.
- Russell — Souris River Co-op
- Scranton — Scranton Equity Exchange
- Sterling — South Central Grain
- Taylor — Southwest Grain
- Valley City — AGP Grain Ltd.

## Sampler's Reports

A completed Sampler's Report must accompany all certified samples submitted for laboratory analysis and final certification. The Sampler's Report and sample should be submitted by the seed conditioner. All pertinent information must be on the report before the sample can be tested. Information required includes labeler, conditioner, field inspection numbers associated with sample, class of seed to be labeled, bin number, number of clean bushels, number of bulk certificates requested. Remember, each bin is a separate lot and requires a separate sample. Incomplete reports will cause a delay in service as we WILL NOT perform the requested tests until we have the correct information.

## Lab Fees Increase for Some Tests

The Seed Commission approved increases in fees for several tests performed in our Diagnostic or Seed Labs. The new prices, effective September 1, help offset increased operating expenses attributable to higher labor costs or testing materials. The tests listed below are the only tests affected.

	Current	New
Test Wt/Seed Count	\$ 3.00	\$ 4.00
Accelerated Aging	12.00	14.00
Ascochyta	75.00	80.00
Anthracnose	65.00	70.00
Barley Loose Smut	30.00	35.00
Electrophoresis	70.00	75.00

## Potato Summer Virus Testing Conducted by Diagnostic Lab

The annual Potato Summer Virus Testing Program was conducted July 16 through August 3. This program allows certified potato growers an opportunity to test their seed fields for several viruses including PVX, PVY, and PVYn. GMO tests were also offered. This service is optional to all growers with the following exception: PVY tests are required for all Silverton, Shepody, and Russet Norkotah varieties, regardless of generation. These varieties are considered latent virus carriers and do not always express symptoms in the field.

The lab performed over 400 individual virus and GMO tests on more than 200 potato leaflet samples. Each sample was ELISA (enzyme-linked immunosorbant assay) tested using 400 individual leaflets composited into 40 test wells of 10 leaflets each. GMO tests were conducted using 10 test wells of 40 leaflets each and were also ELISA tested. The amount of virus found overall was low. No PVX, PVYn, or GMO positives were detected in any sample. PVY was detected in a small number of samples, but was at lower levels than seen in the past several years. Generally, samples were tested within one day of receipt. Growers with questions about their test results or how a test is performed are encouraged to contact the lab.

Thanks to all the growers who submitted samples for testing. All samples submitted this year were of excellent quality. We greatly appreciate the care in packaging and prompt delivery to the lab for testing.



photo caption?

## Ascochyta Testing in Pulse Crops

Jeff Prischmann, Diagnostic Lab Manager

Ascochyta blight is an important disease of pulse crops such as chickpea, lentil, and field pea. Significant yield losses can occur in a chickpea field infected with extremely low levels of ascochyta if environmental conditions are favorable for the development and spread of this disease. Some researchers consider ascochyta blight to be the most important disease of chickpeas worldwide. The fungus *Ascochyta rabiei* causes Ascochyta blight in chickpea. This organism is capable of infecting all above-ground parts of chickpea plants including stems, leaves, pods, and seeds. For these reasons, conducting a laboratory test for the presence of ascochyta is extremely important for chickpea seed. Ascochyta blight is also an important disease of lentil and field pea. Laboratory testing for ascochyta is also important in these crops.

Our department offers a 500 seed test for the presence of ascochyta in chickpea and other pulse crops including lentil and field pea. This test currently costs \$75 per sample. A 1,000 seed test ascochyta test is also available for chickpea at \$100. Growers submitting samples for these tests need to submit sufficient seed. Lentils require ¼ lb of seed while larger seeded crops such as chickpea require ½ lb or more for this test alone. Submit additional seed for germination and purity tests. Test results are reported as percent infected seed. The test typically is completed in 7-10 days.

Producers that may need Ascochyta testing during the upcoming testing season are encouraged to submit samples as early as possible. With the increased amount of Ascochyta tests the Diagnostic Lab has conducted over the past three testing seasons, growers are advised to submit samples early in fall or late summer to make sure samples are tested in a timely fashion. Early season testing allows us to more efficiently process your sample and in turn provide our customers better testing service.

The Ascochyta test is required for labeling of chickpea and lentil seed, and test results must be on the label.

## Reminder

**Unconditioned Carryover Reports** must be submitted by October 1 in order for unconditioned, carryover seed from fields that passed field inspection in 2006 to be eligible for final certification this year. Carryover certified seed does not need to be reported, however, a new sample must be submitted to the department for a new germination test to ensure it meets labeling requirements.

## North Dakota State Seed Department

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# NDSSD Calendar

- September 15** ..... Research fees due
- September 16-18** ... Midwest Shippers Association Grains Conference, Fargo
- October 1** ..... Unconditioned Carryover Seed Report due
- October 1** ..... Applications due for approved seed conditioners and bulk retailers
- November 6** ..... International Durum Forum, Minot
- December 4** ..... SW District Crop Improvement Association, Dickinson
- December 5** ..... NW District Crop Improvement Association, Minot
- December 6** ..... NE District Crop Improvement Association, Lakota
- December 7** ..... SE District Crop Improvement Association, Casselton