



The North Dakota Seed Journal

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Newsletter of the North Dakota State Seed Department

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NDCISA Presents 2014 Awards

Every year the North Dakota Crop Improvement and Seed Association selects a Premier Seed Grower. The Premier Seed Grower Award recognizes individuals who have successfully grown registered or certified seed for several years and have significantly contributed to the certified seed industry. The recipient of this year's Premier Seed Grower Award is Kurt Bollingberg.

Kurt is from Cathay, ND in Wells County. Kurt has been producing seed in that area for approximately 30 years. He has grown beans, corn, wheat, barley, oats, and peas.

Kurt is very active with 4-H and FFA, township board, various elevator boards, Wells County Better Seed & Grain, ND Edible Bean Growers, Farmers Bureau, Farmers Union and his church board.

The NDCISA also presented its 2014 Distinguished Service Award to Steve Sebesta. Steve served first as the ND State Seed Department's Director of Field Seed Programs and then Deputy Seed Commissioner from May of 2003 until December, 2014.

During his tenure, Sebesta served as a Program Coordinator to the NDCISA Board of Directors among many other liaison positions with many commodities throughout the seed industry. As Deputy Commissioner, he organized and managed field crop certification and laboratory service areas of the Seed Department. His work at NDSSD was invaluable to the advancement of the seed industry in North Dakota.

Congratulations to both Kurt Bollingberg and Steve Sebesta!

AOSA/SCST Annual Meeting 2014

Jeanna Mueller, Seed Lab Manager

The AOSA/SCST Members of North Dakota are hosting the 2014 annual meeting in Fargo at the Holiday Inn, May 31–June 5. These organizations are made up of state and private seed labs, crop improvement associations and large seed companies throughout the US and Canada. The business meetings taking place are to insure quality seed testing, harmonization, and uniformity between labs throughout the nation. These organizations are created to benefit the seed grower as well as the seed buyer.

This opportunity of hosting the annual convention is a great way to showcase ND and the diversity of agriculture in the area. The ND Ag Commissioner, Doug Goehring, is giving a brief overview of ND agriculture at our opening session. One evening we will be taking a tour of the new greenhouse located west of the NDSU campus, NDSSD and dinner to follow at the Fargo Air Museum. Our banquet entertainment this year is local historian Steve Stark.

Lab Training and Certification

Ciara Clark, one of our senior seed analysts has passed all the tests required to receive the CSA (Certified Seed Analyst) and RST (Registered Seed Technologist) certifications. Congratulations, Ciara!

We have plans to send one of our newer seed analysts to the Iowa State Seed School for the teaching and training germination course to work towards her certification.

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From the Commissioner's Desk

I've learned a great deal since coming to the Seed Department. Absorbing and applying cereal and field crop material isn't bad since that's my background. Early in my tenure here I learned...that I had a lot to learn about seed potato certification. I also discovered that it's a tough business.

Potato seed production in North Dakota is a critical part of our agriculture industry. We consistently produce from 17,000 to 20,000 acres of certified seed, ranking second behind Idaho in seed acres. The health of the potato seed industry is critical to the well-being of the commercial potato industry and the state's ag economy.

I have immense respect for potato growers in general and seed growers in particular. They are progressive, risk takers and borderline insane; considering the per-acre outlay, fickle markets and production challenges in an industry where the product is perishable. Virus, bacteria, plant pathogens, soil-borne pathogens, insects...the list of certification challenges seems endless. I'll focus today on virus, especially Potato Virus Y (PVY) commonly called mosaic.

Successfully passing certification of a seed potato field/lot is influenced to a great extent by what is growing nearby. Those previously mentioned viruses are vectored by insects from within and outside the seed field, meaning that any level of virus in the area may inhibit the chance of the seed field passing certification. Even worse, virus begets more virus; increasing with each generation planted. Inoculum load increases and the disease cycle narrows. The ONLY thing that limits the virus load in potato country is the planting of clean, or nearly clean, seed.

North Dakota has a seed law that requires the use of certified seed in production of all potatoes in fields of one acre or more. The law was passed with the intent of limiting the buildup and

Ken Bertsch..... State Seed Commissioner
Willem Schrage Director, Potato Program
Joe Magnusson Field Seed Program Manager
Jeanna Mueller..... Seed Laboratory Manager
Jeff Prischmann.. Diagnostic Laboratory Manager
Kris Steussy Administrative Officer
Mike Oosterwijk Potato Program Supervisor

transmission of diseases, and works to an extent since certified seed contains little or no viral or bacterial disease. However, North Dakota also has an exemption to the seed law that allows a commercial grower to replant his/her own commercially produced, non-inspected potatoes for one year after the initial purchase. The "year-out exemption" was added to original seed law legislation to get the bill passed at a time when virus in general, serious and mutating mosaic virus in particular, was not the problem it is today.

Many researchers and industry experts are justifiably concerned about new necrotic strains of PVY becoming a serious production problem in North Dakota. In layman terms, necrosis is a brown discoloration you find when peeling or cutting the tuber. Infection by necrotic strains of PVY virus (among other reasons) can lead to necrosis of tubers. This admittedly unscientific look at the PVYn (n≈necrotic strain, of which there are many) issue begs the question; what happens if the necrotic strains gain a foothold and the inoculum (virus) load increases? More importantly, what if the

problem is compounded by replanting of non-certified seed?

Producing seed potatoes is not for the risk averse farmer. Assuming more operating risk (producing seed potato) seems unlikely when other alternatives exist. I make these points in conversations with commercial growers: Would you like seeing fewer seed farms/ acres in ND? How would you like to search for and acquire your seed from out-of-state? I don't believe this is overstating the issue; it's the reality of the situation in the future.

Our seed growers tread lightly on the year-out exemption issue, fearing adverse commercial industry (customer) reaction. I'm a certification guy, and am comfortable saying it: is the year-out exemption to the seed law really in the best interest of the North Dakota potato industry today? I maintain, for the best interest of the seed grower AND the commercial grower, the planting of non-certified seed in this state should end. Both sectors of the industry would benefit.



Administrative Corner

Bulk Certificates: When you receive your printed bulk certificates for seed sales, there is a log sheet attached behind the certificates. This is a simple, consolidated record-keeping system and replaced the need to return the old yellow copies of three-part forms used in the past. Each sale should be recorded on the log sheet corresponding to the serial number that was used.

Each set of bulk certificates is for your specific lot. Please double check to be sure you are using bulk certificates for the actual lot being sold. **The bulk certificate issued MUST match the seed lot delivered to the customer.**

When all the seed is sold, please return the unused bulk certificates and the log sheet to the Department. **The due date for returning your log sheets and unused certificates has been changed to September 1.** If you do not sell any of the seed, please return all the unused certificates along with the log sheet. The top portion of the bulk certificate is yours to keep for your records.

Annual Reporting: In an effort to make document management and reporting easier for growers and the agency, we are making some administrative changes to annual reporting and deadlines.

Beginning this year, we will be sending out annual reporting forms in one package. In early July, please be looking for an envelope containing the following reports:

- Annual Report of Agricultural, Vegetable and Flower Seed Sold in North Dakota
- Annual Variety Development Research Fee Report
- Annual Report of Carryover Seed

Additionally, the deadline for all annual reports above (and return of unused *bulk certificates and log sheets*) will be changed to September 1.

Please contact our staff for assistance in completing any of these reports.



The North Dakota Certified Seed Potato Growers Association (NDCSPGA) launched a program in February designed to alert

neighbors of the serious problem of spray drift in certified seed potato production.

Seed potato growers have experienced glyphosate damage to growing seed crops, and carryover problems to seed quality in the following year. Early in the season, glyphosate drift can cause misshapen tubers. Late season drift harms the yield potential of the current year crop, and causes late emergence or reduced emergence on the following year crop. Research is indicating that dicamba drift will cause even more pronounced effect on tuber defects, yield and germination in potato. Trials have shown germination of affected seed potatoes can be reduced to near-zero.

Signs will be constructed of ¼" Diebond (aluminum composite material) in a 24"x24" dimension. The signs shown above have been ordered and will be available at the NDSSD Graf-ton office at a cost of \$20 per sign.

Field Inspectors Needed for 2014

The Seed Department is looking for part-time field inspectors for the upcoming crop season. Currently, we have openings in the Oakes area, Steele county and west, Belfield/Beach area and Walsh county. The season is approximately six weeks, starting about the last week of June (depending on the season) until all assigned fields are completed, approximately mid-August. It is preferred that inspectors reside in the county in which they work.

Applicants must be in physical condition to walk fields in a variety of weather conditions, be highly motivated, self-directed and detail oriented.

Classroom and field training will be provided. State vehicle and per diem are furnished. Applicants must have a valid driver's license.

If interested contact Galen Briese at the NDSSD, 701-231-5440.

Diagnostic Lab Test Completion Times

Jeff Prischmann, Diagnostic Lab Manager

As the end of the testing season approaches, a reminder that test completion times may vary depending upon the test type. The Diagnostic Lab conducts three major types of tests including seed health, adventitious presence, and variety identification. Test completion times are not the same for each type. Also, completion times for these tests are not the same as tests conducted in our seed lab.

Most seed health tests require approximately 7 to 10 days to complete once the test has been started. These tests usually involve a grow out of select number of test seeds from the sample. This timeframe allows an adequate time for the disease causing pathogen to grow on the seed. After the designated time period, the samples are evaluated for pathogen presence. Also, some pathogen tests are ELISA based antibody tests. These types of tests usually take 2-3 days to complete.

The Diagnostic Lab conducts adventitious presence tests primarily on soybean. These tests include both DNA and antibody based tests (ELISA, flow strip). Completion dates on these tests are 2-3 days once the test has been started.

Variety identification tests are conducted in the Diagnostic Lab on both service and certification samples. The testing is handled the same for each type. Variety identification tests for wheat are conducted using protein electrophoresis. This test generally is completed within 7 days depending upon when a sample is received. Variety identification tests for barley and field pea are performed using a DNA test. Completion dates on this test is generally within 10 days. Sample loads during these times may increase or decrease completion dates slightly.

If there are any questions on when a sample test will be complete, please contact the Diagnostic Lab for more information.

Reminders for Certified Seed Applicants

Joe Magnusson, Field Seed Certification Manager

Plant Seed Fields on Eligible Ground: Seed fields cannot be planted on the same type of crop that was planted the previous year unless the same variety was planted and was inspected by the NDSSD. Contact the department for specifics on eligibility for your field.

Apply For Inspection: Every year we have growers that don't apply for field inspection, even though they planted seed eligible for certification. If you planted Foundation or Registered class seed, get the applications submitted and be sure that the fields(s) have been inspected and passed prior to harvesting. If your field is not inspected we cannot bring your grain back as a certified class and you will miss the opportunity to sell certified seed for a premium price. Call us for an application for field inspection or go to our website and fill out an application for field inspection before the June 15 deadline.

Submit Maps and Tags/Labels: When your application is submitted, we require a FSA map of your field and the Foundation or Registered bulk certificate or tag you received when you purchased your seed. If you have questions regarding eligibility for certification or you need assistance filling out the application, call our department and we will assist you.

Pay Attention to Certification Standards: There are three factors that result in failure of fields each year. One is Field Bindweed which must be controlled before the inspector arrives in your field.

If the bindweed is not controlled or cannot be isolated, the inspector will reject your field for certification. The second factor is other crop in your fields, exceeding the ND seed certification standards. The third is lack of isolation between inseparable other crops. By ND certification regulations, a five-foot isolation is required between crops that are not separable during conditioning. If the required isolation is not in place when the inspector arrives, you will be required to isolate the field and will be charged for a re-inspection of that field.



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NDSSD Calendar

- May 1** Field inspection applications due for grasses
- June 15** Field inspection applications due for all crops except soybeans requiring one inspection, buckwheat and millet
- July 15** Field inspection applications due for buckwheat and millet
- Aug. 1** Field inspection applications due for soybeans requiring single inspections
- Sept. 1** Deadline for submitting:
- Annual Report of Seed Sales
 - Research Fees
 - Log Sheets and unused Bulk Certificates