



The North Dakota Seed Journal

APRIL 2024

Newsletter of the North Dakota State Seed Department

Inside

- 1 Deadlines Improve Efficiency
- 1 Loose Smut Testing
- 2 From the Commissioner's Desk
- 2 Improving Your Online Experience
- 3 Selling Common Seed
- 3 Field Inspection Application Tips
- 4 Seed Lab Updates
- 4 Happy Trails!
- 5 USDA GAP Audits: What You Need to Know
- 5 Sauter Promoted to State Supervisor
- 6 Calendar



Deadlines Improve Efficiency

Jason Goltz, Certification Manager

Field inspection applications for most crops are due June 15; single inspection soybean deadline is August 1. Missing the deadline will add an additional \$1 per acre to the cost. It is best to submit an application on time rather than not, because a field application can be withdrawn at any time before the inspector shows up to the field; a withdrawn application will have the fees refunded minus a \$20 administrative fee.

When applications arrive at the department, all staff participate in processing, approving and preparing them for our inspectors. After applications are processed, most Fargo staff are out field inspecting along with seasonal inspectors. Because of this, processing late applications and distributing field inspection reports to the appropriate inspector may be delayed which, in turn, could delay timely harvest.

It is best to submit the application as soon as the field is planted instead of waiting for the deadline. Although weather may influence the ability to meet the deadline, in some cases applicants simply forgot to apply and were subject to the late penalty. This seemed to be the case in 2023 when applicants started spraying fields and didn't submit their applications until after the deadline. In some cases, we received applications for spring wheat in August and September when the applicant was ready to harvest.

Each year, some applicants can't apply on time because they were not issued a bulk certificate when they purchased their seed. You must receive the bulk certificate at or before the time of sale. There have been instances in the past where a certificate was not issued because the lot was not certified. This practice may result in numerous seed law violations. Contact the department if you need assistance getting a certificate from the retailer.

When submitting an application, ensure the following:

- The application is filled out completely and accurately
- The application is signed
- Payment is included
- A map for each field is included
- Tags or bulk certificates are included for each planted lot

Plan ahead and watch for the deadlines. Our staff want to provide our inspection services promptly and efficiently. Contact us with questions about the field inspection application process.



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.

ND State Seed Department
p 701.231.5400 f 701.231.5401
ndseed@ndseed.ndsu.edu



Loose Smut Testing

Presley Mosher, Diagnostic Lab Manager

One of the seed health tests the Diagnostic Lab offers is for loose smut disease on barley. The fungus that causes loose smut, *Ustilago nuda*, lies dormant in infected seed. In fact, this specialized fungus can only survive year to year within seed. When an infected kernel is planted and germinates, the fungus becomes

Loose Smut Testing
continued on page 5

From the Commissioner's Desk

This article is less a goodbye than a huge thank you to an individual whose service has changed our agency and the industry we serve.

We've all seen great employees retire or depart from service to our organizations. We've had quite a few over the past few years; losing decades of experience in core competency areas is seldom easy and always tough to replace. It's tougher when you lose an exceptional teammate and partner.

I've never done a newsletter article on a retiring colleague, but will make an exception in the case of Steve Sebesta. By the time this edition of Seed Journal hits our readers Steve will have retired from service with the ND State Seed Department and NDSU Foundation Seedstocks project. His goal may be to fade into the sunset, and he'll probably dislike an article about his service, but he's done so much for this organization that some kind words are well-deserved.

Steve joined the Seed Department in May, 2003 as Field Seed Program Manager after a career spent primarily in crop breeding, wheat and sunflower in particular. We knew Steve had a diverse background when he came on board; I had no clue the number of issues he was either familiar with or had expertise in. Intellectual property, seed testing and seed quality, disease and pathology issues and many other technical issues were in Steve's "wheelhouse", certification and regulatory issue were an easy grasp. I shouldn't have been surprised, as his academic resume includes BS and MS degrees along with the twenty-plus years in the seed industry at that time.

Steve was appointed Deputy Seed Commissioner shortly after his arrival; because the Commissioner soon learned he could do much more than run Field Seed operations, and was more than capable of overseeing Lab Services, Seed Regulatory programs and administrative responsibilities too. I had also figured out that we had the rare "technical expert-great with people" type of individual on

Ken Bertsch.....State Seed Commissioner
Steve Sebesta.....Deputy Seed Commissioner
Adam Winchester.....Director, Potato Program
Jason Goltz.....Field Seed Program Manager
Jeanna Mueller.....Seed Laboratory Manager
Presley Mosher.....Diagnostic Laboratory Manager
Starr Thies.....Business Manager
Dustin Smith.....Regulatory Program Manager
Robert Sauter.....Potato Program Supervisor

our hands, and that we should take advantage of it. One of our close colleagues refers to Steve as "the unicorn"; worthy of a chuckle but not too far off the mark. I'm of the view that if you have a thoroughbred, you let them run.

Steve left service here for a three-year period from 2013-16, and rejoined us as Deputy Commissioner in January of 2017. He took on the additional role of Director of NDSU Foundation Seedstocks Program not long after and has served in the dual role since.

His background in corporate ag provided for a different approach to work systems and program management. Being focused on process and procedure, he developed an internal SOP's process that is used today in managing our field seed/regulatory inspection program. That systematic approach to identifying and creating operational improvements has benefitted the organization and its people, who continue using the processes Steve implemented. Whether intentional or not, we now have many current and former teammates that have benefitted from his mentorship in many operational and technical areas.

Steve brought his competence and expertise on seed quality assurance issues to bear with our national organization as well. He served on numerous and important AOSCA committees for years, including sunflower and small grain variety review boards and numerous crop committees including small grains, hemp, soybean and others. Additionally, he served on the AOSCA Board of Directors from 2008 to 2013 and as the organization's president in 2012-13. Steve's fingerprints are on AOSCA national standards for multiple crops and he's played a lead role in variety review processes at the state and national levels with university programs and private companies alike.

I could go on, but I think you get the picture. Steve deserves every accolade and compliment we can toss his direction, and his service to our industry can't be understated. We'll miss him here at the Department, and his colleagues around the country who read this article will concur with my respect and thanks for his work and friendship.

Well done Steve, enjoy your well-earned retirement, and here's hoping that the fish are biting!



Improving Your Online Experience

The Seed Department understands the need for a robust online platform to provide customers with timely and accurate data. To optimize user experiences, we are transitioning our online customer data from WinHost to Azure. Azure will provide enhanced performance and security, improved reliability and real-time results through seamless integration with NDSSD's custom software.

Over the coming weeks, you will see minor changes to the look and feel of our customer website. These changes are designed to improve usability and optimize performance, thereby improving your experience. Your feedback is invaluable to us so if you have any questions, concerns, or feedback regarding the new website, please reach out.

We are excited about this transition and the opportunities for improved service and the ability for growth it provides.

Selling Common Seed

Dustin Smith, Regulatory Program Manager

For various reasons, between varieties expiring from PVP, increasing cover crop usage or alternative market opportunities, common seed has become a more common find during regulatory inspections. I get a lot of questions about labeling common seed, and there seems to be some confusion about what makes a label legal.

First and foremost, a legal label must accompany any transfer of ownership of seed, no exceptions; regardless if money changes hands, regardless if the recipient is planning to grow a commodity crop, regardless of your personal relationship, regardless. We don't regulate what a seed label looks like, only that it complies with state and federal law. The entire state seed law, as it pertains to labeling, maybe found on our website under "Rules and Standards" then "State Seed Laws."

According to state statute 4.1-53-13, a label must include at minimum:

1. A lot number or lot identification;
2. The state or country the seed was grown in, or a statement indicating the origin is unknown;
3. The percentage by weight of all weed seeds (state law allows no more than 1% weed seeds);
4. The name of each restricted weed present and its rate of occurrence per pound if there are more than five seeds per pound, or 13 seeds per pound in grasses and small seeded legumes;
5. The percentage by weight of any other agricultural seeds (other crop) present;
6. The percentage by weight of inert matter;
7. The percentage of germination, the percentage of hard or dormant seeds if applicable, and the month and year in which the germination test was completed;
8. The full name and address of the labeler;
9. Additional requirements according to 4.1-53-14 or 19 if the seed is treated or a seed mixture;

Variety Not Stated (VNS) labeling is a relatively common practice in many crops and in many states, but the Federal Seed Act (FSA), the Plant Variety Protection Act (PVPA) and North Dakota state law have specific rules about VNS.

1. Per state law 4.1-53-16, seed of barley, canola, dry beans, durum, field peas, flax, oats, soybeans and wheat must include the variety name. These crops may not be sold VNS in North Dakota.
2. Per PVPA section 128 part 4, any variety that has been protected under a PVP certificate must always be sold by variety name, even after the certificate expires, with the exception of grasses, alfalfa and clovers i.e., ND Gardner and ND Dylan may not be sold VNS even though rye is not currently required to be sold by variety name in North Dakota.
3. Per FSA section 1571 section A part 1, if a crop kind is typically labeled by kind and variety, not just kind, it must include the variety name or "Variety Not Stated". The acronym "VNS" is not allowed on a label.

If your name is on the label, you are responsible for the label and the contents of the package so it is important to know labeling laws. Selling a protected variety with a common seed label may be a PVP violation, which can carry a penalty of up to \$10,000 per occurrence. We encourage anyone selling common varieties

to have genetic ID testing done, especially on crops with a lot of protected varieties like barley, durum, field peas, oats and wheat. As the regulatory agency, we are checking common seed lots for variety identity to ensure proper labeling.

In addition to variety identity, we also take weeds seriously. All seed labels must have a noxious weed statement, but the standard noxious weed check included with a purity analysis only identifies weed seeds that are considered noxious in North Dakota. Any interstate transfer will require a noxious weed seed test for the state into which the seed is being shipped. We recommend getting an All-States Noxious test, especially if you are packaging common seed or are selling seed to out of state buyers.

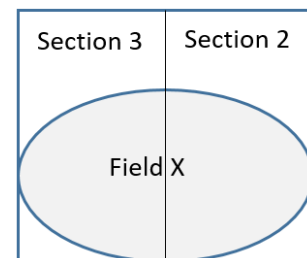
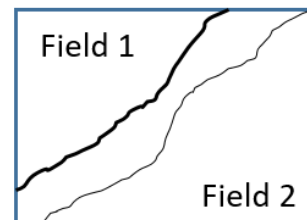
If you have questions about selling common seed, feel free to give me a call.

Field Inspection Application Tips

Ciara Clark, Field Seed Specialist

With planting season getting underway here are a few reminders when submitting your field inspection applications.

- Submit applications early; this helps us get them approved and processed in time to distribute them to inspectors at our annual training session.
- Include a bulk certificate or tag for proof of seed eligibility.
- Include FSA maps (or equivalent) so inspectors can verify proper location.
- Isolation strips are required between inseparable crops or varieties of the same crop, 5 ft minimum; make sure to have them in before the inspection.
- If you have a section or quarter of land that has a physical barrier that cannot be crossed or is completely separated by a strip of land requiring the inspector to enter the field from multiple locations to complete the inspection, make each portion a separate field.
- If you have a field that crosses a section line, but planted as one continuous field, enter it on your field inspection application as one field. Also note on the application form that field X is in sections 2 & 3. Maps must be included for each section.



Seed Lab Updates

Jeanna Mueller, Seed Lab Manager

This year has been a different year all around. Sample flow this season has been very sporadic. Seed quality has been really good following a dry growing season. Our lab hasn't seen too much mechanical damage or disease issues.

Germination tests

- Small Grains- tests are average to good without many seed quality issues. We have not seen a high presence of scab this year.
- Soybeans- germination scores have been average to good.
- Field Beans- test scores have been average.
- Field Peas/Chickpeas- most test scores have been in the 70's to 90's
- Lentils- test scores have been average to high with most scores in the high 80's to 90's.
- Flax- germination test scores have ranged in the 70's-90's

Purity tests

- Test results have been as usual.

AOSA annual meeting

The 2024 AOSA/SCST annual meeting will be held in Rapid City, SD June 3-6. I will be attending AOSA board meetings before the meeting. There are 12 rule proposals scheduled for review. Most of them include adding new species to the rules. We also have to clarify some statements or add to sections in the AOSA Rules for Testing Seeds. The process of adding new species to the rules is not an easy one. The species to be added have to go through a scientific process and the proposed test methods must be vetted by many labs to ensure they have the best testing methods.

Analyst Certification

To become a certified seed analyst, an analyst must have enough work-hours, seed schools and/or plant science courses to be eligible to apply and take the exam. There are written and practical portions to the test. If the analyst does not pass they will take webinars/courses/seed schools in the area of deficiency and then reapply to retake the test. Ashley Thomas is attending Seed School in Ames, Iowa. She will be working to attain her CSA (Certified Seed Analyst) certification in germination. Jannat Yasmin has been studying and working to be ready to take her CSA in germination next year at Seed School.

I wish everyone a safe and smooth planting season! As always, please call if you have any questions or concerns.

Happy Trails!

Steve Sebesta, Deputy Commissioner

Growing up, I watched a lot of *Roy Rogers* TV shows – in black and white, of course. Some of you will remember that show; if you have no clue – Google it. It always ended with Roy and Dale's cheerful and uplifting rendition of that great song, three versus of the exact same lyrics. I think we could all use more shows like *Roy Rogers* today. Just sayin'.

Fittingly, this is my last Seed Journal entry – May 3 is my final day at the Seed Department and ND Foundation Seed. I have had some great opportunities during my career the last 40+ years. More than half that time I worked in the private sector for the three major seed companies that have shaped modern agriculture but no longer exist in name since being swallowed up by mergers and acquisitions. I've traveled three continents, collaborated with some really smart scientists and worked in agriculture from the southern Great Plains to the North. I've been fortunate to have met and work with a lot of great people wherever I've been. And I've had opportunities to relocate to other states, but in the end, I always realized that there is no better place than North Dakota to make a career in agriculture. People in North Dakota still understand and value agriculture.

I've also been blessed to work at the Seed Department, not once but twice, during my career. And I was privileged to also manage the ND Foundation Seedstock Program for the last seven years. Being in the public sector, providing services to our customers, has its own rewards. As the old saying goes, find something you enjoy and you'll never work a day in your life. Well, I have sincerely enjoyed my time at the Seed Department and Foundation Seed. The staff I have worked with during my 18 years here are the best. They really work hard to provide you with the best service and I'm thankful to have worked alongside them.

Many thanks to State Seed Commissioner Ken Bertsch for allowing me to work for all of you. It's been fun. Thanks also to Agricultural Experiment Station Directors, Drs. Ken Grafton and Greg Lardy for the opportunity to work with all the great folks in Foundation Seed. Lastly, thanks to all of you for making my years here so gratifying. People in ag are the best!

And so, finally, may you all fare well and Happy Trails!



Loose Smut Testing

continued from front page

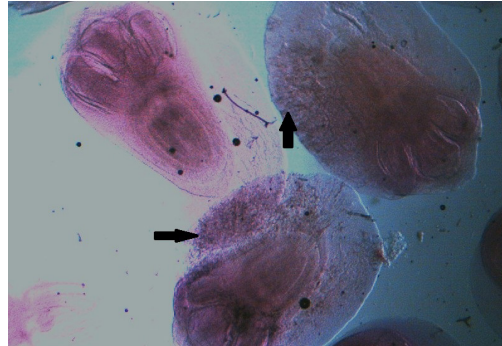
active again and grows within the developing plant. When the infected plant reaches heading stage, the spikelets are made up of dark masses of fungal spores. These spores can spread to other plants in the field resulting in more disease. The potential for disease exists if control methods are not utilized, especially during wet seasons or in wetter portions of fields.

There are several options recommended for control of the loose smut fungus. Planting certified seed, utilizing resistant varieties and applying fungicides to seed are options for preventing the disease.

To test a sample for loose smut at the Diagnostic Lab, seeds are first soaked overnight in a dye solution. The following day embryos are extracted, then washed, and captured on a series of sieves. Next, 500 captured embryos are analyzed microscopically for visual evidence of the fungus (photo). Loose smut incidence is given as a percentage of infected seed of 500 seed tested. A ½ pound

sample of seed is required for the loose smut test.

The Seed Department requires a loose smut test on all certified barley seed. There are no limits on the levels of smut allowed in seed lots, however, at levels of 2% seed infection or higher, the department recommends application of a seed treatment before planting. Please contact the Diagnostic Lab by phone at 701-231-5430 or by email at pmosher@ndseed.ndsu.edu with any questions.



Fungal mycelium of the loose smut pathogen (arrows) visible on the outer tissue of barley embryos.

USDA GAP Audits: What You Need to Know

Adam Winchester, Potato Program Director

Food safety is an important part of our food supply chain. Several audit programs have been developed in recent years to ensure that the food we eat is free from biological, chemical and physical hazards. One of these programs is the USDA Good Agricultural Practices (GAP) Audit Program. Putting these audits into practice in North Dakota is a large undertaking and this responsibility rests on the shoulders of the NDSSD Potato Program. Auditors from the Program audit nearly 80 farms every year and we are the sole designated authority in the state to conduct GAP audits.

Depending on the needs of a farm, a USDA GAP audit entails one-to-two visits a year from NDSSD auditors who will observe harvest and/or storage operations. Food safety training and other documents are also reviewed. The bulk of the audits are conducted from late August through early November, though a GAP audit may be conducted at any time.

This valuable service allows many of our farms to sell their product to large retail chains, food processors, and local grocery stores. Our program has audited a variety of commodities, including potatoes, onions, dry edible beans, tomatoes, leafy greens and herbs. We audit any type of farming operation. Currently, we are auditing wash plants, greenhouses, large commercial farms, and storage facilities. We are licensed to audit small family farms, hobby farms, and distribution centers as well.

The cost of these audits is \$155 per hour and a typical audit takes anywhere from three to eight hours to complete. Larger operations may require more time to complete. It is not uncommon for USDA auditors, from a variety of USDA offices, to travel the U.S. conducting audits. Travel and housing costs are subsumed into the cost of the audit, which

means auditors that travel long distances may charge a large sum. North Dakota growers have an advantage in regards to the cost of these audits when compared to other states, as our auditors are local, and travel costs are kept to a minimum.

The NDSSD has conducted these audits for nearly fifteen years, and we plan to continue to work with North Dakotans so they can get this valuable service. If you are interested in being GAP certified, please contact Adam Winchester at 701.960.8232 or awinchester@ndseed.ndsu.edu



Sauter Promoted to State Supervisor

Robert Sauter, a veteran team member of the Seed Department's Potato Program, has been promoted to the position of Potato Program Supervisor. Robert joined the Department as a potato inspector in November, 2010 and has progressed through Inspector I, II and Senior Inspector positions during his tenure. He has served as the Interim Supervisor since June, 2023, replacing Mike Oosterwijk in the supervisory role.

Robert's responsibilities include managing operations of the Grafton office, potato certification and shipping point services, food safety audit programs and oversight of the PCN survey. Robert holds a BA degree in Biology from the University of Minnesota Morris.

Congratulations, Robert!

North Dakota State Seed Department

PO Box 5257
Fargo, ND 58105-5257

ADDRESS SERVICE REQUESTED

Non-Profit Organization
U.S. Postage
PAID
Fargo, ND
Permit No. 229

NDSSD Calendar

- May 1**.....Applications due for grass inspection
- May 27**.....Memorial Day, office closed
- June 1**Applications due for hemp
- June 15**Applications due for all crops including potato (except buckwheat, millet & soybeans requiring a single inspection)
- July 4**Independence Day, office closed
- July 15**Applications due for buckwheat and millet
- Aug 1**.....Applications due for soybeans requiring one inspection
- Sept 1**.....Reports due: Annual Report of Agricultural & Vegetable Seed Sold (labeling fees), Research Fees; Carryover Seed; Applications for Approved Conditioner & Bulk Retail Facilities
- Sept 2**.....Labor Day, office closed