



The North Dakota Seed Journal

JUNE 2004

Newsletter of the North Dakota State Seed Department

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Maximizing the Profit Potential of Your Seed Fields

Steve Sebesta, Director, Field Seed Program

In the March issue I touched on tactics to reduce the potential for contamination of your seed fields by "other crop" or "other varieties." Briefly, these included starting with clean seed, selecting the right field, rouging and isolation. And now that the crop is in the ground and assuming you've done all these things correctly, your worries are over, right? Not quite. Seed producers need to pay attention to harvest details to ensure their seed isn't contaminated during harvest or storage.

Follow instructions on the field inspection report. Field inspectors are trained to write specific instructions to growers if there are special circumstances. Pay close attention to any notes or instructions on the inspection report. This may include avoiding certain areas in the field due to heavy weed infestation or other crop contamination. These notes are there for a purpose... to help you keep your seed as clean as possible and to further reduce conditioning problems.

Clean your combines. Take the extra time to clean your combine. Obviously there are a lot of places that hold seed. Don't rely on the dilution effect. Simply "flushing" the combine doesn't work. Thoroughly clean the entire combine, inside and out, top to bottom, with air pressure and vacuum.

Clean trucks, grain carts and tarps. Make sure the bottom and the corners of the truck boxes are clean. Don't forget the tarps either.

Clean augers. Make sure your augers are reversible. That's the best way to make sure there isn't a lot of seed hung up in them.

Clean bins. Surprisingly, we have been able to trace some contamination back to the bins in which that seed was stored. Make sure the support braces as well as the floors are clean.

And finally, **BE SAFE!** Always use proper personal protective equipment, and de-energize equipment before cleaning.

A good sanitation program is well worth your time. Don't take anything for granted. Double-check everything. Remember, haste makes waste. Don't let all your hard work during the growing season be ruined by sloppy harvest and storage practices. **Quality seed is a premium product.**

Seed Producers...

be certain your seed fields have been inspected by ND State Seed Department inspectors before you begin harvesting. Fields harvested before the inspection is completed will not be eligible for certification and you will forfeit the inspection fees.

If you are ready to harvest and you are not certain your seed fields have been inspected, call your inspector or the State Seed Department at (701) 231-5400.

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

One of the advantages of being in a position like mine is having access to a forum like Seed Journal to discuss topics of interest. My intent is usually to broach issues that are current, or better yet, slightly contentious. This topic serves as both.

Monsanto announced May 10 that it is "deferring" its commercialization efforts on Roundup Ready wheat. This development is both disturbing and disappointing, but not entirely surprising. Before this opinion is misread or misinterpreted, let me explain the specific reasons for disappointment.

I have been fortunate to represent the seed industry for the past three years on what Monsanto called its Wheat Industry Advisory Council. This group, comprised of representatives from nearly every area of commercial wheat production, milling, baking and export business, was developed for the express purpose of (and I quote) "allowing wheat industry stakeholders to provide advice and counsel on the development of Monsanto's biotechnology traits for the wheat industry." Your state was well represented, with two other members joining a dozen or so

Ken Bertsch State Seed Commissioner
 Steve Sebesta Director, Field Seed Program
 Steve Marquardt Director, Potato Program
 James Swanson Seed Regulatory Manager
 Joe Magnusson Seed Certification Manager
 Mark Hafdahl Seed Laboratory Manager
 Jeff Prischmann Diagnostic Laboratory Manager
 Kris Nicklay Administrative Officer
 Galen Briese Field Seed Specialist
 Mike Oostewijk Potato Program Supervisor

other experts in their respective fields in the wheat industry. Think what you will of Monsanto, but organizing this group and communicating with others is evidence of a willingness to pursue and listen to public input. Most input advised a very cautious, thorough and systematic approach to introduction of the technology.

The disappointment I referred to earlier has nothing to do with not having RR wheat available. The market (and public opinion) suggests it is not quite ready for a biotech product in cereal crops just yet. Personally, I believe the real disaster here is that pursuit of regulatory approval for a biotech trait in wheat will now be dropped.

I understand, and have voiced concern along with many others, that neither consumers nor markets have achieved that mystical point of "acceptance" of biotechnology in wheat. But, I believe that this will never occur without first having a government "okay" in the form of regulatory approval. Federal, scientific approvals were close in this case. In reality, no domestic company or foreign buyer could possibly accept a technol-

ogy without our federal regulatory verification of product safety. One will never happen absent the other.

Without the first domino of regulatory approval tipping over, this game is now at a standstill. There will be no export acceptance, near-term at least. Technology advancement in the wheat industry will slow; sadly, work in public and private biotech breeding programs may step backwards. Instead of being on the cusp of technology new and beneficial to agriculture and food production, wheat gets to wait. Let me be clear: this is not strictly about a herbicide resistant wheat from a rather large multinational corporate entity; this involves ALL beneficial traits under research. Good luck to the next company that runs the biotech commercialization gauntlet, after standing on the sidelines while one company fought the battle alone.

As I said at the outset, it's nice to have an opinion forum. I hope mine is wrong this time.

Best wishes for a profitable and safe season.

Weed Control in Seed Production

Mark Hafdahl, Seed Lab Manager

It's common knowledge that weeds will reduce yield by using water and nutrients that were intended for the crop. A factor that makes weed control important in seed production is the quality of the cleaned seed and the added expense required to remove weed seeds. I came across a circular from 1954 by O. A. Stevens called "Weed Seed Facts." In that circular he listed several weed species and how many seeds are produced by an

average well developed plant. Listed below are some examples of weed species we commonly encounter in the seed lab.

Wild Buckwheat	11,900 seeds per plant
Curled Dock	29,000
Frenchweed	7,040
Barnyardgrass	7,160
Green Foxtail	34,000
Lambsquarters	72,450
Wild Mustard	2,700
Wild Oats	250
Smartweed	19,300

Important Dates to Remember

■ Field Inspection Applications due June 15

Applications for field inspection for all crops **except** conventional soybeans, buckwheat and millet are due on June 15. Potato field inspection applications due. **Late fees will be assessed.**

■ License Applications for Wholesale Potato Dealers due June 30

■ Bulk Certificates due July 1

July 1 is the deadline for returning unused bulk certificates as well as the yellow office copy of the bulk certificates for seed sold. Seed labelers need to maintain records of seed sales for two years. Records should include bushels labeled, bushels sold and should include the pink copies of bulk certificates used.

■ Field Inspection Applications due July 15

Field Inspection applications for conventional soybeans, buckwheat and millet due. **Late fees will be assessed.**

■ Seed Labeling Fees due July 31

Reporting forms for Seed Labeling Fee Permits are sent to permit holders by July 1 each year. Permit holders have until July 31 to return the reporting forms. Reporting forms must be returned whether or not any sales were made. A late filing penalty applies on reports received after the deadline.

■ Research Fees due September 15

NDSSD is responsible for collecting research fees from labelers of the following varieties:

- Barley: Stander and Lacey – 25 cents per bushel; Legacy and Tradition – 30 cents per bushel
- Oats: HiFi and Milton – 25 cents per bushel; Stark naked oat – 20 cents per bushel
- Wheat: Granger, HJ98, Oklee, Steele-ND and Verde – 30 cents per bushel
- Soybeans: Barnes, Council, Daksoy, Danatto, Glacier, Jim, LaMoure, MN301, MN 0302, Nannonatto, Nornatto, Norpro, Sargent, Traill, Walsh – 50 cents per bushel.

Reporting forms will be sent to labelers of each variety this summer and **research fees on seed sold are due each year on September 15.**

■ Unconditioned Carryover Seed Reports due October 1

Unconditioned carryover seed reports are due October 1. Unconditioned seed that passed field inspection but was not final certified must be reported in order to be eligible for final certification in the future. Report forms will be sent to applicants this summer. Reports must be received on time in order for reporting in the Seed Directory. Take advantage of the advertising opportunity. Return your reports as soon as possible. Note: Seed that passed final certification does not need to be reported.

Save and post the back side of this page for quick and easy reference.

Advancing Potato Selections – NDSU Research Trials 2004

*Susie Thompson, Ph.D., Potato Breeder
Department of Plant Sciences, NDSU*

The potato projects at NDSU have planned a busy and exciting season of research trials in the Northern Plains States. These trials will run the gamut from disease and insect evaluation, management and screening, to agronomic practices including seed piece spacing and nitrogen rates for optimum production, to yield and adaptation trials evaluating performance of advancing selections from the NDSU potato breeding program and cooperating programs.

The North Dakota Agricultural Experiment Station and NDSU recently announced the release of *Dakota Jewel*, an exciting new red potato for the fresh market. Interest has been overwhelming. Additional promising selections advancing through the breeding program that producers, packers and processors may wish to look at during upcoming field days in July and August are summarized here.

Several attractive reds with good yield potential and storability are of interest. ND4659-5R is an attractive dark red skinned selection. This selection resulted from a cross of NorDonna and ND2842-3R. Yield potential is medium and vine maturity is medium to late; specific gravity is medium. The size profile is smaller relative to Dakota Rose. ND5002-3R is a medium to late selection with medium yield potential. It resulted from a cross of ND3504-3R and NorDonna. It has excellent red skin color and is suitable for the fresh market.

ND7882b-7Russ is an entry in the North Central Regional trials. It resulted from a cross of AND9552-7Russ and Russet Norkotah. It is dual purpose, has medium to high yield potential and late maturity. Specific gravity has been high in trials across ND. AOND95249-1Russ is an attractive dual-purpose selection. It resulted from a cross of A89163-3LS

Advancing Potato Selections continued on page 5

Seed Department Deadlines

- June 15....** Field inspection applications due for all crops except conventional soybeans, buckwheat and millet. Potato field inspection applications due.
- June 30....** License applications due for wholesale potato dealers
- July 1** Bulk certificates due
- July 15** Field inspection applications due for conventional soybeans, buckwheat and millet
- July 31** Labeling fee report due
- Sept 15....** Research fees due
- Oct 1** Carry-over seed report due
- Dec 31** License applications due for Approved Conditioners
- Dec 31** License applications due for Bulk Retail Facilities
- Dec 31** License applications due for non-resident seed dealers



Plant North Dakota Certified Seed

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Seed Department

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Research Fees on New Releases Announced by NDSU, SDSU

Steve Sebesta, Director, Field Seed Program

North Dakota State University and South Dakota State University announced the implementation of research fees beginning with new varieties released in 2004. The research fees apply to sales of Registered and Certified seed. Fees for specific varieties will not change and will be in effect for the life of the variety.

NDSU will assess fees of 30 cents per bushel on hard red spring and durum wheat, 25 cents per bushel on barley, 20 cents per bushel on oats and 40 cents per bushel on flax. A 50 cent research fee has been in effect on soybeans for a number of years.

SDSU is assessing 30 cents per bushel on spring and winter wheat, 20 cents on oats and 50 cents on soybeans.

The State Seed Department is responsible for collecting research fees from labelers of the following varieties:

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- Oats: HiFi and Milton – 25 cents per bushel
- Wheat: HJ98, Oklee and Verde – 30 cents per bushel
- Soybeans: Barnes, Council, Daksoy, Danatto, Glacier, Jim, MN0301, MN0302, Nannonatto, Nornatto, Norpro, Sargent, Traill, Walsh – 50 cents per bushel.

New varieties released in 2004 that will carry research fees include:

- Granger and Steele-ND wheat – 30 cents per bushel
- LaMoure soybean – 50 cents per bushel
- Stark naked oat – 20 cents per bushel

Reporting forms will be sent to labelers of each variety this summer and **research fees on seed sold are due each year on September 15.**

The seed department serves *only* as the collection agent for royalties. Questions regarding royalties should be directed to the appropriate variety owner. For additional information about research fees on NDSU, SDSU or University of Minnesota varieties please contact Dale Zetocha, NDSU Research Foundation, Robert Pollmann, SD Crop Improvement Association or Gary Beil, Minnesota Crop Improvement Association, respectively.

How to Pick Leaf Samples for Potato Virus Testing

Jeff Prischmann, Diagnostic Lab Manager

Virus testing season will soon be here for potato growers. Every year we get questions from growers on how to pick and ship leaves for virus or GMO tests. A few guidelines for picking leaves are listed below:

1. Whenever possible, pick leaves in the morning before the heat of the day. Leaves should be placed in a perforated plastic zipper bag and stored promptly in a cooler or refrigerator. Samples should not be placed directly onto ice or cooling packs as this may freeze the sample. It is important to prevent leaves from overheating and producing excess condensation in the bag as these can cause rapid sample deterioration. Vegetable bags work well for sending samples as they contain perforations that allow the leaves to "breathe." Do not pack or seal bags too tightly unless they have perforations. If shipping leaves through the mail, use a styrofoam cooler with appropriate cooling packs.
2. Select only larger, cleaner leaves from the top half of plants. We test 400 leaves for all tests so a sample of at least 410 leaves is required.
3. Identify your samples with the printed tags provided to you. A tag will be printed for each field. You may discard tags you do not need.
4. It is important that a representative sample of the field is submitted for testing. Your test results are only as good as the sample submitted.

The summer virus test typically begins by the third week of July. This test is strictly a voluntary test except for any PVYn tests that are required. The other tests that are typically performed include the viruses PVX and PVY as well as a GMO test for Bt-Cry3a. In early July, each grower will be mailed more detailed information about this testing program. Any questions should be directed to the department.

Advancing Potato Selections continued from page 4

and A8914-4. Processing quality is excellent from 45F and evaluations thus far indicate resistance to sugar ends. AOND95292-3Russ is another late maturing dual-purpose russet. This blocky light russet resulted from a cross of A89804-7 and A9014-2 (GemStar Russet). Fry colors from 45F have been terrific and no sugar ends have been noted.

Field days at the Northern Plains Potato Growers Association Research sites are scheduled for July 22 and 29 at Tappen and Grand Forks, respectively. A tentative date for the Twilight Tour at Oberg's near Hoople, ND is August 24. We hope to see you at one or all!

North Dakota State Seed Department

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NDSSD Calendar

- June 17** Crop Management Field School — Carrington REC
- June 24** Field Day, Central Grasslands REC — Streeter
- June 30** Canola Tour, North Central REC — Minot
- July 6** Field Day, Hettinger REC — Hettinger
- July 7** Field Day, Dickinson REC — Dickinson
- July 8** Field Day, Williston REC — Williston
- July 12** Field Day, Agronomy Seed Farm — Casselton
- July 13** Field Day, Carrington REC — Carrington
- July 14** Field Day, North Central REC — Minot
- July 15** Field Day, Langdon REC — Langdon
- July 15** ND Ag Association Summer meeting — Bismarck
- July 16** ND CI&SA Summer Board meeting — Devils Lake
- July 16** Pulse Crop Day, North Central REC — Minot