



# The North Dakota Seed Journal

JUNE 2007

Newsletter of the North Dakota State Seed Department

## Inside

- 1 Seed Growers...check reports closely!
- 2 From the Commissioner's Desk
- 3 Kandel Hired as NDSU Extension Agronomist
- 3 Summer Potato Virus Test Reminder
- 3 Seed Laboratory Comments
- 3 Research Fees Due September 15
- 4 Seed Department Deadlines
- 5 Preparing Your Fields for Inspection
- 6 Regulatory Update
- 6 Diagnostic Lab Testing Trends
- 7 Clean Seed Handling Equipment Before Harvest
- 7 Summer Hours
- 7 Approved Conditioner and Bulk Retailers Applications
- 7 NDSU Field Days Scheduled
- 8 Calendar

## Seed Growers ... check reports closely!

*Galen Briese, Certification Manager*

Field inspection applications were mailed to producers who raised certified seed last year. A cover letter with additional instructions and information was included in the packet. If you didn't receive an application for some reason, call now!

Seed producers should not just forget about the process of inspection after the applications have been returned to the department. There are several critical operations that take place to ensure that all fields are inspected before harvest.

As field inspection applications are received at the office, the certification staff audits each one to determine whether the information on the application supports the eligibility requirements for variety, seedstocks, and fields. These requirements are part of the Federal Seed Act Regulations. Next, applications are entered into the computer. After another check to make sure the information submitted by the applicant has been entered correctly, we generate a report for each applicant listing the information for each field. Among other things, this report lists each field, kind, variety, class, acres and legal description. This report is sent to each applicant.

## Applicants need to review information for accuracy

This report lists all fields in the system for each applicant. Applicants need to verify all the information on the report is correct for each field. They should also verify that all the fields they intended to have inspected are listed. If not, there is still time to apply, providing the field has not been harvested. If an applicant has multiple growers, they will receive a report for each grower. Applicants will also be provided the name of their inspector and their contact information. The inspector should be the first point of contact for the applicant/grower regarding field inspections.

## Make sure the field has been inspected before harvest

Inspectors appreciate being informed of your crop's progress. That knowledge helps them plan their weekly and daily schedule. When the fields are getting close to harvest, make sure the field has been inspected before you harvest! Growers should either receive inspection reports in the mail, or a personal contact from the inspector. Check the report for any comments from the inspector. Remember, if the field is harvested before inspection, there is no action that we can take to accept the seed from this field for certification!

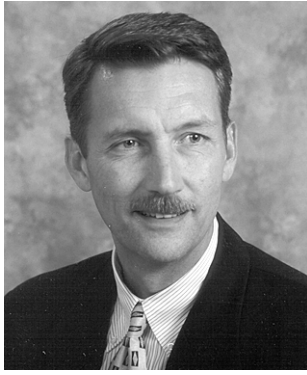
North Dakota State

**NDSSD**

Seed Department

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## From the Commissioner's Desk

The month of May, in odd numbered years, is a wonderful thing.

May is always a great time of year; better weather, wrapping up seasonal issues such as lab testing and regulatory work, looking ahead to field seasons. The reference to odd numbered years relates to that biannual process of the state legislature adjournment. As I've pointed out in this column previously (probably every other year), session-end signifies a time to move forward into a new budget cycle, and to prepare for new laws and policies set to affect all citizens in the near future.

This session may have been one of the lightest in memory regarding major agriculture issues, despite the record length. The Seed Department and seed industry in general exited the session without anything I consider major in terms of policy or budget related legislation. Our agency filed two bills, one dealing with product warranty and liability

language, one dealing with variety release processes. The first was amended substantially, the second passed intact. Nothing exciting in either case, in the end analysis. Other legislation related to seed was almost nonexistent.

As for issues generally related to agriculture, two stand out. The effort to gain general fund monies for construction of research greenhouse facilities at NDSU gained traction this session. The governor's budget provided nine million dollars of general funds for the project, and the final appropriation settled in at seven million dollars. Perhaps not what proponents of the project (including myself) hoped for, but a great effort by the legislature to provide funding for a much-needed facility that will benefit all of agriculture, especially the seed industry.

The issue of biofuels also emerged as a critical topic. We all see and hear on a daily basis the discussions regarding ethanol, biodiesel and other renewable fuels, and impact that production is having on commodity and food prices. The legislative response takes various forms from grant and loan incentive funding for production, to biomass research and demonstration projects. This is a growth issue for two reasons. First, and obviously, bio-crops production (corn

and canola especially) is set to grow tremendously, as is the refining of these fuels in North Dakota. Second, we haven't seen the end yet for research and production of cellulosic type of bio-fuels. The growth potential in this area may be even more profound for North Dakota than crop-based fuels, given our climate and land resources.

Both issues are directly related to the seed industry. Breeding research and cropping patterns affect seedsmen and certification agencies in the short and long term. "The next wave of change" may be a cliché, but it may also be accurate when used in this case. I think the legislature has dialed into the biofuels issue in a pragmatic and meaningful way by initiating some reasonable incentives to push the industry forward. Funding for research capacity in this area is a responsible use of taxpayer monies. Creating additional diversity and income potential in agriculture is always a smart move forward.

Best wishes for a safe start to a profitable year.

- Ken Bertsch ..... State Seed Commissioner
- Steve Sebesta ..... Deputy Seed Commissioner
- Steve Marquardt ..... 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

## Kandel Hired as NDSU Extension Agronomist

Dr. Hans Kandel has been hired as the new extension agronomist, replacing Dr. Duane Berglund, who retired in January. Kandel will assume his new responsibilities at NDSU on July first.

Dr Kandel comes to NDSU from the University of Minnesota system where he was a regional extension educator. He will be responsible for extension activities for broadleaf and alternative crops. He has experience with a wide variety of crops including soybean, dry bean, canola, field pea, and corn. Kandel also has experience with production management issues such as variety selection, tillage, and weed control. He has been involved with the Minnesota Crop Improvement Association since 1995. He is an experienced communicator and has utilized various media to distribute information.

Dr Kandel is already very familiar with NDSU and its strong tradition in research, extension and education. He obtained his Ph.D in Agronomy in 1995 from NDSU and over the years, he has cooperated with NDSU staff on research projects and educational events such as the very successful "Best of the Best in Wheat Production" program.

You are encouraged to take advantage of the opportunity to meet Dr Kandel at the upcoming NDSU field days.

## Summer Potato Virus Test Reminder

*Jeff Prischmann, Diagnostic Lab Manager*

In July, the Diagnostic Lab will conduct the annual summer potato virus test. This testing service is provided to growers on a voluntary basis for anyone interested in submitting leaflet samples for PVX, PVY, or PVYn testing. However, growers need to be aware that there are two testing requirements for certification. As in past years, all G-1 seed lots in the certification program must be tested for potato virus Y-necrotic strain (PVYn) as required by USDA-APHIS. In addition, PVY tests are required on all latent virus carrier varieties including Russet Norkotah, Shepody, and Silverton.

All tests are conducted using an ELISA test and 400 leaflet samples. Growers should submit at least 440 leaflets for these tests in order to ensure the proper sample size. Bt-Cry3a tests will also be available at the same time for any grower interested in obtaining a GMO test. This test also requires a minimum of 400 leaflets. PVX, PVY, PVYn tests and the GMO test can be performed on the same leaflet sample.

In July, each grower will receive an information packet containing instructions on collecting and submitting samples for testing, sample tags, and a test request form. Use the test request form to indicate whether you will be submitting samples for testing and when you would like to test. To ensure proper sample identification, the sample tags must be returned with the samples. Please contact the Diagnostic Lab if you have any questions on sampling and testing.

## Seed Laboratory Comments

*Mark Hafdahl, Seed Lab Manager*

Last year's seed crop has been harvested, stored, cleaned, tested and is now in the ground. The quality of that seed crop was very good with a few exceptions. Some field pea and soybean lots had issues with mechanical damage, primarily caused by handling of low moisture seed. A few lots of cereals apparently went out of condition in storage.

Now is the time to prepare for harvest and all the subsequent steps to producing high quality seed. Clean the combine and bins and conveyance equipment. It doesn't take much contamination to make a lot of seed fail certification. Consider letdown ladders for putting beans and peas in a bin. When it comes to damage or contamination, you don't get a second chance.

We hope that this summer provides another quality seed crop. The seed lab appreciates your business and stands ready to serve you in the future.

## Research Fees due September 15

Research Fee Report Forms will be mailed in July for the 2006-2007 reporting period. Labelers are required to complete the form and remit payment to the Seed Department by September 15 for all bushels sold for seed. Reports must be returned even if no sales occurred.



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Seed Department

## 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 reports due
- Sept. 15...** Research fees due
- Oct. 1 .....** Unconditioned carry-over seed report due
- Oct. 1 .....** License applications due for Approved Conditioners
- Oct. 1 .....** 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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# Preparing Your Fields for Inspection

Steve Sebesta, Deputy Commissioner

An analysis of lab reports from seed lots failing to meet certification standards provides insight into steps producers can take to help them pass field inspection and final certification.

Field management is the first step in the process. Following proper crop rotation can help to eliminate failure due to contamination from other crops. Analysis of certification records from 2000 to 2006 showed that on average, 74% of the durum lots that failed final certification failed due to the presence of wheat. The department took action last year to reduce this problem in durum by changing field eligibility requirements.

Other manageable causes for failing certification include excess inert matter, other varieties and weed seed. Now that this year's crop is in the ground and field inspection is near, producers can improve their odds of passing field inspection and final certification by managing fields properly.

## Isolation from inseparable crops or other varieties

An isolation strip is required between inseparable crops and varieties of the same crop. If the isolation is not in place at the time of inspection the field will be rejected. All small grain crops, if planted adjacent to each other, need an isolation strip between them. A ditch, fencerow, or roadway adjacent to your field may also suffice as an isolation strip. If not left at seeding, the isolation must be mowed or tilled prior to inspection. If you decide to mow the isolation, you must remove part of the field to be inspected and you must make sure the crop debris is thrown away from the field to be inspected so you do not contaminate your seed field. If you are producing both Registered and Certified seed of the same variety in the same field you may place a flag on each end of the field, five feet into the higher-class seed (Registered) and harvest that portion as the lower class (Certified).



Commonly found noxious weeds (left to right): field bindweed and Canada thistle

## Weeds

All growers should know what field bindweed looks like. Field bindweed is a prohibited noxious weed and if inspectors find it in your field and it is not controlled by either spray or isolation the field will be rejected. Watch for bindweed along ditches, fencerows, tree rows, hilltops, rockpiles and old farm sites. Another prohibited noxious weed, Canada thistle, is a major concern in field peas. All areas in a pea field that contain thistle will be rejected. There is no tolerance for prohibited noxious weeds in seed. Patches of wild oats will be rejected in fields as well. Growers should not harvest areas rejected by field inspectors. The presence of other weeds may also be cause for rejection of an entire field or parts of it, if in the opinion of the inspector, the level of infestation is high enough to prevent adequate inspection or impact product quality.

## Roguing

Seed growers may find it necessary to rogue an increase field in order to save it. This could become necessary for certain weed problems such as black nightshade in beans, and the presence of other crops or off-type plants. Plants of the same kind that do not fit the variety description or allowed variants, are considered other variety. An example of this might include as excess "talls" in a wheat variety. If not described as part of the variety by the breeder these could cause rejection. Roguing to reduce the numbers to within field standards might be justified. Always completely remove rogued plants from the field to prevent them from being harvested. Roguing should be completed before the field inspection.

Take time to evaluate your seed production fields before the inspector arrives. If you notice a problem and you are not sure how to proceed, contact the department for guidance. Remember to look at your field inspection report before you harvest to note any problem areas that need correction.



Examples of other crops found in seed fields (left to right): wheat in oats and awnless wheat and 6-row barley in 2-row barley



## Regulatory Update

Joe Magnusson, Regulatory Manager

We have sampled and tested approximately 1,600 samples for truth-in-labeling testing. Stop Sale orders have been issued on 70 seed lots that were improperly labeled or found to be out of tolerance with label claims. We found one lot of wheat during electrophoresis testing which was mislabeled as to variety. The seed in question had not been sold and was dumped as commercial grain. We also found 25 certified seed lots that did not meet certification standards. Most of these resulted from bins or handling equipment that were not adequately cleaned before certified seed was handled.

### Labeling fee reports due July 31

The annual reporting form for seed sales will be mailed to all permit holders the end of June. The form and any fees due must be returned to the department within 31 days or late fees will be administered. If you did not have any sales or wish to cancel your permit, check the appropriate box at the top of the form and return it within the 31 day period.

### Labeling fees apply to all seed

There is some misunderstanding that labeling fees apply only to certified seed. Labeling fees apply to all seed sold in this state. When we discover seed marketed in the state where the labeler does not have a permit, the labeler is contacted and arrangements are made to get a permit in place. This year we have found 30 nonresident dealers and 255 certified seed growers who have labeled seed and do not have a permit to sell seed in this state. Permit applications will be mailed to these individuals or companies along with the annual reporting form. There is no cost for the permit if you are a ND resident. Nonresidents are required to complete a Nonresident Seed Dealer's License and remit an annual fee of \$25. The permit is valid for as long as you sell seed in this state.

### Original labelers are responsible for fees

The movement of certified seed in the system has created some confusion as to who is responsible for paying the labeling fees. The certification system is structured such that when seed is wholesaled and transferred to a new owner, new bulk certificates are issued to the retailer with their name as the seller. We consider the original labeler as the labeler of record and therefore responsible for submitting the labeling fees.

## Diagnostic Lab Testing Trends

Jeff Prischmann, Diagnostic Lab Manager

The 2006-2007 testing season is now complete and several key observations can be made from this past testing season. Disease test scores from the major seed health tests that we conduct were lower than we have seen in two years.

This is clearly evident in edible bean disease tests such as anthracnose and bacterial blight (dome test). Anthracnose has not been found in any sample that we tested this year. Likewise, bacterial blight levels are considerably lower than we have seen in the past. Dome test scores of 2 or less were common this year. In a typical year, dome test scores would average in the 3-4 range.

The other major seed health tests the Diagnostic Lab conducts also showed much lower pathogen levels this past season. These include pulse crop *Ascochyta* and loose smut in barley. Only a handful of barley samples that we tested had loose smut levels above 5%. In a typical year, this number would be higher. Lower pathogen levels in seed directly correlate to higher quality seed. The 2006 growing season was unfavorable for many seed pathogens as the warmer and dryer conditions appear to have played a major role in reducing pathogen levels.

During the past couple of years, the lab has seen a shift away from edible beans to other crops such as pulse crops in the samples we test. *Ascochyta* tests for peas, lentils, and chickpea have generally been increasing while edible bean samples have been slowly declining during this period. Also, with lower pathogen levels and potentially higher quality seed, fewer customers opt for conducting seed health tests unless required by certification. With increased problems with seed borne pathogens in the field, there is generally an increase in testing.

Over the past few years, the Diagnostic Lab has seen an increase in customers requesting variety identification tests. Typically, the majority of our testing is for wheat, barley, and oat. Many of these test requests are to verify the correct location or bin of a particular seed lot. Also, the lab conducts variety identification tests for plant breeders for PVP application purposes. The lab currently has several ongoing test development projects for variety identification. These include the improvement of our DNA based barley variety identification method to add additional varieties and to develop a DNA based field pea variety identification test.

## Clean Seed Handling Equipment Before Harvest

Once your seed fields have passed field inspection you're ready to hop into the combine and harvest right? Not entirely. Harvest is a busy time and can be stressful under the best circumstances. Planning ahead can help eliminate some potential problems and help maintain the quality of your seed.

**Make sure the following are CLEAN before harvest**

- Combines
- Grain carts
- Trucks
- Augers
- Bins

Make sure you label bins with variety and class. Every year we receive calls from customers requesting variety ID tests because they are not sure what seed is in which bin. Our regulatory program also finds seed labeled incorrectly because of mistaken identity due to bin labeling (or lack thereof).



Summer Hours

Effective June 1  
core office hours  
are 7:30 a.m.  
to 4:00 p.m.

## Approved Conditioner and Bulk Retailers Applications

This year the Seed Department will mail applications for Approved Conditioners and Approved Bulk Retailers in August. We believe sending applications earlier will lead to improved efficiency. Please complete the form and return it to the office with the \$40 fee by October 1. Plant inspections will begin in November.

## NDSU Field Days Scheduled

NDSU Research Extension Centers will be conducting field days in July to communicate current research objectives and discuss last year's results.

Field days are an excellent way to learn about any new varieties released since last year. NDSU breeders will be on hand to discuss their respective breeding programs and new varieties.

See the calendar on the back page for a schedule of NDSU field days.

## North Dakota State Seed Department

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# NDSSD Calendar

**June 15 ...** Field inspection applications due for all crops except conventional soybeans, buckwheat and millet

**June 30 ...** License applications due for wholesale potato dealers

**July 1 .....** Bulk certificates due

**July 15 ....** Field inspection applications due for conventional soybean, buckwheat and millet

**July 31 ....** Labeling fee reports due

**Sept. 15 ..** Research fees due

## NDSU Field Days

**June 27 ....** Central Grasslands REC, Streeter

**July 10 .....** Hettinger REC

**July 11 .....** Dickinson REC

**July 12 ....** Williston REC

**July 16 .....** Agronomy Seed Farm, Casselton

**July 17 .....** Carrington REC

**July 18 .....** North Central REC, Minot

**July 19 ....** Langdon REC