



Volume LXI, Number 1
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Iowa Seed News

A publication of the Iowa Crop Improvement Association

MEMBER SPOTLIGHT:

Pattison Bros.

Pattison Bros. is best known for their ability to store commodities in a one-of-a kind silica sand mine. They have a long history of innovation and growth dating back to when the company was started by Bernard Pattison in Fayette, Iowa in 1950. They were the first to introduce nitrogen and bulk blend fertilizers to Northeast Iowa farmers in the 1950s, helping them increase yields.

Their strategic location in the four-state window of Iowa, Illinois, Minnesota and Wisconsin provides efficient access to world markets. Their capabilities include two major facilities – Fayette, Iowa, and the Mississippi River Terminal in Clayton, Iowa.

The country elevator is approximately 50 miles west of their river terminal in the town of Fayette, Iowa. This location also serves as corporate offices for the company and is the site of their new soybean cleaning plant built in the fall of 1999. The elevator consists of several components.



They have three separate grain dumping areas to accept the maximum amount of grain with minimum waiting. The Pattison professionals at Fayette can take in 15,000 bushels an hour, dry up to 2,000 bushels an hour and store up to 2 million bushels. This location can accommodate both commercial and value-added grains. While grain handling is their key business endeavor, the Fayette facility also has the capability to handle both dry fertilizer and bulk storage for 60 tons of anhydrous ammonia.

ICIA member Tim Dillon joined Pattison Bros in 2001 on the Product Development side of their operations at the Fayette facility. Tim's background in seed research was what Pattison Bros. was looking for in operating their own line of seed to fit the niche market of Non GMO soybeans in a GMO soybean market. Tim's responsibilities include seed operations, involvement with the cleaning plant operated by Ben Pattison, a nephew of Bernard, researching genetics and securing acres for seed production for customers in Japan.

The Mississippi River terminal, run by Bernard Pattison's son Kyle is located in Clayton, Iowa. This facility offers a great variety of opportunities for customers. The facility has three different locations for dumping grain, a drying operation, a rail connection, plus a large underground storage system. One unload site is their IP (Identity Preserve) or value-added grainloading dock. This site consists of an unload pit and a conveyor that carefully moves grain directly onto a barge. It is also where they offload incoming bulk commodities such as salt and dry fertilizers.

All in all, their facilities and professional staff offer a wide range of opportunities to meet and satisfy customer needs. They stand ready to serve you for grain merchandising, value added grain markets and Non GMO soybean seed needs. For more information you can contact Pattison Bros. at (563) 425- 3361 or check out their website at www.pattisonbros.com.

Certification Update--Eileen Wuebker

As you are making plans for your 2007 seed production please keep in mind a number of changes for this season.

Corn Standards – Two significant changes are being made to remain in compliance with standards changes made by the Association of Official Seed Certifying Agencies (AOSCA)

1. The isolation standards for hybrid corn have changed from 410 to 660 feet of isolation from the seed parent to other corn. An exception will continue to be allowed for hybrid seed production fields of dent sterile popcorn that need not be isolated from yellow dent field corn. In the case of the same color and texture corn, modification of the isolation distance with border rows will still be permitted according to the table.
2. The previous crop requirement has been amended to no longer allow the previous crop to be corn of another color or endosperm type.

Corn Inbred Eligibility – Last fall a uniform system for handling the eligibility of corn inbred lines was developed amongst the certification agencies with the assistance of industry and USDA representatives. This included the development of two forms: Application for Corn Inbred Line Eligibility and Corn Inbred Characteristics form. In January we distributed these forms to the companies currently involved in corn certification. These forms will be used when applying for foundation or hybrid corn production for AOSCA or OECD certification.

OECD Certification - During the past season we have carefully reviewed our OECD certification procedures and will be implementing several changes this spring.

1. A post-control test is a requirement of the OECD program each season. For Basic seed all seed lots that have been conditioned during the year must be tested. For Certified or Not Finally Certified lots a portion of these must be tested, in 2007 we will be testing approximately 10% of these lots. In the past the association has provided this service in our summer growout without a fee. This season we will be implementing a fee of \$20 per lot planted.
2. Currently we have been verifying that the variety name is on the OECD Cultivar list as you request an OECD certificate. Starting on March 1st we will also be checking that the variety name is on the OECD list as you label seed with an OECD label. Please be sure you are having all varieties added to the list in advance of labeling.

As we initiate planning for field inspections we will be asking for acreage estimates to assist us in positioning and hiring inspectors. We also ask growers of seed corn to provide us with lists of inbreds that they will have in production. This

allows us to verify we have a description on file or to request one in advance of the inspection season. Please be sure to submit your acreage estimates and inbred lists by the end of March.

Updates to the Certification Requirements Handbook (the blue book) were distributed to members in February. Updates to the Approved Conditioner Handbook (green book) will be issued in March. As you review these updates and plan for the coming season please contact us with any questions you may have. We look forward to a safe and productive year.

Minimum distance from other corn to the first seed parent plant	Field Size *	
	to 20 acres	20 acres +
-feet-	(Minimum) border rows	
660	0	0
570	4	2
490	6	2
410	8	4
330	10	6
270	12	8
210	14	10
150	16	12
90	18	14
< 90	24 ¹	16 ²

¹ Minimum of 60 foot including border rows

² Minimum of 40 foot including border rows

* Different dates of planting will not divide a field for isolation purposes but may divide the field for detassling inspection.

Certified...

The Sign of Good Seed

Good Seed Doesn't Cost...It Pays!

Iowa Crop Performance Test Update

Alfalfa Mark Smith

The 2007 Forage Variety Testing Program is offering the following alfalfa yield tests this year: Ames Commercial, Ames Experimental, Ames PLH (unsprayed), Nashua Commercial and Nashua Experimental. We will also plant hay yield tests of other forages at the Ames Location, if sufficient interest is shown.

Application forms were mailed on January 9th and the deadline for receiving entries and payment is March 1st. Anyone wanting an entry form may contact me at 515-294-7887 or smithma@iastate.edu or forms are available at the following web site: www.croptesting.iastate.edu/alfalfa/. Just click on entry form. Here you will also find guidelines for the 2007 tests and results of the 2006 forage variety performance tests.

Please contact me if you have any questions about forage variety testing at Iowa State University.

Corn & Soybean Jim Rouse

After a highly successful 2006, we're looking forward to an equally successful 2007 testing season. A number of program changes were implemented last year, including new district layouts and new test options. These changes were very well-received, and because of that we are leaving the tests unchanged for this year.

All application information and testing procedures can be found on-line from the homepage of Crop Performance Testing at www.croptesting.iastate.edu. Click on the menu item for your crop of interest, then on 'applications' in the submenu. You can view the files on-line or download a copy for your use. To view data from the 2006 testing season, click on the menu links for 'reports' under each crop.

Entry deadlines are March 1 for both tests. Seed deadlines are March 16 for

corn, and March 28 for soybeans. ALL corn and soybean seed for testing should be sent to ICPT, 2219 State Ave., Ames, IA 50010.

For more information, call (515) 294-5604 or email croptesting@iastate.edu

Small Grains Ron Skrdla

The 2007 winter wheat variety tests were planted during the last week in September and early October. Ames (September 29), Crawfordsville (October 2), and Nashua (October 26). Nineteen hard red varieties, two hard white varieties, and six soft red varieties are being tested.

Twenty nine experimental winter triticale lines were planted at Ames (September 29), Crawfordsville (October 2), and Sutherland (October 3).

A mild fall allowed the wheat and triticale to germinate and develop a good root system before the cold weather. The snow cover should help to keep winter kill to a minimum during the current cold spell.

The oat variety test will consist of approximately 25 varieties and 15 experimental lines from Iowa and surrounding states and will be planted at Ames, Lewis, Crawfordsville, Nashua, and Sutherland. The barley variety test will have 16 entries and will be grown at Ames, Nashua, and Sutherland.

A new project directed by Lance Gibson and Jean-Luc Jannink from the ISU Agronomy Department and funded by the Leopold Center for Sustainable Agriculture will create research-based information for developing and selecting winter cereal grain varieties for forage and biomass production. The objectives of the research are to 1) quantify the forage and biomass production in Iowa from commercially available winter triticale and rye cultivars, and 2) screen breeding lines of winter triticale for forage and biomass production in Iowa with the goal of releasing new cultivars. Field experimentation and trait assessment

will be conducted at Ames and Nashua in 2007, 2008, and 2009. The research for 2007, planted in September, includes 15 commercial triticale cultivars, 19 experimental triticale lines, five commercial rye cultivars, and two rye/triticale blends.

Adding more acres of winter crops to current cropping systems would provide cropping system and environmental benefits, such as erosion control, improved nitrogen capture and nutrient cycling, better nutrient use efficiency, and increased profitability. Livestock producers, crop producers, cereal grain breeders, the biofuels industry, and policy developers are the primary audiences for this research. The general public and consumers of agricultural products have considerable stake in the potential benefits that these systems possess for reducing sediment, nutrient, and pesticide contamination of surface and ground waters of the region and creation of more diversified wildlife habitat in agricultural landscapes.

The 2006 variety reports can be found at the following web address: www.croptesting.iastate.edu/smallgrains/ For more information call (515) 294-2732.



Vogel joins ICIA Staff

Jessica Vogel became part of the ICIA team in December 2006 and will be working in the area of Marketing and Member Relations. She will be working with many of the publications ICIA distributes during the year including directories, Iowa Seed News, as well as updating the association web site. Additionally, she will assist in coordinating meeting and training materials for the various events ICIA offers. Jessica is originally from the rural Lohrville, Iowa area. She graduated in May 2005 from Iowa State University with a B.S. degree in Marketing. Prior to coming on board at ICIA, she was employed with Nationwide Insurance in Des Moines, Iowa. You may contact Jessica directly at (515) 294-6921 or jlvogel@iastate.edu.



AOSA SEED ANALYST SHORT COURSES 2007

April

16-19 Purity
23-26 Germination

Location

Seed Testing Laboratory
Seed Science Center
Iowa State University | Ames, Iowa

If you are interested in a solid introductory course in seed analysis, preparing to take the Registered Seed Technologist Examination or the AOSA Purity/Germination CSA Exam you should consider registering for these courses.

To register on-line visit www.ucs.iastate.edu, registration and special request deadline is April 9th.

Iowa Seed Directory
for Seed Growers in 2006



Directories Available

The 2006 Iowa Seed Directory and 2006 Native Species Directory are available on-line at www.agron.iastate.edu/icia. To request a free printed copy, contact the office at (515) 294-6921 or iowacrop@iastate.edu.

WE WANT YOU...To Be An Inspector

Doan Schmitz

Iowa Crop Improvement has been able to retain a large percentage of experienced inspectors from year to year. As with any business through normal attrition of retirements and pursuing other interests, we always have the need for new inspectors. This year we currently have positions open in the following areas: Ames, Iowa City/Cedar Rapids, Hampton and Grundy Center. As the season progresses we may have openings in other areas of the state.

One of our experienced inspectors is Betty Streets from Scotch Grove. She will be starting her 6th season with the Association. Betty started as a foundation ear inspector and now inspects corn, small grains and soybeans. She said "All my life I have been a farm person and working for Iowa Crop Improvement has given me the chance to remain connected with the farming life I have always known." Betty also mentioned that the exercise isn't bad either.

Iowa Crop Improvement Association is now accepting employment applications for the summer and fall inspection season. The summer season runs from about June 15th through August 5th while the fall is from August 22 through October 1st. We are looking for individuals who have an attention to detail, enjoy walking fields, and the willingness to work outside in all kinds of weather. Crop experience is not necessary. If you are an individual who can communicate, follow direction, and finish work in a timely manner, this job is for you. Inspectors are paid an hourly wage plus mileage. The inspection area is within a 50 mile or less radius of an inspector's home.

Please contact me at 515-294-6268 or email me at doan@iastate.edu if you are interested in this opportunity. Applications can also be found at our web site at www.agron.iastate.edu/icia under "Job Opportunity". Please contact me by May 1st for summer employment and August 1st for fall employment.



ISU Seed Laboratory Update--Michael Stahr

At the mid-point of winter and for the Seed Lab's "busy season", I would like to bring you up-to-date on testing and on our newly remodeled trait lab. As Lisa Shepherd mentioned in December's Update, there was concern about the effects of weathering and disease from late summer and early fall's fog, dew, and rains on soybean seed. These conditions did translate into some discolored and shriveled seed, but for the most part warm germs for soybeans have been good. Corn has had problems with shredded leaves and some fungi, but overall has been good. Actually we no longer just have a busy season from September through April, summers have become a busy time testing flowers, vegetables, and cereals. The Seed Health lab continues to test many samples for phytosanitary purposes as well as other testing. Our focus is producing accurate results in a timely manner AND taking the time to work with our customers one-on-one with special requests and problem samples.

"Conventional" lab testing has been done at Iowa State for over 100 years. Seed health testing is more recent with the Seed Lab getting its start in this area in the late 70's. Trait testing is newer yet starting at ISU in the 90's with herbicide bioassay testing of soybeans and corn. The Trait lab is located in the former classroom of the Seed Science Center. Last summer it was completely remodeled with new lab benches, a fume hood, and other equipment added. Trait testing involves checking for genetic purity or for adventitious presence (biotech traits are supposed to be present at a certain level or they aren't supposed to be present). AP testing of soybeans is often done with lateral flow strips (often used at grain elevators). Most corn and soybeans for international shipment are tested using "real-time" PCR. PCR is a highly sensitive procedure which checks the DNA of a seed lot for AP. Our PCR lab is state of the art with a new PCR unit along with a robotic liquid handler. Genetic purity testing for insect-resistant corn (Bt, Herculex®) is often done using 96-well ELISA plates. Wells of these plates are coated with the antibody of the trait protein and turn color to indicate the quantity of the protein present.

Herbicide bioassay involves exposing seed to the herbicide "in question" – glyphosate for Roundup Ready® crops or glufosinate for Liberty-Link® corn. Non-tolerant seed isn't killed, but it does exhibit symptoms such as stubby root growth and loss of color in leaves. Herbicide-tolerant crops we test include corn, soybeans, cotton, canola, and alfalfa. Alfalfa can be interesting because of its tendency to have hard seed. Herbicide bioassay is our oldest trait test and isoelectric focusing (IEF) is the newest. Electrophoresis (of which IEF is a type) has been around for quite a while and its chief use is detecting outcrossing and selfing in seed lots. It involves extracting protein from seed or leaf-tissue, placing it on a gel, running electricity through the gel, and finally checking the resulting banding patterns against parents. IEF gels form and separate bands based on pH. After the gel is run and allowed to evaporate, the remaining plastic backing is silver stained to make a permanent photograph of the banding pattern.

The Center's workshop "season" is fast approaching. Workshops start in mid-April with the two week AOSA Seed Analyst Short Course. The short course is composed of a week of purity testing (working samples, identifying seeds) and a week of germination testing (warm germs, vigor tests, TZ, etc.). June through August are active months for seed conditioning workshops whose topics range from gravity separation, to treating, to color sorting, to research seed corn. Late August has a two day corn and soybean quality workshop which will cover all lab tests commonly done on these crops (including trait tests). For more information on workshops, or on testing in general, check the Seed Lab web page (www.seeds.iastate.edu/seedtest) or call 515-294-6826.

Low Linolenic Soybean Production Opportunity

Seed producers in Iowa & Minnesota have the opportunity to produce seed of low linolenic varieties for sale in the Fairmont, MN area for planting in 2008.

CHS, the soybean processing company, will be contracting soybean acres in 2007 for the production of low linolenic acid soybean oil at its facility in Fairmont, MN. Current work is being done to provide a yield test for low linolenic soybean varieties in Minnesota and Iowa during 2007. The data will be provided to farmers in both states for variety selection.

For more information contact Walt Fehr (515) 294-6865 or wfehr@iastate.edu.

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Sowing the Seeds of
Opportunity

**OFFICIAL NOTICE
2007 ICIA ANNUAL MEETING
MARCH 29, 2007**

Please note the annual meeting has been rescheduled for **Thursday, March 29, 2007** at the Iowa State Center Scheman Building in Ames. Mother nature forced a tough decision upon the ICIA board February 12th, but those of you in Central Iowa know they made the right decision to postpone the Annual Meeting. A

full morning is planned with speakers of various topics. A free meal tops this meeting off while we recognize the efforts of Iowa State University students. More information will be coming your way soon. You won't want to miss this information packed morning, so mark your calendar today!

Dates to Remember

March

29 ICIA Annual meeting

April

15 Early Application Date for reapplication of native species fields
AND for native species fields planted by March 31

May

15 Early Application Date for field inspection of small grains

June

1 Early Application Date for field inspection of corn

1 Early Application Date for field inspection of herbicide tolerant soybean

15 Early Application Date for certification of native species fields established between April 1 and May 31

July

10 Early Application Date for field inspection of soybean