

CEO Report

by Dennis Thompson, CEO • dthompson@ilcrop.com

Prices and Philosophies

A pril 1st kicked off a new fiscal year for IL Crop and with the new year, we've introduced a few adjustments in pricing certain services. Some items changed-many did not. Our business, like yours, must operate within a changing business environment. Our goal is to continue providing value to our many customers.

The annual membership fee for companies utilizing one or more of the authentication services (AOSCA or OECD Certification, AOSCA QA or IP, etc.) remains Company at \$300/yr. satellite location fees have increased to \$300/yr. Approved Conditioner / Sampler fees remain unchanged and are included as part of an active membership. Associate Membership fees remain unchanged at \$40/yr.

No price increases were initiated for the Identity Preserved Grain Laboratory, Greenhouse, or the Puerto Rico Winter Farm services.

AOSCA and OECD tag fees for all classes of certified seed plus AOSCA QA and IP tags increased \$0.02 per tag, while AOSCA Breeder tags increased \$0.05. Modest increases were applied to OECD varietal fees and certificates, bulk transfers, tag initiation fees and shipping and handling.

IL Crop provides two unique categories of field inspection services. Companies utilizing our commercial third-party services will now receive straight-forward project specific quotes beginning in 2010. We'll do our best to price services in an appropriate and competitive market range.

Companies utilizing field inspection services required of the various authentication programs (i.e. seed certification, etc.) will experience a change in how we charge for these services based upon the expectations placed upon IL crop by each respective authentication program, number of fields and location involved, number of field inspections required, availability, distances inspector traveled, etc. Distant or remote fields will be assessed a mileage fee.

As fewer acres are inspected annually under several of the authentication programs, we continue to lose efficiency (time and travel for inspectors located throughout the state) and within our corporate administrative system (overhead must be distributed across fewer fields/acres), it has become necessary that we adjust our overall philosophy on how to provide and price authentication services.

Beginning with the new fiscal year, authentication clients (AOSCA and OECD Certification, AOSCA QA and IP) may expect traditional per acre invoices at the 2009 level following submission of an application - the same as in the past. However, at the end of each respective crop inspection season, a modest surcharge (not to exceed \$1.50/acre) may be applied to larger customer accounts while smaller customers will not be assessed the surcharge.

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Calendar of Events

May 31, 2010 Memorial Day Office Closed

June 9-10, 2010 IL Crop/ISTA Annual Meeting and Golf Outing Champaign, IL Web: ilcrop.com

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Seed Lab News

by Steve Beals, Seed Lab Assistant Director • sbeals@ilcrop.com

Observations from the Seed Lab

verall, germinations that have been conducted in the lab have been above average, given the long, wet and cold harvest season last fall. The soybean lots are also better than expected with an overall average germination of 94.35%. The Pod and Stem Blight rating average is 2.44% across all regions. However, there have been lots that were definitely affected by the adverse conditions. These lots are showing signs of mechanical injury and, in several cases, somewhat heavy infestations of Phomopsis, commonly known as pod and stem blight.



Phomopsis infestation

Fungal seed treatment will be key in aiding the control of the virus for the upcoming planting season. The mechanical injuries that are showing up in the germinations are root injury, negative geotropism and lesions or splits in the hypocotyls. The corn germinations are good for the most part with an overall average germination of 95.80%. There are lots that have reduced germination due to dead seed and mechanical injury. Aside from the dead seed, the abnormal seedlings that have recently been observed include leaf shredding, damaged plumules and leaves protruding beneath the tip of the coleoptile.



Abnormalities found in soybean seedlings

The lab has been extremely busy with an increased number of grass and forage samples for germination and purity testing. The IL Crop Seed Lab remains very current on samples and results.

A Glimpse Into Our Seed Laboratory

When a corn or soybean sample arrives at the IL Crop Seed Lab, the customer can expect timely, accurate and repeatable results. IL Crop is ISO/IEC 17025:2005 accredited which assures the customer that the procedures and standards will be followed on each and every sample that enters the IL Crop Seed Laboratory. The IL Crop Seed Lab follows the rules and recommendations set forth in the Association of Official Seed Analysts (AOSA) Rules for Testing Seed for sampling, dividing,

planting, evaluating and conducting purity on seed. For corn and soybean germinations, the IL Crop Seed Lab uses creped cellulose paper, otherwise known as Kimpac. The Kimpac is placed on an 18 x 26 tray and is watered by a Stults Scientific watering machine which ensures that consistent and even amounts of water are applied to each tray. After the trays have been watered, seeds are planted on the Kimpac using a planting board by placing 400 seeds of each sample to the tray as specified in the AOSA Rules for Testing Seeds. IL Crop plants the 400 seeds in four replicates of 100. The fully planted tray is then placed into a cart that holds 19 samples and one tray for additional moisture that is placed in the bottom on the cart. The cart is closed, tagged and taken to one of the six walk-in germination chambers for the specified period of time according to the AOSA Rules for Testing Seed. At the end of the germination period, the carts are removed and the samples are evaluated by IL Crop's well-trained and skilled analysts in accordance to the AOSA Seedling Evaluation Handbook.



Samples being evaluated for germination

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by Doug Miller, Field Services Director • dmiller@ilcrop.com

Illinois Crop Improvement **Approved Conditioner and Sampler Program**

Thile not the most exciting topic at the recent Seed Conditioner Workshop, many have recognized the importance and value of being an approved conditioner and sampler. The Approved Conditioner and Sampler (ACS) program is designed for companies who produce, handle or tag seed under an authentication program such as certification, green-tag QA, IP, etc. Outlined below are some of the slides from our recent presentation. Later I will talk about how participation in our ACS program can improve your contract production program, food grade products or export business.

What is an **Approved Conditioner?**

Anyone authorized to complete the routine duties of the official inspector. These duties include, but are not limited to:

- Supervision of sampling
- Clean-out
- Conditioning
- · Closing and sealing
- Labeling
- Bulk transfer
- Maintenance of relevant records

What is an **Approved Sampler?**

Anyone authorized to complete the following:

- Routine sampling
- Supervision of bulk transfer activities

Who is required to be an **Approved Conditioner** and Sampler?

Anyone who submits applications for field inspection for any of the following authentication programs:

- Breeder
- Foundation
- Registered
- Certified
- Quality Assurance
- Identity Preserved

Anyonewhoperforms the following on any class of seed in an IL Crop authentication program:

- Cleaning
- Treating
- Grading
- Bagging
- Transferring of seed
- Submitting of samples
- Or anyone who handles seed in an authorized IL Crop authentication program

Also presented was an important reminder for OECD participants regarding the 5% check sampling program. If you have an approved auto sampler, you are exempt from the official sampling requirement. If not, IL Crop will make arrangements to sample at least 5% of your finished OECD lots for analysis and comparison to samples submitted from you under the ACS program.

Many say the proof of good production and conditioning is in the

lab result. But remember that making decisions, applying certification standards and meeting contract specs using a test result from a poorly managed process is better known as guessing. It is a fact that all human endeavors are subject to uncertainty and risk, but the true enemy is ambiguity. If you cannot handle, document and sample your product properly, the glowing field inspection reports and lab reports mean nothing. Nothing demonstrates this fact more clearly than the industry's use of ISO, ISO-like management and electronic data management systems. While not ISO ready by any means, the ACS program in its basic form looks at the processes you have, the processes you need and the processes that will improve your product and quality testing. The old ISO joke is that you can manufacture life-vests made of concrete as long as they sink at a uniform rate.

The bottom line is that you can standardize and document faulty processes and establish non-critical control points or you can look to IL Crop to assess, verify and assist you with improving your plant operations. If you have interest or need for a system review, enhancement or third-party assurance, please feel free to contact us regardless of which "ICIA" you belong!

Doug Miller Business Development Director 217.359.4053



by John McKinney, IPG Lab Director • jmckinney@ilcrop.com

IPG Partners with NSRL and the Beckman Institute for a Study of New Measurement Technology

The Identity Preserved Grain Laboratory staff is joining together with researchers from the National Soybean Research Laboratory (NSRL) and the Beckman Institute for Advanced Science and Technology, both located at the University of Illinois, for a study to determine feasibility and potential application of Raman spectroscopy for measuring chemical constituents of soybeans. The research is sponsored by the United Soybean Board.

Near Infrared spectroscopy (NIRS) has been widely used in the grain industry for many years with generally good results. Near infrared light cannot be seen by the human eye, but behaves similarly to visible light in that it is scattered from, absorbed by, and transmitted through materials with which it interacts. Different wavelengths in the near infrared region interact with materials in a variety of ways just as different wavelengths (colors) of visible light do.

NIRS takes advantage of these properties by measuring the amount of each wavelength in the range being used that is reflected or transmitted. The degree of reflection or transmission is impacted by the composition of the material in question. The different chemical bonds, such as those specific to water, oils, and proteins affect the interaction of particular bands of wavelengths. These effects can be measured and modeled mathematically to values acquired by traditional measurement techniques. This model may then be used to predict the composition of similar materials.

NIRS provides fast and easy analysis, but it is certainly not without limitations. Some materials and constituents are easier to predict than others. Because much of the light in NIRS is scattered, a large portion of the information is lost. There is significant overlap due to the width of some of the spectral bands, resulting in confusion as to which constituent is actually present in the material. Many of the wavelength bands of interest are impacted by water.

Our study seeks to improve on the

existing technology by employing Raman spectroscopy. Raman differs from NIRS in that the sample material is exposed to only one wavelength via a laser. As the light passes through the material, it may encounter one of the constituents (chemical bonds) of interest and gets "excited," being emitted from the material at a higher energy level. These changes may be measured and, similarly to NIRS, modeled mathematically, to make predictions. The spectral resolution of Raman is much better than NIRS, and water does not affect the analysis model to nearly the same degree.

As part of the project, the instrumentation for making the measurements on soybean materials will be assembled and tested, a model for protein and oil will be developed, and the impact of water on the system will be studied. Because of the increased specificity allowed, we hope eventually to expand beyond macroconstituent (oil, protein, moisture) prediction to microconstituents such as amino acids and fatty acids.

Right: Beckman Institute for Advanced Science and Technology at the University of Illinois, Urbana-Champaign is an interdisciplinary research institute devoted to leading-edge research in the physical sciences, computation, engineering, biology, behavior, cognition, and neuroscience.



Puerto Rico News

by Lizandro Perez, Station Manager • lperez@ilcrop.com

Happenings on the Farm

Peanut, Cotton & Corn Harvest

Deanut and cotton fields are almost ready to harvest. This season, due to the delayed harvest in United States and a rain period in Puerto Rico during planting, these two crops are going to be harvested at the same time. Peanut is our main concern because harvest is labor intensive and the acreage is larger than last season. Using more personnel, we should be able to harvest the peanuts in the time frame the customers need it. Time frame for cotton harvest is critical because it is close to the end of the planting season in US. If the weather cooperates and equipment works without major breakdowns, the timing should be just right. The temperature during the winter months was warmer than average reducing the days from planting to harvest. Most of the corn nurseries are harvested and results were mixed from poor to excellent. Corn growouts are read and destroyed.

Insect, Weed and Disease Control

In general terms, the winter season was good with excellent weed control and above average insect and diseases control. Some of the changes and improvements made after Scott M. Bretthauer (Extension Specialist-PesticideSafetyEducation, Department of Agricultural & Bological Engineering, University of Illinois) came to the farm are visible. Our plan is to continue using Scott's expertise to stay up-to-date with the use and maintenance of our spraying equipment.

Trait Introgression Program

🔇 oybean for two cycles are Dharvested and replanted. Also soybean crossing blocks are being pollinated as part of our trait introgression program. Work load on this program is increasing. Soybean crossing and related services such as tissue sampling are expanding at a rapid pace. The lyopholizer is proving to be a valuable tool. Freeze dried tissue can be stored and is much easier to prepare for analysis compared to fresh or wet tissue. Another advantage is that less tissue is required, allowing samples to move through the field more quickly lowering labor charges. If shipment or analysis is delayed for any reason, freeze dried tissue saves you from re-sampling due to "expired" fresh tissue. Much of the crossing deals with valuable intellectual property that needs to be protected and contained. The new Excellence Through Stewardship (ETS) program will facilitate and document our efforts to preserve the integrity of trait and germplasm in our care. Marcos Obando, our soybean manager, is training more personnel to do soybean crossing. On the miscellaneous crops, sunflower growouts are read, sorghum nurseries are pollinated, pearl millet isolations are in progress and wheat is ready to harvest.

Field Inspections

Field inspections work load is still high on the South side of the island due to the increase in acreage for corn and soybeans. Tamar Detres is using help when too many fields are ready for inspection on the same day or fields are spread through the different farms. On the North side, acreage is still the same and the inspector we hired for that area is taking care of all the inspections needs. For summer, the demand for field inspections service on the island goes down considerably.

Stewardship Program

ur Stewardship program is up and running. In January, we hired Irma Alvarado to support our staff with all related to stewardship matters. Her background is in human resources, but she has been involved with seed companies for the last 10 John McKinney provided vears. Irma training on stewardship principles and practices. She has been doing an excellent job. In February, John came to the farm to audit our Stewardship program and he made some improvements and recommendations.







by Tom Newman, ISTA President • tnewman@wyffels.com

Annual Meeting to be held June 9, 2010

he Illinois Seed Trade Association's Annual Meeting will be held Wednesday, June 9, 2010, at the new I-Hotel in Champaign, IL (located near the Assembly Hall). I ask you to consider the importance of attending this gathering of seed industry supporters. The purpose of the annual meeting is for the election of officers and to transact business as determined by the Board of Directors. Events like this provide a connection for members of the Association with seed industry leaders and supporters. When you want to find out what is happening in a competitive market place, your fellow members are the best source. The networking opportunities will abound to share, discuss and learn with your fellow seedsmen.

In addition, the Annual Meeting provides a forum where issues of a state, regional or national interest can be discussed and considered. You'll hear a legislative report from Association lobbyist, Mike McCreery, on the current state of affairs in Springfield. One of the Association's objectives is to "aid, advise and assist in the establishment or enactment of equitable laws, rules and regulations for the transaction of business in the seed industry." Through our lobbyist, House of Representative and Senate bills that pertain to the seed industry and agricultural interest, in general, are monitored. We believe that monitoring legislative issues is an important benefit the Association provides its members.

The opportunity to gather together allows us to celebrate our achievements and culture and provide educational opportunities to our members. For that purpose, this year we will hear a special speaker, Dr. Gale Buchanan, Dean and Director Emeritus of the College of Agricultural and Environmental Sciences at the University of Georgia. He was a former USDA Chief Scientist and Under Secretary for Research, Education, and Economics. His talk is entitled "Role of Seeds in the Future of Agriculture and Ultimately our Civilization." We look forward to his perspective on the seed industry from a national level. Also in attendance will be Pat Miller, Director, State Affairs for ASTA. His attendance is an indication of how important the Illinois seed industry is on a national level.

As you can see, an exciting program is being developed for the Annual Meeting. There is nothing better than face to face communication between our members where our common values can be reinforced, friendships can be renewed and current topics of interest can be discussed.

The day following the annual meeting, Thursday, June 10, is our Golf Day. This activity is a fund



I Hotel Conference Center Entrance www.stayathel.com raiser for the Burlison Memorial Award given to a graduate student in Plant Science. This award is to commemorate Professor W.L. Burlison, third head of the Department of Agronomy (1920-1951). A committee of faculty from Plant Sciences selects a graduate with demonstrated student scholarship, leadership and evidence of professional promise that currently hold a University fellowship. The award is \$2000. The Illinois Seed Trade Assoc. raises about \$1000 from our golf day and the ASTA matches that money to make the award. Also recognized at the Annual Meeting are the Lang Scholarship recipients. This undergraduate scholarship is funded by money donated by your Association years ago to the Department of Agronomy. The proceeds from the invested funds are used to provide this scholarship. We are happy to be able to recognize the accomplishments of deserving students in the Plant Sciences.

The golf will be played at the University of Illinois Course where prizes will be awarded for significant accomplishments and lunch will be served. When you receive your announcement for the Annual Meeting in the mail and the invitation to participate in the Golf Day, respond knowing you'll be rewarded with good information, good fellowship and educational opportunities that will help build your business. As always, your comments are appreciated concerning all aspect of the Association's activities.

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IL Crop News Continued.....

CEO Update Prices and Philosophies (continued from page 1)

The goal is to achieve more equity between various sized companies in helping IL Crop cover administrative overhead costs associated with the four authentication programs.

With the beginning of the new year, IL Crop introduced a new Seed Lab volume discount program (be sure to ask about it) available to all client companies. Prices for many of the most requested laboratory tests will increase about \$0.75 each, while others will increase \$1.00. By taking advantage of the new volume discount program, you can expect to enjoy prices at very competitive rates which will be discounted from standard rates.

Seed Lab Update A Glimpse Into Our Seed Laboratory (continued from page 2)

For the corn and soybean evaluation, two analysts evaluate the sample to help prevent analyst evaluation error. The readings are then recorded on a germination card and taken into IL Crop's Tag and Records Department where the information is entered into the computer system, which instantly makes test results available on the IL Crop website. The IL Crop Report of Analysis is printed and a copy is mailed to customers if requested.

If you have any comments or questions about seed testing and seed quality issues, please contact me or the Seed Lab Director, Gary Cook at the IL Crop office.

News Release: Nels Kasey Recognized by C-FAR

The Illinois Council on Food and Agricultural Research (C-FAR) recognized two members of its board of directors at its recent 2010 annual meeting. Nels Kasey of Ashmore was honored for his seven years of service on the board. He retired from board service upon serving a full complement of terms. Kasey has served as a representative of the Illinois Seed Trade Association and currently serves on the Illinois Crop Improvement Association Board. Mr. Kasey is co-owner of Great Heart Seeds in Paris.



During his board leadership tenure, Nels has served as chair and vice chair of research, chairman of the board and this past year, as immediate past chair.

"Our organization has been very fortunate to have had Nels' service and leadership," said Jerry Hicks, C-FAR chairman of the board. "He has consistently displayed a true sense of caring, dedication, and vision that has served our organization extremely well. We are deeply grateful to Nels."

C-FAR is a statewide partnership organized to support relevant, high-quality research and related outreach programs for Illinois' food, agricultural, and related systems. For more information on C-FAR and its research programs, visit www.ilcfar. org, send an email to cfar@aces. illinois.edu, or call 217.244.4232.

Illinois-Indiana Seed Conditioning Workshop

More than ninety seed plant and industry personnel converged in Champaign on March 3rd to learn about core conditioning principles (sorting, sizing, separating, treating, etc) and other current topics of interest.

Iowa State University seed conditioning specialist Alan Gaul focused on informing participants about how to get the most out of their equipment and how to retain high quality seed.

GROWMARK's Randy Pearson presented a most comprehensive and insightful discussion related to the various challenges seedsmen may face as "Refuge in the Bag" becomes a reality.

Lewis Seed Farm's Shawn Lewis shared a candid discussion about his company's decision following the 2004 crop year to offer soybean seed by "Seed Count" beginning with the 2005 crop year.

Other speakers rounding out the successful program included: Mike Vanausdoll Kitchen Seed Co.; Jim Larkin, IL Dept. of Ag.; and Marion Shier, U of I. Presenters from IL Crop staff included Diane Campbell, Records Specialist; Steve Beals, Assistant Seed Lab Director and Doug Miller, Business Development Director.

The IL-IN Seed Conditioning workshop is co-sponsored by the respective crop improvement associations in Illinois and Indiana.

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