



C.E.O REPORT

by Doug Miller • dmiller@ilcrop.com

The Newsletter is Dead

"The newsletter is dead, long live the newsletter" is the best way for us to announce that we will be transitioning to an electronic newsletter. If you would like to receive the electronic newsletter please be sure to send your email address to ilcrop@ilcrop.com. We did not arrive at this decision lightly. It has been a back burner issue for me since I started as CEO. The time has now come to make the newsletter electronic. The resources necessary, staff time specifically, has sealed the fate of the paper version of the newsletter. We understand that the Illinois Seed News (ISN) is the voice of the Illinois Crop Improvement Association as well as the Illinois Seed Trade Association (ISTA). That tradition will continue and the importance of communicating seed quality, legislative activities and industry issues will not be lost with the change in format.

When I first started at Illinois Crop Improvement the newsletter was a monthly publication. Moving to a quarterly format around the turn of the century was a welcomed change. A true relief for those of us tasked with writing a monthly article. At times we struggled to fill a monthly newsletter. I can still

remember the photo of corn sprouting from the asphalt near the discard bin and the caption indicating that certified corn can grow anywhere. The photo was a humorous attempt to fill space; signaling the need to transition to a quarterly newsletter. To be clear we certify seed for identity and purity. We do not have an asphalt germ test by any stretch of the imagination.

The ISN will live on as a quarterly electronic publication. Its availability through the e-update system and on our website's publications page will make it easier to read. A sentence or two with a link to the full article including germination stats, application deadlines, meeting dates, training opportunities and the like will make it easy for you to find what you need to stay informed. I am old enough now to fully recognize that kids these days want to find what they need quickly. Kids these days don't mind updating a website. Kids these days don't apply for a job to crank out paper based products much less a newsletter.

Perhaps at this point your subconscious has tipped you off that other changes are afoot. Heather Stone, our administrative assistant, has decided to pursue other opportunities. Heather has been one of the best administrative assistants Illinois Crop and ISTA have had over the years. Heather left us once before and we gladly rehired her. Heather was made an Honorary Member by ISTA and she has helped make Illinois Crop Improvement a professional, customer service based, organization. We wish her all the best in her future endeavors.

For those of you who found the opening of my article somewhat foreign (listen up you kids). The traditional proclamation "The king is dead, long live the king!" or simply "long live the king!" simultaneously announces the death and accession of the past and new king or queen. Most importantly it assures the public of a seamless transition and continuity of a time honored institution. I find myself explaining these types of things more and more. Another sign that I am growing older and our communication style has to focus on the kids. We are not a monarchy, so please send us your questions, thoughts and concerns as they relate to the ISN so that we may write the articles and publish the statistics you want to see from your associations. Long live the Illinois Seed News as a time honored tradition of the Illinois Seed Industry.

Application Deadlines

- Winter Grains, Barley, Rye, Wheat: May 1
- Spring Grains, Barley, Oats, Rye: June 1
- Corn, Sorghum, Broomcorn: June 1
- Soybean Herbicide Inspection: June 15
- Soybeans (Foundation), Rice: July 1
- Soybeans Pre-harvest: August 1
- All Other Crops: May 1

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Seed Laboratory News

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

2018 Crop Year Seed Quality

Corn germinations in the lab are just above what we were seeing last year at this time. The overall corn germination average is 95.8% compared to 95.5% last season. The corn cold test germinations are averaging 94.1% which is 3.2% higher than last season. Soybeans have proven to be a challenge for the second year in a row. At the beginning of the testing season, we saw signs of significant Phomopsis infection in the germination samples. We found that treating the seed was going to be a must to salvage some seed lots. During testing we found that there was not a single fungicide treatment or a single testing method that would help every seed lot in every case. It was dependent on how deep the infection was into the seed and the overall integrity of the seed coats themselves as to which seed treatment would help the seed the most. With help from some fungicide applications, we have been finding that the soybean germinations are starting to show signs of mechanical damage in the seedlings, specifically root damage. The soybean germination average as of March 15, 2019 is 83.4% across all regions tested. The soybean germination average was 88.6% in 2018 at this time and 89.7% in 2017. As mentioned, Phomopsis infection was on the rise in 2019 with an overall average of 5.24% across all regions tested. The pod and stem infection average has increased 4.20% over last year. Soybean cold test germination averages are lower this season at 78.3% compared to 82.4% last year at this time. The average soybean

seed count across all regions is 2,834 seeds per pound, which is basically the same as the 2018 testing season. Seed applied fungicides will be beneficial to some seed lots with higher amounts of Phomopsis infection. The Illinois Crop seed lab can hand apply fungicide seed treatment to your seed germination sample to help determine if treating your seed lot may be beneficial. However, seed applied fungicides will not help increase the germination of seed lots that have mechanical damage. Please contact the seed lab if you would like to try or have any questions about this service. Constant monitoring of germinations will ensure that you are supplying good quality seed to your customers.

2018/2019 Corn Germination Comparison at a Glance

Corn	March 2018	March 2019	Change
Germ	95.5%	95.8%	+ 0.3%
Cold Test	90.9%	94.1%	+ 3.2%

2018/2019 Soybean Germination Comparison at a Glance

Soybean	March 2018	March 2019	Change
Germ	88.6%	83.4%	- 5.2%
Pod/Stem	1.04%	5.24%	+ 4.2%
Cold Test	82.4%	78.3%	- 4.1%
Sand	88.9%	81.2%	- 7.7%
Seeds Per #	2,833	2,834	+ 1

[See page 7 for comparisons by region](#)

Changes to the Report of Analysis

Changes have been made to the Illinois Crop Report of Analysis in the germination results section. This change was made to align the Total Germination category to the Federal Seed Act terminology. When there has been hard seed or dormant seed in our germinations, we report those seeds as such and use the term "Total Germination" to report the result. The Federal Seed Act states that if seed is sold in more than one pound containers and has hard seed, it must be labeled on the seed tag as Germination plus Hard Seed not Total Germination. While talking to the U.S. Department of Agriculture in Gastonia, NC, it was mentioned that while labeling dormant seed in this manner is not required in the Federal Seed Act at this time, there are plans to add it in the near future. The new terminology for this category on the Illinois Crop Report of Analysis will be "Total Germ + Hard/Dormant".

The Illinois Crop Seed Laboratory has become well known in the industry. We are continually adding more species tested on a regular basis. We currently have 3 Registered Seed Technologists and other very knowledgeable staff that are capable of testing most any crop. The Illinois Crop Seed Laboratory follows the Association of Official Seed Analysts (AOSA) Rules for Testing Seeds, Canadian Methods and Procedures for Testing Seed, and The International Seed Testing Association testing methods. We are ISO/IEC 17025 accredited and an Officially Recognized Seed Testing



Inspection Application Deadlines

Spring is just around the corner and it is time to start thinking about planting and field inspections. Forms for field inspection applications can be found on the Illinois Crop website and submitted by email to fieldapps@ilcrop.com or mailed to the office. Applications should be filed on or before the following dates:

- Winter Grains, Barley, Rye, Wheat: May 1
- Spring Grains, Barley, Oats, Rye: June 1
- Corn, Sorghum, Broomcorn: June 1
- Soybean Herbicide Inspection: June 15
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Phytosanitary Inspections

When submitting your field inspection applications don't forget to consider the need for a phytosanitary inspection. The purpose of the phytosanitary inspection is to help facilitate the movement of seed across political boundaries. Field inspection during the growing season is required by some countries. Illinois Crop Improvement is accredited to perform phytosanitary field inspections under the National Seed Health System. With an Illinois Crop Improvement field report you can request a phytosanitary certificate from an APHIS official or local ACO using the Phytosanitary Certificate Issuance and Tracking system or PCIT. The phytosanitary certificate is an original document that accompanies the consignment and is presented to the relevant officials on arrival of the consignment in the importing country.

While there is justifiable concerns that phytosanitary measures now serve as a trade barrier the underlying concern is real. The introduction of exotic pests to new regions and the introduction of inoculum to previously un-infested fields should be a concern for exporters and importers. The financial consequences of distributing a diseased seed lot may be substantial. Phytosanitary issues are actually more than just an export-import issue. We all want high-quality, disease free seed for storability and sale-ability in local markets.

This brings us back to the field phytosanitary inspection. Its importance cannot be overlooked. No laboratory test or procedure can recreate or elucidate the condition of the crop during the growing season. Having a field phytosanitary inspection is like an insurance policy. Insurance against the constant change in import are re-export requirements; insurance against pathogen concerns that have no recognized seed test. A field phytosanitary is relatively cheap insurance when you contemplate your seed sitting, unable to move and unable to be sold.

Every country has different import requirements, laws, regulations and restrictions which can be difficult to navigate. You simply have to attend an ASTA Phytosanitary Committee meeting to find out that things like NAPPO, IPPC, NSHS and ISHI affect us all. But rather than getting sidetracked by policy make it your policy to apply for a field phytosanitary inspection. If the production has the potential to move across borders and be subject to the policies and procedures of governments and bureaucrats it's an inexpensive insurance policy.

In Memory

*Jeff B. Duncan
Illinois Crop Field Inspector*

Jeff B. Duncan, 63 of rural Mendota passed away January 26, 2019 in his home.

Jeff was an Illinois Crop field inspector from 2009 to 2018. He conducted purity and phytosanitary inspections on corn, soybeans, wheat, and oats. He was a dedicated employee and was always willing to take on new challenges. His regular inspection territory covered Lee, DeKalb, LaSalle, Bureau and Ogle Counties, but he would often travel even farther to help other inspectors with their workloads. Jeff was a family oriented person who loved people and was known for his gift of gab. He had a warm personality and a great sense of humor. He will be greatly missed at Illinois Crop.

He is survived by his wife Shari Duncan of Mendota; his brother Gary of Batavia; his father George Duncan of Mendota; two daughters Nicole (Michael) Dillard of St. Louis and Tiffany Duncan of Little Rock, Ark; two stepchildren Corwin (Jerica) Magill of Peoria and Brandon (Kelsie) Hardy of Ottawa; and four grandchildren.



Stress Crack Testing

On November 29, 1995, the Grain Inspection, Packers, and Stockyards Administration (GIPSA) published in the Federal Register (60 FR 61194) a final rule offering stress crack testing of corn effective January 1, 1996. The method developed at the Identity Preserved Grain Laboratory was selected as the official GIPSA method for stress crack analysis. We are still proud of this fact and as such thought everyone could use a refresher on what it takes to do a stress crack analysis.

Stress cracks are internal fissures in the hard endosperm of a corn kernel. The pericarp of the kernel is not damaged, so the outward appearance of the kernel may be unaffected at first glance. The cause of stress cracks is pressure buildup due to large gradients of moisture content and temperature within the kernel's hard endosperm. The internal stresses are not able to build up as much in soft, floury endosperm. A kernel may have one, two, or multiple cracks. High-temperature drying is the most common cause of stress cracks. Therefore, high levels of stress cracking can serve as a guide to poor suitability for particular uses.

Wet Milling – larger amounts of broken corn lost in cleaning (screening to remove chaff, broken grain and small kernels), lower starch yield due to high-temperature drying.

Dry Milling – larger amounts of broken corn lost to cleanout, lower yield of the most valuable products (large grits). Alkaline Cooking – larger amounts of broken corn lost in cleaning, disturbance of process balance leading

to overcooking or undercooking.

The IPG Lab evaluates stress cracks using a backlit viewing board to accentuate the cracks. Two replicates of 100 intact kernels (no external damage) are examined. The severity of the stress crack damage is related to the total number of stress-cracked kernels and the number of cracks in each kernel. Many corn users will specify the acceptable level of cracks. The Stress Cracks Test report includes:

% Stress Cracks

Percentage of kernels with at least one crack

% Single Stress Cracks (SSC)

Percentage of kernels with only one crack

% Double Stress Cracks (DSC)

Percentage of kernels with exactly two cracks

% Multiple Stress Cracks (MSC)

Percentage of kernels with more than two cracks

Stress Crack Index (SCI)

Weighted average, showing severity of cracking - SCI is calculated using the formula:

$$SCI = [SSC \times 1] + [DSC \times 3] + [MSC \times 5]$$

Lower numbers for the percentages and index are always better. If stress cracks are present, singles are better than doubles or multiples. Many contracts are written with a stress crack allowance of 20%, but this may vary from case to case.

% Stress Cracks Possible Values 0-100%

- Typical Results 0-60%

% Single Stress Cracks Possible Values 0-100%

- Typical Results 0-30%

% Double Stress Cracks Possible Values 0-100%

- Typical Results 0-20%

% Multiple Stress Cracks Possible Values 0-100%

- Typical Results 0-50%

Stress Crack Index Possible Values 0-500

- Typical Results 0-300

Identity Preserved Grain Lab Services

ACCREDITATION

ISO/IEC 17025:2005

accredited laboratories

CROPS & PRODUCT TYPES

Corn, Soybean, Wheat, DDGS,

Meals, Flours and more

TESTS OFFERED

Food-grade Bundles

Alkaline Cooker Bundles

Ethanol Fermentation Yield

Amylose Content

BCFM

Stress Cracks

Waxy Purity

Nitrogen Solubility Index

Protein Dispersibility Index

Non-GMO

Protein, Oil, Fiber, Moisture

Falling Number

Sugar Profile

Stevent Hardness Test

Extractable Starch

Mycotoxins

and more



Returning Crops

So far the farm is having a very good season. Crops currently planted are barley, corn, cowpeas, dry beans, mung beans, peanuts, sorghum, soybeans, sunflowers, tobacco and wheat. We are having abnormally dry weather and while our well is in good condition, the lack of rainfall is making it difficult to prepare the field for new plantings due to the low moisture content in the soil. Disease pressure has been mild but insect pressure went from moderate in late January to high in February. But despite the high pressure we were able to keep insect damage to our crops under control. The addition of a Hagie DTS10 sprayer has been helping a lot because we now have the flexibility to spray different types of insecticides to different crops at the same time.

At this point in the season all corn nurseries have been harvested with good results that were better than previous season because of improvements we made on practices done after pollination. Most of the corn growouts are read and crop conditions were excellent for readings. The change we made on corn growout row length significantly reduced double plants which resulted in more accurate readings. Our plan for future corn growout plantings is to keep the longer row length.

The first soybean cycle has been harvested with excellent seed quality. Soybean projects for two cycles were planted by mid-February or before.

A considerable amount of sorghum growouts were done at the farm with excellent results. Reading sorghum

growouts was something not common for our staff but we took training with our client. We now have trained personnel able to do sorghum growout readings. Sorghum isolations and increases were also planted.



One of our sunflower clients returned after not sending growouts last season due to the uncertainty after the hurricane. We planted around 40 acres of sunflower growouts and most of the readings are done. The client visited the farm and was very pleased with the field's condition and results.



Another crop that a client did not send to the farm last season because of the hurricane was wheat. They also returned and their wheat field was recently harvested by the breeder and his feedback was very positive.

Sunflower cages were not used this season. Although results last season were good, none of the sunflower projects requested to be under cages this season.



Due to the good results obtained on last season's tobacco trial, we planted more tobacco this season plus cowpeas and soybeans. All three crops were for the same client. So far projections for that project are to plant more acreage next season.

A new crop that we may plant next winter season is canola for growout.

Summer is a good time for our staff to evaluate requests and do trials. If you have a request or future project that includes winter farm services please contact us and we can give you information about our services or design the project to fit your needs. Feel free to contact our Champaign, IL or Juana Diaz, PR offices.



Illinois Seed Trade Assn

by Greg Smith, President • greg.smith@hubnerindustries.com

Spring Ahead

This week was the first week of Daylight Saving Time. Hopefully this means spring is just around the corner. I think most of us are ready for some normal spring weather. Mother Nature has been pretty cruel this past week with the Bomb Cyclone event that crossed the nation. A wide range of events were associated with this from blizzard conditions in the west and north, major flooding in the western plains, and tornadoes in the east. Hopefully the weather will settle down and our attention can turn to planting season.

Your Illinois Seed Trade Association has been monitoring activities in Springfield. According to Mike McCreery, your ISTA Lobbyist, The House introduced over 3,500 legislative proposals. The Senate introduced over 2,100 this past February. Keeping track of how these bills may impact the way seedsmen do business in the state is our top priority. Your Executive Secretary, Richard Denhart, is not only in contact with Mike at the state level, but he also monitors activity in Washington with the American Seed Trade Association.

We have two important dates to remember for ISTA. First is our annual golf outing that has been scheduled for June 12, 2019 at Stone Creek Golf Club in Urbana, Illinois. Registration begins at 10 a.m. with a shotgun start at noon. Hopefully the spring planting season will be normal and we can have a record turnout for a fun and relaxing day of golf. This would be an excellent opportunity to bring customers or associates and entertain them at this event. This is the only

ISTA fund raiser for the W.L. Burlison Memorial Award which is given to an outstanding University of Illinois Crop Sciences graduate student. If you're not able to golf but would like to contribute, you can by way of a hole or hospitality sponsorship. If you have any questions please contact Richard Denhart at rdenhart_ista@ilcrop.com or call 217.359.4053.

Second, is the Illinois Seed Trade Association annual meeting which is held in conjunction with the Illinois Crop Improvement Association meeting. These meetings will take place June 13th, 2019 at the Illinois Department of Agriculture building in Springfield, Illinois.

The Illinois Seed Trade Association Board thanks you for your continued support. With your support, we are able to monitor legislation that could impact the future of the Illinois Seedsman. We look forward to seeing you in June at the golf outing. I wish everyone a safe planting and growing season!

April is Declared Seed Month in the State of Illinois

Governor Pritzker has proclaimed April 2019 as Seed Month in Illinois. This Proclamation, written below, is given in appreciation of the seed industry's contribution in supplying food and fiber to the world.

WHEREAS, the abundance of Illinois' crop relies on fertile soils, diligent farmers, and high quality seeds; and,
WHEREAS, agriculture and the seed industry significantly contribute to our state's economy with value-added products marketed throughout the world; and,

WHEREAS, the Bureau of Agricultural Products Inspection within the Illinois Department of Agriculture tests the purity and germination of seeds, validates accuracy of product labels, and cooperates with the Illinois Crop Improvement Association which is the state's official seed certifying agency, and an independent nonprofit organization; and,

WHEREAS, in cooperation with educational and regulatory agencies, the Illinois Seed Trade Association has sustained an informed membership, the latest research developments, the production of high-quality seed, and has developed an effective seed program advocating for their members' interests: and,

THEREFORE, I do hereby proclaim April, 2019, as SEED MONTH in Illinois in appreciation of the seed industry's contribution in supplying food and fiber to the world through the production of Illinois crops.





Illinois Seed News Continued...

Seed Laboratory News - continued from page 2

Laboratory for Canada. Illinois Crop conducts a wide variety of traditional testing services and will also perform customized quality testing according to your specifications.

Should you have any questions regarding seed testing or seed quality issues please contact me at the Illinois Crop office at 217.359.4053 or by e-mail at sbeals@ilcrop.com.

Region	Soybean Germ	Soybean Pod Stem	Soybean Hand Treated Germ	Soybean Sand Germ	Soybean Hand Treated Sand	Soybean Cold Test	Soybean Seed Count	Corn Germ	Corn Cold Test
Central	85.9	2.19	N/A	86.6	86.2	86.9	3,103	97.5	98.3
East	83.3	2.38	89.4	87.4	N/A	80.2	2,509	95.7	92.9
East SE	85.2	2.85	88.2	87.1	87.8	83.8	2,824	96.1	91.1
Northeast	91.7	1.92	N/A	N/A	N/A	92.5	2,675	93.0	98.0
Northwest	77.8	11.52	54.5	57.5	59.5	66.5	N/A	96.6	93.6
Southeast	75.8	8.32	82.0	91.0	N/A	60.7	2,846	96.5	90.7
Southwest	84.0	6.32	83.1	80.4	86.4	68.1	3,084	97.2	98.0
West	85.6	3.93	84.9	78.0	N/A	85.4	2,986	96.5	95.1
West SW	80.4	7.90	76.7	76.4	76.7	80.5	2,818	93.8	89.8
Out of State	83.9	5.04	82.7	86.8	82.0	78.8	2,658	94.8	93.2

Calendar of Events

April 19

CLOSED - Good Friday

April 23-24

AOSCA Northern Regional Mtg
Lansing, MI

May 27

CLOSED - Memorial Day

June 1-6

AOSA/SCST Annual Mtg
www.analyzeseeds.com
Sparks, NV

June 12

ISTA Annual Golf Outing
Stone Creek Golf
Urbana, IL

June 13

Illinois Crop/ISTA Joint Annual Mtg
Springfield, IL

June 23-26

AOSCA Annual Mtg
100th Anniversary
www.aosca.org
Chicago, IL

2019 Illinois Crop & Illinois Seed Trade Joint Annual Meeting

Illinois Crop Improvement and Illinois Seed Trade Association joint annual meetings will be held June 13, 2019 at the Illinois Department of Agriculture building in Springfield, Illinois. This meeting provides an opportunity for our respective members to keep updated on Illinois Crop Improvement and Illinois Seed Trade's progress during the past year and to hear updates on what is happening with the Illinois Department of Agriculture, University of Illinois Crop Sciences Department, and the American Seed Trade Association. Illinois Seed Trade Association will also host their Annual Golf Outing on June 12, 2019 at the Stone Creek Golf Club in Urbana, Illinois. Invites for this meeting will be going out soon. Please contact the office if you have any questions or would like to attend the golf outing at 217.359.4053.





Illinois Crop Improvement Association, Inc.

3105 Research Road
Champaign, IL 61822

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Illinois Crop Improvement Association, Inc.

Shipping: 3105 Research Road, Champaign, Illinois 61822

Tel 217.359.4053 Fax 217.359.4075 Toll Free 888.455.3105

E-mail: ilcrop@ilcrop.com • Web: www.ilcrop.com

Office Hours: Monday - Friday 8:00 am to Noon and 1:00 pm to 5:00 pm