



**Missouri Crop Improvement Association
News and Notes**

December - 2018

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MCIA's News and Notes is designed to provide members and other interested individuals with information about MCIA programs and services, as well as timely access to information that impacts the seed industry and agriculture in general. Our format is structured to provide a brief introduction to topics of interest along with contact information or links to sources where you can obtain more detailed information. Many of the articles and items listed in this newsletter contain web addresses or hyperlinks by which you can obtain additional information. If you do not have internet access and would like additional information on any of the topics mentioned in this newsletter, please contact the MCIA office and we will forward you the information. Please feel free to contact the MCIA office if you have questions or suggestions for items to be included in future issues.

*Season's Greetings and Best
Wishes for a Joyous
Holiday Season and
Prosperous New Year from
the Staff of the Missouri
Crop Improvement
Association*

Soybean Quality Update and Testing Issues

As of December 21, the MCIA seed lab has completed germination testing on 949 samples from the 2018 crop with an average germination of 88.20%. Even for samples with higher germinations, visual quality is less than ideal for most samples, even after aggressive conditioning. Unlike previous years where soybean germinations started out high and declined throughout the conditioning season, 2018 soybean germinations have struggled from the beginning. The 88.20% represents results from all germination methods (regular towel, treated towel, sand and treated sand). We have seen varying degrees of success using a standard fungicide treatment, however, regular towel germinations are running within recognized tolerances of sand germinations in most instances. We are working on a modification to our software that will allow us to break out germination averages by the different methods and hope to have results to share in the January newsletter.

Unlike recent years, the main factor contributing to lower germinations this season is diseased and dead seeds caused by extreme stress on the plants and diseases that increased in severity due to plant stress and late season rains. As would be expected, vigor test (accelerated aging) results are much lower across the board for 2018 production.

For those producers that have preliminary samples showing low germination results, MCIA's seed testing lab offers optional sand germination and lab treated germination services. As mentioned above, in some instances sand germination testing can show improved results for samples with light seed borne infections and no mechanical damage, however, severely diseased samples are showing little to no improvement in sand. Treated germination testing can show the response of a sample to testing with a standard fungicide treatment. MCIA is currently using CruiserMaxx Vibrance and we have just started testing products that contain Thiabendazole to see if there is a noticeable improvement. Please feel free to contact the MCIA seed testing lab if you have questions or would like to discuss testing options for your 2018 soybean seed production.

Vigor Testing for Soybeans

There are basically two types of vigor tests for soybean, namely a cold test or an accelerated aging test. Based on past experience, MCIA believes the accelerated aging test is a more reliable tool for measuring vigor and predicting storability for soybeans than a cold test. We offer the accelerated aging test in house and can accommodate requests for cold tests through one of our partnerships with other seed testing labs.

Accelerated aging tests should be conducted in conjunction with and compared to the results from a normal warm germination exam. High vigor lots should not exhibit more than a 5-10% spread between the 2 tests. Spreads over 10% indicate that the vigor level is dropping and the higher the spread, the lower the vigor. Please contact the MCIA office if you have questions or would like to discuss vigor testing in greater detail.

Variety Testing Performance Results

Results from the University of Missouri's 2018 performance testing for corn and soybean are available via the internet at <http://varietytesting.missouri.edu/> and may also be accessed via a link on MCIA's web site (<http://mocrop.org>). Preliminary results were posted as soon as locations were harvested, but keep in mind they are only preliminary results until all data has been checked and verified. It should be noted that the same high stress conditions that plagued most of Missouri did not spare the variety testing plots. Some locations had to be abandoned completely and other locations experienced a high degree of variability. Please contact the MCIA office if you would like to receive a printed copy of the 2018 results when they become available.

2019 Spring Seed Directory

A copy of the 2019 Missouri Spring Seed Directory will be posted to the MCIA web site shortly after the first of the year. In the interim, please contact the MCIA office if you have questions regarding the availability of any particular type and/or variety of soybeans.

MCIA Holiday Office Hours

The MCIA office will be closed on the following days during the upcoming holidays.

December 24

December 25

December 26

January 1

Happy Holidays