



Missouri Crop Improvement Association

News and Notes

January – 2017

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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.

New Conventional Soybean Varieties

5 new conventional soybean varieties have been approved for release to MCIA members for seed increase this spring. Maturities range from 3.9 to 5.3 and all were tested in the 2016 Missouri soybean performance trials. As with recent releases, a combination of named cultivars for production as Certified seed and non-exclusive licensing for branding under the Momentum brand or a company's own private brand will be utilized in releasing these varieties.

Please refer to the enclosed data sheets for more detailed agronomic and performance data for these new releases. Missouri Foundation Seeds will be sending out their order form for these and established lines by the end of January and there will be a limited time frame for orders to be returned in order to be eligible to receive an allocation of Foundation and/or Parent Seed. Please feel free to contact the MCIA office if you have questions or would like more detailed information concerning any of these new varieties.

Soybean Seed Quality Update

MCIA's seed testing laboratory has completed germination analysis on 1,242 soybean samples with an average germination of 93.69%. This is unchanged from the 93.70% reported in the December newsletter and the 93.54% on 1,342 samples reported for the same period in 2016. Quality in general remains average and we are still seeing samples showing shriveled seed, mottled hila and cracked/broken seed coats. Recent cold weather has slowed conditioning in many areas and samples are showing lower moisture levels, as would be expected. Mechanical damage remains roughly the same as it has been since harvest, with the exception of slightly higher levels on late harvested production and production from some parts of the delta/mid-south region.

Seed size is fairly uniform and stable although it can vary more than normal on lots conditioned from co-mingled production. Conditioners should closely monitor each lot during conditioning, especially if you intend to package your product by seed count or use seed count as the basis for sale. Please feel free to contact the MCIA office if you have questions or concerns with regard to the quality of your 2016 soybean seed production.

2017 Spring Seed Directory

The 2017 Spring Missouri Seed Directory is completed and is available on MCIA's website under the Forms, Documents and Publications tab. In an effort to reduce postage expenses, we are not mailing a printed copy as has been the normal practice. Please contact the MCIA office if you would like to receive a printed copy of the directory and he would be happy to mail one to you. Please feel free to contact the MCIA office if you have questions regarding availability of anything contained in the directory or questions about varieties not being produced in Missouri.

Variety Testing Performance Results

Results from the University of Missouri's 2016 performance testing for corn, sorghum and soybean are available via the internet and in printed form. Visit <http://varietytesting.missouri.edu> to access the 2016 results via the internet or contact the MCIA office and we will send you a printed copy.

Missouri Agricultural Statistics Service Reports Available

The Missouri Agricultural Statistics Service (MASS) recently released several reports, including the 2016 Missouri Wheat Seedings Report, December Grain Stocks Report and the Final 2016 Crop Production Report. These reports and many other MASS and National Agricultural Statistics Service reports can be found at: http://www.nass.usda.gov/Statistics_by_State/Missouri/Publications/Press_Releases/

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CAFNR Alumnus Award Nominations

The MU Ag Alumni Association is now accepting nominations for the following awards; *Alumnus of the Year*, *Citation of Merit*, *Honorary Member*, *True Tiger Volunteer* and *Dana Brown Haynes Distinguished Service Award*. These awards annually recognize the best and brightest in Missouri agriculture and reflect the history of achievement earned by CAFNR alumni and friends. Nominations may be submitted online at <http://cafnr.missouri.edu/coe/alumni> or by mail to Dana B. Haynes, 2-64 Agriculture Building, Columbia MO 65211. Submission deadline for nominations is January 30.

Links to Articles of Interest to MCIA Members

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| Midwest Cover Crops Council Website Gets Upgrade | http://extension.missouri.edu/n/2959 |
| MU Drainage System Increases Yields, Reduces Nutrient Runoff | http://extension.missouri.edu/n/2962 |
| Chinese Scientists Develop Marker-free GM Hexaploid Wheat | http://www.grainnet.com/article.php?ID=162862 |
| Has Wheat Gluten Changed Over Time? K-State Project Seeks Answers | http://www.grainnet.com/article.php?ID=163387 |
| Soybean Plants with Fewer Leaves Yield More | http://www.grainnet.com/article.php?ID=162952 |
| Researchers Make Breakthrough in Controlling Soybean Cyst Nematode | http://www.grainnet.com/article.php?ID=162950 |
| Future Grass Will Make Animals Healthier, More Productive | http://www.grainnet.com/article.php?ID=162749 |
| Dicamba and Soybean: What to Expect in 2017 | http://www.seedtoday.com/info/ST_articles.html?ID=163120 |
| Illinois Soy Yield Contest Tops 106 | http://www.seedtoday.com/info/ST_articles.html?ID=163504 |
| Will Growers Pay for Hybrid Wheat? | http://www.seedtoday.com/info/ST_articles.html?ID=162955 |
| Wheat Gene Identified to Combat Crippling Wheat Disease | http://www.seedtoday.com/info/ST_articles.html?ID=162866 |
| Genetic Resistance Found for Wheat Curl Mite | http://www.seedtoday.com/info/ST_articles.html?ID=162769 |
| Kansas PVPA Violator Settles with Syngenta | http://www.seedtoday.com/info/ST_articles.html?ID=163428 |
| Plant Populations Trend Downward | http://www.seedtoday.com/info/ST_articles.html?ID=162951 |
| Microbial Traits, Not Plants, Determine Abundance of Soil Organic Matter | http://www.seedtoday.com/info/ST_articles.html?ID=163429 |
| Common Insecticides are Riskier than Thought to Predatory Insects | http://www.seedtoday.com/info/ST_articles.html?ID=163468 |
| Bioenergy Grass Can Withstand Freezing Temperatures | http://www.seedtoday.com/info/ST_articles.html?ID=163109 |
| Stine Seed Gives U.S. Soy Farmers Rare Chance to Replant GMO Seeds | http://www.reuters.com/article/us-usa-seeds-saving-idUSKBN14118N |
| Missouri 2016 Soybean Yield Contest Winners Announced | http://mosoy.org/missouri-soybean-yield-contest-winners-announced |
| University Yield Data Emerging for Xtend Soybeans | https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2016/11/16/university-yield-data-emerging-xtend-2 |

Calendar

| | | |
|----------------|--|------------------|
| January 28-31 | ASTA 56th Vegetable & Flower Seed Conference | Orlando, FL |
| February 7 | Illinois/Indiana Seed Conditioning Workshop | Indianapolis, IN |
| February 8-9 | Corn Belt Seed Conference | Indianapolis, IN |
| February 11 | UM-CAFNR Ag Unlimited 2017 | Columbia, MO |
| February 24-26 | 2017 Western Farm Show | Kansas City, MO |
| March 1-4 | 2017 Commodity Classic | San Antonio, TX |

2017 New Late MG 3 - Mid MG 4 Conventional Soybean Variety Info

| 2016 Experimental Testing Designation | MFS MO EXP 1455 | MFS MO EXP 3791 | MFS MO EXP 1451 |
|--|------------------------------------|--------------------------------|------------------------------------|
| Anticipated Release Method | Licensed for QA Branding | Certified Seed by Variety Name | Licensed for QA Branding |
| Anticipated Common Brand/Variety Name | Momentum 39C07 | MO4501D CONV | Momentum 44C07 |
| Available for Company Name Branding | YES | NO | YES |
| Anticipated Royalty | \$2.20 per 50# unit | \$2.20 per 50# unit | \$2.20 per 50# unit |
| Anticipated Foundation/Parent Seed Cost | \$35.00 per 140,000 seeds | \$30.00 per 140,000 seeds | \$35.00 per 140,000 seeds |
| Herbicide Tolerance | None | None | None |
| Agronomics | | | |
| Maturity | Late III-Early IV (RM = 4.0) | Mid Group IV (RM = 4.5) | Mid Group IV (RM = 4.4) |
| Growth Habit | Indeterminate | Indeterminate | Indeterminate |
| Plant Height | Medium - 37" | Short - 31" | Medium - 35" |
| Flower Color | White | White | Purple |
| Pubescence Color | Light Tawny | Light Tawny | Grey |
| Pod Color | Tan | Tan | Tan |
| Hilum Color | Grey | Black | Imperfect Black |
| Seed Size (per pound) | 2,600 | 2,300 | 3,400 |
| Disease Resistance | | | |
| Soybean Cyst Nematode (SCN) | Resistant - Races 3 & 14 (PI88788) | Resistant - Races 3 & 14 | Resistant - Races 3 & 14 (PI88788) |
| Sudden Death Syndrome (SDS) | MR - Moderately Resistant | Unknown | MR - Moderately Resistant |
| Phytophthora Root Rot | Susceptible | Field Tolerant | Susceptible |
| Stem Canker | Unknown | Resistant | Unknown |
| Frogeye Leaf Spot | Resistant | Resistant | Resistant |
| Root-Knot Nematode | Susceptible | MR - Moderately Resistant | Susceptible |
| 2016 Yield Performance (bu/ac)*** | | | |
| Annada | 43.5 | 53.5 | 36.1 |
| Columbia | 66.1* | 57.1 | 58.5* |
| Henrietta | 60.0 | 52.1 | 49.4 |
| Truxton | 79.5* | 73.8 | 60.7 |
| Central Region Mean | 62.2 | 59.1 | 51.1 |
| Adrian | NT | 57.8 | NT |
| Garden City | NT | 43.3 | NT |
| Lamar | NT | 48.2 | NT |
| Urich | NT | 60.9* | NT |
| SW Region Mean | NT | 52.5 | NT |
| Chaffee | NT | 63.1* | NT |
| Charleston | NT | 39.1 | NT |
| Morehouse | NT | 54.3 | NT |
| New Madrid | NT | 48.6 | NT |
| Portageville | NT | 59.5* | NT |
| SE Region Mean | NT | 52.9 | NT |

* Yield not significantly different than the highest yielding variety in the test

** Highest yielding variety in the test

*** University of Missouri 2016 Soybean Crop Performance Trials - refer to <http://varietytesting.missouri.edu> for complete test info

Please note - a license agreement is required in order to produce and market these varieties. Please contact the MCIA office for details

2017 New Late MG 4 - Early MG 5 Conventional Soybean Variety Info

| 2016 Experimental Testing Designation | MFS MO EXP 2418 | MFS MO EXP 4718 |
|--|--|--|
| Anticipated Release Method | Certified Seed by Variety Name | Certified Seed by Variety Name |
| Anticipated Common Variety/Brand Name | MO4801D C/STS | MOS201D CONV |
| Available for Company Name Branding | NO | NO |
| Anticipated Royalty | \$2.20 per 50# unit | \$2.20 per 50# unit |
| Anticipated Foundation/Parent Seed Cost | \$30.00 per 140,000 seeds | \$30.00 per 140,000 seeds |
| Herbicide Tolerance | Sulfonylurea (STS) | None |
| Agronomics | | |
| Maturity | Late Group IV (RM = 4.8) | Early Group V (RM = 5.2) |
| Growth Habit | Indeterminate | Determinate |
| Plant Height | Short - 34" | Short - 30" |
| Flower Color | White | White |
| Pubescence Color | Light Tawny | Light Tawny |
| Pod Color | Tan | Tan |
| Hilum Color | Black | Black |
| Seed Size (per pound) | 2,400 | 3,360 |
| Disease Resistance | | |
| Soybean Cyst Nematode (SCN) | MR - Moderately Resistant - Races 3 & 14 | MR - Moderately Resistant - Races 3 & 14 |
| Sudden Death Syndrome (SDS) | MS - Moderately Susceptible | MR - Moderately Resistant |
| Phytophthora Root Rot | Field Tolerant | Field Tolerant |
| Stem Canker | Resistant | Resistant |
| Frogeye Leaf Spot | Resistant | Resistant |
| Root-Knot Nematode | MR - Moderately Resistant | Susceptible |
| Salt Tolerance | Chloride Includer | Chloride Excluder |
| 2016 Yield Performance (bu/ac)*** | | |
| Adrian | 48.5 | 60.9* |
| Garden City | 47.3 | 48.6 |
| Lamar | 49.3 | 53.2* |
| Urich | 62.6* | 49.3 |
| SW Region Mean | 51.9 | 53.0 |
| Chaffe | 52.3 | 58.8* |
| Charleston | 44.2 | 42.2* |
| Morehouse | 51.2 | 53.3* |
| New Madrid | 42.5 | 37.7 |
| Portageville | 59.0* | 60.2* |
| SE Region Mean | 49.8 | 50.4 |

* Yield not significantly different than the highest yielding variety in the test

** Highest yielding variety in the test

*** University of Missouri 2015 Soybean Crop Performance Trials - refer to <http://varietytesting.missouri.edu> for complete test info

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