



MEMORANDUM

February 24, 2021

To: All Commercial Hybrid Corn Seed Vendors in Montana

From: 
Kenneth D. Kephart, Superintendent/Research Agronomist
Professor of Agronomy

Subject: 2021 Irrigated Corn Hybrid Test at Huntley, Montana

The Southern Agricultural Research Center (SARC) is one of seven research centers in the Montana Agricultural Experiment Station (MAES) system of Montana State University, Bozeman (MSU). Located in an irrigation district of the Yellowstone River Valley east of Billings, Montana, SARC conducts research programs that serve agriculture more diverse than the remainder of the state. The SARC Variety Testing Program again offers a corn hybrid field test for grain production. The test will be conducted at one location under irrigation on the research center using conventional herbicides. SARC is not offering separate tests for Roundup Ready™, Liberty Link™ or other genetically engineered hybrids at this time. This memorandum serves as an agreement to perform said research on a fee basis.

Department
of
Research Centers

This memorandum contains the entire and only agreement between the Montana State University (MSU) and entities (Vendor) wishing to submit corn hybrids for field testing as stipulated in this memorandum. Should processing of materials provided pursuant to this agreement require issuance of a purchase order or transfer agreement, all terms and conditions of that document are hereby deleted in their entirety and superseded by this agreement. This agreement may not be amended except by a writing signed by the authorized representatives of each party.

Terms and Conditions:

Mandatory Compliance: The MSU Office of Research Compliance policy states "*transgenic or genetically modified organisms (GMOs) plants must be identified and licensed for both domestic growth, and domestic and export sales. Plants that have been genetically modified via molecular methods (e.g. CRISPR) and are not licensed for commercial growth require additional protocols and permitting per USDA/APHIS. Additional permitting is required for materials imported to the United States, or for select materials transported within the United States.*" For clarification or questions regarding this policy, please contact Mr. Kirk Lubick, Director, MSU Office of Research Compliance, 406-994-6998, kirk.lubick@montana.edu.

Entries: Regardless of the above stated compliance policy, the Southern Agricultural Research Center will NOT accept regulated genetically engineered crop varieties and hybrids, as defined in 7 CFR Part 340, for field testing. All commercial conventional, and commercial non-regulated genetically engineered corn hybrids as defined by 7 CFR § 340.6, offered or likely to be offered for sale in Montana will be accepted for performance testing. **All hybrids must be entered by using the attached 2-sided application form.** Please indicate priority by order of listing. Entries will be accepted on a first come, first served basis, however, the right is reserved to limit the number of entries from each entrant if the number of entries exceed available facilities. **Genetically engineered hybrids must be identified and licensed for both domestic and export sales. Montana State University and the Montana Agricultural Experiment Station shall not be held liable for genetically engineered corn hybrids submitted for testing and not properly identified by the entrant.**

**Southern Agricultural
Research Center**

748 Railroad Highway
Huntley, MT 59037

Tel (406) 348-3400
Fax (406) 348-3410
<http://www.sarc.montana.edu>

Fee & Remittance: **There will be no fee for the first six (6) hybrids submitted for testing by an entity.** Additional entries will be tested on a fee basis of \$150.00 US per entry. **Remittance shall accompany entry form.** Please make all remittances payable to "SARC Variety Testing Program".

MSU Obligations: MSU will use good faith efforts to plant, harvest, and tabulate analyzed results of every entry submitted. MSU shall not be liable for loss of crop or data and will not refund any entry fee paid unless the loss was caused by MSU's gross negligence or intentional misconduct. MSU will destroy or dispose of unused materials in a reasonable manner upon completion of the trial. MSU will provide Client a copy of trial results as the sole deliverable under this agreement.

Publication: All results belong to MSU. Vendor recognizes MSU and investigators participating in variety trials are free to publish results and distribute such publications as to provide the greatest benefit to the public.

Use of Data: Vendor shall be solely responsible for any liability arising out of Vendor's use of or reliance upon data generated pursuant to this trial. Vendor may use performance in the following manner: 1) tables may be reproduced in their entirety provided the source is referenced and data are not manipulated or reinterpreted; and 2) advertising statements by an individual company about the performance of its submitted entries may be made as long as they are accurate statements about the data published with no reference to another company's name or cultivars.

Intellectual Property: Nothing in these terms grants to MSU any intellectual property rights associated with the provided materials.

Use of Name: Neither Party shall use the name of the other party for advertising, news release, or in any other manner without the prior written approval of the other Party. Any statements regarding the trial or results must not imply endorsement or recommendation by Montana State University.

No Warranties: MSU makes no warranty whatsoever regarding research outcomes. MSU makes no representations or warranties, whether express or implied, regarding its performance under this agreement, including (without limitation) to any warranties related to the marketability, use, or fitness for any particular purpose of results.

Governing Law: The laws of the State of Montana, without reference to choice of law principles, shall apply to all disputes arising under the Agreement, and any and all claims or actions of any nature arising out of this Agreement shall be brought in the courts of Gallatin County, Montana.

Methods: A randomized complete block (RCB) design with four replications or lattice design with three or four replications will be used, depending on the total number of entries. Seed for each row within each plot will be electronically counted to insure that each entry establishes from a uniform population. Plots will be 4 rows wide and 30 feet long. Row spacing will be 30 inches. Plots will be planted using a modified John Deere MaxEmerge planter equipped with fluted seed cones. Target planting date is May 1st plus or minus 7 days depending on local conditions. Pre-plant and/or pre-emergent broad spectrum broadleaf and grass herbicides will be applied for weed control in all entries. Post emergence application of selective herbicides and hand weeding will be implemented as needed. Nitrogen and phosphorus will be applied to produce a 225+ bushel corn crop based on established soil test recommendations.

Data will be collected from the center two rows of each plot. All hybrids will be evaluated for establishment, silking date, lodging (if applicable), grain yield, test weight and grain moisture content. Center rows will be trimmed to 27 feet prior to harvest and harvested with a research plot combine equipped with a conventional 2-row corn header. Reported grain yields (bushels/acre) will be adjusted to 15.5 percent grain moisture content. Related climate data (*i.e.* temperature, precipitation, GDD_{corn}) and management information also will be summarized.

Seed Required: Past studies at SARC indicate maximum corn grain yields under irrigation are achieved with an established population of ~38,000 plants per acre. Hybrids will be planted at 105 percent of the target population. Each row will be planted with 68 seed, approximately equal to planting 39,500 plants per acre. Please submit a 1,000 gram (~2 pounds) sample of seed for each entry. Any remnant seed will be stored as a reference sample for the duration of the 2020 cropping season. Upon publication of the results, all remnant seed will be destroyed. Prior arrangement may be made to return remnant seed to the entrant. Treated seed must be accompanied with the appropriate safety data sheet (SDS) for each active ingredient.

Deadlines: Signed applications for entry must be postmarked no later than **April 1, 2021**. **Unsigned applications will not be accepted.** Remit completed application form and checks to:

Ken Kephart
MSU Southern Ag. Research Center
748 Railroad Highway
Huntley MT 59037
em: kephart@montana.edu
fax: 406-348-3410

Seed must be received by **April 15, 2021**. Ship all seed prepaid to the above address.

If you are not responsible for submission of materials into public performance tests, please pass this letter and application form onto the appropriate person in your company. Please feel free to contact me if you have any questions regarding this matter.

attachment: 2021 SARC Irrigated Corn Hybrid Trials Entry Form

**Montana State University / Montana Agricultural Experiment Station
Southern Agricultural Research Center
2021 Irrigated Corn Hybrid Performance Test Entry Application Form**

Corresponding contact and address.

Submitted by: _____
Company: _____
Address: _____

City/State/Zip Code: _____
Phone: _____
FAX: _____
Email: _____
Federal Employer Identification Number: _____
 (Company FEIN required to process remittance, not for public distribution)

For publication as contact information (if different from above).

Contact: _____
Company: _____
Address: _____

City/State/Zip Code: _____
Phone: _____
FAX: _____
Email: _____

Submission and Performance Testing Policy Agreement

Permission is hereby given to the personnel of the Southern Agricultural Research Center, Montana State University, to test corn hybrids designated on the second page of this entry form in the manner indicated by the test memorandum dated February 24, 2021. I certify that seed submitted for testing is a true sample of the seed being offered for sale. I understand that Montana State University seeks to protect the genetics and intellectual property rights of the entrants and that no seed submitted for testing will be used for breeding, selection, genetic engineering or other related purposes.

I understand all results from the SARC Variety Testing Program belong to Montana State University and shall be controlled by the University so as to produce the greatest benefit to the public. Performance data may be used in the following way: 1) Tables may be reproduced in their entirety provided the source is referenced and data are not manipulated or reinterpreted; 2) Advertising statements by an individual company about the performance of its submitted entries may be made as long as they are accurate statements about the data published with no reference to other company's names or hybrids.

Signed _____
 Title _____
 Date _____

2021 Hybrid Corn Test Entry Form. Montana Agricultural Experiment Station, Southern Ag. Research Center, Huntley, Montana.

Brand/Hybrid Identification (as desired for publication)	Relative Maturity (days)	Genetically Modified (Y/N)	Glyphosate Tolerance (Y/N)	Other Unique Traits/Information
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				