

# **Procedures and Guidelines**

## **University of Maryland**

### **2016 Corn Hybrid Performance Tests**

#### **Objective:**

To evaluate at representative locations the agronomic performance of corn hybrids which are currently being sold or are being considered for sale in Maryland.

#### **Procedures**

##### **1. Entries:**

There is no limit to the number of hybrids that can be entered as long as they meet entry requirements. Each entry will be placed into one of three maturity group tests based upon Corn Relative Maturity (CRM) information provided by the submitting company. The three maturity group tests for 2016 will be early season hybrids (107 days CRM or earlier), mid season hybrids (108 – 112 days CRM) and full season hybrids (113 days or greater CRM).

##### **2. Check Hybrids:**

The Maryland Grain Producers Utilization Board supports the inclusion of popular, commonly grown hybrids that serve as check hybrids for the tests. Two to three hybrids meeting these criteria will be chosen for inclusion in each of the maturity group tests.

##### **3. Location of Tests:**

- Lower Eastern Shore Research and Education (R&E) Center-Poplar Hill, Quantico, MD
- Lower Eastern Shore R&E Center-Salisbury, Salisbury, MD. (irrigated site)
- Wye Research and Education Center, Queenstown, MD
- Central Maryland R&E Center-Clarksville, Clarksville, MD
- Western Maryland R&E Center, Keedysville, MD

##### **4. Field Plot Design and Management:**

Each maturity group test at each location will have hybrids arranged in a randomized complete block experimental design with three replications. Each plot will consist of four, 30-inch rows that will be ~32 feet in length (~0.0073acre). The plots will be planted using a John Deere 1750 planter equipped with coulters and trash-wheels for no-till planting and modified planter units manufactured by Clewell Precision Machine, Inc., Milton, PA for planting research plots. The seeding rate will be ~29,500 seeds/acre. Standard recommendations for fertility and pest management practices will be used at each location. Planting date will be dependent upon weather but generally begins during the latter half of April at the three Eastern Shore (east of Chesapeake Bay) locations and is completed by mid-May at the two locations west of the Chesapeake Bay. The two center rows of each plot will be harvested with a Massey Ferguson 8-XP plot combine equipped with a Harvest Master HM 800 grain gauge (Juniper Systems) that records yield, grain moisture content and test weight on a Panasonic Toughpad equipped with Mirus Harvest software. Harvest normally begins by mid-September and is generally completed by mid-October.

##### **5. Data Collection:**

- Emerged plant population three weeks post-planting
- Percent lodged plants at harvest
- Harvest population
- Grain moisture at harvest
- Yield in bushels/acre corrected to 15% moisture

##### **6. Publication of Results:**

All data will be published in Agronomy Facts No. 54 that is posted to the University of Maryland Cropping Systems web site:

[www.psla.umd.edu/extension/md-crops](http://www.psla.umd.edu/extension/md-crops)

The publication of data for the entries does not imply approval or endorsement by the University of Maryland. Any reproduction of the data must give the name, number and date of the Agronomy Facts from which the data originated. The University of Maryland strives to publish the preliminary results for the test no later than November 10.

## 7. Entry Fee:

A fee of **\$400 per entry** is charged for each hybrid submitted to a maturity group test. This fee is the same as it was the past two years and covers testing an entry at five locations. Discounts based upon the total number of hybrids submitted to the test are available. The discounts are 5% for 6 – 10 entries and 10% if the entry total is 11 or more. Every possible effort will be made to plant, harvest, and summarize the results for each entry. However, if unforeseen circumstances or weather conditions cause loss of the crop and data, the University of Maryland will incur no financial liability including the reimbursement of test fees.

**Please make checks payable to the University of Maryland and mail to:**

Corn Hybrid Testing Program  
c/o Dr. Bob Kratochvil  
Room 2102 Plant Science Building  
University of Maryland  
College Park, MD 20742

**Send entry forms to one of the following:**

**Mail**

Corn Hybrid Testing Program  
c/o Dr. Bob Kratochvil  
Room 2102 Plant Science Building  
University of Maryland  
College Park, MD 20742

**E-mail (preferred)**

[rkratoch@umd.edu](mailto:rkratoch@umd.edu)

## 8. Information Required from Seed Company:

Information regarding corn relative maturity (either GDU's or days to maturity), hybrid traits, and seed treatment is required. Please designate this information on the entry forms.

## 9. Quantity of Seed Required:

Please submit a **minimum of 6000 seeds** per entry. Receiving less than this amount of seed per entry risks the possibility that there will not be enough seed to plant in all trials.

## 10. Method of Shipping Seed:

All seed should be shipped prepaid to:

Corn Hybrid Testing Program  
ATTN: Moynul Islam  
Room 1101, Research Greenhouse Complex  
398 Regents Drive  
University of Maryland  
College Park, MD 20742-5821

## 11. Closing Dates:

- **March 18, 2016 for submission of hybrids.**
- **March 25, 2016 for delivery of seed.**