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**Agronomy Facts No. 54**  
**November 5, 2018**

**2018 Maryland Corn Hybrid Performance Tests**

<http://www.psla.umd.edu/extension/md-crops>

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Test Procedures

The University offers a fee-based, corn hybrid performance-testing program to seed corn companies. The results from these replicated trials provide agronomic performance information about the corn hybrids tested at five Maryland locations (Table 1) considered representative of the state's geography and weather conditions. Table 1 summarizes the agronomic and production information for each test site.

Hybrids tested during 2018 were entered by participating seed companies (Table 2) that were solicited for submission of hybrids. These hybrids represented those currently available for purchase to experimental lines still under evaluation. Select Pioneer and Dekalb brand hybrids were identified for use as checks in the test. The inclusion of the performance data for check hybrids that are proven performers in the Mid-Atlantic region allows comparisons of newer hybrids being tested with some that are familiar.

During 2018, 48 hybrids were tested using three maturity group tests: (1) early season (10 hybrids; Table 5); (2) mid-season (19 hybrids; Table 6); and (3) full-season (18 hybrids; Table 7). Each company designated the maturity group assignments for hybrids they submitted. Check hybrids were included in each of the four tests. All hybrids had genetic traits for insect protection and/or herbicide tolerance (Tables 5-7).

Each hybrid was assigned to its maturity group where it was replicated three times per location. Planting was done with a modified, four-row John Deere 1750 planter equipped with coulters and trash-wheels for no-till planting. The modified planter units were manufactured by Clewell Precision Machine, Inc., Milton, PA. Each plot was four rows spaced 30 inches apart. Plot harvest length was 32 feet. Harvest stand and number of lodged plants were counted during the same week of harvest. The center two rows of each plot were harvested with a Massey Ferguson 8-XP research combine (Kincaid Equipment Manufacturing, Haven, KS). Grain yield, harvest moisture and test weight were measured for each plot. These data were collected with a HarvestMaster HM 800 Classic GrainGage system (Juniper Systems, Inc., Logan, UT). Data was recorded using Mirus software (Juniper Systems, Inc.) on a Panasonic Toughpad computer.

Test Results

The overall performance across the locations for the hybrids in each maturity group is found in Tables 8-10. Hybrid performance at individual locations can be found in Tables 11-25. The agronomic characteristics reported are yield in bushels/acre at 15% moisture content, harvest moisture content, per cent lodging, harvest population, and test weight (lb/bu) at 15% moisture content.

As seen in Table 3, growing season precipitation was between 16% (Wye) and 60% (Keedysville) above the long-term averages at the five locations. The 2018 growing season was extremely wet

especially with May, July, and September precipitation excesses. Even though May was wet, all five locations were planted without a planting delay. However, the wetter than normal soil conditions did cause some emergence issues for some plots at some locations. The biggest challenge faced by Maryland's growers during 2018 was managing nitrogen. Those who put all nitrogen out either as a pre-plant or at planting were faced with greater amounts of denitrification and/or leaching losses that resulted in nitrogen deficiency that was observed early in the growing season. Even those growers who used a split application of nitrogen were challenged by more N loss than is typically experienced.

Averaged over the five locations, yield for the early (10), mid (19), and full season (19) hybrids was 174 bu/acre, 201 bu/acre, and 195 bu/acre, respectively. Compared to 2017, these yields were -11%, -4%, and -8%, respectively, to those observed for the early, mid, and full season hybrids for that season. Average yield for the 48 hybrids tested across the five locations was 193 bu/acre or 18 bu/acre less than the record 211 bu/acre in 2014. Two 2018 locations had average yield of 210 bu/acre (Salisbury – 210.0; and Keedysville – 210.3); but none were better than the 232 bu/acre best location yield attained at the Wye during 2016.

A least significant difference (LSD) value is reported for each test where statistically significant differences ( $p \leq 0.10$ ) for a variable were observed among hybrids. The mean separation value has been calculated at the 10 percent probability level ( $LSD_{0.10}$ ). The LSD can be used to compare two hybrids within the same test. For example, when the yield difference between two hybrids is greater than or equal to the LSD value, there is a 90% certainty that the difference is real rather than due to random variability. The coefficient of variation (CV) is a measurement of the variability that existed at a test site. It is used as an indicator of the degree of precision for a test. In general, CV values below 10% for yield indicate that the precision for distinguishing yield differences was very good. You will see that 9-15 CV values for yield for 2018 were greater than 10%. This is attributed to wetter than normal planting conditions at some locations resulting in greater harvest population variability among hybrids, raccoon damage to early season hybrids at Clarksville and Wye, and excessive rainfall that caused some nitrogen deficiency to occur.

#### Relative Yield

The selection of a hybrid or hybrids based solely on performance at one location is not recommended. It is better to select a hybrid/s based upon performance over a number of locations and/or years, if possible. In order to compare the performance of each hybrid across the five locations, relative yield tables (Tables 26-28) are included. Relative yield is the ratio of the yield of a hybrid at a location to the mean yield of all the hybrids at that location expressed in percentage. A hybrid that has a relative yield consistently greater than 100 across all testing locations is considered to have excellent stability. During 2018, only four hybrids met this gold standard; Dekalb brand 57-99RIB (early); Dekalb brand DKC62-53RIB and Pioneer brand 1197AM (mid-season); and Dekalb brand DKC 65-95RIB. Eleven hybrids (two early season, five mid-season and four full season) had relative yield greater than 100 at 4-5 locations; a mark of good stability.

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Assistance with land preparation, planting, plot management, harvesting, and equipment maintenance/repair (as needed) was provided by research farms personnel (Table 1). Finally, I want to thank the research farm managers David Armentrout, John Draper, Ryan McDonald, and David Justice for their continued support.

#### Additional Information

The inclusion of hybrids in these tests is not an endorsement by the University of Maryland. Advertising statements about a company’s hybrids can be made as long as they are accurate statements about the data as published. Statements similar to “See the Maryland Corn Hybrid Tests Agronomy Facts No. 54” or “Endorsement or recommendation by the University of Maryland is not implied” must accompany any reproduced information.

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Table 1. Production management practices used and other pertinent information for the locations of the 2018 Maryland Corn Hybrid Test.

Location	Soil Type & Previous Crop	Fertilizer	Herbicides & Insecticides	Tillage	Plant & Harvest Dates	Farm Staff
Wye R & E Center Queenstown, MD	Nassowango silt loam  Soybean	<u>01 May:</u> 165 lb/a as 4-18-28 <u>06 June:</u> 201 lb N/a as 30-0-0 <u>Total:</u> 208-30-46	<u>05 May Pre-Emerge</u> Accuron @ 2.5 qt/a Gramoxone SL @ 1 pt/a Atrazine 4L @ 1 qt/a Scanner @ 2 pt/a  No insecticide	No-till with aid of trash wheels on planter	<u>Plant</u> 01 May  <u>Harvest</u> 11 September (Early) 13 September (Mid) 19 September (Full)	John Draper  Joseph Street  Thomas Eason
Lower Eastern Shore R&E Center-Poplar Hill Quantico, MD	Mattapex silt loam  Soybean followed by wheat cover crop	<u>5 April:</u> 400 lb/a 4.7-4.7-39.4-6.9S-1.3Mg <u>3 May:</u> 181.9 lb/a as 19-19-00-0.1B-0.01Zn <u>12 June:</u> 140 lb N/a as 30% UAN <u>Total:</u> 193-53-158-28S-5.3Mg-1.9B-0.25Zn	<u>21 April Pre-Plant</u> Gramoxone SL @ 1 qt/A 2-4D Ester @ 1 pt/A 820 Surfactant @ 5 fl oz/A <u>4 May Pre-Emerge</u> Harness Extra @ 2.5 qt/A <u>14 June Post – Emerge</u> Round Up @ 28 fl oz/A Aatrex 90 @ 0.5 lb/A  No insecticide	No-till into cover crop with aid of trash wheels on planter	<u>Plant</u> 3 May  <u>Harvest</u> 08 October	David Armentrout  Jordan Miller  Fred Senkbeil
Lower Eastern Shore R&E Center-Salisbury Salisbury, MD	Rosedale loamy sand  Soybean followed by wheat cover crop	<u>5 April:</u> 400 lb/a 4.7-4.7-39.4-6.9S-1.3Mg <u>3 May:</u> 181.9 lb/a as 19-19-00-0.1B-0.01Zn <u>23 May:</u> 98 lb N/a as 30% UAN <u>7 June:</u> 98 lb N/a as 30% UAN <u>Total:</u> 249-53-158-28S-5.3Mg-1.9B-0.25Zn	<u>18 April Pre-Plant</u> Gramoxone SL @ 1 qt/A 2-4D Ester @ 1 pt/A 820 Surfactant @ 5 fl oz/A <u>3 May Pre-Emerge</u> Harness Extra @ 2.5 qt/A <u>1 June Post – Emerge</u> Round Up @ 28 fl oz/A Aatrex 90 @ 0.5 lb/A  No insecticide	No-till into cover crop with aid of trash wheels on planter	<u>Plant</u> 3 May  <u>Harvest</u> 09 October	David Armentrout  James Lynch  Vivian Calder  David Long  Jordan Miller
Central Maryland R&E Center - Clarksville Clarksville, MD	Glenville silt loam  Soybean	<u>19 April</u> 225 lb/A 4-12-36-11S <u>11 May</u> 130 N/a as 30% UAN <u>Total:</u> 139-27-81-25S	<u>21 April Pre-plant</u> Roundup Power Mas @ 24 oz/A Sharpen @ 2 oz/A <u>11 May Pre-Emerge</u> Lexar EZ @ 3 qt/A Gramoxone S.L. 2.0 @ 1 pt/A Surfactant @ 1 pt/A  No insecticide	No-till with aid of trash wheels on planter	<u>Plant</u> 8 May  <u>Harvest</u> 18 October	Mike Dwyer  David Justice  Michael Gray
Western Maryland R&E Center Keedysville, MD	Swanpond - Funkstown silt loam  Double Crop Soybean	<u>1 May:</u> 400 lb/a 10-10-20-3.75S <u>4 May</u> 130 lb N/a as 30% UAN <u>Total:</u> 170-40-80-15S-0.5B	<u>4 May Pre-plant</u> Accuron @ 2.5 qt/A Aatrex @ 1 qt/A Gramoxone Inteon @ 1 qt/A  No post-emerge herbicide No insecticide	No-till with aid of trash wheels on planter	<u>Plant</u> 10 May  <u>Harvest</u> 16 October	Ryan McDonald  Douglas Price  David Wyand

Table 2. Brands and companies represented in the 2018 Maryland corn hybrid tests.

Brand	Address
Augusta	Augusta Seed, P.O. Box 899, Verona, VA 24482 www.augustaseed.com
DeKalb	Monsanto Company, 800 N. Lindbergh Blvd. St. Louis, MO 63167 www.aganytime.com/dekalb/
Doebler's	Doebler's PA Hybrids, Inc., 1000 Commerce Park Dr., Williamsport, PA 17701 www.doeblers.com
Dyna-Gro	Crop Production Services/Dyna-Gro, 1140 Sweet Road, East Aurora, NY 14052 www.dynagroseed.com
Hubner Seed	Hubner Seed Company, 306 North Main Street, Monticello, IN 47960 www.hubnerseed.com
Local	Local Seed Company, 802 Rozelle Street, Memphis, TN 38104 www.localseed.com/
NK	Syngenta Seeds, 4013 Fairmount Pike, Signal Mountain, TN 37377 www.syngenta-us.com
Pioneer	Dupont- Pioneer, PO Box 1000, Johnston, IA 50131 www.pioneer.com

Table 3. Precipitation received at each location where the Maryland corn hybrid tests were conducted during 2018.

Month	Wye	Poplar Hill	Salisbury <sup>1</sup>	Keedysville	Clarksville
	-----Inches-----				
April	2.89	2.64	2.93	3.43	3.42
May	7.56	12.46	12.6 (.3)	6.28	6.65
June	3.28	2.67	5.56 (1.1)	6.55	5.82
July	8.20	4.58	4.9 (2.7)	4.58	6.30
August	2.27	3.35	3.73	6.77	5.09
September	7.18	6.69	8.73	6.34	8.29
<b>2018 Total (6 month)</b>	<b>31.38</b>	<b>32.39</b>	<b>38.45 (4.1)</b>	<b>33.95</b>	<b>35.57</b>
<b>Long Term Average<sup>2</sup></b>	<b>27.08</b>	<b>23.55</b>	<b>25.39</b>	<b>21.25</b>	<b>23.95</b>

<sup>1</sup>The number in parentheses following the precipitation total for each month at Salisbury indicates the amount of supplemental irrigation used.

<sup>2</sup>Long term average precipitation is for the following number of years at Wye (19), Poplar Hill (18), Salisbury (29), Clarksville (9), and Keedysville (39).

**Table 4. Glossary of abbreviations for hybrid genetic traits and description of seed treatments used in Tables 5, 6, 7, and 8.**

Abbreviation	Description
Acceleron 250	Seed treatment for nematode and insect protection, and soil/seed borne fungal pathogens.
AcreMax or AM	Refers to a refuge in the bag hybrid.
AcreMax Above	Refuge in the bag plus above ground insect protection.
AcreMax Xtreme	Contains above and below ground insect protection, refuge in the bag, plus glyphosate and glufosinate herbicide tolerance.
Agrisure 3010	Protection against European corn borer plus glyphosate and glufosinate herbicide tolerance.
Agrisure Viptera 3110	Protection against European corn borer; broad Lepidopteran plus glyphosate and glufosinate herbicide tolerance
Avicta 500 or A500	A nematicide seed treatment.
Avicta 500 + Vibrance	A nematicide seed treatment plus fungicide protection.
Avicta Complete Corn	A nematicide/insecticide/fungicide seed treatment combination.
BT	Contains a <i>Bacillus thuringiensis</i> (Bt) event for protection against European corn borer.
Cruiser 250 and 500	A neonicotinoid based insecticide seed treatment.
Cruiser 250 + Lumivia	A neonicotinoid based insecticide seed treatment plus another seed treatment providing broad-spectrum insect protection.
Cruiser 250 + Raxil	A neonicotinoid based insecticide seed treatment plus fungicide that provides broad spectrum protection against seed/soil borne fungal pathogens.
CruiserMaxx 250	A neonicotinoid based insecticide seed treatment plus seed applied Maxim Quatro fungicide.
GENSSRIB	Refers to hybrids that have eight traits combined or 'stacked' together – 6 for insect resistance (Bt) and 2 for herbicide (Roundup and Liberty) tolerance. Includes non-Bt seed blended in the bag creating refuge in the bag.
GENDGVT2PRIB	Provides protection against aboveground Lepidopteran insects, has tolerance to glyphosate, is considered a drought guard hybrid, and has non-Bt seed blended in the bag creating refuge in the bag.
GENVT2PRIB	Provides protection against aboveground Lepidopteran insects, has tolerance to glyphosate, and has non-Bt seed blended in the bag creating refuge in the bag.
GT	Refers to glyphosate (Roundup) herbicide tolerance.
GT3010	Stacked trait hybrid with corn borer control plus glyphosate tolerance.
GT3111	Stacked trait hybrid with broad lepidopteran, corn borer, and corn rootworm control plus glyphosate tolerance.
GT3220	Stacked trait hybrid with broad lepidopteran and corn borer control plus glyphosate tolerance.
HX1	Contains a <i>Bacillus thuringiensis</i> (Bt) event for protection against European corn borer.
LL	Refers to glufosinate (Liberty) herbicide tolerance.
Poncho 250, 500 or 1250	An insecticide seed treatment with the number referring to the concentration of insecticide used.
RIB	Has non-Bt seed blended in the bag creating refuge in the bag
RR	Has glyphosate herbicide tolerance.
RR2	Designates the second generation event for glyphosate herbicide tolerance.
RW	Designates protection against corn rootworm.
SSX, STX	Refers to a SmartStax hybrid.
SSXRA	Refers to a SmartStax hybrid that has non-Bt seed blended in the bag creating refuge in the bag.
Votivo 500 and Votivo 1250	A nematicide seed treatment.
VT2P, VT2PRO	Contains RR2 gene and YieldGard corn stalk borer gene
VT2PDG RIB; DGVT2PRIB	Contains RR2 gene, YieldGard corn stalk borer gene, Drought Gard gene, and non-Bt seed blended in the bag for refuge in the bag.
YGCB	Hybrid with yield guard corn borer protection.

**Table 5. Relative maturity, genetic traits, and seed treatments for early-season hybrids tested in Maryland during 2018.**

Brand/Company Name	Hybrid Name	Relative Maturity	Genetic Traits <sup>1</sup>	Seed Treatment
Augusta	A2856GT3220	106	GT3220	Cruiser 250
Dekalb	DKC 55-21RIB	105	GENVT2PRIB	Acceleron 250
Dekalb	DKC 55-53RIB	105	GENSSRIB	Acceleron 250
Dekalb	DKC 55-85RIB	105	GENVT2PRIB	Acceleron 250
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>107</b>	<b>GENDGVT2PRIB</b>	<b>Acceleron 250</b>
Doebler's	4417AMXT	104	HX1/YGCB/LL/RR2	Cruiser 250 + Raxil
Doebler's	4919AM	109	HX1/YGCB/LL/RR2	Cruiser 250 + Lumivia
Hubner Seed	H04G287 DGVT2PRIB	104	DGVT2PRIB	Acceleron Poncho/Votivo 500
Local Seed	LC0488SSX	104	BT,RW,RR,LL	Cruiser Max 250
<b>Pioneer</b>	<b>0339AM</b>	<b>103</b>	<b>YGCB, HX1, LL, RR2</b>	<b>Poncho/Votivo 1250 Raxil</b>

<sup>1</sup>Refer to Table 4 to see the descriptions of the trait codes.

<sup>2</sup>Hybrids in **bold print** are check hybrids.

**Table 6. Relative maturity, genetic traits, and seed treatments for mid-season hybrids tested in Maryland during 2018.**

Brand/Company Name	Hybrid Name	Relative Maturity	Genetic Traits <sup>1</sup>	Seed Treatment
Augusta	A4463VT2PRO	112	VT2P	Avicta 500 + Vibrance
Augusta	A4858GT3010	108	GT3010	Cruiser 250
Augusta	A4860GT3220	110	GT3220	Cruiser 250
Dekalb	DKC 60-88RIB	110	GENVT2PRIB	Acceleron 250
Dekalb	DKC 61-98RIB	111	GENVT2PRIB	Acceleron 250
Dekalb	DKC 62-20RIB	112	GENVT2PRIB	Acceleron 250
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>112</b>	<b>GENVT2PRIB</b>	<b>Acceleron 250</b>
Doebler's	4919AM	109	HX1/YGCB/LL/RR2	Cruiser 250 + Lumivia
Doebler's	5018AM	110	HX1/YGCB/LL/RR2	Cruiser 250 + Lumivia
Dyna-Gro	D49VC70	109	VT2P	Acceleron 500/Votivo
Dyna-Gro	D50VC30	110	VT2P	Acceleron 500/Votivo
Dyna-Gro	D52VC63	112	VT2P	Acceleron 500/Votivo
Hubner Seed	H08G394 DGVT2PRIB	108	DGVT2P	Acceleron Poncho/Votivo 500
Hubner Seed	H4563RC2P VT2PRIB	111	VT2P	Acceleron Poncho/Votivo 500
Local Seed	LC0877VT2P	108	VT2P	Cruiser Max 250
<b>Pioneer</b>	<b>0843AM</b>	<b>108</b>	<b>YGCB, HX1, LL, RR2</b>	<b>Poncho/Votivo 1250 Raxil</b>
<b>Pioneer</b>	<b>1197AM</b>	<b>111</b>	<b>YGCB, HX1, LL, RR2</b>	<b>Poncho/Votivo 1250 Raxil</b>
Syngenta	NK0886-3010	108	Agrisure 3010	Avicta Complete 500 + Vibrance
Syngenta	NK0968-3110	109	Agrisure Viptera 3110	Avicta Complete 500 + Vibrance

<sup>1</sup>Refer to Table 4 to see the descriptions of the trait codes.

<sup>2</sup>Hybrids in **bold print** are check hybrids.

**Table 7. Relative maturity, genetic traits, and seed treatments for full-season hybrids tested in Maryland during 2018.**

Brand/ Company Name	Hybrid Name	Relative Maturity	Genetic Traits <sup>1</sup>	Seed Treatment
Augusta	A1165VT2 PRORIB	115	VT2P	QV1250
Augusta	A1166VT2PRORIB	116	VT2P	QV1250
Augusta	A4465GT3111	115	GT3111	Avicta Complete 500
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>114</b>	<b>GENVT2PRIB</b>	<b>Acceleron 250</b>
Dekalb	DKC 65-20RIB	115	GENDGVT2PRIB	Acceleron 250
Dekalb	DKC 65-95RIB	115	GENVT2PRIB	Acceleron 250
Dekalb	DKC 66-75RIB	116	GENVT2PRIB	Acceleron 250
Dekalb	DKC 67-44RIB	117	GENVT2PRIB	Acceleron 250
Doebler's	5018AM	110	HX1/YGCB/LL/RR2	Cruiser 250 + Lumivia
Doebler's	5319AM	113	HX1/YGCB/LL/RR2	Cruiser 250 + Lumivia
Doebler's	5518AM	115	HX1/YGCB/LL/RR2	Cruiser 250 + Lumivia
Dyna-Gro	D55VC45	115	VT2P	Acceleron 500/Votivo
Hubner Seed	H4663RC2P VT2PRIB	113	VT2P	Acceleron Poncho/Votivo 500
Hubner Seed	H4890RC2P VT2PRIB	117	VT2P	Acceleron Poncho/Votivo 500
Local Seed	LC1577VT2P	115	VT2P	Cruiser Max 250
<b>Pioneer</b>	<b>1442AM</b>	<b>114</b>	<b>YGCB, HX1, LL, RR2</b>	<b>Poncho/Votivo 1250 Raxil</b>
Syngenta	NK1354-3110	113	Agrisure 3110	Avicta Complete 500 + Vibrance
Syngenta	NK1573-3110	115	Agrisure 3110	Avicta Complete 500 + Vibrance

<sup>1</sup>Refer to Table 4 to see the descriptions of the trait codes.

<sup>2</sup>Hybrids in **bold print** are check hybrids.



**Table 8. Average performance of early maturity hybrids evaluated at five Maryland locations during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>
Augusta	A2856GT3220	155.4	89.3	16.9	4.4	55.7
Dekalb	DKC 55-21RIB	159.8	91.8	17.0	2.0	56.2
Dekalb	DKC 55-53RIB	178.5	102.6	16.8	0.8	56.1
<b>Dekalb</b>	<b>DKC 55-85RIB</b>	<b>196.6</b>	<b>113.0</b>	<b>17.0</b>	<b>6.2</b>	<b>55.2</b>
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>184.7*</b>	<b>106.1</b>	<b>16.7</b>	<b>3.1</b>	<b>56.0</b>
Doebler's	4417AMXT	162.8	93.5	17.0	7.4	57.3
Doebler's	4919AM	195.7*	112.5	16.7	0.4	56.9
Hubner Seed	H04G287 DGVT2PRIB	182.2*	104.7	17.3	0.7	57.0
Local Seed	LC0488SSX	140.4	80.7	16.8	2.6	56.0
<b>Pioneer</b>	<b>0339AM</b>	<b>184.3*</b>	<b>105.9</b>	<b>17.6</b>	<b>0.2</b>	<b>56.2</b>
<b>Trial Mean (5 locations)</b>		<b>174.0</b>	<b>100</b>	<b>17</b>	<b>2.8</b>	<b>56.3</b>
<b>Probability &gt; F</b>		<b>&lt;0.0001</b>				
<b>LSD<sub>0.10</sub></b>		<b>14.5</b>				

<sup>1</sup>See Table 6 for trait designations for early-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are checks.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (p=0.10) compared to the **top-yielding hybrid**.

**Table 9. Average performance of mid-season maturity hybrids evaluated at five Maryland locations during 2018.**

Brand/ Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>
Syngenta	NK0968-3110	194.5	96.6	17.5	0.7	55.7
Syngenta	NK0886-3010	190.9	94.8	17.6	1.1	58.3
Dekalb	DKC 60-88RIB	206.3*	102.5	17.2	1.4	58.9
Dekalb	DKC 61-98RIB	195.6	97.2	17.5	1.1	58.4
Dekalb	DKC 62-20RIB	204.0	101.4	17.3	0.5	58.1
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>219.2*</b>	<b>108.9</b>	<b>17.6</b>	<b>0.2</b>	<b>57.8</b>
Augusta	A4858GT3010	193.6	96.2	17.4	1.5	58.5
Augusta	A4860GT3220	187.1	92.9	17.8	1.4	56.9
Dyna-Gro	D49VC70	188.8	93.8	17.5	0.9	58.6
Dyna-Gro	D50VC30	197.0	97.8	17.7	1.9	58.7
Dyna-Gro	D52VC63	205.6	102.1	18.3	0.7	58.2
Doebler's	4919AM	197.3	98.0	16.8	0.5	57.1
Doebler's	5018AM	209.5*	104.1	16.4	2.4	56.0
Augusta	A4463VT2PRO	211.8*	105.2	17.5	0.4	58.5
Local Seed	LC0877VT2P	199.6	99.2	17.0	0.4	56.4
Hubner Seed	H08G394 DGVT2PRIB	197.2	97.9	16.8	1.8	57.7
Hubner Seed	H4563RC2P VT2PRIB	210.5*	104.5	18.3	0.4	59.1
<b>Pioneer</b>	<b>0843AM</b>	203.4	101.0	17.0	0.3	57.9
<b>Pioneer</b>	<b>1197AM</b>	213.8*	106.2	17.3	1.0	58.2
<b>Trial Mean (5 locations)</b>		<b>201.3</b>	<b>100</b>	<b>17.4</b>	<b>1</b>	<b>57.9</b>
<b>Probability &gt; F</b>		<b>&lt;0.0001</b>				
<b>LSD<sub>0.10</sub></b>		<b>9.8</b>				

<sup>1</sup>See Table 7 for hybrid trait designations for mid-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are checks.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (p=0.10) compared to the **top-yielding hybrid**.

**Table 10. Performance of full season hybrids evaluated at five Maryland locations during 2018.**

Brand/ Company	Hybrid <sup>1</sup>	Yield (bu/a) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>
Augusta	A1165VT2 PRORIB	191.8	98.5	17.4	1.5	58.5
Augusta	A1166VT2PRORIB	193.1*	99.2	17.5	0.9	58.6
Augusta	A4465GT3111	186.8	96.0	17.8	1.4	56.9
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>190.3</b>	<b>97.8</b>	<b>17.6</b>	<b>1.1</b>	<b>58.3</b>
Dekalb	DKC 65-20RIB	183.0	94.1	17.2	1.4	58.9
Dekalb	DKC 65-95RIB	206.7*	106.2	17.5	1.1	58.4
Dekalb	DKC 66-75RIB	199.3*	102.4	17.3	0.5	58.1
Dekalb	DKC 67-44RIB	202.6*	104.1	17.6	0.2	57.8
Doebler's	5018AM	207.4*	106.6	18.3	0.7	58.2
Doebler's	5319AM	192.2	98.8	16.4	2.4	56.0
Doebler's	5518AM	192.2	98.8	16.8	0.5	57.1
Dyna-Gro	D55VC45	197.7*	101.6	17.7	1.9	58.7
Hubner Seed	H4663RC2P VT2PRIB	198.8*	102.2	17.0	0.4	56.4
Hubner Seed	H4890RC2P VT2PRIB	202.6*	104.1	18.3	0.4	59.1
Local Seed	LC1577VT2P	189.6	97.4	17.5	0.4	58.5
<b>Pioneer</b>	<b>1442AM</b>	<b>183.2</b>	<b>94.1</b>	<b>17.0</b>	<b>0.3</b>	<b>57.9</b>
Syngenta	NK1354-3110	178.9	91.9	17.3	1.0	58.2
Syngenta	NK1573-3110	195.6*	100.5	17.5	0.7	55.7
<b>Trial Mean</b>		<b>194.4</b>	<b>100</b>	<b>17.4</b>	<b>1</b>	<b>57.9</b>
<b>Probability &gt; F</b>		<b>0.053</b>				
<b>LSD<sub>0.10</sub></b>		<b>14.4</b>				

<sup>1</sup>See Table 8 for trait designations for full season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (p=0.10) compared to the top-yielding hybrid.

**Table 11. Performance of early maturity hybrids evaluated at Wye Research and Education Center, Queenstown, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A2856GT3220	154.1*	95.6	20.1	0.9	55.8	22641
Dekalb	DKC 55-21RIB	171.6*	106.4	20.9	0.0	56.8	23232
Dekalb	DKC 55-53RIB	181.4*	112.5	22.1	0.0	54.2	24610
<b>Dekalb</b>	<b>DKC 55-85RIB</b>	<b>182.0*</b>	<b>112.9</b>	<b>22.5</b>	<b>0.0</b>	<b>53.2</b>	<b>23626</b>
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	165.4*	102.6	21.3	0.0	56.6	24216
Doebler's	4417AMXT	180.7*	112.1	20.3	0.0	55.7	23429
Doebler's	4919AM	177.5*	110.1	20.1	0.9	56.4	22838
Hubner Seed	H04G287 DGVT2PRIB	142.9	88.7	21.1	1.9	57.3	21854
Local Seed	LC0488SSX	101.7	63.1	21.3	1.9	56.2	22641
<b>Pioneer</b>	<b>0339AM</b>	154.6*	95.9	20.9	0.0	54.7	24610
<b>Mean</b>		<b>161.2</b>	<b>100</b>	<b>21.1</b>	<b>0.57</b>	<b>55.7</b>	<b>23370</b>
<b>Probability &gt; F</b>		<b>0.0203</b>		<b>0.0023</b>	<b>0.73</b>	<b>0.0005</b>	<b>0.65</b>
<b>LSD<sub>0.10</sub></b>		<b>34.8</b>		<b>0.28</b>	<b>2.4</b>	<b>1.3</b>	<b>2568</b>
<b>CV%</b>		<b>22.9</b>		<b>4.4</b>	<b>276</b>	<b>2.6</b>	<b>7.8</b>

<sup>1</sup>See Table 5 for trait designations for early-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids (**bold**) are included as checks.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 12. Performance of mid-season maturity hybrids evaluated at Wye R&E Center, Queenstown, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A4463VT2PRO	201.1	105.3	23.1	0.0	57.1	24413
Augusta	A4858GT3010	176.8	92.6	22.0	0.5	58.8	22838
Augusta	A4860GT3220	171.6	89.9	23.1	2.8	56.1	24020
Dekalb	DKC 60-88RIB	194.6	101.9	22.8	2.5	58.9	26776
Dekalb	DKC 61-98RIB	180.2	94.4	23.7	0.4	57.7	24807
Dekalb	DKC 62-20RIB	204.9	107.4	22.5	0.0	58.4	25201
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>237.8*</b>	<b>124.6</b>	<b>25.3</b>	<b>0.5</b>	<b>57.0</b>	<b>28676</b>
Doebler's	4919AM	177.1	92.8	20.5	1.2	57.1	23035
Doebler's	5018AM	212.3*	111.2	19.9	0.0	52.8	24807
Dyna-Gro	D49VC70	154.3	80.8	23.6	0.5	57.2	23823
Dyna-Gro	D50VC30	181.4	95.0	23.6	5.1	58.6	25791
Dyna-Gro	D52VC63	199.9	104.7	25.1	1.7	57.8	27563
Hubner Seed	H08G394 DGVT2PRIB	171.2	89.7	22.6	4.3	57.8	24837
Hubner Seed	H4563RC2P VT2PRIB	211.1*	110.6	24.9	0.0	58.0	25988
Local Seed	LC0877VT2P	186.9	97.9	21.7	0.0	56.7	25201
<b>Pioneer</b>	<b>0843AM</b>	<b>202.9</b>	<b>106.3</b>	<b>20.6</b>	<b>1.0</b>	<b>56.5</b>	<b>29335</b>
<b>Pioneer</b>	<b>1197AM</b>	<b>205.8</b>	<b>107.8</b>	<b>22.7</b>	<b>0.8</b>	<b>58.4</b>	<b>24413</b>
Syngenta	NK0886-3010	160.5	84.1	22.4	3.7	58.8	21498
Syngenta	NK0968-3110	167.1	87.5	21.8	1.7	54.3	25201
<b>Trial Mean</b>		<b>190.9</b>	<b>100</b>	<b>22.6</b>	<b>1.3</b>	<b>57.3</b>	<b>25283</b>
<b>Probability &gt; F</b>		<b>0.0012</b>		<b>&lt;0.0001</b>	<b>0.25</b>	<b>0.0003</b>	<b>0.0001</b>
<b>LSD<sub>0.10</sub></b>		<b>27.1</b>		<b>1.4</b>	<b>3.2</b>	<b>2</b>	<b>2500</b>
<b>CV%</b>		<b>14.8</b>		<b>7.4</b>	<b>194</b>	<b>3.4</b>	<b>10.1</b>

<sup>1</sup>See Table 6 for hybrid trait designations for mid-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are checks.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 13. Performance of full season hybrids evaluated at Wye Research and Education Center, Queenstown, MD during 2018.**

Brand/ Company Name	Hybrid Name <sup>1</sup>	Yield (bu/a) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A1165VT2 PRORIB	186.5*	100.8	24.1	2.2	58.2	25595
Augusta	A1166VT2PRORIB	188.0*	101.6	22.2	1.4	56.4	26382
Augusta	A4465GT3111	184.0*	99.4	22.4	0.9	57.3	23429
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>182.2*</b>	98.4	<b>22.4</b>	<b>7.1</b>	<b>58.3</b>	<b>24020</b>
Dekalb	DKC 65-20RIB	131.2	70.9	23.6	18.0	58.7	22641
<b>Dekalb</b>	<b>DKC 65-95RIB</b>	<b>208.1*</b>	<b>112.4</b>	<b>23.3</b>	<b>2.4</b>	<b>59.0</b>	<b>24807</b>
Dekalb	DKC 66-75RIB	168.9	91.2	23.0	3.0	57.2	24807
Dekalb	DKC 67-44RIB	204.1*	110.3	22.2	1.1	58.0	25594
Doebler's	5018AM	199.7*	107.9	22.0	0.4	57.4	25201
Doebler's	5319AM	191.3*	103.3	20.3	0.4	59.0	25201
Doebler's	5518AM	169.8	91.7	20.6	0.0	57.1	25398
Dyna-Gro	D55VC45	199.2*	107.6	21.8	1.2	57.9	26272
Hubner Seed	H4663RC2P VT2PRIB	203.7*	110.0	21.7	1.1	57.3	27366
Hubner Seed	H4890RC2P VT2PRIB	190.1*	102.7	24.0	0.8	59.4	24807
Local Seed	LC1577VT2P	166.2	89.8	21.9	2.7	58.8	21263
<b>Pioneer</b>	<b>1442AM</b>	<b>185.8*</b>	100.4	<b>21.4</b>	<b>0.5</b>	<b>57.9</b>	<b>22444</b>
Syngenta	NK1354-3110	143.0	77.3	21.8	14.5	55.9	23822
Syngenta	NK1573-3110	188.3*	101.7	22.3	3.4	57.2	23626
<b>Trial Mean</b>		<b>185.1</b>	100	<b>22.2</b>	<b>2.6</b>	<b>57.9</b>	<b>24635</b>
<b>Probability &gt; F</b>		<b>0.126</b>		<b>&lt;0.0001</b>	<b>0.059</b>	<b>&lt;0.0001</b>	<b>0.19</b>
<b>LSD<sub>0.10</sub></b>		<b>33.6</b>		<b>0.9</b>	<b>7.2</b>	<b>0.8</b>	<b>2882</b>
<b>CV%</b>		<b>15.2</b>		<b>5.2</b>	<b>221</b>	<b>4.1</b>	<b>9.7</b>

<sup>1</sup>See Table 7 for trait designations for full season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 14. Performance of early season hybrids at Lower Eastern Shore R&E Center- Poplar Hill Facility, Quantico, MD during 2018.**

Brand/Company	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A2856GT3220	153.9	90.3	17.0	1.7	58.2	22222
Dekalb	DKC 55-21RIB	144.6	84.9	15.6	1.3	57.8	19916
Dekalb	DKC 55-53RIB	155.5	91.2	15.7	0.6	57.6	20408
<b>Dekalb</b>	<b>DKC 55-85RIB</b>	<b>208.4*</b>	<b>122.3</b>	<b>15.6</b>	<b>0.0</b>	<b>56.4</b>	<b>23113</b>
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>196.4*</b>	115.3	<b>15.7</b>	<b>0.0</b>	<b>57.5</b>	<b>25194</b>
Doebler's	4417AMXT	156.1	91.6	15.7	2.7	57.9	19916
Doebler's	4919AM	183.4*	107.6	15.9	0.0	58.1	21951
Hubner Seed	H04G287 DGVT2PRIB	179.8*	105.5	15.3	0.2	58.3	20225
Local Seed	LC0488SSX	146.0	85.7	15.5	0.0	57.9	23174
<b>Pioneer</b>	<b>0339AM</b>	<b>177.3*</b>	104.0	<b>15.9</b>	<b>0.0</b>	<b>56.7</b>	<b>21515</b>
<b>Mean</b>		<b>170.4</b>	<b>100</b>	<b>15.9</b>	<b>0.5</b>	<b>57.7</b>	<b>22003</b>
<b>Probability &gt; F</b>		<b>0.142</b>		<b>0.9</b>	<b>0.41</b>	<b>0.39</b>	<b>0.71</b>
<b>LSD<sub>0.10</sub></b>		<b>37.3</b>		<b>2.1</b>	<b>2.2</b>	<b>1.5</b>	<b>5760</b>
<b>CV%</b>		<b>13.2</b>		<b>5</b>	<b>203</b>	<b>1.2</b>	<b>10.8</b>

<sup>1</sup>See Table 5 for trait designations for early-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 15. Performance of mid-season hybrids evaluated at Lower Eastern Shore R&E Center- Poplar Hill Facility, Quantico, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A4463VT2PRO	187.2*	101.8	16.3	1.4	59.2	24154
Augusta	A4858GT3010	176.2	95.8	16.2	0.4	58.7	22494
Augusta	A4860GT3220	159.3	86.6	16.8	0.9	57.9	19738
Dekalb	DKC 60-88RIB	201.6*	109.6	16.1	0.0	59.1	24863
Dekalb	DKC 61-98RIB	189.0*	102.8	16.3	0.0	59.1	21600
Dekalb	DKC 62-20RIB	192.9*	104.9	16.4	0.8	59.0	23785
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>195.7*</b>	106.4	<b>16.4</b>	<b>0.0</b>	<b>58.0</b>	<b>22349</b>
Doebler's	4919AM	188.6*	102.5	15.9	0.0	58.5	21388
Doebler's	5018AM	188.4*	102.5	15.9	0.0	58.5	21814
Dyna-Gro	D49VC70	159.6	86.8	16.4	0.0	59.1	20891
Dyna-Gro	D50VC30	170.8	92.9	16.8	0.0	60.2	21757
Dyna-Gro	D52VC63	190.9*	103.8	17.1	0.4	58.6	23785
Hubner Seed	H08G394 DGVT2PRIB	173.7	94.5	16.1	0.0	58.7	22990
Hubner Seed	H4563RC2P VT2PRIB	178.4	97.0	16.4	0.0	59.9	22863
Local Seed	LC0877VT2P	190.2*	103.4	16.0	0.0	57.4	23970
<b>Pioneer</b>	<b>0843AM</b>	<b>180.9</b>	98.4	<b>16.2</b>	<b>0.0</b>	<b>59.1</b>	<b>19913</b>
<b>Pioneer</b>	<b>1197AM</b>	<b>205.4*</b>	<b>111.7</b>	<b>16.0</b>	<b>0.0</b>	<b>59.2</b>	<b>21388</b>
Syngenta	NK0886-3010	191.8*	104.3	16.4	1.5	59.4	23970
Syngenta	NK0968-3110	173.8	94.5	16.5	0.0	56.5	22310
<b>Trial Mean</b>		<b>183.9</b>	<b>100</b>	<b>16.3</b>	<b>0.3</b>	<b>58.7</b>	<b>22422</b>
<b>Probability &gt; F</b>		<b>0.0044</b>		<b>0.0009</b>	<b>0.5</b>	<b>&lt;0.0001</b>	<b>0.098</b>
<b>LSD<sub>0.10</sub></b>		<b>18.2</b>		<b>0.42</b>	<b>1.2</b>	<b>0.86</b>	<b>2684</b>
<b>CV%</b>		<b>9</b>		<b>2.4</b>	<b>303</b>	<b>1.7</b>	<b>9.5</b>

<sup>1</sup>See Table 6 for trait designations for mid-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.



**Table 16. Performance of full season hybrids evaluated at Lower Eastern Shore R&E Center- Poplar Hill Facility, Quantico, MD during 2018.**

Brand/ Company Name	Hybrid Name <sup>1</sup>	Yield (bu/a) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A1165VT2 PRORIB	176.7	102.9	17.5	0.0	60.2	21249
Augusta	A1166VT2PRORIB	170.9	99.5	16.7	0.0	57.3	21941
Augusta	A4465GT3111	174.3	101.5	18.0	0.4	58.1	20717
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>166.4</b>	<b>96.9</b>	<b>16.5</b>	<b>0.0</b>	<b>60.3</b>	<b>18370</b>
Dekalb	DKC 65-20RIB	173.7	101.1	18.0	0.0	61.0	19544
Dekalb	DKC 65-95RIB	174.7	101.7	17.5	0.0	60.0	22126
Dekalb	DKC 66-75RIB	165.3	96.2	17.6	0.4	58.7	22706
Dekalb	DKC 67-44RIB	159.2	92.7	17.3	0.0	59.9	20098
Doebler's	5018AM	185.1	107.7	16.1	0.0	58.4	22232
Doebler's	5319AM	181.8	105.8	16.3	0.0	60.2	22494
Doebler's	5518AM	176.7	102.9	15.9	0.8	58.5	21757
Dyna-Gro	D55VC45	157.3	91.6	16.6	0.0	59.4	19795
Hubner Seed	H4663RC2P VT2PRIB	178.2	103.7	16.4	1.3	58.0	20835
Hubner Seed	H4890RC2P VT2PRIB	181.5	105.6	17.9	0.4	60.7	19729
Local Seed	LC1577VT2P	168.8	98.3	16.6	0.0	59.0	19454
<b>Pioneer</b>	<b>1442AM</b>	<b>159.5</b>	<b>92.8</b>	<b>16.9</b>	<b>0.0</b>	<b>60.0</b>	<b>19729</b>
Syngenta	NK1354-3110	161.8	94.2	17.0	3.9	57.6	19726
<b>Syngenta</b>	<b>NK1573-3110</b>	<b>190.1</b>	<b>110.7</b>	<b>17.9</b>	<b>0.0</b>	<b>58.4</b>	<b>20850</b>
<b>Trial Mean</b>		<b>171.8</b>	<b>100</b>	<b>17</b>	<b>0.38</b>	<b>59.2</b>	<b>20497</b>
<b>Probability &gt; F</b>		<b>0.9 (NS)</b>		<b>&lt;0.0001</b>	<b>0.53</b>	<b>&lt;0.0001</b>	<b>0.09</b>
<b>LSD<sub>0.10</sub></b>		<b>30</b>		<b>0.58</b>	<b>2.25</b>	<b>0.78</b>	<b>3072</b>
<b>CV%</b>		<b>11.8</b>		<b>4.3</b>	<b>420</b>	<b>2</b>	<b>12.5</b>

<sup>1</sup>See Table 7 for trait designations for full season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 17. Performance of early-season hybrids evaluated at Lower Eastern Shore Research and Education Center, Salisbury Facility, Salisbury, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A2856GT3220	164.9	84.0	15.2	0.6	54.0	31270
Dekalb	DKC 55-21RIB	192.7	98.1	15.4	0.0	55.1	32573
Dekalb	DKC 55-53RIB	226.7*	115.4	15.4	1.4	55.6	32414
<b>Dekalb</b>	<b>DKC 55-85RIB</b>	<b>230.4*</b>	<b>117.3</b>	<b>15.6</b>	<b>0.0</b>	<b>55.8</b>	<b>32267</b>
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>197.5*</b>	100.6	<b>15.1</b>	<b>0.3</b>	<b>54.1</b>	<b>30496</b>
Doebler's	4417AMXT	196.2*	99.9	15.6	0.9	57.2	32082
Doebler's	4919AM	181.7	92.5	15.6	0.3	57.3	31183
Hubner Seed	H04G287 DGVT2PRIB	201.5*	102.6	15.2	0.3	56.0	31073
Local Seed	LC0488SSX	174.7	89.0	15.2	0.0	54.3	29827
<b>Pioneer</b>	<b>0339AM</b>	<b>197.5*</b>	100.5	<b>15.2</b>	<b>0.7</b>	<b>56.2</b>	<b>28026</b>
<b>Mean</b>		<b>196.4</b>	<b>100</b>	<b>15.3</b>	<b>0.45</b>	<b>55.6</b>	<b>31121</b>
<b>Probability &gt; F</b>		<b>0.098</b>		<b>0.0063</b>	<b>0.050</b>	<b>0.004</b>	<b>0.051</b>
<b>LSD<sub>0.10</sub></b>		<b>35.5</b>		<b>0.26</b>	<b>0.7</b>	<b>1.4</b>	<b>2207</b>
<b>CV%</b>		<b>15.3</b>		<b>1.6</b>	<b>134</b>	<b>2.5</b>	<b>6</b>

<sup>1</sup>See Table 5 for trait designations for early-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 18. Performance of mid-season hybrids evaluated at Lower Eastern Shore R&E Center, Salisbury Facility, Salisbury, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A4463VT2PRO	245.0*	114.2	15.5	0.6	58.5	31504
Augusta	A4858GT3010	205.9	96.0	16.0	0.6	58.0	32772
Augusta	A4860GT3220	203.9	95.0	15.7	0.0	56.7	31244
Dekalb	DKC 60-88RIB	215.4	100.4	15.4	0.0	57.7	32045
Dekalb	DKC 61-98RIB	190.7	88.9	15.5	0.3	58.2	33938
Dekalb	DKC 62-20RIB	215.7	100.5	15.8	0.6	58.4	30792
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>223.1</b>	<b>104.0</b>	<b>15.8</b>	<b>0.0</b>	<b>57.6</b>	<b>32082</b>
Doebler's	4919AM	213.5	99.5	15.5	0.0	57.5	31327
Doebler's	5018AM	216.0	100.7	15.4	0.3	55.9	32977
Dyna-Gro	D49VC70	209.5	97.6	15.8	0.0	57.5	32560
Dyna-Gro	D50VC30	210.0	97.9	15.6	0.0	57.5	33139
Dyna-Gro	D52VC63	219.7	102.4	16.1	0.5	58.2	32445
Hubner Seed	H08G394 DGVT2PRIB	227.5*	106.0	15.4	0.3	56.6	34123
Hubner Seed	H4563RC2P VT2PRIB	216.3	100.8	16.2	0.6	58.8	33533
Local Seed	LC0877VT2P	208.6	97.2	15.6	0.0	55.8	32451
<b>Pioneer</b>	<b>0843AM</b>	<b>209.9</b>	<b>97.8</b>	<b>15.7</b>	<b>0.3</b>	<b>58.3</b>	<b>33692</b>
<b>Pioneer</b>	<b>1197AM</b>	<b>225.9*</b>	<b>105.2</b>	<b>15.9</b>	<b>0.3</b>	<b>58.4</b>	<b>32635</b>
Syngenta	NK0886-3010	194.1	90.4	16.2	0.3	57.8	31442
Syngenta	NK0968-3110	226.2*	105.4	15.5	0.6	55.8	32511
<b>Trial Mean</b>		<b>214.6</b>	<b>100</b>	<b>15.7</b>	<b>0.28</b>	<b>57.5</b>	<b>32485</b>
<b>Probability &gt; F</b>		<b>0.038</b>		<b>&lt;0.0001</b>	<b>0.82</b>	<b>&lt;0.0001</b>	<b>0.67</b>
<b>LSD<sub>0.10</sub></b>		<b>20.9</b>		<b>0.26</b>	<b>0.7</b>	<b>0.8</b>	<b>2509</b>
<b>CV%</b>		<b>8.1</b>		<b>2.1</b>	<b>184</b>	<b>1.8</b>	<b>5.4</b>

<sup>1</sup>See Table 6 for trait designations for mid-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids included.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.05) compared to the **top-yielding hybrid** at this location.

**Table 19. Performance of full season hybrids evaluated at Lower Eastern Shore R&E Center, Salisbury Facility, Salisbury, MD during 2018.**

Brand/ Company Name	Hybrid Name <sup>1</sup>	Yield (bu/a) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A1165VT2 PRORIB	208.3	98.1	16.5	2.1	59.6	30913
Augusta	A1166VT2PRORIB	210.9	99.3	16.1	0.0	57.3	32808
Augusta	A4465GT3111	204.2	96.1	18.6	0.0	58.7	31996
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>207.7</b>	97.8	<b>16.1</b>	<b>0.9</b>	<b>60.1</b>	<b>32777</b>
Dekalb	DKC 65-20RIB	225.5	106.2	17.3	1.5	62.3	32409
<b>Dekalb</b>	<b>DKC 65-95RIB</b>	<b>235.5</b>	<b>110.9</b>	<b>18.5</b>	<b>0.0</b>	<b>62.7</b>	<b>34067</b>
Dekalb	DKC 66-75RIB	232.5	109.5	18.2	0.3	61.0	34110
Dekalb	DKC 67-44RIB	225.3	106.1	16.5	0.0	60.7	33349
Doebler's	5018AM	224.0	105.5	15.6	0.0	56.4	32574
Doebler's	5319AM	191.6	90.2	20.6	0.0	63.5	31837
Doebler's	5518AM	217.5	102.4	18.1	0.0	59.1	33539
Dyna-Gro	D55VC45	211.9	99.8	20.5	0.0	63.3	34060
Hubner Seed	H4663RC2P VT2PRIB	212.5	100.0	17.8	0.0	59.5	33907
Hubner Seed	H4890RC2P VT2PRIB	214.7	101.1	21.2	0.3	64.5	33176
Local Seed	LC1577VT2P	210.5	99.1	16.2	0.0	60.2	27542
<b>Pioneer</b>	<b>1442AM</b>	<b>182.7</b>	86.0	<b>19.7</b>	<b>0.0</b>	<b>62.1</b>	<b>32635</b>
Syngenta	NK1354-3110	202.0	95.1	18.1	0.0	58.3	32267
Syngenta	NK1573-3110	206.5	97.2	20.8	0.0	60.8	32795
<b>Trial Mean</b>		<b>212.4</b>	<b>100</b>	<b>18.1</b>	<b>0.3</b>	<b>60.6</b>	<b>32598</b>
<b>Probability &gt; F</b>		<b>0.63 (NS)</b>		<b>0.22</b>	<b>0.02</b>	<b>0.002</b>	<b>&lt;0.0001</b>
<b>LSD<sub>0.10</sub></b>		<b>34.5</b>		<b>3.7</b>	<b>1</b>	<b>2.9</b>	<b>1646</b>
<b>CV%</b>		<b>11.9</b>		<b>15.8</b>	<b>293</b>	<b>4.6</b>	<b>5.5</b>

<sup>1</sup>See Table 7 for trait designations for full season hybrids.

<sup>2</sup>Yields are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk next to yield are not significantly different (Probability > F ≤ 0.10) compared to the **top-yielding hybrid** at this location.

**Table 20. Performance of early season hybrids evaluated at Western Maryland Research and Education Center, Keedysville, MD during 2018.**

Brand/Company	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A2856GT3220	183.4	91.9	17.3	0.3	56.3	27473
Dekalb	DKC 55-21RIB	198.4	99.5	16.4	0.0	56.0	27104
Dekalb	DKC 55-53RIB	199.5	100.0	16.2	0.7	57.1	26920
<b>Dekalb</b>	<b>DKC 55-85RIB</b>	<b>217.5</b>	<b>109.0</b>	<b>16.4</b>	<b>0.3</b>	<b>56.6</b>	<b>25998</b>
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>214.2</b>	<b>107.3</b>	<b>16.4</b>	<b>0.0</b>	<b>57.4</b>	<b>26835</b>
Doebler's	4417AMXT	203.4	101.9	17.3	0.0	59.0	26551
Doebler's	4919AM	198.8	99.6	17.1	0.3	56.1	27473
Hubner Seed	H04G287 DGVT2PRIB	207.7	104.1	16.2	0.0	57.3	26598
Local Seed	LC0488SSX	169.3	84.9	17.4	0.0	57.8	24707
<b>Pioneer</b>	<b>0339AM</b>	<b>202.8</b>	<b>101.6</b>	<b>17.8</b>	<b>0.0</b>	<b>57.3</b>	<b>25445</b>
<b>Mean</b>		<b>199.5</b>	<b>100</b>	<b>16.85</b>	<b>0.17</b>	<b>57.1</b>	<b>26510</b>
<b>Probability &gt; F</b>		<b>&lt;0.0001</b>		<b>1E-04</b>	<b>0.71</b>	<b>&lt;0.0001</b>	<b>0.08</b>
<b>LSD<sub>0.10</sub></b>		<b>11.6</b>		<b>0.52</b>	<b>0.7</b>	<b>0.7</b>	<b>1502</b>
<b>CV%</b>		<b>7.6</b>		<b>3.8</b>	<b>276</b>	<b>1.7</b>	<b>4.9</b>

<sup>1</sup>See Table 5 for trait designations for early-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk are not significantly different (Probability > F ≤ 0.10) for yield compared to the **top-yielding hybrid** at this location.

**Table 21. Performance of mid-season hybrids evaluated at Western Maryland Research and Education Center, Keedysville, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A4463VT2PRO	209.7	99.3	17.6	0.0	58.3	27473
Augusta	A4858GT3010	207.0	97.9	18.2	0.3	59.1	26920
Augusta	A4860GT3220	209.5	99.1	18.3	2.0	57.3	28026
Dekalb	DKC 60-88RIB	210.3	99.5	17.5	3.0	60.1	26735
Dekalb	DKC 61-98RIB	207.9	98.4	17.3	0.7	58.8	27104
Dekalb	DKC 62-20RIB	207.2	98.1	16.8	0.0	57.7	26920
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>218.5</b>	<b>103.4</b>	<b>18.3</b>	<b>0.7</b>	<b>58.6</b>	<b>27657</b>
Doebler's	4919AM	203.6	96.3	17.2	0.3	55.7	26366
Doebler's	5018AM	206.2	97.6	16.8	10.8	56.2	26817
Dyna-Gro	D49VC70	223.9	106.0	17.0	0.3	60.1	29132
Dyna-Gro	D50VC30	210.9	99.8	17.6	0.7	58.7	28220
Dyna-Gro	D52VC63	207.9	98.4	18.0	0.0	57.9	26920
Hubner Seed	H08G394 DGVT2PRIB	206.2	97.6	17.3	1.8	57.8	27971
<b>Hubner Seed</b>	<b>H4563RC2P VT2PRIB</b>	<b>233.4</b>	<b>110.5</b>	<b>18.6</b>	<b>0.3</b>	<b>59.7</b>	<b>29317</b>
Local Seed	LC0877VT2P	216.9	102.6	17.0	0.0	56.5	27288
<b>Pioneer</b>	<b>0843AM</b>	<b>209.4</b>	<b>99.1</b>	<b>17.9</b>	<b>0.0</b>	<b>58.1</b>	<b>28364</b>
<b>Pioneer</b>	<b>1197AM</b>	<b>223.3</b>	<b>105.7</b>	<b>17.1</b>	<b>1.0</b>	<b>57.5</b>	<b>27473</b>
Syngenta	NK0886-3010	198.4	93.9	18.3	0.0	58.4	26920
Syngenta	NK0968-3110	204.0	96.6	18.7	0.3	56.2	27104
<b>Trial Mean</b>		<b>211.3</b>	<b>100</b>	<b>17.65</b>	<b>1.18</b>	<b>58</b>	<b>27512</b>
<b>Probability &gt; F</b>		<b>0.42 (NS)</b>		<b>&lt;0.0001</b>	<b>0.25</b>	<b>&lt;0.0001</b>	<b>0.82</b>
<b>LSD<sub>0.10</sub></b>		<b>19.4</b>		<b>0.49</b>	<b>5.2</b>	<b>0.85</b>	<b>2360</b>
<b>CV%</b>		<b>6.7</b>		<b>3.9</b>	<b>341</b>	<b>2.3</b>	<b>5.8</b>

<sup>1</sup>See Table 6 for trait designations for mid-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk are not significantly different (Probability > F ≤ 0.10) for yield compared to the **top-yielding hybrid** at this location.

**Table 22. Performance of full season hybrids evaluated at Western Maryland Research and Education Center, Keedysville, MD during 2018.**

Brand/ Company Name	Hybrid Name <sup>1</sup>	Yield (bu/a) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A1165VT2 PRORIB	211.9	99.5	19.6	0.4	59.8	26920
Augusta	A1166VT2PRORIB	208.9	98.1	19.4	0.7	58.7	27473
Augusta	A4465GT3111	202.9	95.3	20.2	0.3	58.3	26551
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>218.0</b>	<b>102.3</b>	<b>19.5</b>	<b>0.4</b>	<b>61.0</b>	<b>26182</b>
Dekalb	DKC 65-20RIB	192.6	90.4	21.2	0.0	61.9	27473
Dekalb	DKC 65-95RIB	220.3	103.4	20.7	0.3	62.2	29501
Dekalb	DKC 66-75RIB	232.1*	109.0	19.5	0.0	59.3	26920
Dekalb	DKC 67-44RIB	220.8	103.7	20.4	0.7	61.6	28026
Doebler's	5018AM	205.6	96.5	16.7	9.4	56.2	27842
Doebler's	5319AM	209.6	98.4	18.7	0.6	59.7	29501
Doebler's	5518AM	201.6	94.6	18.1	0.0	58.3	26366
Dyna-Gro	D55VC45	218.2	102.4	18.6	0.7	59.3	26735
Hubner Seed	H4663RC2P VT2PRIB	217.6	102.2	18.8	0.3	58.7	28763
Hubner Seed	H4890RC2P VT2PRIB	241.1*	113.2	21.0	0.0	62.1	27104
Local Seed	LC1577VT2P	213.7	100.3	19.0	0.0	60.2	24891
<b>Pioneer</b>	<b>1442AM</b>	<b>205.6</b>	<b>96.5</b>	<b>21.2</b>	<b>0.3</b>	<b>61.8</b>	<b>27288</b>
Syngenta	NK1354-3110	219.9	103.2	19.1	0.0	57.6	26182
Syngenta	NK1573-3110	197.1	92.5	22.3	0.4	59.9	26551
<b>Trial Mean</b>		<b>213</b>	<b>100</b>	<b>19.7</b>	<b>0.8</b>	<b>59.8</b>	<b>27237</b>
<b>Probability &gt; F</b>		<b>0.16</b>		<b>0.0007</b>	<b>0.53</b>	<b>&lt;0.0001</b>	<b>0.009</b>
<b>LSD<sub>0.10</sub></b>		<b>23.3</b>		<b>1.7</b>	<b>5.3</b>	<b>1.3</b>	<b>1763</b>
<b>CV%</b>		<b>8.5</b>		<b>8.4</b>	<b>483</b>	<b>3.1</b>	<b>6.1</b>

<sup>1</sup>See Table 7 for trait designations for full season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk are not significantly different (Probability > F ≤ 0.10) for yield compared to the **top-yielding hybrid** at this location.

**Table 23. Performance of early season hybrids evaluated at Central Maryland Research and Education Center, Clarksville, MD during 2018. Note: The performance variation among these early season hybrids was the result of extensive raccoon damage.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A2856GT3220	121.7	90.6	14.9	17.4	55.1	27657
Dekalb	DKC 55-21RIB	92.8	69.1	13.6	26.6	55.7	28992
Dekalb	DKC 55-53RIB	130.4	97.1	14.1	3.7	56.2	27485
Dekalb	DKC 55-85RIB	ND <sup>6</sup>	ND	ND	ND	ND	ND
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>151.1</b>	<b>112.5</b>	<b>14.1</b>	<b>20.8</b>	<b>54.2</b>	<b>26837</b>
Doebler's	4417AMXT	78.5	58.5	14.4	38.7	57.3	26713
Doebler's	4919AM	202.2	150.5	14.6	0.4	56.5	26062
Hubner Seed	H04G287 DGVT2PRIB	ND <sup>6</sup>	ND	ND	ND	ND	ND
Local Seed	LC0488SSX	111.4	82.9	14.2	10.1	54.5	27288
<b>Pioneer</b>	<b>0339AM</b>	<b>145.8</b>	<b>108.5</b>	<b>13.8</b>	<b>26.6</b>	<b>55.1</b>	<b>25348</b>
<b>Mean</b>		<b>134.3</b>	<b>100</b>	<b>14.27</b>	<b>16.3</b>	<b>55.6</b>	<b>26808</b>
<b>Probability &gt; F</b>		<b>0.194 (NS)</b>		<b>0.0008</b>	<b>0.046</b>	<b>0.45</b>	<b>0.54</b>
<b>LSD<sub>0.10</sub></b>		<b>65.9</b>		<b>0.3</b>	<b>15.5</b>	<b>2.2</b>	<b>2344</b>
<b>CV%</b>		<b>37.1</b>		<b>3</b>	<b>94.4</b>	<b>2.7</b>	<b>6.1</b>

<sup>1</sup>See Table 5 for trait designations for early-season hybrids.

<sup>2</sup>Yields and test weights are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

<sup>6</sup>ND – no data; this hybrid was completely destroyed by raccoon damage.

\*Hybrids with an asterisk are not significantly different (Probability > F ≤ 0.10) for yield compared to the **top-yielding hybrid** at this location.



**Table 24. Performance of mid-season hybrids evaluated at Central Maryland Research and Education Center, Clarksville, MD during 2018.**

Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A4463VT2PRO	215.7	103.8	15.1	0.0	59.3	27204
Augusta	A4858GT3010	201.8	97.1	14.7	5.5	58.0	26079
Augusta	A4860GT3220	191.1	91.9	15.0	1.1	56.5	26257
Dekalb	DKC 60-88RIB	209.5	100.7	14.4	1.4	58.8	27344
Dekalb	DKC 61-98RIB	209.9	100.9	14.8	3.9	58.5	28244
Dekalb	DKC 62-20RIB	199.3	95.9	14.8	1.0	57.2	26818
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>220.1</b>	<b>105.9</b>	<b>15.0</b>	<b>0.4</b>	<b>57.8</b>	<b>27029</b>
Doebler's	4919AM	203.8	98.0	14.7	0.8	56.9	25176
<b>Doebler's</b>	<b>5018AM</b>	<b>224.5</b>	<b>108.0</b>	<b>14.2</b>	<b>1.1</b>	<b>56.7</b>	<b>26660</b>
Dyna-Gro	D49VC70	196.4	94.5	14.7	3.6	58.9	27470
Dyna-Gro	D50VC30	211.5	101.7	14.7	3.9	58.4	27763
Dyna-Gro	D52VC63	209.4	100.7	15.3	1.1	58.5	26182
Hubner Seed	H08G394 DGVT2PRIB	206.5	99.3	14.7	3.9	57.7	27187
Hubner Seed	H4563RC2P VT2PRIB	212.9	102.4	15.7	1.3	59.4	28579
Local Seed	LC0877VT2P	195.5	94.0	14.9	2.1	55.7	27428
<b>Pioneer</b>	<b>0843AM</b>	<b>222.1</b>	<b>106.9</b>	<b>14.8</b>	<b>0.0</b>	<b>57.7</b>	<b>27019</b>
<b>Pioneer</b>	<b>1197AM</b>	<b>208.6</b>	<b>100.3</b>	<b>15.0</b>	<b>2.8</b>	<b>57.6</b>	<b>27143</b>
Syngenta	NK0886-3010	209.7	100.9	14.7	0.0	57.4	25542
Syngenta	NK0968-3110	201.4	96.9	15.3	0.7	55.8	26838
<b>Trial Mean</b>		<b>207.9</b>	<b>100</b>	<b>14.9</b>	<b>1.8</b>	<b>57.7</b>	<b>26945</b>
<b>Probability &gt; F</b>		<b>0.71</b> <b>(NS)</b>		<b>&lt;0.0001</b>	<b>0.63</b>	<b>&lt;0.0001</b>	<b>0.12</b>
<b>LSD<sub>0.10</sub></b>		<b>24.5</b>		<b>0.36</b>	<b>4.2</b>	<b>0.7</b>	<b>1603</b>
<b>CV%</b>		<b>8.2</b>		<b>2.7</b>	<b>164</b>	<b>2</b>	<b>4.9</b>

<sup>1</sup>See Table 6 for trait designations for mid-season hybrids.

<sup>2</sup>Yield and test weight are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk are not significantly different (Probability > F ≤ 0.10) for yield compared to the **top-yielding hybrid** at this location.

**Table 25. Performance of full season hybrids evaluated at Central Maryland Research and Education Center-Clarksville Facility, Clarksville, MD during 2018.**

Brand/ Company Name	Hybrid Name <sup>1</sup>	Yield (bu/a) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
Augusta	A1165VT2 PRORIB	175.1	93.0	16.1	1.2	58.4	24483
Augusta	A1166VT2PRORIB	186.6	99.1	15.2	0.0	57.6	26941
Augusta	A4465GT3111	168.6	89.6	15.7	0.4	57.3	26228
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>177.0</b>	<b>94.0</b>	<b>16.0</b>	<b>0.7</b>	<b>60.7</b>	<b>27482</b>
Dekalb	DKC 65-20RIB	188.6	100.2	17.1	0.0	62.0	28589
Dekalb	DKC 65-95RIB	194.5	103.3	16.0	0.0	60.0	25763
Dekalb	DKC 66-75RIB	197.5	104.9	15.7	0.0	59.4	26920
Dekalb	DKC 67-44RIB	200.0	106.3	15.5	0.0	59.5	27619
Doebler's	5018AM	222.2	118.1	14.1	0.4	56.0	26289
Doebler's	5319AM	186.4	99.0	15.5	2.2	59.4	25813
Doebler's	5518AM	195.0	103.6	14.9	0.4	57.2	25553
Dyna-Gro	D55VC45	201.6	107.1	15.4	0.4	59.1	26145
Hubner Seed	H4663RC2P VT2PRIB	178.6	94.9	16.0	5.1	57.5	26478
Hubner Seed	H4890RC2P VT2PRIB	185.2	98.4	17.1	2.3	60.1	25338
Local Seed	LC1577VT2P	188.7	100.3	15.7	1.8	59.6	25163
<b>Pioneer</b>	<b>1442AM</b>	<b>182.1</b>	<b>96.8</b>	<b>15.9</b>	<b>0.0</b>	<b>59.8</b>	<b>26556</b>
Syngenta	NK1354-3110	164.0	87.1	15.5	1.8	57.4	25544
Syngenta	NK1573-3110	195.7	104.0	16.7	0.0	58.1	28164
<b>Trial Mean</b>		<b>188.2</b>	<b>100</b>	<b>15.8</b>	<b>0.94</b>	<b>58.8</b>	<b>26393</b>
<b>Probability &gt; F</b>		<b>0.81 (NS)</b>		<b>&lt;0.0001</b>	<b>0.54</b>	<b>&lt;0.0001</b>	<b>0.027</b>
<b>LSD<sub>0.10</sub></b>		<b>39.5</b>		<b>0.6</b>	<b>3.2</b>	<b>0.9</b>	<b>1759</b>
<b>CV%</b>		<b>15.1</b>		<b>5.3</b>	<b>251</b>	<b>2.7</b>	<b>5.6</b>

<sup>1</sup>See Table 7 for hybrid type code designations for full season hybrids.

<sup>2</sup>Yields are reported at 15% moisture content.

<sup>3</sup>Lodging is recorded as the percentage of plants broken below the ear and/or leaning 45° or greater.

<sup>4</sup>Hybrids in **bold** are check hybrids.

<sup>5</sup>NS indicates that no statistically significant difference was observed for this characteristic.

\*Hybrids with an asterisk are not significantly different (p=0.10) for yield compared to the top-yielding hybrid at this location.

**Table 26. Relative yield scores for early season hybrids evaluated in Maryland during 2018. Hybrids have good stability with scores 100 or greater at four or more locations.**

Brand/ Company Name	Hybrid	Relative Yield					
		Avg. 5 Sites	Wye	Poplar Hill	Salisbury	Clarksville	Keedysville
Augusta	A2856GT3220	90.5	95.6	90.3	84.0	90.6	91.9
Dekalb	DKC 55-21RIB	91.6	106.4	84.9	98.1	69.1	99.5
Dekalb	DKC 55-53RIB	103.2	112.5	91.2	115.4	97.1	100.0
Dekalb	DKC 55-85RIB	115.4	112.9	122.3	117.3	ND	109.0
<b>Dekalb</b>	<b>DKC 57-99RIB</b>	<b>107.7</b>	<b>102.6</b>	<b>115.3</b>	<b>100.6</b>	<b>112.5</b>	<b>107.3</b>
Doebler's	4417AMXT	92.8	112.1	91.6	99.9	58.5	101.9
Doebler's	4919AM	112.1	110.1	107.6	92.5	150.5	99.6
Hubner Seed	H04G287 DGVT2PRIB	100.2	88.7	105.5	102.6	ND	104.1
Local Seed	LC0488SSX	81.1	63.1	85.7	89.0	82.9	84.9
<b>Pioneer</b>	<b>0339AM</b>	<b>102.1</b>	<b>95.9</b>	<b>104.0</b>	<b>100.5</b>	<b>108.5</b>	<b>101.6</b>
Average (bu/A)		<b>172.4</b>	<b>161.2</b>	<b>170.4</b>	<b>196.4</b>	<b>134.3</b>	<b>199.5</b>

<sup>1</sup> **Bold** hybrids are checks.

<sup>2</sup> Hybrids highlighted in light gray have relative yield ratings of 100 or greater at all sites tested.

<sup>3</sup> Hybrids highlighted in dark gray have relative yield ratings of 100 or greater at 4 testing sites.

**Table 27. Relative yield scores for mid-season hybrids evaluated in Maryland during 2018. Hybrids with scores 100 or greater at four or more locations are considered to have good stability.**

Brand/Company Name	Hybrid Name	Relative Yield %					
		Avg. 5 sites	Wye	Poplar Hill	Salisbury	Clarksville	Keedysville
Augusta	A4463VT2PRO	104.9	105.3	101.8	114.2	103.8	99.3
Augusta	A4858GT3010	95.9	92.6	95.8	96.0	97.1	97.9
Augusta	A4860GT3220	92.5	89.9	86.6	95.0	91.9	99.1
Dekalb	DKC 60-88RIB	102.4	101.9	109.6	100.4	100.7	99.5
Dekalb	DKC 61-98RIB	97.1	94.4	102.8	88.9	100.9	98.4
Dekalb	DKC 62-20RIB	101.4	107.4	104.9	100.5	95.9	98.1
<b>Dekalb</b>	<b>DKC 62-53RIB</b>	<b>108.9</b>	<b>124.6</b>	<b>106.4</b>	<b>104.0</b>	<b>105.9</b>	<b>103.4</b>
Doebler's	4919AM	97.8	92.8	102.5	99.5	98.0	96.3
Doebler's	5018AM	104.0	111.2	102.5	100.7	108.0	97.6
Dyna-Gro	D49VC70	93.1	80.8	86.8	97.6	94.5	106.0
Dyna-Gro	D50VC30	97.5	95.0	92.9	97.9	101.7	99.8
Dyna-Gro	D52VC63	102.0	104.7	103.8	102.4	100.7	98.4
Hubner Seed	H08G394 DGVT2PRIB	97.4	89.7	94.5	106.0	99.3	97.6
Hubner Seed	H4563RC2P VT2PRIB	104.3	110.6	97.0	100.8	102.4	110.5
Local Seed	LC0877VT2P	99.0	97.9	103.4	97.2	94.0	102.6
<b>Pioneer</b>	<b>0843AM</b>	<b>101.7</b>	106.3	98.4	97.8	106.9	99.1
<b>Pioneer</b>	<b>1197AM</b>	<b>106.1</b>	<b>107.8</b>	<b>111.7</b>	<b>105.2</b>	<b>100.3</b>	<b>105.7</b>
Syngenta	NK0886-3010	94.7	84.1	104.3	90.4	100.9	93.9
Syngenta	NK0968-3110	96.2	87.5	94.5	105.4	96.9	96.6
<b>Trial Mean (bu/acre)</b>		<b>201.7</b>	<b>190.9</b>	<b>183.9</b>	<b>214.6</b>	<b>207.9</b>	<b>211.3</b>

<sup>1</sup> **Bold** hybrids are checks.

<sup>2</sup> Hybrids highlighted in light gray have relative yield ratings of 100 or greater at all sites tested.

<sup>3</sup> Hybrids highlighted in dark gray have relative yield ratings of 100 or greater at 4 testing sites.

**Table 28. Relative yield scores for full-season hybrids evaluated in Maryland during 2018. Hybrids with scores 100 or greater at four or more locations are considered to have good stability.**

Brand/ Company Name	Hybrid Name	Relative Yield %					
		Avg. 5 Sites	Wye	Poplar Hill	Salisbury	Clarksville	Keedysville
Augusta	A1165VT2 PRORIB	98.5	100.8	102.9	98.1	93.0	99.5
Augusta	A1166VT2PRORIB	99.2	101.6	99.5	99.3	99.1	98.1
Augusta	A4465GT3111	96.0	99.4	101.5	96.1	89.6	95.3
<b>Dekalb</b>	<b>DKC 64-35RIB</b>	<b>97.5</b>	<b>98.4</b>	<b>96.9</b>	<b>97.8</b>	<b>94.0</b>	<b>102.3</b>
Dekalb	DKC 65-20RIB	93.4	70.9	101.1	106.2	100.2	90.4
Dekalb	DKC 65-95RIB	106.0	112.4	101.7	110.9	103.3	103.4
Dekalb	DKC 66-75RIB	101.8	91.2	96.2	109.5	104.9	109.0
Dekalb	DKC 67-44RIB	103.4	110.3	92.7	106.1	106.3	103.7
Doebler's	5018AM	106.8	107.9	107.7	105.5	118.1	96.5
Doebler's	5319AM	99.0	103.3	105.8	90.2	99.0	98.4
Doebler's	5518AM	98.7	91.7	102.9	102.4	103.6	94.6
Dyna-Gro	D55VC45	101.3	107.6	91.6	99.8	107.1	102.4
Hubner Seed	H4663RC2P VT2PRIB	101.8	110.0	103.7	100.0	94.9	102.2
Hubner Seed	H4890RC2P VT2PRIB	103.8	102.7	105.6	101.1	98.4	113.2
Local Seed	LC1577VT2P	97.2	89.8	98.3	99.1	100.3	100.3
<b>Pioneer</b>	<b>1442AM</b>	<b>94.2</b>	<b>100.4</b>	<b>92.8</b>	<b>86.0</b>	<b>96.8</b>	<b>96.5</b>
Syngenta	NK1354-3110	91.0	77.3	94.2	95.1	87.1	103.2
Syngenta	NK1573-3110	100.9	101.7	110.7	97.2	104.0	92.5
Syngenta	NK1573-3110	100.9	100.8	102.9	98.1	93.0	99.5
<b>Trial Mean (bu/acre)</b>		<b>194.8</b>	<b>185.1</b>	<b>171.8</b>	<b>212.4</b>	<b>188.2</b>	<b>213</b>

<sup>1</sup>**Bold** hybrids are checks.

<sup>2</sup>Hybrids highlighted in light gray have relative yield ratings of 100 or greater at 5 testing locations.

<sup>3</sup>Hybrids highlighted in dark gray have relative yield ratings of 100 or greater at 4 testing locations.