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# MGPUB Report 2016155 2016 Maryland Corn Hybrid Performance Tests

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

## Agronomy Facts No. 54 is prepared by: Robert Kratochvil and Louis Thorne. Test Procedures

A fee-based, corn hybrid performance-testing program is offered to seed corn companies by the University of Maryland's Extension Service and Agricultural Experiment Station. 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 2016 were submitted in two ways. First, participating seed companies (Table 2) were solicited for submission of hybrids. These hybrids represented those currently available for purchase to experimental lines still under evaluation. Second, the Maryland Grain Producers' Utilization Board provided funding for inclusion of check hybrids; hybrids that are commonly grown and familiar to farmers. The inclusion of the performance data for these check hybrids allows comparisons of newer hybrids with those that are familiar.

During 2016, 55 hybrids were tested using three maturity group tests: (1) early season (9 hybrids; Table 5); (2) mid-season (24 hybrids; Table 6); and (3) full season (22 hybrids; Table 7). Each company designated the maturity group assignments for hybrids they submitted. Check hybrids were included in each of the three tests. All tested hybrids had genetic traits for insect protection and/or herbicide tolerance (Tables 5-7).

Hybrids were grouped and randomized by maturity group and 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 population and number of lodged plants were counted during the same week of harvest and frequently on the same day as 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 GrainGage system (Juniper Systems, Inc., Logan, UT). Data was recorded using Mirus software (Juniper Systems, Inc.) on a Panasonic Toughpad computer mounted in the combine cab.

#### 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 15.5% moisture content, harvest moisture content, per cent lodging, harvest population, and test weight (lb/bu) at 15.5% moisture content.

As seen in Table 3, growing season precipitation was above the long term averages for four of the five locations; the exception was WMREC. Highlighting the 2016 trial year was the almost daily rain that occurred between April 27 and May 14. This resulted in a nearly three-week delay in planting at Salisbury and Poplar Hill and approximately 10 days' delay for Clarksville and

Keedysville. There were two individual rain events at Salisbury that exceeded 8 inches; one in June and the other in late September.

Averaged over the five locations, yield for the early (9), mid (24), and full season (22) hybrids was 200 bu/acre, 206 bu/acre, and 204 bu/acre, respectively. Compared to 2015, these yields were ~13%, 12%, and 7% more, respectively, than was observed for the early, mid, and full season hybrids for that season. Average yield for the 55 hybrids tested across the five locations was 204 bu/acre or 7 bu/acre less than the record setting 211 bu/acre in 2014. However, 2016 was the second time in three years that average yield across the five testing locations exceeded 200 bu/acre. The primary difference between the two years was the wet May that delayed planting at all locations except the Wye which had timely planting on April 25. Averaged over the 55 hybrids tested at the Wye yield there (232 bu/a) eclipsed the previous single location record of 225 bu/a that was observed at Clarksville during 2014.

A least significant difference (LSD) value is reported for the variables measured for each test where statistically significant differences ( $p \le 0.05$  generally) for a variable were observed among hybrids. The mean separation value has been calculated at the 5 percent probability level (LSD<sub>0.05</sub>). 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 95% certainty that the difference is real rather than due to random variability. The coefficient of variation (CV) is a measurement of the level of 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.

#### Relative Yield

The selection of a hybrid to grow on your farm based solely on its 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 specific 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 score consistently greater than 100 across all testing locations is considered to have excellent stability. Four hybrids met this gold standard for stability, the early season entry Pioneer brand 0604 AM; the mid-season hybrid Dekalb brand DKC62-08; and the full season hybrids T.A. Seeds brand TA767-22DPRIB and Hubner brand H14G153. Eleven hybrids (one early season; seven mid-season; and three full season) had relative yield scores greater than 100 at 4-5 locations and are considered to have good stability. Those hybrids are highlighted in light and dark gray in Tables 26-28.

#### Acknowledgments

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### 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 information that is reproduced.

Index to Tables		<u>Page</u>
Table 1.	Production management information	4
Table 2.	Participating companies	5
Table 3.	Precipitation received at each location	5
Table 4.	Glossary of genetic trait abbreviations	6
Table 5.	Relative maturity, genetics, and seed treatments for early season hybrids	7
Table 6.	Relative maturity, genetics, and seed treatments for mid-season hybrids	7
Table 7.	Relative maturity, genetics, and seed treatments for full-season hybrids	8
Table 8.	Early season hybrids at five locations	9
Table 9.	Mid-season hybrids at five locations	10
Table 10.	Full-season hybrids at five locations	11
Table 11.	Early season hybrids at Wye Research and Education Center	12
Table 12.	Mid-season hybrids at Wye Research and Education Center	13
Table 13.	Full Season hybrids at Wye Research and Education Center	14
Table 14.	Early season hybrids at LESREC-Poplar Hill	15
Table 15.	Mid-season hybrids at LESREC-Poplar Hill	16
Table 16.	Full season hybrids at LESREC-Poplar Hill	17
Table 17.	Early season hybrids at LESREC-Salisbury	18
Table 18.	Mid-season hybrids at LESREC-Salisbury	19
Table 19.	Full-season hybrids at LESREC-Salisbury	20
Table 20.	Early season hybrids at Western Maryland R&E Center	21
Table 21.	Mid-season hybrids at Western Maryland R&E Center	22
Table 22.	Full-season hybrids at Western Maryland R&E Center	23
Table 23.	Early season hybrids at CMREC-Clarksville	24
Table 24.	Mid-season hybrids at CMREC-Clarksville	25
Table 25.	Full-season hybrids at CMREC-Clarksville	26
Table 26.	Relative yield summary for early season hybrids	27
Table 27.	Relative yield summary for mid-season hybrids	28
Table 28.	Relative yield summary for full-season hybrids	29

Table 1. Production management practices used and other pertinent information for the locations of the 2016 Maryland Corn Hybrid Test.

Location	Soil Type &	Fertilizer	Herbicides & Insecticides	Tillage	Plant &	Farm Staff
	Previous Crop				Harvest Dates	
Wye R & E Center Queenstown, MD	Mattapeake silt loam Soybean	25 April: 275 lb/a as 11-18-18-8 S 10 June:	19 April Pre-Plant Glyphosate 41 @ 1 qt/a 11 June Post-Emerge	No-till with aid of trash wheels on planter	<u>Plant</u> 25 April	John Draper  Joseph Street
	Soybean	150 lb N and 40 lb S/a as 30-0-0-9	Glyphosate 41 @ 1.5 qt/a	plantei	Harvest	,
		Total: 180-50-50-62 S	Rifle (Dicamba) 1 pt/a No Insecticide		14 September Early/Mid-	Thomas Eason
					Season Tests	
					23 September Full Season Test	
Lower Eastern	Mattapex silt loam	6 April:	14 April Pre-Plant	No-till into cover	<u>Plant</u>	David
Shore R&E Center- Poplar Hill	Nassowango silt loam	276 lb/a 7-00-39-8S 16 May:	Gramoxone SL @ 1.5 pt/A Aatrex90 @ 8 oz/A	crop with aid of trash wheels on	16 May	Armentrout
Quantico, MD	loam	135 lb/a as 08-20-00-0.1B-0.2Zn	820 Surfactant @ 8 fl oz/A	planter	Harvest	Fred Senkbeil
·	Soybean followed by	9 June:	16 May Pre-Emerge		5 October	
	wheat cover crop	140 lb N/a as 30% UAN	Lexar @ 3 qt/A No Insecticide			
		Total: 170-27-108-47S-1.3 B-2.7Zn	No insecticide			
Lower Eastern	Fort Mott loamy	5 April:	13 April Pre-Plant	No-till into cover	<u>Plant</u>	David
Shore R&E Center- Salisbury	sand	276 lb/a 7-00-39-8S 16 May:	Gramoxone SL @ 1.5 pt/A Aatrex90 @ 8 oz/A	crop with aid of trash wheels on	16 May	Armentrout
Salisbury, MD	Soybean followed by	155.7 lb/a as 08-20-00-0.1B-0.2Zn	820 Surfactant @ 5 fl oz/A	planter	Harvest	James Lynch
,,	wheat cover crop	2 June:	16 May Pre-Emerge		6 October	•
		100 lb N/a as 30% UAN 8 June:	Lexar @ 3 qt/A No Insecticide			Vivian Calder
		100 lb N/a as 30% UAN	No insecticide			David Long
		Total:				ŭ
		232-31-108-47S-1.6B-3.1Zn	2011	N	BI 4	Robert Miller
Central Maryland R&E Center -	Delanco silt loam	19 April 225 lb/a 4-12-36-11S	26 May Pre-Emerge Bicep II Mag @ 2 qt/acre	No-till with aid of trash wheels on	<u>Plant</u> 25 May	Mike Dwyer
Clarksville	Soybean	26 May	Gramoxone S.L. 2.0 @ 1.5 pt/acre	planter	20 May	David Justice
Clarksville, MD		130 lb N/a as 30% UAN	80/20 Surfactant @ 1 pt/acre		<u>Harvest</u>	
		27 June 40 lb N/a as 30% UAN	27 June Post-Emerge Status @ 4 oz/acre		18 October	Michael Gray
		Total:	Accent Q @ 0.25 oz/acre			
		179-27-81-25S				
Western Maryland R&E Center	Hagerstown silt loam	27 April: 176 lb/a 6-28-28	14 May Pre-Plant Lumax @ 3 gt/a	No-till with aid of trash wheels on	Plant	Ryan McDonald
K&E Center Keedysville, MD	Soybean	176 lb/a 6-28-28	Weedone.LV4 @1 pt/a	planter	26 May	Douglas Price
. 1000/07/110, 17/10	20,204.1	130 lb N/a as 30% UAN	Gramoxone Inteon @1 qt/a	Piantoi	<u>Harvest</u>	
		Total:	No Post-Emerge Herbicide		19 October	David Wyand
		140-50-50	No Insecticide			

Table 2. Brands and companies represented in the 2016 Maryland corn hybrid tests.

Brand	Address
Augusta	Augusta Seed Corporation, P.O. Box 899, Staunton, VA 24401
DeKalb	Monsanto Company, 800 N. Lindbergh Blvd. St. Louis, MO 63167
5	B. I.I. B. B. I.I. B. B. C. B.
Doebler's	Doebler's PA Hybrids, Inc., 202 Tiadaghton Ave., Jersey Shore, PA 17740
Dyna-Gro	Crop Production Services/Dyna-Gro, 1140 Sweet Road, East Aurora, NY 14052
Dyna Gro	210p 1 1000011011010101010101101011110101111010
Hubner Seed	Hubner Seed Company, 10280 West State Road 28, West Lebanon, IN 47991
Mycogen	Mycogen Seeds, 9330 Zionsville Rd., Indianapolis, IN 46268
NK	Syngenta, 11055 Wayzata Blvd., Minnetonka, MN 55305
Pioneer	Pioneer Hi-bred International, Inc., PO Box 14453, Des Moines, IA 50306
RPM®	Doebler's PA Hybrids, Inc., 202 Tiadaghton Ave., Jersey Shore, PA 17740
T.A. Seeds	T.A. Seeds LLC., PO Box 300, Avis, PA 17721

Table 3. Precipitation received at each location where the Maryland corn hybrid tests were conducted during 2016.

Month	Wye	Poplar Hill	Salisbury <sup>1</sup>	Keedysville	Clarksville
			Inches		
April	1.57	4.95	3.53 (0.0)	0.68	2.22
May	7.78	4.6	5.35 (0.0)	3.51	6.49
June	3.97	6.0	10.31 (1.2)	2.17	3.53
July	6.93	6.85	2.62 (1.8)	5.08	8.91
August	4.63	3.5	4.98 (0.9)	2.72	3.96
September	6.18	8.65	11.93 (0.0)	2.30	2.89
2016 Total (6 month)	31.06	34.55	38.72 (3.9)	19.46	28.00
Long Term Average	22.63	22.32	25.00	21.4	24.16

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

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

Abbreviation	Description
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 3000GT	Protection against corn borer and corn rootworm plus glyphosate and glufosinate herbicide tolerance.
Avicta 500 or A500	A nematicide seed treatment.
Avicta Complete Corn	A nematicide/insecticide/fungicide seed treatment combination.
ВТ	Contains a <i>Bacillus thuringiensis</i> (Bt) event for protection against European corn borer.
Conventional	Indicates a hybrid with no biotechnology linked genetic enhancement.
Cruiser 250 and 500	A neonicotinoid based insecticide seed treatment.
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 insecresistance (Bt) and 2 for herbicide (Roundup and Liberty) tolerance. Includes 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.
GENVT3PRIB, VT3P RIB	A triple stack package that protects against European and Southwest corn borer, corn earworm, fall armyworm, and corn rootworm, is glyphosate tolerant, and has non-Bt seed blended in the bag creating refuge in the bag.
GT	Refers to glyphosate (Roundup) herbicide tolerance.
3110GT	All indicate tolerance to both glufosinate-ammonium (Ignite) and glyphosate (Roundup) herbicides in addition to having protection from Western, Northern, Southern and Mexican rootworm and European and Southwestern corn borer.
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
VT2PRO/DroughtGard	Contains RR2 gene, YieldGard corn stalk borer gene, and Drought Gard gene.
VT2PDG RIB	Contains RR2 gene, YieldGard corn stalk borer gene, Drought Gard gene, and non-Bt seed blended in the bag for refuge in the bag.
VT3PRO	Contains RR2 gene plus above and below ground insect protection.
VT3P RIB	A triple stack package that protects against European and Southwest corn borer, corn earworm, fall armyworm, and corn rootworm, is glyphosate tolerant, and has non-Bt seed blended in the bag creating refuge in the bag.

Table 5. Relative maturity, genetic traits, and seed treatments for early-season hybrids tested in Maryland during 2016.

Brand/Company Name	Hybrid Name	Relative	Genetic Traits <sup>1</sup>	Seed Treatment
		Maturity		
Augusta	A 1108	107	VT2 PRO	Cruiser 250
Dekalb	DKC52-30RIB	102	GENSSRIB	A500/Votivo
Dekalb	DKC55-20RIB	105	GENSSRIB	A500/Votivo
Dekalb	DKC56-03RIB	106	GENSSRIB	A500/Votivo
Dekalb	DKC57-92RIB	107	GENSSRIB	A500/Votivo
Doeblers®	RPM® 4717AMX™	107	AcreMax Xtra	Poncho1250/Votivo
NK	N60F-3111	107	BT, RR, LL, RW	Avicta 500+Vib
Pioneer	P0604 AM	106	AM, LL, RR2	PPST 250
T.A. Seeds	TA547-22DPRIB	104	VT2PRIB	CruiserMax 250

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

Table 6. Relative maturity, genetic traits, and seed treatments for mid-season hybrids tested in Maryland during 2016.

Brand/Company	Hybrid Name	Relative	Genetic Traits <sup>1</sup>	Seed Treatment
Name		Maturity		
Augusta	A 1564	112	GTCBLL	Cruiser 250
Augusta	A 5063	112	VT2 PRO	Cruiser 250
Dekalb	DKC58-06RIB	108	GENSSRIB	A500/Votivo
Dekalb	DKC60-67RIB	110	GENSSRIB	A500/Votivo
Dekalb	DKC61-88RIB	111	GENVT3PRIB	A500/Votivo
Dekalb	DKC62-08RIB	112	GENSSRIB	A500/Votivo
Dekalb	DKC62-05	112	RR2	A500/Votivo
Dekalb	DKC62-08	112	SS	A500/Votivo
Doeblers®	RPM® 4917AM™	109	AcreMax Above	Poncho1250/Votivo
Doeblers®	RPM® 5015AM™	110	AcreMax Above	Poncho1250/Votivo
Doeblers®	RPM® 5125AM™	111	AcreMax Above	Poncho1250/Votivo
Dyna-Gro	CX16110	110	VT2 PRO	Ponch500/Votivo
Dyna-Gro	D49VC39	109	VT2 PRO	Ponch500/Votivo
Dyna-Gro	D52VC91	112	VT2 PRO	Ponch500/Votivo
Hubner	H12G703	112	VT2PDG RIB	Poncho500/Votivo
Hubner	H6624RCSS	112	SStax RIB	Poncho500/Votivo
Mycogen	MY10Z28 RA	110	SSX, LL, RR2	CruiserMax 500
NK	N59B-3111A	108	BT, RR, LL, RW	Avicta 500+Vib
NK	N66V-3000GT	109	BT, RR, LL, RW	Avicta 500+Vib
NK	N68K-3111A	111	BT, RR, LL, RW	Avicta 500+Vib
NK	N69D-3000GT	112	BT, RR, LL, RW	Avicta 500+Vib+TEB
NK	N70J-3111A	112	BT, RR, LL, RW	Avicta 500+Vib
Pioneer	P1197 AMXT	111	AMXT, LL, RR2	PPST 250
T.A. Seeds	TA583-22DPRIB	108	VT2PRIB	CruiserMax 250

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

Table 7. Relative maturity, genetic traits, and seed treatments for full-season hybrids tested in Maryland during 2016.

<sup>&</sup>lt;sup>2</sup>Hybrids in **bold print** are check hybrids that were included with funding from the Maryland Grain Producers' Utilization Board.

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Brand/ Company Name	Hybrid Name	Relative Maturity	Genetic Traits <sup>1</sup>	Seed Treatment
Augusta	A 1565	115	GTCBLL	Cruiser 250
Augusta	A 6465	115	VT2 PRO	Cruiser 250
Dekalb	DKC63-33RIB	113	GENSSRIB	A500/Votivo
Dekalb	DKC63-60RIB	113	GENSSRIB	A500/Votivo
Dekalb	DKC63-71RIB	113	GENSSRIB	A500/Votivo
Dekalb	DKC64-87RIB	114	GENSSRIB	A500/Votivo
Dekalb	DKC65-19RIB	115	GENVT3PRIB	A500/Votivo
Dekalb	DKC65-71RIB	115	GENDGVT2P	A500/Votivo
Doeblers®	5615GRQ™	116	3000GT	Poncho1250/Votivo
Doeblers®	RPM <sup>®</sup> 5315AM™	113	AcreMax Above	Poncho1250/Votivo
Dyna-Gro	D54VC52	114	VT2 PRO	Ponch500/Votivo
Hubner	H14G153	114	VT2PDG RIB	Poncho500/Votivo
Hubner	H4744RC2P	113	VT2P RIB	Poncho500/Votivo
Hubner	H6663RCSS	113	SStax RIB	Poncho500/Votivo
Mycogen	2C799	113	SSX, LL, RR2	CruiserMax 500
Mycogen	MY13M87 RA	113	SSX, LL, RR2	CruiserMax 502
NK	N74L-3010	114	BT, RR, LL	Avicta 500+Vib
NK	N74R-3122	114	BT, RR, LL, RW	Avicta 500+Vib
NK	N83D-3000GT	118	BT, RR, LL, RW	Avicta 500+Vib
Pioneer	P1498	114	RR	PPST 250
T.A. Seeds	TA736-22DPRIB	113	VT2PRIB	CruiserMax 250
T.A. Seeds	TA767-22DPRIB	116	VT2PRIB	CruiserMax 250

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

<sup>&</sup>lt;sup>2</sup>Hybrids in **bold print** are check hybrids that were included with funding from the Maryland Grain Producers' Utilization Board.

Table 8. Performance of early maturity hybrids evaluated at five Maryland locations during 2016.

Entry	Brand/Company	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Harvest
No.	Name	Name <sup>1</sup>	(bu/A)²	Yield	%	%	Weight	Population
							(lb/bu) <sup>2</sup>	(plants/A)
<mark>42</mark>	Pioneer⁴	P0604 AM	<b>208.0</b>	<b>104.2</b>	<b>18.1</b>	<b>1.2</b>	<mark>54.2</mark>	<b>27881</b>
20	Dekalb <sup>4</sup>	DKC57-92RIB	206.5	103.4	19.4	1.1	53.8	28258
11	Dekalb	DKC56-03RIB	204.9	102.6	19.2	0.9	54.1	28748
51	NK <sup>4</sup>	N60F-3111	198.5	99.4	20.3	1.5	53.5	28823
23	Augusta	A 1108	198.4	99.4	20.0	2.4	52.4	27806
5	T.A. Seeds	TA547-22DPRIB	197.1	98.8	18.6	1.9	52.9	27534
9	Dekalb	DKC52-30RIB	197.0	98.7	17.9	1.2	52.7	28522
10	Dekalb	DKC55-20RIB	193.9	97.2	18.7	0.4	53.1	28823
36	Doeblers®	RPM® 4717AMX™	192.4	96.4	19.4	0.4	53.7	27881
	Mean		199.6		19.1	1.2	53.4	28253
	Probability > F		0.123		<0.0001	0.54	<0.0001	0.11
	LSD <sub>0.05</sub>		NS		0.52	NS	0.70	NS
	CV%		8.12		5.04	219	1.80	5.17

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are checks included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (p=0.05) compared to the top-yielding hybrid.

Table 9. Performance of mid-season maturity hybrids evaluated at five Maryland locations during 2016.

Entry	Brand/	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Population
No.	Company	Name <sup>1</sup>	(bu/A) <sup>2</sup>	Yield	%	%	Weight	(plants/A)
	Name						(lb/bu)²	
<mark>55</mark>	Dekalb	DKC 62-05	221.4	107.3	<mark>21.0</mark>	<mark>1.3</mark>	<mark>54.8</mark>	29049
54	Dekalb	DKC 62-08	219.9*	106.5	20.0	1.0	53.5	29238
14	Dekalb	DKC61-88RIB	216.1*	104.7	20.5	1.2	53.8	28371
26	Augusta	A 5063	215.1*	104.2	23.2	0.7	55.1	26600
37	Doeblers®	RPM® 4917AM™	213.6*	103.5	21.0	0.7	54.4	28409
25	Augusta	A 1564	213.3*	103.3	21.8	0.4	51.7	28522
2	Dyna-Gro	CX16110	212.4*	102.9	20.7	0.4	54.4	28522
3	Dyna-Gro	D52VC91	211.0*	102.2	21.2	1.9	56.3	28447
28	Hubner	H6624RCSS	211.0*	102.2	22.3	0.8	54.8	30142
29	Hubner	H12G703	210.9*	102.2	21.8	0.6	55.0	28436
43	Pioneer <sup>4</sup>	P1197 AM	210.3*	101.9	19.8	0.1	53.4	28207
52	NK <sup>4</sup>	N70J-3111A	206.9	100.2	22.5	0.6	54.2	29351
21	Dekalb <sup>4</sup>	DKC62-08RIB	206.5	100.0	20.7	2.5	53.9	27737
46	NK	N66V-3000GT	204.9	99.3	20.4	1.2	52.9	27881
6	T.A. Seeds	TA583-22DPRIB	202.6	98.1	18.7	0.6	52.7	26073
1	Dyna-Gro	D49VC39	201.8	97.8	19.8	1.9	52.6	28258
38	Doeblers®	RPM® 5015AM™	201.4	97.6	20.6	0.7	53.7	27580
39	Doeblers®	RPM® 5125AM™	200.9	97.3	19.2	0.2	53.3	28032
13	Dekalb	DKC60-67RIB	200.3	97.1	19.9	0.5	54.7	28296
47	NK	N68K-3111A	197.8	95.8	20.6	2.0	51.5	28032
34	Mycogen	MY10Z28RA	197.5	95.7	21.7	0.8	52.0	28107
45	NK	N59B-3111A	196.1	95.0	21.8	1.1	53.5	28522
12	Dekalb	DKC58-06RIB	192.0	93.0	21.0	1.4	54.1	28447
48	NK	N69D-3000GT	188.8	91.5	21.1	0.4	53.3	28635
	Trial Me	an	206.4		20.9	0.95	53.7	28287
	Probabilit	y > F	<0.0001		<0.0001	0.39	<0.0001	<0.0001
	LSD <sub>0.0</sub>		13.3		0.72	NS	0.51	1207
	CV%		8.95		4.79	242	1.33	5.93

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are checks included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (p=0.05) compared to the top-yielding hybrid.

Table 10. Performance of full season hybrids evaluated at five Maryland during 2016.

Entry	Brand/	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Population
No.	Company	Name <sup>1</sup>	(bu/a)²	Yield	%	%	Weight	(plants/A)
	Name						(lb/bu)²	
8	T.A. Seeds	TA767-22DPRIB	220.1	108.1	<mark>22.2</mark>	<mark>0.8</mark>	<mark>53.4</mark>	30368
31	Hubner	H4744RC2P	217.4*	106.7	21.2	0.7	55.4	28861
32	Hubner	H14G153	215.4*	105.8	23.1	0.5	54.1	28145
30	Hubner	H6663RCSS	212.9*	104.5	22.5	0.5	54.7	27994
24	Augusta	A 6465	212.5*	104.3	23.6	0.7	54.5	27957
18	Dekalb	DKC65-19RIB	209.5*	102.9	22.2	0.9	56.3	28221
19	Dekalb	DKC65-71RIB	209.4*	102.8	22.2	0.5	56.1	27806
4	Dyna-Gro	D54VC52	205.8	101.0	21.7	0.4	55.0	26939
27	Augusta	A 1565	205.3	100.8	22.5	0.6	53.1	26261
50	NK	N83D-3000GT	205.2	100.7	24.5	1.6	55.3	28070
16	Dekalb	DKC63-60RIB	201.5	98.9	21.1	0.4	54.7	28635
41	Doeblers®	5615GRQ™	200.7	98.5	22.4	0.9	53.4	30255
17	Dekalb	DKC63-71RIB	200.4	98.4	21.2	0.3	55.1	28786
35	Mycogen	MY13M87RA	200.2	98.3	22.6	0.4	54.7	28484
22	Dekalb⁴	DKC64-87RIB	198.3	97.4	21.5	0.1	54.5	28447
33	Mycogen	2C799	198.0	97.2	21.7	0.5	53.5	29087
15	Dekalb	DKC63-33RIB	196.5	96.5	20.0	0.4	54.8	28861
44	Pioneer <sup>4</sup>	P1498 AM	196.5	96.5	19.8	1.1	54.8	28107
7	T.A. Seeds	TA736-22DPRIB	196.3	96.4	21.6	0.1	55.0	26864
40	Doeblers®	RPM <sup>®</sup> 5315AM™	196.1	96.3	21.2	1.0	53.7	29502
53	NK <sup>4</sup>	N74R-3122	194.0	95.2	23.2	0.9	54.1	26670
49	NK	N74L-3010	189.1	92.8	19.4	1.2	50.6	27467
	Trial M	ean	203.7		21.9	0.65	54.4	28263
	Probabili	ty > F	<0.0001		<0.0001	0.28	<0.0001	<0.0001
	LSD <sub>0.</sub>	05	13.4		0.34	NS	0.64	1555
	CV%	ó	9.14		4.51	195	1.63	7.64

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (p=0.05) compared to the top-yielding hybrid.

Table 11. Performance of early maturity hybrids evaluated at Wye Research and Education Center, Queenstown, MD during 2016.

Entry No.	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)
20	Dekalb⁴	DKC57-92RIB	247.6	108.2	20.5	0.6	<b>53.7</b>	30142
23	Augusta	A 1108	237.6	103.9	21.5	0.6	52.3	29577
42	Pioneer <sup>4</sup>	P0604 AM	233.5	102.1	21.4	1.2	54.2	29012
51	NK <sup>4</sup>	N60F-3111	230.0	100.6	20.3	0.0	53.7	31084
11	Dekalb	DKC56-03RIB	228.5	99.9	20.6	1.2	54.1	29954
36	Doeblers®	RPM® 4717AMX™	224.7	98.2	19.0	0.0	53.8	31272
9	Dekalb	DKC52-30RIB	220.8	96.5	18.6	0.7	52.9	30330
10	Dekalb	DKC55-20RIB	218.6	95.6	20.0	0.0	53.9	28635
5	T.A. Seeds	TA547-22DPRIB	217.3	95.0	22.0	0.0	53.7	29723
	Mean		228.7		20.4	0.5	53.6	29970
Probability > F		0.093		0.018	0.58	0.015	0.73	
	LSD <sub>0.05</sub>		NS		1.82	NS	0.98	NS
	CV%	_	5.07		5.15	201	1.05	6.25

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids (**bold**) are included as checks with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>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 12. Performance of mid-season maturity hybrids evaluated at Wye R&E Center, Queenstown, MD during 2016.

Entry	Brand/Company	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Population
No.	Name	Name <sup>1</sup>	(bu/A) <sup>2</sup>	Yield	%	%	Weight	(plants/A)
							(lb/bu)²	
<mark>55</mark>	Dekalb	DKC 62-05	259.9	112.1	23.9	0.0	<mark>55.9</mark>	31084
26	Augusta	A 5063	255.6*	110.2	27.3	0.0	56.8	31084
2	Dyna-Gro	CX16110	248.4*	107.1	25.2	0.0	55.3	32214
54	Dekalb	DKC 62-08	248.0*	107.0	23.0	0.6	54.8	31461
14	Dekalb	DKC61-88RIB	242.8*	104.7	23.8	1.2	54.5	30896
3	Dyna-Gro	D52VC91	241.8*	104.3	24.5	0.6	57.1	32026
43	Pioneer <sup>4</sup>	P1197 AM	239.2	103.2	20.7	0.0	54.1	29697
37	Doeblers®	RPM® 4917AM™	238.5	102.9	20.9	0.0	54.8	31084
25	Augusta	A 1564	237.4	102.4	22.5	0.7	52.3	29577
1	Dyna-Gro	D49VC39	234.2	101.0	20.7	0.6	52.2	31838
46	NK	N66V-3000GT	232.5	100.3	23.8	0.0	54.0	29577
38	Doeblers®	RPM® 5015AM™	229.9	99.2	22.2	1.3	54.5	29577
13	Dekalb	DKC60-67RIB	228.8	98.7	22.7	0.0	55.6	31272
28	Hubner	H6624RCSS	228.3	98.5	23.6	0.0	55.4	31272
39	Doeblers®	RPM® 5125AM™	227.7	98.2	21.2	0.0	53.3	29765
21	Dekalb <sup>4</sup>	DKC62-08RIB	227.0	97.9	22.8	2.6	54.8	30707
47	NK	N68K-3111A	223.5	96.4	21.5	0.0	51.2	31272
29	Hubner	H12G703	223.0	96.2	24.1	0.6	55.5	29577
48	NK	N69D-3000GT	222.4	95.9	24.0	0.0	53.5	29389
52	NK <sup>4</sup>	N70J-3111A	221.8	95.7	25.7	1.2	54.7	31649
45	NK	N59B-3111A	218.6	94.3	22.9	0.0	53.3	29200
6	T.A. Seeds	TA583-22DPRIB	217.0	93.6	20.6	0.6	53.3	29577
34	Mycogen	MY10Z28RA	215.3	92.9	25.1	0.6	52.8	29577
12 Dekalb DKC58-06RIB		203.2	87.6	22.3	4.3	53.9	31084	
	Trial Mean				23.1	0.6	54.3	30602
	Probability > F				<0.0001	0.69	<0.0001	0.13
	LSD <sub>0.05</sub>				2.36	NS⁵	0.93	NS
	CV%		5.19		6.22	310	1.04	4.52

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are checks included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>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 13. Performance of full season hybrids evaluated at Wye Research and Education Center, Queenstown, MD during 2016.

Test	Brand/	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Population
Entry	Company	Name <sup>1</sup>	(bu/a)²	Yield	%	%	Weight	(plants/A)
No.	Name						(lb/bu)²	
31	Hubner	H4744RC2P	264.6	113.5	21.2	0.0	<mark>55.8</mark>	32026
19	Dekalb	DKC65-71RIB	257.3*	110.4	22.3	0.6	57.1	31084
8	T.A. Seeds	TA767-22DPRIB	251.5*	107.9	23.6	0.0	53.0	33533
24	Augusta	A 6465	245.7*	105.4	22.7	0.0	53.9	29765
18	Dekalb	DKC65-19RIB	241.8	103.7	21.5	0.0	57.3	31084
15	Dekalb	DKC63-33RIB	239.7	102.8	19.7	0.0	55.5	31461
50	NK	N83D-3000GT	238.5	102.3	24.5	0.0	55.2	30142
32	Hubner	H14G153	236.8	101.6	22.7	0.6	54.1	30896
40	Doeblers®	RPM <sup>®</sup> 5315AM™	235.6	101.0	19.4	1.1	53.8	31461
4	Dyna-Gro	D54VC52	235.4	101.0	21.4	0.0	55.3	29389
30	Hubner	H6663RCSS	229.6	98.5	21.4	0.0	54.9	30142
16	Dekalb	DKC63-60RIB	229.3	98.3	20.9	0.0	51.8	30330
17	Dekalb	DKC63-71RIB	227.5	97.6	21.1	0.0	55.5	31084
27	Augusta	A 1565	227.4	97.5	21.9	0.0	53.9	27693
41	Doeblers®	5615GRQ™	227.4	97.5	22.5	0.0	53.5	29577
22	Dekalb⁴	DKC64-87RIB	227.1	97.4	21.4	0.0	55.0	31084
44	Pioneer <sup>4</sup>	P1498 AM	225.5	96.7	20.1	0.6	55.3	30142
33	Mycogen	2C799	223.5	95.8	21.0	0.0	53.7	30330
35	Mycogen	MY13M87RA	223.2	95.7	23.0	0.0	55.4	29765
53	NK <sup>4</sup>	N74R-3122	221.0	94.8	23.4	0.8	53.9	27852
49	NK	N74L-3010	218.4	93.7	18.8	0.0	51.8	29577
7	7 T.A. Seeds TA736-22DPRIB		202.5 <b>233.2</b>	86.9	19.9	0.0	54.9	27316
	Trial Mean				21.6	0.2	54.6	30261
	Probability > F				<0.0001	0.65	<0.0001	0.052
	LSD <sub>0.05</sub>				1.9	NS⁵	1.73	3048
	CV	<b>%</b>	5.73		5.35	372	1.93	6.11

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (Probability >  $F \le 0.05$ ) 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 2016.

Test Entry No.	Brand/Company Name	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight	Population (plants/A)
							(lb/bu) <sup>2</sup>	
<mark>11</mark>	<b>Dekalb</b>	DKC56-03RIB	199.0	107.0	20.6	0.7	<b>53.6</b>	25056
20	Dekalb	DKC57-92RIB	195.6	105.2	22.1	1.6	54.8	23925
42	Pioneer	P0604 AM	193.9	104.2	18.8	2.1	55.1	26186
51	NK	N60F-3111	192.4	103.4	22.5	0.7	53.9	25432
9	Dekalb	DKC52-30RIB	186.2	100.1	19.3	0.0	53.0	25056
23	Augusta	A 1108	185.1	99.5	20.6	2.6	51.5	22418
10	Dekalb	DKC55-20RIB	183.4	98.6	20.4	0.0	53.8	25244
36	Doeblers®	RPM® 4717AMX™	178.9	96.2	20.5	1.6	53.5	23360
5	T.A. Seeds	TA547-22DPRIB	159.7	85.8	19.2	1.1	52.5	19969
	Trial Mean	1	186.0		20.4	1.15	53.5	24072
	Probability >	• F	0.19		0.0315	0.23	0.063	0.01
	LSD <sub>0.05</sub>		NS		2.2	NS	NS	2943
	CV%		8.62		6.2	110	2.28	7.06

See Table 5 for trait designations for early-season hybrids.

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (Probability > F  $\leq$ 0.05) 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 2016.

Test Entry	Brand/Company	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Population
No.	Name	Name <sup>1</sup>	(bu/A) <sup>2</sup>	Yield	%	%	Weight	(plants/A)
							(lb/bu)	
<mark>37</mark>	Doeblers®	RPM <sup>®</sup> 4917AM™	238.4	122.9	23.1	0.7	<mark>54.3</mark>	24490
25	Augusta	A 1564	219.8*	113.3	22.9	0.7	51.9	26939
54	Dekalb	DKC 62-08	210.9*	108.8	20.2	3.1	52.6	25809
14	Dekalb	DKC61-88RIB	208.2	107.4	20.8	1.0	53.1	22607
46	NK	N66V-3000GT	205.2	105.8	21.0	0.0	52.4	24679
28	Hubner	H6624RCSS	203.8	105.1	23.0	1.3	54.3	28070
29	Hubner	H12G703	202.7	104.5	22.7	1.6	55.3	24379
1	Dyna-Gro	D49VC39	199.5	102.9	20.6	0.0	51.1	24114
43	Pioneer	P1197 AM	199.5	102.9	20.6	0.0	53.2	23737
6	T.A. Seeds	TA583-22DPRIB	199.4	102.8	20.3	0.0	53.2	21665
45	NK	N59B-3111A	197.7	102.0	23.3	0.7	53.2	26939
47	NK	N68K-3111A	196.1	101.1	22.5	2.3	52.2	24114
52	NK	N70J-3111A	194.8	100.4	23.2	0.7	54.4	25809
26	Augusta	A 5063	190.4	98.2	22.8	1.1	54.0	20158
55	Dekalb	DKC 62-05	189.1	97.5	21.1	1.4	54.4	25056
13	Dekalb	DKC60-67RIB	187.6	96.7	20.5	1.0	54.0	24867
3	Dyna-Gro	D52VC91	184.6	95.2	22.0	3.8	56.5	19781
21	Dekalb	DKC62-08RIB	183.7	94.7	20.9	0.0	52.4	21132
39	Doeblers®	RPM® 5125AM™	181.7	93.7	20.4	0.8	53.2	24114
2	Dyna-Gro	CX16110	178.3	91.9	21.3	0.0	54.2	21476
48	NK	N69D-3000GT	177.0	91.3	22.0	0.0	53.0	25621
34	Mycogen	MY10Z28RA	173.6	89.5	23.1	0.0	50.4	24302
38	Doeblers®	RPM® 5015AM™	167.4	86.3	22.2	0.9	53.1	22230
12	Dekalb	DKC58-06RIB	164.8	85.0	22.8	0.0	54.2	22041
	Trial Mean				21.8	0.88	53.4	23922
	Probability > F				<0.0001	0.58	<0.0001	0.013
	LSD <sub>0.05</sub>	28.8		1.5	NS	1.3	4178	
	CV%		9.05		4.27	211	1.81	10.63

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (Probability > F  $\leq$ 0.05) 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 2016.

Test Entry No.	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)
<mark>31</mark>	Hubner	H4744RC2P	226.8	116.7	<mark>22.0</mark>	0.0	54.1	25244
24	Augusta	A 6465	219.9*	113.2	25.0	1.5	54.2	25809
32	Hubner	H14G153	214.9*	110.6	24.2	0.0	53.8	25056
40	Doeblers®	RPM® 5315AM™	209.2*	107.6	23.2	2.4	53.2	25998
50	NK	N83D-3000GT	206.1*	106.0	27.9	1.5	56.0	24679
15	Dekalb	DKC63-33RIB	199.6	102.7	22.5	0.0	54.2	25056
18	Dekalb	DKC65-19RIB	198.6	102.2	23.2	2.4	55.1	22795
8	T.A. Seeds	TA767-22DPRIB	198.3	102.0	23.4	0.8	53.7	23925
19	Dekalb	DKC65-71RIB	198.1	102.0	22.1	0.7	55.0	23360
4	Dyna-Gro	D54VC52	196.9	101.3	23.6	0.7	54.8	22607
27	Augusta	A 1565	196.4	101.0	23.5	0.8	53.3	20158
41	Doeblers®	5615GRQ™	195.2	100.4	23.5	2.3	53.0	25621
30	Hubner	H6663RCSS	190.9	98.2	24.2	0.0	54.3	21665
7	T.A. Seeds	TA736-22DPRIB	188.0	96.8	23.7	0.0	55.4	20534
16	Dekalb	DKC63-60RIB	187.3	96.4	22.7	0.7	54.6	25056
35	Mycogen	MY13M87RA	184.9	95.1	25.0	0.0	54.9	24302
44	Pioneer	P1498 AM	183.8	94.6	20.8	1.5	54.8	24867
33	Mycogen	2C799	183.0	94.2	23.0	0.0	52.8	24867
49	NK	N74L-3010	182.8	94.0	21.7	3.1	49.9	23360
22	Dekalb	DKC64-87RIB	181.9	93.6	22.6	0.0	53.7	22607
17	Dekalb	DKC63-71RIB	180.0	92.6	21.9	0.8	53.9	23548
53	NK	N74R-3122	153.2	78.8	24.9	0.0	54.0	20723
	Trial Mean				23.4	0.87	54.0	23720
	Probability > F				<0.0001	0.23	<0.0001	0.004
	LSD <sub>0.05</sub>				1.7	NS	1.4	3104
	CV	%	7.45		4.34	168	1.62	7.94

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (Probability >  $F \le 0.05$ ) 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 2016.

Test Entry No.	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)
<mark>42</mark>	<b>Pioneer</b>	P0604 AM	203.8	108.9	<b>19.2</b>	0.0	<b>53.8</b>	<b>29389</b>
9	Dekalb	DKC52-30RIB	199.7	106.7	21.9	0.0	53.3	29389
11	Dekalb	DKC56-03RIB	198.1	105.8	22.2	0.0	54.3	28823
5	T.A. Seeds	TA547-22DPRIB	190.9	102.0	20.0	0.7	52.6	27881
20	Dekalb	DKC57-92RIB	185.8	99.2	23.1	0.0	54.1	28823
36	Doeblers®	RPM® 4717AMX™	185.4	99.0	24.0	0.0	53.9	27881
23	Augusta	A 1108	177.2	94.6	21.1	0.0	51.5	29012
51	NK	N60F-3111	172.5	92.1	23.4	1.3	53.0	29389
10	Dekalb	DKC55-20RIB	171.5	91.6	20.8	0.7	52.6	28823
	Mear	n	187.2		21.7	0.3	53.3	28823
	Probabili	ty > F	0.56		<0.0001	0.61	0.12	0.58
	LSD <sub>0.05</sub>				1.3	NS	NS	NS
	CV%				3.49	310	2.1	3.85

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (Probability > F  $\leq$ 0.05) 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 2016.

Test Entry No.	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)
<mark>55</mark>	Dekalb	DKC 62-05	217.3	114.3	21.2	0.0	53.8	30707
13	Dekalb	DKC60-67RIB	206.3	108.5	22.6	0.0	54.7	29765
34	Mycogen	MY10Z28RA	204.6	107.6	23.7	0.0	51.9	30330
2	Dyna-Gro	CX16110	203.0	106.8	22.2	0.0	54.7	29954
6	T.A. Seeds	TA583-22DPRIB	202.7	106.6	19.8	0.0	52.4	27316
54	Dekalb	DKC 62-08	200.2	105.3	20.5	0.0	52.2	30330
14	Dekalb	DKC61-88RIB	199.6	105.0	22.4	0.0	54.1	29200
29	Hubner	H12G703	196.2	103.2	23.2	0.0	54.6	28070
52	NK	N70J-3111A	194.8	102.5	22.7	0.0	52.5	29577
21	Dekalb	DKC62-08RIB	194.7	102.4	20.4	0.0	52.2	29765
38	Doeblers®	RPM® 5015AM™	194.3	102.2	23.5	0.0	53.8	29200
47	NK	N68K-3111A	193.7	101.9	21.6	0.0	50.9	28635
25	Augusta	A 1564	192.9	101.4	24.7	0.0	52.4	28635
26	Augusta	A 5063	192.1	101.0	23.4	0.0	54.5	28258
1	Dyna-Gro	D49VC39	190.1	100.0	21.8	0.0	52.4	29389
39	Doeblers®	RPM <sup>®</sup> 5125AM™	183.9	96.7	22.1	0.0	53.2	28823
3	Dyna-Gro	D52VC91	183.6	96.5	22.1	0.0	55.8	30519
45	NK	N59B-3111A	181.5	95.5	23.8	0.0	53.5	29954
12	Dekalb	DKC58-06RIB	180.5	94.9	23.2	0.0	53.8	30142
37	Doeblers®	RPM <sup>®</sup> 4917AM™	179.7	94.5	25.1	0.0	55.1	30519
43	Pioneer	P1197 AM	175.3	92.2	23.2	0.0	53.3	29389
46	NK	N66V-3000GT	171.3	90.1	22.8	0.6	51.0	29577
28	Hubner	H6624RCSS	170.4	89.6	25.1	0.0	55.5	30142
48	,		154.9	81.4	23.5	0.0	52.4	29577
	Trial Mean				22.7	0.03	53.4	29491
	Probability > F				<0.0001	0.48	<0.0001	0.02
	LSD <sub>0.05</sub>				1.3	NS	1.2	1709
	CV%				3.53	849	1.4	3.53

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

<sup>\*</sup>Hybrids with an asterisk next to yield are not significantly different (Probability >  $F \le 0.05$ ) 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 2016.

Test	, MD during 2016.  Brand/Company	Hybrid	Yield	Relative	Moisture	Lodging <sup>3</sup>	Test	Population
Entry	Name	Name <sup>1</sup>	(bu/a)²	Yield	%	%	Weight	(plants/A)
No.							(lb/bu)²	
<mark>31</mark>	Hubner	H4744RC2P	217.7	115.6	22.3	<mark>0.6</mark>	<mark>55.4</mark>	28635
30	Hubner	H6663RCSS	217.3	115.4	26.5	0.0	56.0	29012
8	T.A. Seeds	TA767-22DPRIB	214.1	113.7	23.1	0.0	53.3	31084
27	Augusta	A 1565	209.5	111.2	24.4	0.0	53.1	28447
32	Hubner	H14G153	200.7	106.5	25.6	0.0	54.7	29200
35	Mycogen	MY13M87RA	199.0	105.6	25.0	0.0	54.6	29577
15	Dekalb	DKC63-33RIB	195.6	103.9	23.3	0.0	54.5	29012
33	Mycogen	2C799	191.3	101.6	23.2	0.0	52.9	29200
50	NK	N83D-3000GT	189.5	100.6	26.5	1.4	55.6	29389
22	Dekalb	DKC64-87RIB	188.9	100.3	24.8	0.0	54.8	29954
24	Augusta	A 6465	188.2	100.0	27.9	0.0	55.6	28635
7	T.A. Seeds	TA736-22DPRIB	187.0	99.3	24.2	0.0	55.8	29389
40	Doeblers®	RPM® 5315AM™	186.0	98.7	26.9	0.0	53.8	29577
18	Dekalb	DKC65-19RIB	185.8	98.7	24.8	0.7	55.4	28823
44	Pioneer	P1498 AM	182.9	97.1	21.7	0.7	54.7	28447
41	Doeblers®	5615GRQ™	178.2	94.6	24.6	0.0	52.8	28635
4	Dyna-Gro	D54VC52	177.9	94.4	24.5	0.0	55.0	28258
19	Dekalb	DKC65-71RIB	175.9	93.4	24.1	0.0	54.8	28258
49	NK	N74L-3010	172.0	91.3	19.8	0.0	49.3	28823
53	NK	N74R-3122	169.2	89.8	26.3	0.0	54.2	28258
16	Dekalb	DKC63-60RIB	167.2	88.8	23.6	0.0	55.4	27505
17	Dekalb	DKC63-71RIB	149.4	79.4	24.1	0.7	56.4	28447
	Trial Mean				24.4	0.2	54.5	28935
	Probability > F				<0.0001	0.71	<0.0001	0.41
	LSD <sub>0.05</sub>				1.8	NS	1.6	NS
	CV%				4.57	394	1.8	4.28

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

<sup>&</sup>lt;sup>2</sup>Yields are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>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 20. Performance of early season hybrids evaluated at Western Maryland Research and Education Center, Keedvsville. MD during 2016.

Test Entry No.	Brand/Company Name	Hybrid Name¹	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
<mark>5</mark>	T.A. Seeds	TA547-22DPRIB	212.0	109.8	13.6	0.0	<mark>52.7</mark>	29765
51	NK	N60F-3111	206.2*	106.8	17.0	0.6	53.3	29012
42	Pioneer	P0604 AM	200.0*	103.6	14.8	1.3	54.2	28823
11	Dekalb	DKC56-03RIB	195.5*	101.2	15.0	1.2	54.2	30707
10	Dekalb	DKC55-20RIB	193.7*	100.3	14.8	0.7	52.3	30330
23	Augusta	A 1108	188.9	97.8	17.2	3.8	53.3	29954
20	Dekalb	DKC57-92RIB	185.6	96.1	14.6	1.3	53.3	29200
36	Doeblers®	RPM® 4717AMX™	185.0	95.8	16.3	0.0	54.6	29200
9	Dekalb	DKC52-30RIB	170.6	88.4	14.0	2.5	52.6	29765
	Mean		193.1		15.2	1.3	53.4	29640
	Probability > F				<0.0001	0.0009	0.001	0.47
	LSD <sub>0.05</sub>				0.7	1.5	1.0	1894
	CV%				2.59	66.4	1.1	3.69

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk are not significantly different (Probability > F  $\leq$  0.05) 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 2016.

Test Entry No.	Brand/Company	Hybrid Name <sup>1</sup>	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup>	Test Weight	Population (plants/A)
200		N 5063	220.4	114.5	20.2	0.0	(lb/bu) <sup>2</sup>	20012
<mark>26</mark>	Augusta	A 5063	228.1		20.2		56.2	29012
55	Dekalb	DKC 62-05	223.0*	112.0	18.7	0.0	55.7	30896
54	Dekalb	DKC 62-08	218.7*	109.8	18.2	0.0	55.2	30707
43	Pioneer	P1197 AM	215.6*	108.2	17.3	0.0	53.5	28258
48	NK	N69D-3000GT	206.9*	103.9	17.0	0.0	54.4	30707
28	Hubner	H6624RCSS	205.9*	103.4	19.0	1.8	55.4	30707
39	Doeblers®	RPM® 5125AM™	205.9*	103.4	15.9	0.0	53.5	30519
25	Augusta	A 1564	205.7*	103.3	18.5	0.6	51.6	29765
29	Hubner	H12G703	204.4*	102.7	18.4	0.0	54.9	30519
2	Dyna-Gro	CX16110	202.4	101.6	16.5	0.0	54.3	29200
21	Dekalb	DKC62-08RIB	201.9	101.4	18.9	0.0	55.2	28447
52	NK	N70J-3111A	199.4	100.1	20.3	0.0	55.2	29954
3	Dyna-Gro	D52VC91	198.7	99.8	18.9	2.0	57.2	29577
14	Dekalb	DKC61-88RIB	194.2	97.5	16.9	0.6	54.4	29200
46	NK	N66V-3000GT	193.7	97.3	16.4	2.0	54.5	28447
1	Dyna-Gro	D49VC39	192.6	96.7	17.5	4.0	53.8	28258
34	Mycogen	MY10Z28RA	192.0	96.4	17.7	0.7	53.3	28635
47	NK	N68K-3111A	190.6	95.7	18.1	0.0	52.3	28635
6	T.A. Seeds	TA583-22DPRIB	189.7	95.3	15.6	0.7	53.0	27128
12	Dekalb	DKC58-06RIB	187.1	94.0	17.5	2.5	54.9	30519
45	NK	N59B-3111A	184.0	92.4	19.3	0.7	54.0	28635
37	Doeblers®	RPM® 4917AM™	183.8	92.3	17.9	0.7	54.4	28823
13	Dekalb	DKC60-67RIB	178.5	89.6	17.0	0.0	55.4	28823
38	Doeblers®	RPM® 5015AM™	176.8	88.8	17.0	0.6	54.6	28635
	Mean				17.9	0.7	54.5	29334
	Probability > F				<0.0001	0.10	<0.0001	0.05
	LSD <sub>0.05</sub>				1.3	NS	0.85	2240
	CV%				4.45	184	0.95	4.65

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

Table 22. Performance of full season hybrids evaluated at Western Maryland Research and Education Center, Keedysville, MD during 2016.

Test Entry No.	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)
<mark>53</mark>	<mark>NK</mark>	N74R-3122	<b>210.2</b>	108.0	<mark>20.8</mark>	0.0	<b>55.1</b>	<b>29012</b>
4	Dyna-Gro	D54VC52	208.4	107.1	19.5	0.0	56.2	27128
19	Dekalb	DKC65-71RIB	207.7	106.7	21.4	0.0	57.8	28635
8	T.A. Seeds	TA767-22DPRIB	203.2	104.4	18.8	1.2	53.7	31272
7	T.A. Seeds	TA736-22DPRIB	202.2	103.8	19.0	0.7	55.2	29389
32	Hubner	H14G153	201.6	103.6	21.6	1.3	55.1	29577
17	Dekalb	DKC63-71RIB	200.3	102.9	18.9	0.0	55.6	31084
18	Dekalb	DKC65-19RIB	197.3	101.4	21.6	0.7	59.2	29577
40	Doeblers®	RPM® 5315AM™	195.3	100.3	17.8	0.7	54.3	29577
41	Doeblers®	5615GRQ™	194.2	99.8	20.7	0.7	54.5	29765
16	Dekalb	DKC63-60RIB	194.1	99.7	19.1	0.6	56.4	29577
30	Hubner	H6663RCSS	194.0	99.7	19.5	1.3	54.6	29200
50	NK	N83D-3000GT	192.0	98.6	21.0	3.6	55.4	29389
22	Dekalb	DKC64-87RIB	189.6	97.4	18.8	0.6	55.1	29765
27	Augusta	A 1565	189.6	97.4	20.3	0.0	53.2	27316
31	Hubner	H4744RC2P	189.6	97.4	20.9	0.7	56.9	29954
15	Dekalb	DKC63-33RIB	188.6	96.9	16.7	0.0	55.5	28070
33	Mycogen	2C799	188.6	96.9	20.2	0.6	54.1	30896
35	Mycogen	MY13M87RA	187.5	96.3	19.8	0.6	55.4	29012
44	Pioneer	P1498 AM	185.0	95.1	18.1	1.9	55.3	30142
24	Augusta	A 6465	184.1	94.6	20.0	1.4	54.8	27128
49	NK	N74L-3010	179.5	92.2	18.1	0.7	51.7	28635
	Mean				19.7	0.8	55.3	29277
	Probability > F				<0.0001	0.65	<0.0001	0.049
	LSD <sub>0.05</sub>				1.2	NS	0.7	2420
	CV%				3.73	197	0.78	5.02

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

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

<sup>\*</sup>Hybrids with an asterisk are not significantly different (Probability > F  $\leq$ 0.05) for yield compared to the top-yielding hybrid at this location.

Table 23. Performance of early hybrids evaluated at Central Maryland Research and Education Center, Clarksville, MD during 2016.

Test Entry No.	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)
<mark>20</mark>	Dekalb	DKC57-92RIB	217.7	107.4	16.8	1.9	<b>53.0</b>	29200
42	Pioneer	P0604 AM	208.7	102.9	16.5	1.4	53.5	25998
9	Dekalb	DKC52-30RIB	207.9	102.6	15.9	2.7	51.7	28070
5	T.A. Seeds	TA547-22DPRIB	205.6	101.4	18.1	7.7	53.0	30330
23	Augusta	A 1108	205.5	101.4	19.5	5.0	53.4	28070
11	Dekalb	DKC56-03RIB	203.3	100.3	17.4	1.3	54.0	29200
10	Dekalb	DKC55-20RIB	202.5	99.9	17.5	0.6	52.8	31084
51	NK	N60F-3111	187.5	92.5	18.3	5.1	53.6	29200
36	Doeblers®	RPM® 4717AMX™	185.8	91.6	17.3	0.7	52.6	27693
	Mean		202.7		17.5	2.9	53.1	28761
	Probability > F				0.03	0.79	0.41	0.01
	LSD <sub>0.05</sub>				1.9	NS	NS	2343
	CV%				6.21	193	2.1	4.71

<sup>&</sup>lt;sup>1</sup>See Table 5 for hybrid type code designations for early-season hybrids.

<sup>&</sup>lt;sup>2</sup>Yields and test weights are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk are not significantly different (Probability > F ≤0.05) 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 2016.

Test Entry No.	Brand/Company	Hybrid Name¹	Yield (bu/A) <sup>2</sup>	Relative Yield	Moisture %	Lodging <sup>3</sup> %	Test Weight (lb/bu) <sup>2</sup>	Population (plants/A)
<mark>28</mark>	Hubner	H6624RCSS	246.6	113.3	20.7	<mark>0.6</mark>	53.4	30519
3	Dyna-Gro	D52VC91	246.2*	113.1	18.4	3.2	55.1	30330
38	Doeblers®	RPM <sup>®</sup> 5015AM™	238.8*	109.7	18.2	0.8	52.5	28258
29	Hubner	H12G703	237.0*	108.9	19.9	0.9	54.1	30236
14	Dekalb	DKC61-88RIB	235.8*	108.3	18.4	3.2	53.0	29954
37	Doeblers®	RPM® 4917AM™	235.6*	108.3	18.7	2.1	53.6	27128
21	Dekalb	DKC62-08RIB	234.3*	107.7	20.6	9.8	54.8	28635
2	Dyna-Gro	CX16110	230.0*	105.7	18.4	1.9	53.4	29765
12	Dekalb	DKC58-06RIB	224.6*	103.2	19.2	0.0	54.0	28447
52	NK	N70J-3111A	223.7*	102.8	20.9	1.2	54.0	29765
43	Pioneer	P1197 AM	222.2*	102.1	17.2	0.7	52.9	29954
46	NK	N66V-3000GT	222.0*	102.0	17.8	3.1	52.5	27128
54	Dekalb	DKC 62-08	221.5*	101.8	17.9	1.3	52.4	27881
55	Dekalb	DKC 62-05	217.6*	100.0	20.0	4.8	53.9	27505
25	Augusta	A 1564	210.5	96.7	20.2	0.0	50.4	27693
26	Augusta	A 5063	209.6	96.3	22.5	2.3	53.9	24490
39	Doeblers®	RPM <sup>®</sup> 5125AM™	205.1	94.2	16.6	0.0	53.2	26939
6	T.A. Seeds	TA583-22DPRIB	204.1	93.8	17.0	1.5	51.9	24679
34	Mycogen	MY10Z28RA	202.1	92.8	19.0	2.8	52.0	27693
13	Dekalb	DKC60-67RIB	200.4	92.1	16.8	1.4	53.6	26751
45	NK	N59B-3111A	198.7	91.3	19.8	4.1	53.4	27881
1	Dyna-Gro	D49VC39	192.5	88.5	18.3	4.8	53.3	27693
47	NK	N68K-3111A	184.8	84.9	19.1	7.4	50.9	27505
48	NK	N69D-3000GT	179.6	82.5	18.1	2.1	53.3	27881
	Mean				18.9	2.5	53.1	28083
	Probability	> F	0.02		<0.0001	0.53	<0.0001	0.002
LSD <sub>0.05</sub>			36.0		1.45	NS	1.1	2724
CV%			10.03		4.65	165	1.3	5.90

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

<sup>&</sup>lt;sup>2</sup>Yields are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk are not significantly different (Probability > F  $\leq$  0.05) 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 2016.

Test Entry No.	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)
<mark>17</mark>	Dekalb	DKC63-71RIB	244.8	117.6	19.7	0.0	<b>54.1</b>	29765
8	T.A. Seeds	TA767-22DPRIB	233.6*	112.2	22.1	1.8	53.5	32026
30	Hubner	H6663RCSS	232.5*	111.7	20.7	1.2	53.6	29954
24	Augusta	A 6465	230.9*	110.9	22.2	0.7	54.1	28447
16	Dekalb	DKC63-60RIB	229.4*	110.2	19.0	0.6	55.1	30707
18	Dekalb	DKC65-19RIB	224.0*	107.6	20.0	0.6	54.5	28823
32	Hubner	H14G153	223.2*	107.2	21.3	0.8	52.8	25998
53	NK	N74R-3122	216.3*	103.9	20.8	3.5	53.4	27505
4	Dyna-Gro	D54VC52	210.5*	101.1	19.5	1.4	53.9	27316
41	Doeblers®	5615GRQ™	208.6*	100.2	20.6	1.4	53.1	37678
19	Dekalb	DKC65-71RIB	207.6*	99.7	20.9	1.3	55.8	27693
35	Mycogen	MY13M87RA	206.7*	99.3	20.0	1.3	53.5	29765
44	Pioneer	P1498 AM	205.4*	98.6	18.1	0.7	53.6	26939
22	Dekalb	DKC64-87RIB	204.0	98.0	19.8	0.0	54.2	28823
27	Augusta	A 1565	203.5	97.7	22.1	2.0	52.0	27693
33	Mycogen	2C799	203.4	97.7	21.1	1.9	53.9	30142
7	T.A. Seeds	TA736-22DPRIB	201.8	96.9	21.1	0.0	53.5	27693
50	NK	N83D-3000GT	199.7	95.9	22.6	1.4	54.2	26751
49	NK	N74L-3010	192.9	92.6	18.7	2.1	50.1	26939
31	Hubner	H4744RC2P	188.2	90.4	19.6	2.1	54.7	28447
15	Dekalb	DKC63-33RIB	159.1	76.4	17.9	1.8	54.5	30707
40	Doeblers®	RPM® 5315AM™	154.7	74.3	18.8	0.6	53.4	30896
	Mean				20.3	1.2	53.7	28703
	Probability > F				<0.0001	0.65	<0.0001	<0.0001
	LSD <sub>0.05</sub>				1.4	NS	1.6	2212
	CV%	11.83		4.21	129	1.79	4.68	

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

<sup>&</sup>lt;sup>2</sup>Yields are reported at 15.5% moisture content.

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

<sup>&</sup>lt;sup>4</sup>Hybrids in **bold** are check hybrids included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>\*</sup>Hybrids with an asterisk are not significantly different (p=0.05) for yield compared to the top-yielding hybrid at this location.

Table 26. Relative yield scores for early season hybrids evaluated in Maryland during 2016. Hybrids with scores 100 or greater at four or more locations are considered to have good stability.

Entry	Brand/	Hybrid	Relative Yield						
No.	Company		Avg.	Wye	Poplar	Salisbury	Clarksville	Keedysville	
	Name		5 Sites		Hill				
42	Pioneer	P0604 AM	104.2	102.1	104.2	108.9	102.9	103.6	
20	Dekalb	DKC57-92RIB	103.4	108.2	105.2	99.2	107.4	96.1	
11	Dekalb	DKC56-03RIB	102.6	99.9	107.0	105.8	100.3	101.2	
23	Augusta	A 1108	99.4	103.9	99.5	94.6	101.4	97.8	
51	NK	N60F-3111	99.4	100.6	103.4	92.1	92.5	106.8	
5	T.A. Seeds	TA547-22DPRIB	98.8	95.0	85.8	102.0	101.4	109.8	
9	Dekalb	DKC52-30RIB	98.7	96.5	100.1	106.7	102.6	88.4	
10	Dekalb	DKC55-20RIB	97.2	95.6	98.6	91.6	99.9	100.3	
36	Doeblers®	RPM® 4717AMX™	96.4	98.2	96.2	99.0	91.6	95.8	
	Trial Mean	199.6	228.7	186.0	187.2	202.7	193.1		

<sup>&</sup>lt;sup>1</sup> Bold hybrids are checks included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>&</sup>lt;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 2016. Hybrids with scores 100 or greater at four or more locations are considered to have good stability.

Test	Brand/Company	Hybrid	Relative Yield %					
Entry No.	Name	Name	Avg. 5 sites	Wye	Poplar Hill	Salisbury	Clarksville	Keedysville
55	Dekalb	DKC62-05	107.3	112.1	97.5	114.3	100.0	112.0
54	Dekalb	DKC62-08	106.5	107.0	108.8	105.3	101.8	109.8
14	Dekalb	DKC61-88RIB	104.7	104.7	107.4	105.0	108.3	97.5
26	Augusta	A 5063	104.2	110.2	98.2	101.0	96.3	114.5
37	Doeblers®	RPM® 4917AM™	103.5	102.9	122.9	94.5	108.3	92.3
25	Augusta	A 1564	103.3	102.4	113.3	101.4	96.7	103.3
2	Dyna-Gro	CX16110	102.9	107.1	91.9	106.8	105.7	101.6
3	Dyna-Gro	D52VC91	102.2	104.3	95.2	96.5	113.1	99.8
28	Hubner	H6624RCSS	102.2	98.5	105.1	89.6	113.3	103.4
29	Hubner	H12G703	102.2	96.2	104.5	103.2	108.9	102.7
43	Pioneer	P1197 AM	101.9	103.2	102.9	92.2	102.1	108.2
52	NK	N70J-3111A	100.2	95.7	100.4	102.5	102.8	100.1
52 21	NK Dekalb	N70J-3111A DKC62-08RIB	100.2 100.0	95.7 97.9	100.4 94.7	102.5 102.4	102.8 107.7	100.1 101.4
21	Dekalb	DKC62-08RIB	100.0	97.9	94.7	102.4	107.7	101.4
<b>21</b> 46	<b>Dekalb</b> NK	<b>DKC62-08RIB</b> N66V-3000GT	<b>100.0</b> 99.3	<b>97.9</b> 100.3	<b>94.7</b> 105.8	<b>102.4</b> 90.1	<b>107.7</b> 102.0	<b>101.4</b> 97.3
<b>21</b> 46 6	NK T.A. Seeds	DKC62-08RIB N66V-3000GT TA583-22DPRIB	99.3 98.1	<b>97.9</b> 100.3 93.6	<b>94.7</b> 105.8 102.8	90.1 106.6	107.7 102.0 93.8	97.3 95.3
21 46 6 1	Dekalb NK T.A. Seeds Dyna-Gro	DKC62-08RIB N66V-3000GT TA583-22DPRIB D49VC39	99.3 98.1 97.8	97.9 100.3 93.6 101.0	94.7 105.8 102.8 102.9	90.1 106.6 100.0	107.7 102.0 93.8 88.5	97.3 95.3 96.7
21 46 6 1 38	Dekalb  NK  T.A. Seeds  Dyna-Gro  Doeblers®	DKC62-08RIB N66V-3000GT TA583-22DPRIB D49VC39 RPM® 5015AM™	99.3 98.1 97.8 97.6	97.9 100.3 93.6 101.0 99.2	94.7 105.8 102.8 102.9 86.3	90.1 106.6 100.0 102.2	107.7 102.0 93.8 88.5 109.7	97.3 95.3 96.7 88.8
21 46 6 1 38 39	Dekalb  NK  T.A. Seeds  Dyna-Gro  Doeblers®  Doeblers®	DKC62-08RIB  N66V-3000GT  TA583-22DPRIB  D49VC39  RPM® 5015AM™  RPM® 5125AM™	99.3 98.1 97.8 97.6 97.3	97.9 100.3 93.6 101.0 99.2 98.2	94.7 105.8 102.8 102.9 86.3 93.7	90.1 106.6 100.0 102.2 96.7	107.7 102.0 93.8 88.5 109.7 94.2	97.3 95.3 96.7 88.8 103.4
21 46 6 1 38 39 13	Dekalb  NK  T.A. Seeds  Dyna-Gro  Doeblers®  Doeblers®  Dekalb	DKC62-08RIB N66V-3000GT TA583-22DPRIB D49VC39 RPM® 5015AM™ RPM® 5125AM™ DKC60-67RIB	99.3 98.1 97.8 97.6 97.3 97.1	97.9 100.3 93.6 101.0 99.2 98.2 98.7	94.7 105.8 102.8 102.9 86.3 93.7 96.7	90.1 106.6 100.0 102.2 96.7 108.5	107.7 102.0 93.8 88.5 109.7 94.2 92.1	97.3 95.3 96.7 88.8 103.4 89.6
21 46 6 1 38 39 13 47	Dekalb  NK  T.A. Seeds  Dyna-Gro  Doeblers®  Doeblers®  Dekalb  NK	DKC62-08RIB N66V-3000GT TA583-22DPRIB D49VC39 RPM® 5015AM™ RPM® 5125AM™ DKC60-67RIB N68K-3111A	99.3 98.1 97.8 97.6 97.3 97.1 95.8	97.9 100.3 93.6 101.0 99.2 98.2 98.7 96.4	94.7 105.8 102.8 102.9 86.3 93.7 96.7 101.1	90.1 106.6 100.0 102.2 96.7 108.5 101.9	107.7 102.0 93.8 88.5 109.7 94.2 92.1 84.9	97.3 95.3 96.7 88.8 103.4 89.6 95.7
21 46 6 1 38 39 13 47 34	Dekalb  NK T.A. Seeds Dyna-Gro Doeblers® Doeblers® Dekalb NK Mycogen	DKC62-08RIB  N66V-3000GT  TA583-22DPRIB  D49VC39  RPM® 5015AM™  RPM® 5125AM™  DKC60-67RIB  N68K-3111A  MY10Z28RA	99.3 98.1 97.8 97.6 97.3 97.1 95.8 95.7	97.9 100.3 93.6 101.0 99.2 98.2 98.7 96.4 92.9	94.7 105.8 102.8 102.9 86.3 93.7 96.7 101.1 89.5	90.1 106.6 100.0 102.2 96.7 108.5 101.9	107.7 102.0 93.8 88.5 109.7 94.2 92.1 84.9 92.8	97.3 95.3 96.7 88.8 103.4 89.6 95.7 96.4
21 46 6 1 38 39 13 47 34	Dekalb  NK T.A. Seeds Dyna-Gro Doeblers® Doeblers® Dekalb NK Mycogen NK	DKC62-08RIB N66V-3000GT TA583-22DPRIB D49VC39 RPM® 5015AM™ RPM® 5125AM™ DKC60-67RIB N68K-3111A MY10Z28RA N59B-3111A	99.3 98.1 97.8 97.6 97.3 97.1 95.8 95.7 95.0	97.9 100.3 93.6 101.0 99.2 98.2 98.7 96.4 92.9 94.3	94.7 105.8 102.8 102.9 86.3 93.7 96.7 101.1 89.5 102.0	90.1 106.6 100.0 102.2 96.7 108.5 101.9 107.6 95.5	107.7 102.0 93.8 88.5 109.7 94.2 92.1 84.9 92.8 91.3	97.3 95.3 96.7 88.8 103.4 89.6 95.7 96.4 92.4

<sup>&</sup>lt;sup>1</sup> **Bold** hybrids are checks included with funding from the Maryland Grain Producers' Utilization Board.

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

<sup>&</sup>lt;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 2016. Hybrids with scores 100 or greater at four or more locations are considered to have good stability.

Test	Brand/	Hybrid	Relative Yield %					
Entry	Company	Name	Avg.	Wye	Poplar	Salisbury	Clarksville	Keedysville
No.	Name		5 Sites		Hill			
8	T.A. Seeds	TA767-22DPRIB	108.1	107.9	102.0	113.7	112.2	104.4
31	Hubner	H4744RC2P	106.7	113.5	116.7	115.6	90.4	97.4
32	Hubner	H14G153	105.8	101.6	110.6	106.5	107.2	103.6
30	Hubner	H6663RCSS	104.5	98.5	98.2	115.4	111.7	99.7
24	Augusta	A 6465	104.3	105.4	113.2	100.0	110.9	94.6
18	Dekalb	DKC65-19RIB	102.9	103.7	102.2	98.7	107.6	101.4
19	Dekalb	DKC65-71RIB	102.8	110.4	102.0	93.4	99.7	106.7
4	Dyna-Gro	D54VC52	101.0	101.0	101.3	94.4	101.1	107.1
27	Augusta	A 1565	100.8	97.5	101.0	111.2	97.7	97.4
50	NK	N83D-3000GT	100.7	102.3	106.0	100.6	95.9	98.6
16	Dekalb	DKC63-60RIB	98.9	98.3	96.4	88.8	110.2	99.7
41	Doeblers®	5615GRQ™	98.5	97.5	100.4	94.6	100.2	99.8
17	Dekalb	DKC63-71RIB	98.4	97.6	92.6	79.4	117.6	102.9
35	Mycogen	MY13M87RA	98.3	95.7	95.1	105.6	99.3	96.3
22	Dekalb	DKC64-87RIB	97.4	97.4	93.6	100.3	98.0	97.4
33	Mycogen	2C799	97.2	95.8	94.2	101.6	97.7	96.9
15	Dekalb	DKC63-33RIB	96.5	102.8	102.7	103.9	76.4	96.9
44	Pioneer	P1498 AM	96.5	96.7	94.6	97.1	98.6	95.1
7	T.A. Seeds	TA736-22DPRIB	96.4	86.9	96.8	99.3	96.9	103.8
40	Doeblers®	RPM® 5315AM™	96.3	101.0	107.6	98.7	74.3	100.3
53	NK	N74R-3122	95.2	94.8	78.8	89.8	103.9	108.0
49	NK	N74L-3010	92.8	93.7	94.0	91.3	92.6	92.2
	Trial Mean (bu/acre)			233.2	194.3	188.3	207.9	194.7

<sup>&</sup>lt;sup>1</sup>Bold hybrids are checks included with funding from the Maryland Grain Producers' Utilization Board.

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

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