AGRONOMY UPDATE

Agronomy Update No. 54
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2001 Maryland Corn Hybrid Performance Tests

Corn hybrid performance tests are conducted annually by the Maryland Agricultural Experiment Station and the Department of Natural Resource Sciences and Landscape Architecture. The results obtained from these evaluations provide Maryland corn producers with agronomic performance information for corn hybrids grown at representative Maryland locations and weather conditions for the year. For the 2001 crop year, the tests were conducted at five locations: (1) Lower Eastern Shore Research and Education Center - Poplar Hill Facility in Wicomico County; (2) Lower Eastern Shore Research and Education Center - Salisbury Facility in Wicomico County; (3) Wye Research and Education Center in Queen Anne's County; (4) Central Maryland Research and Education Center - Clarksville Facility in Howard County; and (5) Western Maryland Research and Education Center in Washington County.

Entries for the 2001 tests were submitted in two ways. First, seed companies (Table 26) that sell hybrid corn seed in Maryland were solicited regarding hybrids they wanted tested in the replicated state trials under the fee-based system. These entries ranged from currently available hybrids to experimental hybrids that are still under evaluation. Second, the Maryland Grain Producers Utilization Board provided funding via a grant for the purchase of seed and to cover the costs for testing a number of commonly grown hybrids that otherwise would not be tested in the fee-based testing program. This funding supported the inclusion of hybrids that are familiar to farmers and can be used as "checks". The inclusion of performance data for these benchmark hybrids allows a farmer to make comparisons between the newer hybrids and some of the old standbys.

In 2001, a total of 70 entries were tested in one of three maturity group tests: (1) early maturity (20 hybrids); (2) mid-maturity (40 hybrids); and (3) full season maturity (10 hybrids). Each company designated the maturity group for each hybrid they submitted under the fee-based system. There were six check hybrids for the early maturity group; 11 check hybrids submitted to the mid-season maturity group; and two check hybrids used in the full season maturity group. Some of the entries in the maturity group tests were genetically modified, i.e. Bt hybrids.

In addition to the three maturity group tests, the seed companies were asked to submit entries for a Bt hybrid test (19 entries) and a "Roundup-Ready" hybrid test (5 entries). All the check hybrids (10) that were included in the maturity group tests that were Bt hybrids were also included in the Bt test. There were no "Roundup-Ready" hybrids used as check hybrids. These two tests were conducted at two locations: 1) Wye Research and Education Center and 2) Western Maryland Research and Education Center.

Though 2001 was not the record production year seen in 2000, the state's corn crop, for the most part, was better than average (estimated to be 138 bu/ac). The growing season started early with nearly 70% of the state's corn acreage planted by mid-May. The research season also got off to a good start

with all five sites planted by May 11. The most significant problem that affected the crop early on was a lack of soil moisture that caused non-uniform germination, especially for corn planted during the first two weeks of May. This was most conspicuous among the five research sites at the Clarksville Facility. For most of the sites, rain finally came in mid-May. Some locations received a great deal of rainfall from mid-May to the end of June. The excessive rainfall, coupled with cool temperatures, created a phosphorus deficiency situation for the newly emerged corn. This was most apparent in the research plots located at the Western Maryland Research and Education Center. On the Eastern Shore, an over-abundance of rainfall at the Salisbury Facility, which has a very sandy soil, created a nitrogen deficiency across the plots that remained visible until late June. The remainder of the summer had ample and timely rainfall (Table 25) coupled with few excessively hot days during the growing season that provided good growing conditions for much of the Eastern Shore. Parts of the Western Shore were not as fortunate. There was a period of very dry weather across the northern tier counties of Maryland that caused some of the corn acreage to become drought stressed during the mid-summer. Some of this corn never recovered and the yields reflected it as seen by the performance data at the Western Maryland R&E Center. The drought stress conditions experienced at the Western Maryland site led to a rather large degree of stalk rot problems that resulted in a high amount of lodging.

The performance of the entries in the State Corn Hybrid Tests (SCHT) ranged from excellent to below average dependent upon the location. Averaged over five locations, the mean yield for each of the three maturity groups was 156 bu/acre (early maturity group), 162 bu/acre (mid-maturity group), and 164 bu/acre (full-maturity group), respectively. The average yield for the 29 entries at the two locations for the Bt test was 147 bu/acre. The five entries in the "Roundup-Ready" test averaged 135 bu/acre.

Basic production information for each location can be found in Table 24. The entries were planted with a Wintersteiger Plotking 2600 Precision Air Planter. The entries were grouped according to maturity, randomized within their appropriate maturity group block and replicated three times per location. Each planted plot was approximately 31 feet long and consisted of four rows that were spaced 30 inches apart. The plots were planted at a rate of 26,500 seeds/acre. Each plot was trimmed to a length of 25 feet (harvest length) prior to the onset of the reproductive growth stage. Plant population counts were made during early summer and lodging scores were assessed just prior to harvest. The center two rows of each plot were harvested to obtain a yield measurement using a Massey-Ferguson 8-XP plot combine equipped with a HarvestMaster weighing system that measured and recorded grain weight and grain moisture content.

The agronomic characteristics measured and reported in this update are yield in bushels/acre at 15.5% moisture content, harvest moisture content, lodging score reported as the percentage of plants either broken below the ear or leaning more than 45 degrees and plant population in plants/acre. These data can be found in Tables 1-19. A least significant difference (LSD) value is reported for yield for each maturity group in every test where statistically significant differences for that trait were observed among hybrids. This number is a statistical test calculated at the 20 percent probability level. Readers of this report can use the LSD value to compare two hybrids within the same test. If the yield difference between two hybrids is greater than or equal to the LSD value, the reader can be 80% sure that the difference is real. The coefficient of variation (CV) that is reported is a relative measure of the amount of variation at a test site and is an indicator of the degree of precision for that particular test. In these corn hybrid tests, CV values below 15% are an indication that the precision of the test was good in distinguishing differences for yield among hybrids.

The selection of a hybrid based solely upon its performance at one location for one year is not recommended. Instead, it is better to select a hybrid based upon its performance over a number of locations and/or years. In order to compare the performance of each hybrid across the five locations for the maturity group tests for 2001, relative yield tables (Tables 20-22) 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 with a relative yield consistently greater than 100 is a hybrid that consistently yielded better than the mean yield of all the hybrids within the same maturity group in the tests.

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Acknowledgments

The Field Crops Program would like to recognize the farm staff at each of the five locations (Table 24) for their assistance with land preparation, planting, plot management, harvesting, and equipment maintenance and repair. In addtion, the contributions of Kevin Conover, Bryan Dillehay, Timothy Ellis, Mike Harrison Jr., David Justice, F. Ronald Mulford, Mark Sultenfuss, and Fred Wells are recognized for being essential in the successful completion of these tests and are gratefully acknowledged. Special recognition goes to Mr. Kelvin Grant. Kelvin served as Agricultural Research Technician for the Field Crops program for three years. During that time, he had primary responsibility for the management of the State Corn Hybrid Tests. Kelvin accepted a research assistantship at Cornell University where he is now working on his Master's Degree. His contributions to the State Corn Hybrid Tests during the past three years have been invaluable. Special recognition also goes to the Maryland Grain Producers Utilization Board who provided funding for inclusion of the check hybrids.

Additional Information

The inclusion of hybrids in the Maryland Corn Hybrid Tests does not constitute an endorsement of a specific entry by the University of Maryland. Advertising statements about the performance of a company's entries can be made as long as they are accurate statements about the data as published, with no reference to other companies' hybrids. Statements similar to "See the Maryland Corn Hybrid Tests Agronomy Update No. 54" or Endorsement or recommendation by the University of Maryland is not implied" must accompany any information that is reproduced. Update No. 54 can be obtained at the Maryland Cropping Systems webpage: http://www.agnr.umd.edu/users/nrsl/crops

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Table 1. Performance of early maturity corn hybrids grown at Wye Research and Education Center. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG657Bt	219.6	18.7	0	24278
Agway	AG6001[4]	218.8	20.0	10	23813
Augusta	9884	200.9	20.1	10	24045
Augusta	9873	179.5	17.3	35	23232
Dekalb	*DK 58-52*[3]	203.9	16.8	0	24742
Dekalb	DKB567	203.5	17.4	0	23813
Doebler's	636XY	192.4	19.0	0	22535
Doebler's	649XY	225.5	21.1	10	24975
Doebler's	HC540	197.8	18.3	10	23464
Doebler's	*638XYG*[3]	212.8	20.0	0	25091
Fielder's Choice	*9211*[3]	183.6	19.6	25	23464
Garst	8464-IT[4]	197.6	20.4	0	23464
Garst	8590-IT	196.3	16.7	10	23232
Garst	8541-IT	187.9	18.0	0	23116
Garst	8442	203.8	20.0	10	24394
Mycogen	6920Bt	196.7	19.6	0	24858
NK	NX6569	177.8	17.6	0	23465
Pioneer	*33V08*[3]	201.3	19.3	0	24626
Pioneer	*3394*[3]	191.4	19.1	0	25323
Pioneer	*34K77*[3]	196.1	19.4	0	24045
	Mean	199.4	19.1	6	23999
	$LSD_{.20}$	11.7			
	CV (%)	5.5			
Mean of 6 Check Hybrids[3]		198.2	19.0	4	24549

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.

[4]Hybrid suggested for silage production by seed company.

Table 2. Performance of mid-maturity field corn hybrids grown at Wye Research and Education Center. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population
Agway	AG6191[4]	207.6	19.8	15	25672
Agway	AG6297Bt	196.5	19.4	0	22884
Agway	AG6305	212.5	22.6	0	25207
Agway	AG6399Bt[4]	212.2	21.1	10	25439
Asgrow	RX708	201.4	19.7	0	26600
Augusta	2062	195.2	26.2	0	24162
Augusta	3562	192.2	25.1	10	23464
Augusta	4487	202.7	21.3	0	23581
Augusta	3885	204.7	22.7	0	24626
DeKalb	DK567	210.6	17.9	0	26020
DeKalb	*DK626BtY*[3]	211.4	17.7	10	26020
Dekalb	DKC61-24	184.0	18.2	10	24742
Doebler's	760DT	202.2	23.1	25	22083
Doebler's	749XYG	198.5	22.8	0	25439
Doebler's	*747XY*[3]	210.6	20.5	0	24510
Doebler's	818XYG	208.5	22.1	0	24394
Doebler's	797RYG	191.4	21.4	0	25555
Doebler's	851XY	178.0	23.0	0	23581
Garst	8362-IT[4]	197.1	21.4	10	24278
Garst	8222-ITS	215.3	25.3	10	25439
Mycogen	*2767*[3]	214.2	18.7	0	26949
Mycogen	7474	197.6	20.8	0	25207
Mycogen	2833	198.2	20.8	15	26601
NK	N58-D1[4]	206.6	15.8	0	25555
NK	N65-Y3	180.1	18.7	0	24510
NK	*N70D5*[3]	191.0	21.3	0	24975
NK	N64-L5	186.2	17.3	0	23348
NK	N72-V7	203.6	22.2	0	25207
NK	N75-K6	205.0	23.2	0	25671
Pioneer	*33A14*[3]	211.4	21.9	0	24626
Pioneer	*33G30*[3]	185.0	18.7	0	24858
Pioneer	*33K81*[3]	207.9	19.7	10	25555
Pioneer	*33Y18*[3]	191.1	19.8	0	25091
Pioneer	*33J56*[3]	209.5	19.8	25	25091
Pioneer	*33G26*[3]	183.5	19.6	0	23697
Pioneer	*33Y09*[3]	191.2	20.3	0	25904
Southern States	740	197.7	23.3	0	23813
Vigoro	V5320	203.4	19.9	0	25555
Vigoro	V5110	220.7	20.7	0	25207
Vigoro	V5520	222.5	21.4	0	24742
	Mean	201.0	20.9	4	24980
	$LSD_{.20}$	15.7			
	CV (%)	7.4			
Mean of 11 Check Hybrids[3]		200.6	19.8	4	25207

[1]Yields are reported at 15.5% moisture content. [2]Percentage of plants with either breakage below the ear or with a 45° or greater lean. [3]Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group. [4]Hybrid suggested for silage production by the seed company

Table 3. Performance of full-maturity field corn hybrids grown at Wye Research and Education Center. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG6515[4]	214.7	22.4	0	26136
Clark	CL789	186.2	24.5	10	23813
Clark	CL790	206.4	26.5	25	24278
Dekalb	DKC63-03	207.6	21.9	0	25439
Dekalb	*DK647BtY*[3]	212.0	19.8	10	25671
Doebler's	887V2	199.7	27.2	15	21954
NK	*N82-J6*[3,4]	211.7	22.2	25	24859
NK	N82-E9	213.9	23.6	15	26136
Southern States	781CL	205.3	21.4	0	24045
Vigoro	V5800	201.4	21.9	0	23464
	Mean	205.9	23.1	10	24580
	$LSD_{.20}$	13.2			
	CV (%)	5.9			
Mean of 2Check Hybrids[3]		211.9	21.0	18	25265

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
[4]Hybrid suggested for silage production by the seed company.

Table 4. Performance of Roundup-Ready corn hybrids grown at the Wye Research and Education Center. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Clarks	CL790RR	200.5	25.3	0	23929
Doebler's	639RYG	184.8	16.8	0	25523
Doebler's	75X2RR	199.0	24.1	0	24742
Doebler's	797RYG	202.4	22.0	2	26252
Doebler's	82XPRR	202.0	23.8	0	24394
	Mean	197.8	22.4	0	24968
	$LSD_{.20}$	10.1			
	CV (%)	4.5			

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

Table 5. Performance of Bt corn hybrids grown at the Wye Research and Education Center. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Clark	CL735Bt	207.0	16.9	0	24651
Dekalb	DKC56-71	203.2	17.0	0	26949
Dekalb	*DKC58-52*[3]	196.2	16.5	0	25555
Dekalb	DKC58-78	184.1	15.3	0	24161
Dekalb	DKC60-08	204.3	16.9	0	26484
Dekalb	DKC61-25	192.5	18.0	0	24161
Dekalb	*DK647BtY*[3]	205.6	19.7	0	26350
Dekalb	*DK626BtY*[3]	207.7	17.1	0	26600
Dekalb	DKB567	205.9	16.2	0	26716
Dekalb	DKC61-24	209.9	16.6	0	24858
Doebler's	639RYG	177.2	17.1	0	25870
Doebler's	*638XYG*[3]	193.9	18.4	0	26393
Doebler's	749XYG	207.2	21.6	0	24626
Doebler's	797RYG	193.7	22.9	0	23813
Doebler's	818XYG	191.4	22.2	0	23929
Garst	8342GLS/Bt/IT	176.7	21.2	0	23388
Garst	8484BT	181.3	19.3	0	26368
NK	*N82J6*[3]	209.9	23.0	0	25323
NK	*N70D5*[3]	192.1	14.5	0	24825
NK	NX6569	173.5	17.7	0	25090
NK	N75-K6	194.0	22.2	0	25173
NK	N82-E9	194.8	23.4	0	26218
Pioneer	*33A14*[3]	203.7	20.6	0	22883
Pioneer	*33V08*[3]	196.2	18.6	0	25904
Pioneer	*33G30*[3]	193.1	18.6	0	23116
Pioneer	*33Y09*[3]	191.3	19.8	0	24509
Southern States	692Bt	190.0	19.6	0	24510
Southern States	670Bt	200.4	19.3	0	23697
Vigoro	V55Y21	201.7	19.4	0	24626
	Mean	195.6	18.9	0	25060
	LSD $_{.20}$	16.3			
	CV (%)	7.9			
Mean of 10 Check Hybrids[3]		199.0	18.7	0	25146

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids.

Table 6. Performance of early maturity field corn hybrids grown at Lower Eastern Shore Research & Education Center-Poplar Hill Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG657Bt	187.8	19.7	0	24728
Agway	AG6001[4]	147.9	21.3	0	25672
Augusta	9884	139.1	21.0	0	28408
Augusta	9873	163.1	19.0	15	24975
Dekalb	*DK 58-52*[3]	157.7	18.8	2	24626
Dekalb	DKB567	162.7	20.2	0	25207
Doebler's	636XY	144.9	20.0	0	23929
Doebler's	649XY	171.6	20.2	2	22304
Doebler's	HC540	150.1	20.6	17	25788
Doebler's	*638XYG*[3]	165.5	20.4	0	22321
Fielder's Choice	*9211*[3]	174.9	22.7	5	27878
Garst	8464-IT[4]	147.7	21.8	10	25439
Garst	8590-IT	145.1	18.2	3	24742
Garst	8541-IT	152.8	21.4	2	25091
Garst	8442	155.0	21.0	5	27885
Mycogen	6920Bt	149.4	20.9	0	24626
NK	NX6569	145.5	19.9	0	23929
Pioneer	*33V08*[3]	144.5	20.8	0	25323
Pioneer	*3394*[3]	175.0	20.3	2	24744
Pioneer	*34K77*[3]	155.1	20.5	0	24161
	Mean	156.7	19.4	3	25089
	LSD $_{.20}$	25.5			
	CV (%)	12.2			
Mean of 6 Check Hybrids[3]		162.1	20.6	2	24842

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.

[4]Hybrid suggested for silage production by seed company

Table 7. Performance of mid-maturity field corn hybrids grown at Lower Eastern Shore Research & Education Center-Poplar Hill Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG6191[4]	213.1	21.2	3	23248
Agway	AG6297Bt	163.4	22.7	0	23895
Agway	AG6399Bt[4]	154.6	22.9	0	28076
Asgrow	RX708	178.7	20.4	2	24742
Augusta	2062	177.0	25.5	0	25165
Augusta	3562	201.5	25.1	0	26561
Augusta	4487	160.5	20.1	3	21802
Augusta	3885	170.3	20.1	0	23250
DeKalb	*DK626BtY[3]*	*144.5*	*19.8*	*0*	*24742*
Dekalb	DKC61-24	160.4	19.6	0	22255
Doebler's	749XYG	154.6	21.7	2	24510
Doebler's	*747XY[3]*	*176.1*	*23.1*	*0*	*24818*
Doebler's	818XYG	161.1	24.0	2	23465
Doebler's	797RYG	168.7	23.4	2	22728
Doebler's	851XY	178.7	23.6	0	26386
Mycogen	*2767[3]*	*157.4*	*19.9*	*0*	*25091*
Mycogen	7474	155.0	21.1	7	22767
Mycogen	2833	178.0	22.2	2	22883
NK	N58-D1[4]	168.5	17.2	5	23373
NK	N64-L5	152.5	18.8	3	25090
NK	N72-V7	163.8	22.9	0	25439
NK	N75-K6	178.6	22.4	7	24470
Pioneer	*33A14[3]*	*158.9*	*21.7*	*0*	*25207*
Pioneer	*33G30[3]*	*171.8*	*20.8*	*2*	*24510*
Pioneer	*33K81[3]*	*146.4*	*21.8*	*0*	*26036*
Pioneer	*33Y18[3]*	*175.7*	*21.3*	*0*	*24742*
Pioneer	*33J56[3]*	*166.1*	*20.2*	*0*	*24816*
Pioneer	*33G26[3]*	*177.8*	*22.9*	*0*	*24045*
Pioneer	*33Y09[3]*	*139.0*	*21.6*	*0*	*23232*
Southern States	740	163.4	22.6	3	27031
Vigoro	V5110	186.3	20.8	0	26484
Vigoro	V5520	164.4	20.8	7	25516
	Mean	167.8	21.7	2	24633
	LSD $_{.20}$	25.2			
	CV (%)	11.5			
Mean of 10 Check Hybrids[3]		162.9	21.4	1	24701

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.

[4]Hybrid suggested for silage production by the seed company

Table 8. Performance of full-maturity field corn hybrids grown at Lower Eastern Shore Research & Education Center - Poplar Hill Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG6515[4]	194.6	23.0	5	23000
Clark	CL789	156.5	23.4	3	25389
Clark	CL790	187.2	24.4	0	26136
Dekalb	DKC63-03	177.4	21.4	0	23660
Dekalb	*DK647BtY*[3]	159.3	22.2	0	24161
Doebler's	887V2	184.9	26.8	3	23660
NK	*N82-J6*[3,4]	187.1	24.5	2	26717
NK	N82-E9	171.2	23.7	0	26223
Southern States	781CL	175.6	21.5	5	26260
Vigoro	V5800	161.8	22.5	3	25191
	Mean	175.6	23.3	2	25040
	$LSD_{.20}$	30.7			
	CV (%)	12.7			
Mean of 2 Check Hybrids[3]		173.2	23.4	1	25439

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
[4]Hybrid suggested for silage production by seed company

Table 9. Performance of early maturity field corn hybrids grown at Lower Eastern Shore Research & Education Center-Salisbury Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG657Bt	164.8	19.3	50	24045
Agway	AG6001[4]	183.4	17.8	35	23116
Augusta	9884	138.6	16.3	25	23697
Augusta	9873	138.6	18.1	10	21489
Dekalb	*DK 58-52*[3]	160.7	19.7	35	25555
Dekalb	DKB567	148.7	18.0	15	24858
Doebler's	636XY	156.8	17.4	40	23581
Doebler's	649XY	131.8	19.5	90	23348
Doebler's	HC540	141.2	18.3	50	23464
Doebler's	*638XYG*[3]	179.3	17.4	10	24975
Fielder's Choice	*9211*[3]	169.1	17.2	50	23813
Garst	8464-IT[4]	165.6	17.9	40	24975
Garst	8590-IT	151.3	19.1	35	23348
Garst	8541-IT	155.9	16.7	50	25207
Garst	8442	136.2	17.8	35	24394
Mycogen	6920Bt	159.9	19.4	40	25091
NK	NX6569	153.5	19.4	25	24161
Pioneer	*33V08*[3]	186.3	17.1	25	22713
Pioneer	*3394*[3]	170.2	18.0	10	22713
	Mean	155.2	18.2	36	23950
	LSD $_{.20}$	22.2			
	CV (%)	13.2			
Mean of 5 Check Hybrids[3]		173.1	17.9	26	23954

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.

[4]Hybrid suggested for silage production by seed company

Table 10. Performance of mid-maturity field corn hybrids grown at Lower Eastern Shore Research & Education Center-Salisbury Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population
Agway	AG6191[4]	147.2	17.3	35	24975
Agway	AG6297Bt	138.6	18.1	40	22535
Agway	AG6305	166.6	20.6	60	23929
Agway	AG6399Bt[4]	151.2	18.0	0	22651
Asgrow	RX708	150.2	18.8	35	26833
Augusta	2062	168.3	18.7	25	24510
Augusta	3562	166.6	20.9	25	23813
Augusta	4487	165.9	17.1	10	23580
Augusta	3885	160.3	19.3	0	24510
DeKalb	DK567	168.3	20.1	40	23813
DeKalb	*DK626BtY*[3]	154.4	18.9	65	25671
Dekalb	DKC61-24	139.9	18.3	35	24045
Doebler's	760DT	147.3	18.4	100	23116
Doebler's	749XYG	167.9	18.7	35	23465
Doebler's	*747XY*[3]	181.8	18.5	10	23697
Doebler's	818XYG	129.8	18.5	40	23232
Doebler's	797RYG	158.4	18.0	35	22664
Doebler's	851XY	133.1	18.0	0	24626
Garst	8362-IT[4]	151.0	16.3	10	24045
Garst	8222-ITS	168.0	17.3	35	22884
Mycogen	*2767*[3]	154.3	19.3	40	24974
Mycogen	7474	160.6	18.1	60	23813
Mycogen	2833	129.6	18.1	40	24626
NK	N58-D1[4]	164.4	17.9	0	25439
NK	N65-Y3	168.2	16.5	40	24742
NK	*N70D5*[3]	148.2	18.6	15	23348
NK	N64-L5	133.2	18.8	75	24626
NK	N72-V7	198.4	20.0	50	23884
NK	N75-K6	148.7	22.8	40	26484
Pioneer	*33A14*[3]	152.5	18.0	25	25555
Pioneer	*33G30*[3]	153.2	19.3	50	23929
Pioneer	*33K81*[3]	149.2	18.1	35	23536
Pioneer	*33Y18*[3]	155.7	16.7	40	24394
Pioneer	*33J56*[3]	144.1	17.2	10	24742
Pioneer	*33G26*[3]	165.4	20.6	40	23000
Pioneer	*33Y09*[3]	148.7	17.2	40	25555
Southern States	740	179.1	18.1	65	25091
Vigoro	V5320	185.0	19.8	15	25323
Vigoro	V5110	159.7	20.4	15	25555
Vigoro	V5520	164.8	19.1	25	23013
	Mean	156.9	18.3	35	24256
	LSD $_{.20}$	25.4			
	CV (%)	15.2			
Mean of 11 Check Hybrids[3]		155.2	18.4	34	24400

[1] Yields are reported at 15.5% moisture content. [2]Percentage of plants with either breakage below the ear or with a 45° lean or greater. [3]Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group. [4]Hybrid suggested for silage production by the seed company

Table 11. Performance of full-maturity field corn hybrids grown at Lower Eastern Shore Research & Education Center – Salisbury Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG6515[4]	177.8	18.2	25	24394
Clark	CL789	171.9	19.2	15	23397
Clark	CL790	161.8	18.7	0	24161
Dekalb	DKC63-03	152.4	16.8	10	24626
Dekalb	*DK647BtY*[3]	133.2	20.4	10	23580
Doebler's	887V2	169.2	18.6	75	22419
NK	*N82-J6*[3,4]	139.2	19.1	40	21838
NK	N82-E9	167.2	17.5	40	25671
Southern States	781CL	162.0	17.8	0	23348
Vigoro	V5800	148.8	17.7	15	24626
	Mean	158.3	18.4	23	23806
	$LSD_{.20}$	15.1			
	CV (%)	6.4			
Mean of 2 Check Hybrids[3]		150.2	19.0	25	24626

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
[4] Hybrid suggested for silage production by the seed company.

Table 12. Performance of early maturity field corn hybrids grown at Western Maryland Research and Education Center near Keedysville, Maryland. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG657Bt	106.6	19.0	62	24858
Agway	AG6001[4]	145.3	16.5	13	24018
Augusta	9884	125.0	19.0	37	21954
Augusta	9873	138.1	16.7	32	23116
Dekalb	*DK 58-52*[3]	114.2	17.6	43	25904
Dekalb	DKB567	124.1	17.6	45	23697
Doebler's	636XY	131.4	18.5	37	25323
Doebler's	649XY	130.7	17.7	22	23581
Doebler's	HC540	107.6	18.7	82	24858
Doebler's	*638XYG*[3]	107.0	21.5	42	23464
Fielder's Choice	*9211*[3]	123.8	22.4	17	21722
Garst	8464-IT[4]	130.3	20.1	25	22303
Garst	8590-IT	119.9	17.0	10	22884
Garst	8541-IT	141.5	19.1	28	23465
Garst	8442	112.8	19.6	12	24394
Mycogen	6920Bt	104.4	23.3	55	22187
NK	NX6569	143.0	19.4	17	25555
Pioneer	*33V08*[3]	115.6	19.1	43	23465
Pioneer	*3394*[3]	89.9	18.2	40	24742
Pioneer	*34K77*[3]	103.9	18.1	92	25903
	Mean	120.7	19.0	38	23800
	LSD $_{.20}$	18.2			
	CV (%)	13.9			
Mean of 6 Check Hybrids[3]		109.1	19.5	46	24200

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
[4]Hybrid suggested for silage production by seed company

Table 13. Performance of mid-maturity field corn hybrids grown at Western Maryland Research and Education Center near Keedysville, Maryland. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population
Agway	AG6191[4]	125.9	16.6	17	23697
Agway	AG6297Bt	110.9	20.5	38	22535
Agway	AG6305	121.5	20.5	32	22741
Agway	AG6399Bt[4]	143.5	21.3	15	22187
Asgrow	RX708	152.8	19.4	8	24858
Augusta	2062	126.8	23.1	45	23465
Augusta	3562	115.9	26.8	52	24045
Augusta	4487	118.8	19.5	38	24626
Augusta	3885	110.0	24.9	82	24742
DeKalb	DK567	158.5	17.0	27	23813
DeKalb	*DK626BtY*[3]	111.0	21.6	57	23813
Dekalb	DKC61-24	101.1	21.6	10	23813
Doebler's	760DT	110.5	22.4	33	24394
Doebler's	749XYG	148.0	21.6	18	23116
Doebler's	*747XY*[3]	127.1	20.7	23	23581
Doebler's	818XYG	99.7	22.5	35	24277
Doebler's	797RYG	90.1	25.2	22	23929
Doebler's	851XY	133.2	19.5	45	25181
Garst	8362-IT[4]	138.8	22.9	17	23000
Garst	8222-ITS	124.6	26.6	23	24278
Mycogen	*2767*[3]	120.3	23.3	42	25207
Mycogen	7474	140.4	20.4	8	25439
Mycogen	2833	117.8	22.0	43	23697
NK	N58-D1[4]	121.2	18.4	42	23000
NK	N65-Y3	165.1	19.9	15	24510
NK	*N70D5*[3]	129.8	17.7	40	24161
NK	N64-L5	117.0	17.6	28	26400
NK	N72-V7	124.7	20.5	22	24858
NK	N75-K6	94.8	25.3	53	26252
Pioneer	*33A14*[3]	121.8	21.8	80	22621
Pioneer	*33G30*[3]	106.9	20.4	72	24858
Pioneer	*33K81*[3]	152.3	23.9	25	23697
Pioneer	*33Y18*[3]	127.9	21.0	33	24626
Pioneer	*33J56*[3]	149.5	16.4	33	23787
Pioneer	*33G26*[3]	137.9	19.5	38	26252
Pioneer	*33Y09*[3]	140.6	23.1	25	23929
Southern States	740	123.3	20.6	37	24045
Vigoro	V5320	120.2	20.7	35	24510
Vigoro	V5110	111.1	117.4	40	25932
Vigoro	V5520	121.7	21.0	42	22419
	Mean	124.9	21.1	35	24163
	LSD $_{.20}$	24.3			
	CV (%)	18.3			
Mean of 11 Check Hybrids[3]		129.6	20.9	43	24230

[1]Yields are reported at 15.5% moisture content. [2]Percentage of plants with either breakage below the ear or with a 45° lean or greater. [3]Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group. [4]Hybrid suggested for silage production by seed company

Table 14. Performance of full maturity field corn hybrids grown at Western Maryland Research and Education Center near Keedysville, Maryland. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG6515[4]	139.7	23.8	23	24045
Clark	CL789	111.0	24.5	35	23000
Clark	CL790	93.6	23.1	65	23465
Dekalb	DKC63-03	137.4	21.2	22	25802
Dekalb	*DK647BtY*[3]	126.1	21.7	78	23000
Doebler's	887V2	99.7	24.5	30	23000
NK	*N82-J6*[3,4]	124.7	26.7	57	23014
NK	N82-E9	132.7	25.3	33	23232
Southern States	781CL	125.7	22.9	35	24045
Vigoro	V5800	148.3	22.1	33	23116
	Mean	123.9	23.6	41	23571
	$LSD_{.20}$	23.8			
	CV (%)	17.5			
Mean of 3 Check Hybrids[3]		125.4	24.2	68	23007

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
[4]Hybrid suggested for silage production by seed company

Table 15. Performance of Roundup-Ready corn hybrids grown at the Western Maryland Research and Education Center, near Keedysville, MD. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Clarks	CL790RR	56.1	26.8	22	22767
Doebler's	639RYG	70.6	21.7	43	24510
Doebler's	75X2RR	73.9	25.1	25	22419
Doebler's	797RYG	89.7	25.0	7	23348
Doebler's	82XPRR	72.9	26.7	30	22071
	Mean	71.4	25.1	25	23023
	$LSD_{.20}$	12.5			
	CV (%)	14.9			

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

Table 16. Performance of Bt corn hybrids grown at the Western Maryland Research and Education Center, near Keedysville, MD. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Clark	CL735Bt	113.0	17.8	37	23697
Dekalb	DKC56-71	97.5	19.8	67	22767
Dekalb	*DKC58-52*[3]	110.1	16.8	55	23813
Dekalb	DKC58-78	106.6	17.9	13	20118
Dekalb	DKC60-08	107.1	16.8	17	24742
Dekalb	DKC61-25	98.2	21.5	50	25555
Dekalb	*DK647BtY*[3]	71.0	24.0	33	24510
Dekalb	*DK626BtY*[3]	88.5	22.4	55	25777
Dekalb	DKB567	103.8	17.2	28	22767
Dekalb	DKC61-24	101.9	19.9	30	24278
Doebler's	639RYG	77.4	22.2	37	25090
Doebler's	*638XYG*[3]	105.1	20.9	38	24742
Doebler's	749XYG	94.4	22.9	15	23697
Doebler's	797RYG	79.7	25.0	10	23929
Doebler's	818XYG	101.1	24.2	5	24162
Garst	8342GLS/Bt/IT	109.0	19.4	27	24975
Garst	8484BT	113.1	20.3	32	24161
NK	*N82J6*[3]	91.2	27.0	25	24975
NK	*N70D5*[3]	110.2	17.1	27	22383
NK	NX6569	121.8	20.2	0	23929
NK	N75-K6	107.8	22.7	18	23232
NK	N82-E9	82.3	25.4	22	23581
Pioneer	*33A14*[3]	102.4	23.2	65	25207
Pioneer	*33V08*[3]	98.9	18.1	25	23929
Pioneer	*33G30*[3]	101.5	21.1	22	23581
Pioneer	*33Y09*[3]	109.5	20.6	38	24847
Southern States	692Bt	89.7	23.1	8	21944
Southern States	670Bt	102.4	20.4	33	24510
Vigoro	V55Y21	54.5	25.5	27	24510
	Mean	98.3	21.2	30	23980
	$LSD_{.20}$	14.0			
	CV (%)	13.5			
Mean of 10 Check Hybrids[3]		98.8	21.1	38	24376

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids.

[4]Hybrid suggested for silage production by seed company

Table 17. Performance of early maturity field corn hybrids grown at Central Maryland Research and Education Center - Clarksville Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG657Bt	152.5	21.1	0	23697
Agway	AG6001[4]	169.3	19.6	5	24161
Augusta	9884	134.9	21.2	8	20792
Augusta	9873	141.2	17.4	10	22187
Dekalb	*DK 58-52*[3]	147.0	20.2	3	21838
Dekalb	DKB567	143.7	18.8	27	23232
Doebler's	636XY	139.4	19.5	0	20328
Doebler's	649XY	169.0	19.7	17	20444
Doebler's	HC540	162.1	20.1	3	23348
Doebler's	*638XYG*[3]	159.0	21.8	2	19515
Fielder's Choice	*9211*[3]	137.5	22.4	8	23348
Garst	8464-IT[4]	121.1	21.3	2	22070
Garst	8590-IT	147.2	20.1	5	21373
Garst	8541-IT	148.4	19.4	3	22883
Garst	8442	144.4	20.6	3	20444
Mycogen	6920Bt	172.1	22.0	2	22651
NK	NX6569	164.0	19.7	7	24294
Pioneer	*33V08*[3]	164.2	19.8	2	23232
Pioneer	*3394*[3]	140.2	19.9	0	23116
Pioneer	*34K77*[3]	146.2	20.2	0	22767
	Mean	150.2	20.2	5	22291
	LSD $_{.20}$	25.0			
	CV (%)	15.3			
Mean of 6 Check Hybrids[3]		149.0	20.7	3	22302

[1] Yields are reported at 15.5% moisture content.

[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.

[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.

[4]Hybrid suggested for silage production by seed company

Table 18. Performance of mid-maturity field corn hybrids grown at Central Maryland Research and Education Center - Clarksville Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population
Agway	AG6191[4]	136.8	20.8	2	21141
Agway	AG6297Bt	139.7	21.5	2	21257
Agway	AG6305	169.2	22.6	0	22303
Agway	AG6399Bt[4]	151.1	22.9	5	23929
Asgrow	RX708	169.2	20.0	0	20793
Augusta	2062	167.3	25.8	4	23813
Augusta	3562	163.8	26.0	3	22419
Augusta	4487	157.5	22.2	10	22186
Augusta	3885	161.3	26.1	2	21606
DeKalb	DK567	163.9	17.7	2	21838
DeKalb	*DK626BtY*[3]	162.8	21.2	3	19399
Dekalb	DKC61-24	143.8	20.7	20	22767
Doebler's	760DT	166.2	20.7	5	19360
Doebler's	749XYG	176.3	23.5	8	21954
Doebler's	*747XY*[3]	132.1	23.2	5	19631
Doebler's	818XYG	159.6	22.2	5	20793
Doebler's	797RYG	152.2	25.1	2	22419
Doebler's	851XY	145.3	26.5	3	22186
Garst	8362-IT[4]	163.6	21.1	3	24045
Garst	8222-ITS	167.8	24.5	2	25555
Mycogen	*2767*[3]	160.9	22.5	3	21954
Mycogen	7474	149.8	20.5	7	22303
Mycogen	2833	153.8	24.0	5	21838
NK	N58-D1[4]	165.7	18.6	0	20328
NK	N65-Y3	150.9	21.9	0	19937
NK	*N70D5*[3]	163.0	20.0	2	22535
NK	N64-L5	141.5	20.1	3	23464
NK	N72-V7	155.0	24.0	10	21141
NK	N75-K6	168.3	22.0	3	20328
Pioneer	*33A14*[3]	186.1	22.0	5	23055
Pioneer	*33G30*[3]	146.2	21.9	0	22651
Pioneer	*33K81*[3]	143.7	22.9	2	20328
Pioneer	*33Y18*[3]	146.6	22.5	2	22071
Pioneer	*33J56*[3]	148.9	23.2	2	21606
Pioneer	*33G26*[3]	150.4	22.4	2	24161
Pioneer	*33Y09*[3]	164.8	22.1	3	19864
Southern States	740	177.1	22.7	10	21954
Vigoro	V5320	144.4	21.5	0	23116
Vigoro	V5110	155.6	21.5	2	21606
Vigoro	V5520	160.3	21.8	2	21490
	Mean	157.4	22.4	4	21847
	LSD $_{.20}$	18.7			
	CV (%)	11.2			
Mean of 11 Check Hybrids[3]		155.0	22.2	3	21569

[1] Yields are reported at 15.5% moisture content. [2]Percentage of plants with either breakage below the ear or with a 45° lean or greater. [3]Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group. [4]Hybrid suggested for silage production by the seed company.

Table 19. Performance of full-maturity field corn hybrids grown at Central Maryland Research and Education Center - Clarksville Facility. (2001)

Brand	Hybrid	Yield[1] bu/acre	Harvest Moisture (%)	Lodging[2] %	Harvest Population (plants/acre)
Agway	AG6515[4]	160.6	23.9	5	23232
Clark	CL789	156.9	24.5	3	24393
Clark	CL790	149.0	24.3	2	23696
Dekalb	DKC63-03	178.4	21.3	5	20444
Dekalb	*DK647BtY*[3]	162.3	23.0	2	22767
Doebler's	887V2	140.4	26.9	3	22884
NK	*N82-J6*[3,4]	157.6	25.3	7	22303
NK	N82-E9	152.5	22.0	5	23348
Southern States	781CL	148.3	22.0	7	22884
Vigoro	V5800	166.8	22.9	3	21606
	Mean	157.3	23.6	4	22755
	$LSD_{.20}$	15.8			
	CV (%)	9.2			
Mean of 2 Check Hybrids[3]		157.4	22.5	4	23058

[1] Yields are reported at 15.5% moisture content.
[2] Percentage of plants with either breakage below the ear or with a 45° lean or greater.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
[4]Hybrid suggested for silage production by seed company

Table 20. Relative yield (%)[1] of corn hybrids compared to the mean yield of all entries in the early maturity group at each location in Maryland in 2001.

Brand	Hybrid	Wye	Poplar Hill	Salisbury	Keedysville	Clarksville
Agway	AG657Bt	110*	120*	106*	88	102*
Agway	AG6001	110*	94	118*	120*	113*
Augusta	9884	101	88	89	104	90
Augusta	9873	90	104*	89	114*	94
Dekalb	*DK 58-52*[3]	*102*	*100*	*104*	*95*	*98*
Dekalb	DKB567	102	103*	96	103	96
Doebler's	636XY	97	92	101	109*	93
Doebler's	649XY	113*	109*	85	108*	113*
Doebler's	HC540	99	95	91	89	108*
Doebler's	*638XYG*[3]	*107*	*105**	*116**	*89*	*106**
Fielder's Choice	*9211*[3]	*92*	*111**	*109**	*103*	*92*
Garst	8464-IT	99	94	107*	108*	81
Garst	8590-IT	98	92	98	99	98*
Garst	8541-IT	94	97	101	117*	99*
Garst	8442	102	99	88	94	96
Mycogen	6920Bt	99	95	103	87	115*
NK	NX6569	89	92	99	119*	109*
Pioneer	*33V08*[3]	*101*	*92*	*120**	*96*	*109**
Pioneer	*3394*[3]	*96*	*111**	*110**	*75*	*93*
Pioneer	*34K77*[3]	*98*	*99*	*N/A*[2]	*86*	*97*
Mean (bu/a)		199.4	156.7	155.2	120.7	150.2

[1] Relative yield= (Hybrid Yield Mean/Grand Yield Mean) x 100.
[2] Not Applicable because hybrid was not tested at this location.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
* Indicates that the relative yield of an entry was not significantly different ($LSD_{0.20}$) from the best yielding entry at a particular location.

Table 21. Relative yield (%)[1] of corn hybrids compared to the mean yield of all entries in the mid-maturity group at each location in Maryland in 2001.

Brand	Hybrid	Wye	Poplar Hill	Salisbury	Keedysville	Clarksville
Agway	AG6191	103*	127*	94	101	87
Agway	AG6297Bt	98	97	88	89	89
Agway	AG6305	106*	N/A[2]	106	97	108*
Agway	AG6399Bt	106*	92	96	115*	96
Asgrow	RX708	100	107	96	122*	108*
Augusta	2062	97	106	107	101	106
Augusta	3562	96	120*	106	93	104
Augusta	4487	101	96	106	95	100
Augusta	3885	102	102	102	88	103
DeKalb	DK567	105*	N/A[2]	107	127*	104
DeKalb	*DK626BtY[3]*	*105**	*86*	*98*	*89*	*104*
Dekalb	DKC61-24	92	96	89	81	92
Doebler's	760DT	101	N/A[2]	94	89	106
Doebler's	749XYG	99	92	107	118*	112*
Doebler's	*747XY[3]*	*105**	*105*	*116**	*101*	*84*
Doebler's	818XYG	104*	96	82	80	102
Doebler's	797RYG	95	101	101	72	98
Doebler's	851XY	89	107	85	106	92
Garst	8362-IT	98	N/A[2]	96	111	104
Garst	8222-ITS	107*	N/A[2]	107	99	107*
Mycogen	*2767[3]*	*107**	*94*	*98*	*96*	*102*
Mycogen	7474	98	92	102	112	95
Mycogen	2833	99	106	83	94	98
NK	N58-D1	103	100	104	97	105
NK	N65-Y3	90	N/A[2]	107	132*	96
NK	*N70D5[3]*	*95*	*N/A[2]*	*95*	*104*	*104*
NK	N64-L5	93	91	85	93	90
NK	N72-V7	101	98	126*	100	99
NK	N75-K6	102	106	95	76	107*
Pioneer	*33A14[3]*	*105**	*95*	*97*	*97*	*118**
Pioneer	*33G30[3]*	*92*	*102*	*98*	*85*	*93*
Pioneer	*33K81[3]*	*103**	*87*	*95*	*122**	*91*
Pioneer	*33Y18[3]*	*95*	*105*	*99*	*102*	*93*
Pioneer	*33J56[3]*	*104**	*99*	*92*	*119**	*95*
Pioneer	*33G26[3]*	*91*	*106*	*105*	*110*	*96*
Pioneer	*33Y09[3]*	*95*	*83*	*95*	*112*	*105*
Southern States	740	98	97	114*	98	113*
Vigoro	V5320	101	N/A[2]	118*	96	92
Vigoro	V5110	110*	111	102	89	99
Vigoro	V5520	111*	98	105	97	102
Mean (bu/a)		201.0	167.8	156.9	125.3	157.2

[1] Relative yield= (Hybrid Yield Mean/Grand Yield Mean) x 100.
[2] Not Applicable because hybrid was not tested at this location.
[3] Check hybrids are included in the test through funding provided by the Maryland Grain Producers Utilization Board. They are commonly available and widely grown hybrids of this maturity group.
* Indicates that the relative yield of an entry was not significantly different ($LSD_{0.20}$) from the best yielding entry at a particular location.

Table 22. Relative yield (%)[1] of corn hybrids compared to the mean yield of all entries in the full maturity group at each location in Maryland in 2001.

Brand	Hybrid	Wye	Poplar Hill	Salisbury	Keedysville	Clarksville
Agway	AG6515	104*	111*	112*	113*	102
Clark	CL789	90	89*	109*	90	100
Clark	CL790	100*	107*	102	76	95
Dekalb	DKC63-03	101*	101*	96	111*	113*
Dekalb	*DK647BtY*[3]	*103**	*91**	*84*	*102**	*103*
Doebler's	887V2	97	105*	107*	81	89
NK	*N82-J6*[3]	*103**	*107**	*88*	*101**	*100*
NK	N82-E9	104*	98*	106*	107*	97
Southern States	781CL	100*	100*	102	102*	94
Vigoro	V5800	98	92*	94	120*	106*
Mean (bu/a)		205.9	175.6	158.3	123.9	157.3

[1] Relative yield= (Hybrid Yield Mean/Grand Yield Mean) x 100.

Table 23. Relative yield (%)[1] of Bt corn hybrids compared to the mean yield of all entries in the full maturity group at each location in Maryland in 2001.

Brand	Hybrid	Wye	Keedysville
Clark	CL735Bt	105*	115*
Dekalb	DKC56-71	103*	99
Dekalb	*DKC58-52*[3]	100*	112*
Dekalb	DKC58-78	94	108
Dekalb	DKC60-08	104*	109
Dekalb	DKC61-25	98	99
Dekalb	*DK647BtY*[3]	105*	72
Dekalb	*DK626BtY*[3]	106*	90
Dekalb	*DKB567*	105*	105
Dekalb	*DKC61-24*	107*	103
Doebler's	639RYG	90	78
Doebler's	*638XYG*[3]	99*	106
Doebler's	749XYG	105*	96
Doebler's	797RYG	99*	81
Doebler's	818XYG	97	102
Garst	8342GLS/BT/IT	90	110*
Garst	8484BT	92	115*
NK	*N82J6*[3]	107*	92
NK	*N70D5*[3]	98	112*
NK	*NX6569*	88	123*
NK	*N75-K6*	99*	109*
NK	*N82-E9*	99*	83
Pioneer	*33A14*[3]	104*	104
Pioneer	*33V08*[3]	100*	100
Pioneer	*33G30*[3]	98	103
Pioneer	*33Y09*[3]	97	111*
Southern States	692Bt	97	91
Southern States	670Bt	102*	104
Vigoro	V55Y21	103*	55
Mean (bu/a)		195.6	98.3

[1] Relative yield= (Hybrid Yield Mean/Grand Yield Mean) x 100.

*Indicates relative yield of an entry was not significantly different ($LSD_{.20}$) from the highest yielding entry at that location.

Table 24. Corn hybrid test plot information.

Wye Research and Education Center, Queenstown, Maryland.

Soil type:	Mattapeake silt loam
Previous crop:	Soybeans
Fertilizer:	1 ton/acre Hi cal lime in February
	Broadcast 300 lbs./acre 16-8-8-12 N-P_2O_5-K_2O on April 24
	Sidedress with 130 lbs./acre N as 30% UAN on June 1
Herbicides:	Pre-emergent--2 qt./acre Bicep II Magnum
	Post-emergent --14oz/acre Basis Gold on May 23
	Crop Oil 1% vol/vol
	2qt./acre 30% UAN solution
Insecticides:	2.0 oz./acre Warrior
Tillage:	Conventional
Planted:	April 25, 2001
Harvested:	September 18, 2001
Farm Crew:	Mark Sultenfuss
	Reese Stafford
	Joe Streett

Lower Eastern Shore Research and Education Center Poplar Hill Facility, Quantico, Maryland.

Soil Type:	Mattapex silt loam
Previous Crop:	Conventional Soybeans
Fertilizer:	Broadcast 100 lbs/acre 0-0-60 N-P_2O_5-K_2O
	Planter application of 30-20-15-24 N-P_2O_5-K_2O-S
	Sidedress w/ 32 gal./acre of 30% UAN
Herbicides:	Pre-emergent--1.0 qt./acre Princep
	2.2 qts/acre Bicep II Magnum
	Post-emergent--Basis 75 WDG
	0.5 qt/acre Atrazine
	4 oz/acre Banvel
	2 qts/acre 30% UAN
Insecticides:	None
Tillage:	Minimum
Planted:	April 30, 2001
Harvested:	October 2, 2001
Farm Crew:	Ron Mulford
	Craig Anderson
	Dover Dickerson

Table 24. Corn hybrid test plot information (continued).

Lower Eastern Shore Research and Education Center Salisbury Facility, Salisbury, Maryland.

Soil Type:	Norfolk loamy sand
Previous Crop:	Wheat/Double-cropped no-till soybeans
Fertilizer:	Broadcast 200lbs/acre 10-0-29 N-P_2O_5-K_2O
	Planter application of 18-10-0 N-P_2O_5-K_2O
	Sidedressed w/ 15 gal/acre 30% UAN solution, May 29
	Sidedressed w/ 15 gal/acre 30% UAN solution, June 11
Herbicides:	Pre-plant-- 1 qt/acre Roundup
	1 pt/acre 2,4 D Ester
.	1 qt/acre Princep
	Pre-emergent-- 1 qt/acre Roundup
	1.25 pt/acre Aatrex 4L
	1pt/acre Dual II Magnum
Insecticides:	2 oz/acre Baythroid
Tillage:	Minimum
Planted:	April 27, 2001
Harvested:	October 1, 2001
Farm Crew:	Fred Wells

Central Maryland Research and Education Center, Clarksville Facility Clarksville, Maryland.

Soil type:	Delanco silt loam
Previous crop:	Soybeans
Fertilizer:	160 lb. N/acre as 30% UAN applied with herbicide at planting.
Herbicides:	Pre-emergent-- 2 qt./acre Bicep II magnum +
	1 pt./acre Activator (surfactant);
	1 pt./acre Gramoxone Extra.
	Post-emergent (June 11, 2001): 1 qt./acre Marksman
Insecticides:	None
Tillage:	Minimum
Planted:	May 5, 2001
Harvested:	October 8,2001
Farm Crew:	David Justice
	Tim Ridgley

Western Maryland Research and Education Center, Keedysville, Maryland.

Soil type:	Hagerstown silt loam
Previous crop:	Soybeans
Fertilizer:	120 lb. N/acre applied as urea on April 20
Herbicides:	Pre-emergent-- 2 qt./acre Bicep II
	Post emergent (June 18, 2001)--2/3 oz./acre Permit
	4 oz./acre Banvel
Insecticides:	None
Tillage:	Conventional
Planted:	May 11, 2001
Harvested:	October 10, 2001
Farm Crew:	Tim Ellis
	David Wyand, Jr.

Table 25. Growing Season Precipitation (inches).

	Wye	Poplar Hill	Salisbury	Keedysville	Clarksville
April	3.79	1.97	2.50	1.60	0.28[1]
May	3.99	7.77	7.50[2]	1.70	3.56
June	3.82	4.21	5.29[3]	4.21	7.66
July	6.81	4.87	7.73[4]	2.12	1.86
August	2.85	5.12	6.55[5]	3.74	4.11
September	4.72	2.71	2.35	1.85	2.01
Total	25.98	26.65	31.92[6]	15.22	19.48

[1] Equipment failure from April 10 through April 25.
[2] Includes 2.4" of irrigation
[3] Includes 1.1" of irrigation
[4] Includes 2.7" of irrigation
[5] Includes 0.7" of irrigation
6 Includes 6.9" of irrigation

Table 26. Participating companies in the 2001 Maryland State Corn Hybrid tests.

Brand	Address
Agway	Agway Farm Seeds, 6835 Tully-Truxton Rd Tully, NY 13159
Asgrow	Monsanto, 3100 Sycamore Rd., DeKalb, IL 60115
Augusta	Augusta Seed, 106 Fairburn Rd., Mt. Solon, VA 22843
Clark's	Clark Seeds, Inc., PO Box 219, Kenton, DE 19955
DeKalb	Monsanto, 3100 Sycamore Rd., DeKalb, IL 60115
Doebler's	Doebler's Hybrids, Inc., RR1 Box 424, Jersey Shore, PA 17740
Fielder's Choice	Fielder's Choice Direct, 306 North Main St., Monticello, IN 47960
Garst	Garst Seed Company, PO Box 414, Providence Forge,VA 23140
Mycogen	Mycogen Seeds, 1340 Corporate Center Curve Eagan, MN 55121
NK	Hoffman Seeds, Inc. 144 Main St., Landisville, PA 17538
Pioneer	Pioneer Hi-bred International, Inc., PO Box 14453 Des Moines, IA 50306
Southern States	Southern States, PO Box 26234, Richmond, VA 23260
Vigoro	Royster-Clark, Inc. 70 N. Market St., Mt. Sterling, OH 43143