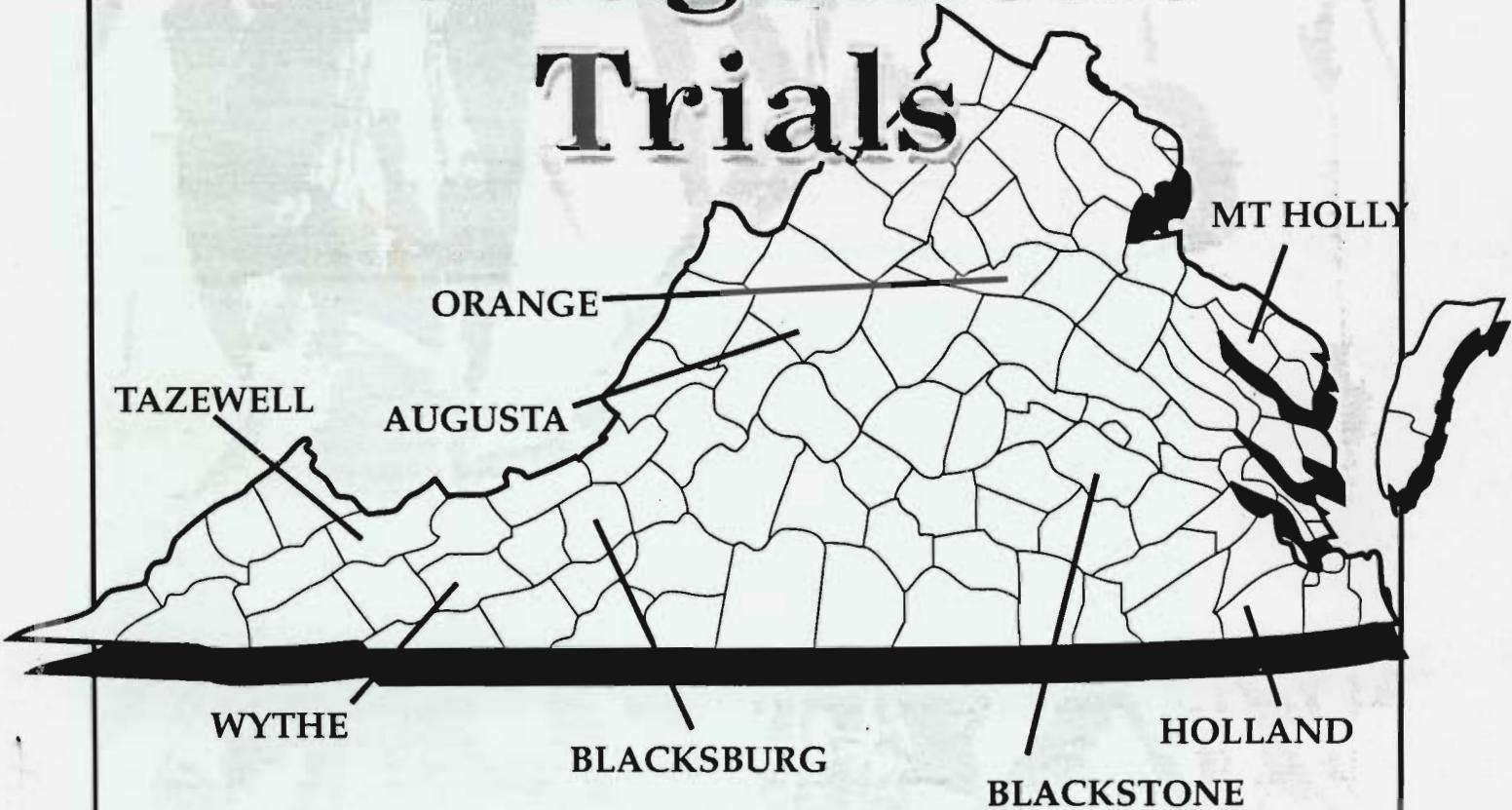


# 2000 Virginia Corn Hybrid Management Trials



Virginia  
 Tech

VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY

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## SECTION I. VIRGINIA CORN HYBRID TRIALS IN 2000.

### Companies Participating in the 2000 Corn Hybrid Trials

Company	Brand	Address
AUGUSTA SEED CORPORATION	AUGUSTA	106 FAIRBURN RD MT SOLON VA 22843
BIO GENE	BIO GENE	5491 TRI COUNTY HWY SARDINIA OH 45171
CHEMGRO SEEDS	CHEMGRO	466 BEAVER DAM LN WINCHESTER VA 22603
DOEBLER'S PA. HYBRIDS INC.	DOEBLER'S	RR 1 BOX 424 JERSEY SHORE PA 17740
GARST SEED CO.	GARST AND AGRIPRO	2369 330TH SLATER IA 50244
HOFFMAN SEEDS, INC.	NK BRAND	144 MAIN ST LANDISVILLE PA 17538
MID-ATLANTIC SEEDS	MID-ATLANTIC	2083 SPRINGWOOD ROAD #163 YORK PA 17403
MONSANTO	DEKALB AND ASGROW	3100 SYCAMORE RD DEKALB IL 60115
MYCOGEN SEEDS	MYCOGEN	9330 ZIONSVILLE RD INDIANAPOLIS IN 46268
SYNGENTA SEEDS, INC.	NK BRAND	PO BOX 959 MINNEAPOLIS MN 55440
PIONEER HI-BRED INT., INC.	PIONEER BRAND	800 TIFFANY BLVD SUITE 200 ROCKY MOUNT NC 27804
SOUTHERN STATES COOP., INC.	SOUTHERN STATES	PO BOX 26234 RICHMOND VA 23260

### VIRGINIA CORN HYBRID TRIALS IN 2000

Coordinated by H. Behl, D. E. Brann, and E. G. Rucker  
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R.R. Wilmouth; D.E. Starner; D. Dixon; D. Danner; Scott Jessee; the Huffard family; J. Wooge; T. Stanley; the Showalter family;

Performance trials of commercial corn hybrids were conducted at seven locations in Virginia in 2000. Test weights were taken with a GrainGauge manufactured by HarvestMaster and calibrated over four years of testing. A list of the companies participating in the trials is shown in the above table. All hybrids entered in the Virginia trials were those submitted by commercial companies. The locations at which particular hybrids were entered were specified by the company. Companies entering hybrids were charged a fee for each hybrid per location to support the Corn Performance Trials.

All locations except Orange were planted with a Wintersteiger PlotKing 2600. Populations were determined by counting plants in a number of plots at each testing site and averaging them. Orange was planted by hand and thinned to the desired population. All locations except Orange were harvested with a Massey-Ferguson 8XP plot combine. Orange was hand-harvested and shelled to obtain grain weights. Yields have been adjusted to 15% moisture.

### Yield Differences

Experimental plots vary in yield and other measurements due to location in the field and other factors which cannot be controlled. Statistics given in the tables are intended to help the reader make valid comparisons between hybrids. The magnitude of differences which may have been due to uncontrollable variation has been computed for the data and listed at the bottom of columns as the LSD (.05) (least significant difference with 95% confidence). Differences less than the LSD are assumed not to be real differences with 95% confidence.

### Choice of Hybrids

When making hybrid selections it is important to realize that hybrids differ in their performance under different environments. Some hybrids are more adapted to a wide range of environments. Hybrid performance may vary with year and location variations in rainfall, temperature, pests and other environmental variables. In these experiments, many hybrids have essentially the same yield, and great care should be taken in interpreting the results of a single year's tests, especially at only one location. For these reasons it is important, whenever possible, to also look at a hybrid's average across locations when making hybrid selections. Multi-year averages give even greater confidence to hybrid performance decisions. The relative yield tables compare the yield of a hybrid to the average yield of all hybrids in the test. These tables are an excellent summary of yield potential compared to other hybrids.

*Appreciation is expressed to the Virginia Corn Check-Off Board for financial support of this research and the Virginia Extension corn program.*

**2000 VIRGINIA CORN HYBRID PLOT INFORMATION**  
 (Rates are on a per acre basis.)

Blacksburg	Whitethorne Farm	Pesticide:	5 lb Force 3G® + 1.6 qt Bicep II Magnum® + 1 pt atrazine at planting
Land Prep:	plowed, disked, finished/smoothed	Fertilizer:	50 lb N preplant incorporated + 10 gal 10-34-0 at planting; 150 lb N May 25, 2000
Planted:	May 9, 2000	Irrigation:	1.0" June 23
Harvested:	October 23, 2000	Plot Size:	2 rows 25' x 30" 4 replications
Pesticide:	5 lb Force 3G® at planting; 1.5 lb atrazine + 1 lb simazine + 4.5 lb Partner® + 1 oz Python® preplant incorporated May 1, 2000	Soil Type:	State fine sandy loam
Fertilizer:	2.5 tons lime in April + 40-50-30 preplant incorporated May 1, 2000 + 10 gal 10-34-0 at planting + 150 lb N using UAN sidedressed June 16, 2000	Cooperator:	Bruce Beahm
Plot Size:	2 rows 25' x 30" 4 replications		
Soil Type:	Hayter		
Cooperator:	J. Wooge		
Blackstone	Southern Piedmont Agricultural Research & Extension Center	Orange	Northern Piedmont Agricultural Research & Extension Center
Planted:	May 5, 2000	Planted:	May 18, 2000
Harvested:	September 20, 2000	Harvested:	October 26-27, 2000
Pesticide:	5 lb Force 3G® at planting + 1.5 qt Bladex 4L + 1 qt Dual II May 5, 2000	Pesticide:	1 qt Dual® + 2 qt Aatrex® 4L preplant incorporated
Fertilizer:	1000 lb 10-10-10 preplant incorporated April 7, 2000 10 gal 10-34-0 at planting + 235 lb ammonium nitrate broadcasted June 5, 2000	Fertilizer:	1000 lb 10-10-10 May 12, 2000 + 100 lb N sidedressed June 30, 2000
Irrigation:	0.5" May 15, 2000 to activate herbicides	Plot Size:	1 row 30' x 30" 4 replications
Plot Size:	2 rows 25' x 30" 4 replications	Soil Type:	Davidson silty clay loam
Soil Type:	Wedowee	Cooperators:	D. E. Starner and D. Dixon
Cooperators:	W. B. Wilkinson and R. R. Wilmouth		
Holland	Tidewater Agricultural Research & Extension Center	Wythe County	
Land Prep:	chisel-plowed Mar 16; disked April 5; land conditioned April 14, 2000	Land Prep:	minimum tillage (chiseled and disked)
Planted:	May 2, 2000	Planted:	May 10, 2000
Harvested:	September 12, 2000	Harvested:	October 26, 2000
Pesticide:	2 qt Lasso® + 1 qt atrazine preplant incorporated April 14, 2000 + 5 lb Force 3G® at planting + 1.5 pt Dual May 24, 2000	Pesticide:	5 lb Force® + 2.25 qt Bicep II Magnum® + 3 pt Gramoxone Extra + 8 oz Assana XL®
Fertilizer:	300 lb 5-10-30 March 15, 2000 + 60 units N April 14, 2000 + 10 gal 10-34-0 at planting + 100 units N using UAN sidedressed May 24, 2000	Fertilizer:	preplant incorporated according to soil test + 10 gal 10-34-0 at planting
Irrigation:	1.25" July 19, 2000	Plot Size:	2 rows 25' x 30" 4 replications
Plot Size:	2 rows 35' x 30" 4 replications	Cooperators:	David Danner, Scott Jessee, and John Huffard
Soil Type:	Uchee, Nansemond, Eunola		
Cooperators:	Bobby Ashburn and Gene Whitley		
Mt Holly (dry)	Virginia Crop Improvement Association Farm	Augusta County	
Land Prep:	ripped, worked and planted conventionally	Land Prep:	conventional tillage
Planted:	April 24, 2000	Planted:	May 8, 2000
Harvested:	September 28, 2000	Harvested:	October 13, 2000
Pesticide:	5 lb Force 3G® + 1.6 pt Bicep II Magnum® + 1 pt atrazine May 25	Pesticide:	2.2 qt Bicep II Magnum® + 1.2 qt Princep 4LC® + 1 pt Comix + 0.5 oz Basis + 5 lb Force 3G® at planting
Fertilizer:	50 lb N preplant incorporated + 10 gal 10-34-0 at planting + 100 lb N sidedressed May 25, 2000	Fertilizer:	3 tons poultry litter preplant incorporated + 10 gal 10-34-0 at planting + 8 lb N + 10 lb S
Plot Size:	2 rows 25' x 30" 4 replications	Plot Size:	2 rows 25' x 30" 4 replications
Soil Type:	State fine sandy loam	Cooperators:	Tom Stanley and the Showalter family
Cooperator:	Bruce Beahm		
Mt Holly (irr)	Virginia Crop Improvement Association Farm		
Land Prep:	ripped, worked and planted conventionally		
Planted:	May 1, 2000		
Harvested:	September 27, 2000		

Table 1. 2000 RELATIVE YIELD\* of hybrids entered in three or more locations.

Very Early Maturity		Mt Holly Dryland	Mt Holly Irrigated	Black- stone	Orange	Augusta	Blacks- burg	Wythe	Mean
Brand	Hybrid								
AUGUSTA	4584	98	103	—	105	—	—	—	102
DEKALB	DK567	96	103	104	99	95	—	—	99
DEKALB	DK585	102	92	92	103	105	—	—	99
PIONEER BRAND	34K77	94	98	—	99	104	—	—	99
AUGUSTA	9884	97	100	—	105	95	96	—	99
AUGUSTA	4484	93	97	—	104	—	—	—	98
ASGROW	RX708	105	95	97	90	102	—	—	98
ASGROW	RX764	102	100	95	91	96	—	—	97
DEKALB	DKC58-52	96	92	99	98	98	—	—	97
ASGROW	RX637	104	107	90	102	78	—	—	96
NK BRAND	N58-D1	95	92	—	97	95	85	103	94
GARST	8585GLS/IT	—	—	95	88	90	97	—	93
PIONEER BRAND	34K78(Bt)	94	100	—	93	94	81	92	92
AUGUSTA	9873	91	88	—	97	87	—	—	91
ASGROW	RX508YG	95	87	96	79	79	—	—	87
Early Maturity		Mt Holly Dryland	Mt Holly Irrigated	Black- stone	Orange	Augusta	Blacks- burg	Wythe	Mean
Brand	Hybrid								
PIONEER BRAND	33J56	—	—	103	111	115	113	112	111
AUGUSTA	4487	110	114	—	107	—	—	—	110
MID-ATLANTIC	MA9137	114	108	—	98	113	—	—	108
NK BRAND	N82-J6	113	106	—	106	105	—	—	107
AUGUSTA	4485	112	104	—	—	104	—	—	106
MID-ATLANTIC	8011RR	109	110	—	93	114	—	—	106
PIONEER BRAND	3223	103	110	105	107	—	—	—	106
DEKALB	DK647BtY	106	112	100	93	117	—	—	106
AUGUSTA	4585	101	104	—	—	109	—	—	105
AUGUSTA	4587	99	101	—	113	—	—	—	104
PIONEER BRAND	33G27(Bt)	95	111	—	109	103	—	103	104
PIONEER BRAND	32K61	99	103	—	—	100	111	104	103
PIONEER BRAND	32K62(Bt)	105	102	—	—	91	109	108	103
AUGUSTA	3387	106	99	—	104	—	—	—	103
SOUTHERN STATES	670Bt	109	97	—	106	104	100	102	103
MID-ATLANTIC	MA9116	102	104	—	103	103	—	—	103
PIONEER BRAND	33G26	100	111	106	105	99	97	—	103
AUGUSTA	3685	103	106	—	—	100	—	—	103
DEKALB	DKC61-24	104	102	105	104	99	—	—	103
MID-ATLANTIC	MA9121YG	106	103	—	96	105	—	—	103
SOUTHERN STATES	EXP78351	103	95	—	101	101	111	100	102
SOUTHERN STATES	EXP80000	100	106	—	86	102	107	107	101
MYCOGEN	2833	96	105	106	—	—	—	97	101
AUGUSTA	285	104	103	—	—	104	93	—	101
ASGROW	RX826	92	104	106	101	101	—	—	101
PIONEER BRAND	33V08(Bt)	98	107	100	97	—	—	—	101
DEKALB	DKC65-25	101	104	99	104	94	—	—	100
PIONEER BRAND	33Y09(Bt)	—	—	—	101	106	94	100	100
NK BRAND	N79-L3	100	101	—	103	95	95	98	99
SOUTHERN STATES	729CL	98	102	—	100	95	99	97	99
MYCOGEN	2799IMI	88	95	105	—	—	—	104	98
PIONEER BRAND	33K81	92	102	—	102	101	95	92	97

Table 1, cont'd. 2000 RELATIVE YIELD\* of hybrids entered in three or more locations.

Early Maturity, cont'd.		Mt Holly Dryland	Mt Holly Irrigated	Black- stone	Orange	Augusta	Blacks- burg	Wythe	Mean
Brand	Hybrid								
PIONEER BRAND	34T14(Bt/LL)	93	101	—	98	—	—	—	97
DEKALB	DK611	97	95	98	98	96	—	—	97
NK BRAND	NX7528	91	92	—	97	106	—	—	97
GARST	8362	89	98	100	93	100	99	—	97
SOUTHERN STATES	710	99	94	—	91	96	103	95	96
PIONEER BRAND	3394	98	101	—	89	—	—	—	96
NK BRAND	N75-K6	90	96	—	91	83	86	80	88
Medium Maturity		Mt Holly Dryland	Mt Holly Irrigated	Black- stone	Orange	Augusta	Blacks- burg	Wythe	Mean
Brand	Hybrid								
PIONEER BRAND	31G98	115	107	112	110	120	111	118	113
PIONEER BRAND	3163	110	117	—	105	—	118	103	110
PIONEER BRAND	31B13(Bt)	108	114	107	112	—	—	—	110
AUGUSTA	2062	105	100	—	103	102	108	105	104
AUGUSTA	9552	—	—	—	106	103	104	102	104
SOUTHERN STATES	849CL	102	100	—	106	100	111	100	103
PIONEER BRAND	31G20	100	100	97	106	110	—	103	103
SOUTHERN STATES	EXP78406	96	101	—	103	106	100	95	100
SOUTHERN STATES	859CL	119	62	—	106	107	97	108	100
AUGUSTA	9561	103	98	—	96	—	—	—	99
AUGUSTA	2513	—	—	—	106	94	99	95	99
MID-ATLANTIC	MA9181	110	77	—	101	104	—	—	98
AUGUSTA	3661	99	97	—	98	—	—	—	98
DOEBLERS	747XY	—	—	—	91	96	98	92	94
GARST	8341	94	99	96	—	102	79	—	94
AUGUSTA	3762	85	96	—	—	99	—	—	93
DOEBLERS	851XY	—	—	—	97	—	97	82	92
Mid-Full Maturity		Mt Holly Dryland	Mt Holly Irrigated	Black- stone	Orange	Augusta	Blacks- burg	Wythe	Mean
Brand	Hybrid								
PIONEER BRAND	31R88	—	—	98	109	99	117	105	106
PIONEER BRAND	3156	—	—	—	101	110	100	103	104
DOEBLERS	859XY	—	—	—	93	94	109	93	97

\* Relative yield is calculated by dividing the yield of a hybrid by the average yield of all hybrids of all maturities at that location. A hybrid with a relative yield of 105 was 5% above the average of all hybrids at that location. The value of 105 is not a yield but a value relative to all other yield values at that location. Relative yields are listed in order of descending mean values.

**Table 2. Two-year average RELATIVE YIELD\* (1999-2000) of hybrids entered in three or more locations each year.**

Very Early Maturity		# of Observations	Relative Yield
Brand	Hybrid	Observations	Yield
AUGUSTA	9884	36	105
DEKALB	DK585	31	103
PIONEER BRAND	34K78(Bt)	56	101
AUGUSTA	9873	28	100
PIONEER BRAND	34K77	48	94
Early Maturity		# of Observations	Relative Yield
Brand	Hybrid	Observations	Yield
PIONEER BRAND	3223	35	111
PIONEER BRAND	33J56	35	105
AUGUSTA	285	36	105
PIONEER BRAND	3394	32	104
PIONEER BRAND	33V08(Bt)	35	103
PIONEER BRAND	33G27(Bt)	52	103
PIONEER BRAND	34T14(Bt/LL)	32	102
PIONEER BRAND	32K62(Bt)	52	101
DEKALB	DK611	43	101
PIONEER BRAND	33G26	55	101
PIONEER BRAND	32K61	52	100
PIONEER BRAND	33Y09(Bt)	48	100
SOUTHERN STATES	729CL	48	99
NK BRAND	N79-L3	48	99
PIONEER BRAND	33K81	56	99
MID-ATLANTIC	MA9121YG	32	98
Medium Maturity		# of Observations	Relative Yield
Brand	Hybrid	Observations	Yield
PIONEER BRAND	31B13(Bt)	35	114
PIONEER BRAND	3163	52	106
PIONEER BRAND	31G20	55	105
AUGUSTA	2062	44	104
SOUTHERN STATES	849CL	40	102
AUGUSTA	2513	32	101
AUGUSTA	9561	24	100
SOUTHERN STATES	859CL	52	100
DOEBLERS	851XY	36	94
Mid-Full Maturity		# of Observations	Relative Yield
Brand	Hybrid	Observations	Yield
PIONEER BRAND	3156	32	100
DOEBLERS	859XY	44	99

\* Relative yield is calculated by dividing the yield of a hybrid by the average yield of all hybrids of all maturities at that location. A hybrid with a relative yield of 105 was 5% above the average of all hybrids at that location. The value of 105 is not a yield but a value relative to all other yield values at that location. Relative yields are listed in order of descending mean values.

**Table 3. Three-year average RELATIVE YIELD\* (1998-2000) of hybrids entered in three or more locations each year.**

Very Early Maturity		# of Observations	Relative Yield
Brand	Hybrid		
AUGUSTA	9873	38	104
PIONEER BRAND	34K77	76	97
Early Maturity		# of Observations	Relative Yield
Brand	Hybrid		
PIONEER BRAND	3223	52	114
PIONEER BRAND	33V08(Bt)	52	108
PIONEER BRAND	33Y09(Bt)	76	105
AUGUSTA	285	53	105
PIONEER BRAND	33G26	83	104
NK	N79-L3	61	103
PIONEER BRAND	3394	49	103
PIONEER BRAND	32K61	80	100
Medium Maturity		# of Observations	Relative Yield
Brand	Hybrid		
PIONEER BRAND	31B13(Bt)	52	114
PIONEER BRAND	3163	80	106
PIONEER BRAND	31G20	83	104
AUGUSTA	2062	65	101
SOUTHERN STATES	849CL	54	100
Mid-Full Maturity		# of Observations	Relative Yield
Brand	Hybrid		
PIONEER BRAND	3156	50	101
DOEBLERS	859XY	60	100

\* Relative yield is calculated by dividing the yield of a hybrid by the average yield of all hybrids of all maturities at that location. A hybrid with a relative yield of 105 was 5% above the average of all hybrids at that location. The value of 105 is not a yield but a value relative to all other yield values at that location. Relative yields are listed in order of descending mean values.

**Table 4. Yields at HOLLAND, VA in 1999. Population averaged 25,325 plants/acre.  
Please note that hybrid yields are not being reported for 2000, due to high variability  
in plots because of micronutrient deficiency.**

Very Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu	Lodging %
AUGUSTA	A9884	184	19.5	56.1	6
SOUTHERN STATES	EXP77095	179	17.1	54.4	10
PIONEER BRAND	34K78(Bt)	167	20.6	56.5	3
DOEBLERS	585XPT	156	18.3	60.0	4
PIONEER BRAND	34K77	146	19.8	56.0	2
Maturity Average		167	19.0	56.7	5
LSD		18	0.7	1.5	4
Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu	Lodging %
PIONEER BRAND	3223	192	20.2	56.0	9
NK BRAND	N79-L3	190	21.6	59.8	3
HYPERFORMER	HY9646	187	18.6	54.7	7
PIONEER BRAND	33V08(Bt)	179	19.5	57.5	4
DOEBLERS	639XYG	177	19.1	53.4	3
DEKALB	DK611	173	19.2	57.4	10
SOUTHERN STATES	EXP77457	173	18.9	54.7	6
PIONEER BRAND	33Y09(Bt)	172	20.4	58.1	13
WILSON	E1046	171	20.0	54.1	16
WILSON	E4015Bt	171	21.4	58.0	9
WILSON	E4017	170	22.3	57.1	12
PIONEER BRAND	3394	170	19.3	56.9	9
PIONEER BRAND	33A14(Bt)	168	20.8	56.2	3
PIONEER BRAND	32K62(Bt)	168	19.7	58.1	4
PIONEER BRAND	32K61	167	20.0	58.0	6
PIONEER BRAND	33G26	166	20.1	54.7	6
AGRIPRO	AP9689Bt	166	19.7	57.4	2
HYTEST	HTX7730	165	19.6	58.2	12
SOUTHERN STATES	729CL	163	18.4	55.3	5
DOEBLERS	642XP	161	19.3	58.1	11
HYTEST	HT7712	161	20.0	56.8	10
WILSON	E4012	157	22.8	56.6	19
PIONEER BRAND	34T14(Bt/LL)	152	20.2	58.1	3
WILSON	E4025	152	22.7	54.0	24
PIONEER BRAND	33K81	149	20.9	58.2	7
WILSON	1792	146	21.4	56.6	13
GARST	8464	146	20.4	54.7	4
DEKALB	DK647	143	19.5	52.6	6
Maturity Average		166	20.2	56.5	8
LSD		25	1.4	1.2	9

Table 4, continued. Yields at HOLLAND, VA in 1999.

Medium Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu	Lodging %
PIONEER BRAND	3163	208	20.3	56.2	6
PIONEER BRAND	31B13(Bt)	205	21.0	57.2	7
NK BRAND	NX8318	196	20.0	57.7	9
NK BRAND	N83-N5	195	21.1	57.5	10
SOUTHERN STATES	859CL	192	21.2	53.3	12
PIONEER BRAND	31G20	190	21.2	56.9	8
SOUTHERN STATES	EXP78469	184	20.8	54.2	5
AGRIPRO	AP9909	184	20.1	57.3	10
HYTEST	HT7820	183	21.5	53.8	7
DEKALB	DK679	181	20.5	57.3	11
AGRIPRO	AP9829IMI	180	20.0	57.2	17
DOEBLERS	859XY	179	20.5	58.0	11
DOEBLERS	75X2PT	174	19.3	56.8	14
DEKALB	DK650	171	22.6	55.3	12
HYPERFORMER	HS9843	168	19.3	56.9	4
AUGUSTA	A3383	166	21.1	57.5	4
SOUTHERN STATES	769Bt	162	19.9	58.3	3
GARST	8366Bt/LL	162	18.3	51.3	6
Maturity Average		182	20.5	56.3	9
LSD		25	1.2	1.1	8
Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu	Lodging %
DOEBLERS	859XY	195	19.9	57.9	10
SOUTHERN STATES	EXP79027	188	21.1	55.0	8
PIONEER BRAND	3167	181	21.9	52.1	11
GARST	8285	180	19.3	56.9	8
DEKALB	DK697	167	22.4	57.3	15
GARST	8220	164	24.4	49.0	11
Maturity Average		179	21.5	54.7	10
LSD		33	1.2	1.3	8
Location Average		173	20.3	56.2	8

**Table 5. Two-year average yields at HOLLAND, VA in 1998 and 1999. Please note that yields are not being reported for 2000 because of high variability in plots due to micronutrient deficiency.**

Very Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu
PIONEER BRAND	34K77	110	18.2	53.8
Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu
PIONEER BRAND	3223	179	19.3	55.7
NK BRAND	N79-L3	173	20.8	59.1
PIONEER BRAND	33V08(Bt)	157	18.6	56.9
PIONEER BRAND	33G26	154	18.6	54.5
PIONEER BRAND	33Y09(Bt)	148	19.2	56.6
PIONEER BRAND	3394	144	18.3	56.7
WILSON	1792	140	19.5	56.1
GARST	8464	129	19.1	53.7
PIONEER BRAND	32K61	126	18.9	55.1
Maturity Average		150	19.1	56.1
LSD		28	0.7	1.5
Medium Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu
PIONEER BRAND	31B13(Bt)	181	20.1	55.8
PIONEER BRAND	3163	177	19.5	54.7
NK BRAND	N83-N5	165	19.9	56.7
PIONEER BRAND	31G20	154	20.1	55.9
DEKALB	DK679	153	18.9	56.7
Maturity Average		167	19.7	55.9
LSD		28	0.9	1.6
Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu
DOEBLERS	859XY	166	19.0	57.6
Location Average		154	19.3	56.0

**Table 6. Yields at MT HOLLY, VA in 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
ASGROW	RX708	223	17.4	54.5
ASGROW	RX637	219	14.9	54.2
DEKALB	DK585	216	17.1	55.3
ASGROW	RX764	215	16.9	56.2
AUGUSTA	9813	209	18.9	54.8
AUGUSTA	4584	207	18.8	55.4
AUGUSTA	9884	205	17.8	56.1
AUGUSTA	4473	205	14.3	55.4
DEKALB	DK567	203	16.9	55.8
DEKALB	DKC58-52	202	13.9	55.2
NK BRAND	N58-D1	200	14.3	56.6
ASGROW	RX508YG	200	14.9	54.4
PIONEER BRAND	34K77	198	17.7	56.8
PIONEER BRAND	34K78(Bt)	197	16.8	56.3
AUGUSTA	4484	196	17.8	55.0
AUGUSTA	9873	193	16.4	55.8
Maturity Average		205	16.5	55.5
LSD (0.05)		22	1.7	1.3

<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
MID-ATLANTIC	MA9137	241	19.0	53.4
NK BRAND	N82-J6	239	17.1	54.8
AUGUSTA	4485	236	17.7	54.0
AUGUSTA	4487	232	19.1	53.4
SOUTHERN STATES	670Bt	229	17.9	54.5
MID-ATLANTIC	8011RR	229	17.3	53.2
DEKALB	DK64I7BY	224	18.5	54.4
MID-ATLANTIC	MA9121YG	224	19.4	53.7
AUGUSTA	3387	224	17.9	54.1
PIONEER BRAND	32K62(Bt)	222	19.0	57.8
DEKALB	DKC61-24	220	18.5	55.9
AUGUSTA	285	219	19.1	53.6
AUGUSTA	3685	217	20.2	53.9
PIONEER BRAND	3223	217	19.3	54.8
SOUTHERN STATES	EXP78351	216	17.3	54.9
MID-ATLANTIC	MA9116	216	17.8	53.9
DEKALB	DKC65-25	213	18.6	53.6
AUGUSTA	4585	212	18.9	53.6
NK BRAND	N79-L3	211	20.4	58.1
SOUTHERN STATES	EXP80000	210	20.1	53.2
PIONEER BRAND	33G26	210	19.7	56.7
PIONEER BRAND	32K61	209	18.1	57.5
SOUTHERN STATES	710	208	18.6	55.5
AUGUSTA	4587	208	20.0	53.4
PIONEER BRAND	33V08(Bt)	208	18.7	56.1
SOUTHERN STATES	729CL	207	18.4	56.3
PIONEER BRAND	3394	207	18.5	56.5
DEKALB	DK611	205	17.2	55.7

Table 6, continued. Yields at MT HOLLY, VA in 2000.

Early Maturity, cont'd		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
MYCOGEN	2833	203	17.8	53.3
PIONEER BRAND	33G27(Bt)	200	19.8	57.2
PIONEER BRAND	34T14(Bt/LL)	196	19.3	58.0
PIONEER BRAND	33K81	195	18.5	57.1
ASGROW	RX826	193	19.3	54.4
NK BRAND	NX7528	193	19.8	54.4
NK BRAND	N75-K6	191	19.4	56.8
GARST	8362	187	18.6	55.9
AUGUSTA	3673	187	19.1	55.4
MYCOGEN	2799IMI	185	17.1	53.5
AUGUSTA	6462	185	20.3	56.5
Maturity Average		211	18.7	55.1
LSD (0.05)		23	1.8	0.9
Medium Maturity		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
SOUTHERN STATES	859CL	251	20.5	52.1
PIONEER BRAND	31G98	243	19.5	55.0
MID-ATLANTIC	MA9181	232	19.3	53.2
PIONEER BRAND	3163	231	20.9	52.6
PIONEER BRAND	31B13(Bt)	229	18.1	54.6
AUGUSTA	2062	222	19.1	55.5
AUGUSTA	9561	218	19.5	55.2
SOUTHERN STATES	849CL	215	19.7	50.0
PIONEER BRAND	31G20	212	19.2	54.9
AUGUSTA	3661	208	20.2	54.8
SOUTHERN STATES	EXP78406	202	19.4	54.3
GARST	8341	198	19.0	55.3
AUGUSTA	3762	178	19.9	54.1
Maturity Average		218	19.5	54.0
LSD (0.05)		25	1.4	1.2
Location Average		211	18.4	55.0

**Table 7. Two-year average yields at MT HOLLY, VA in 1999 and 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
DEKALB	DK585	168	17.4	56.4
PIONEER BRAND	34K77	167	18.3	57.8
AUGUSTA	9873	159	17.1	57.0
AUGUSTA	9884	158	19.1	58.5
PIONEER BRAND	34K78(Bt)	157	19.1	58.6
Maturity Average		161	18.3	57.7
LSD (0.05)		19	1.3	1.1
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	3223	169	20.5	56.7
NK	N79-L3	164	21.1	59.3
AUGUSTA	285	163	19.3	55.3
PIONEER BRAND	32K62(Bt)	160	20.9	59.2
PIONEER BRAND	33V08(Bt)	158	20.0	57.6
PIONEER BRAND	32K61	158	19.7	59.5
PIONEER BRAND	3394	158	19.8	58.0
PIONEER BRAND	33G26	157	20.8	58.2
SOUTHERN STATES	729CL	156	18.8	57.5
DEKALB	DK611	156	18.7	58.1
PIONEER BRAND	34T14(Bt/LL)	155	20.3	59.4
PIONEER BRAND	33K81	152	19.9	58.5
PIONEER BRAND	33G27(Bt)	152	20.6	58.5
Maturity Average		159	20.0	58.1
LSD (0.05)		13	1.0	0.9
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	31B13(Bt)	182	19.9	56.5
SOUTHERN STATES	859CL	170	20.7	53.6
PIONEER BRAND	3163	166	21.0	56.2
AUGUSTA	2062	157	20.6	57.5
PIONEER BRAND	31G20	155	20.6	57.8
AUGUSTA	9561	152	20.3	56.0
AUGUSTA	6462	143	21.3	58.2
Maturity Average		158	20.7	56.5
LSD (0.05)		17	1.1	1.1
Location Average		160	19.8	57.6

**Table 8. Three-year average yields at MT HOLLY, VA in 1998, 1999, and 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	34K77	164	16.8
AUGUSTA	9873	152	15.6
Maturity Average		158	16.1
LSD (0.05)		19	1.3
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3223	167	18.9
AUGUSTA	285	159	17.4
PIONEER BRAND	33V08(Bt)	157	18.1
NK	N79-L3	155	19.4
PIONEER BRAND	32K61	154	18.0
PIONEER BRAND	3394	151	18.1
PIONEER BRAND	33G26	151	18.7
Maturity Average		156	18.3
LSD (0.05)		13	0.9
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	31B13(Bt)	159	18.2
PIONEER BRAND	3163	149	18.5
AUGUSTA	2062	147	18.8
PIONEER BRAND	31G20	147	19.0
Maturity Average		150	18.6
LSD (0.05)		17	0.9
Location Average		155	18.1

**Table 9. Yields at MT HOLLY, VA under irrigation in 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
ASGROW	RX637	265	19.6
AUGUSTA	4584	254	20.5
DEKALB	DK567	254	18.3
PIONEER BRAND	34K78(Bt)	248	20.7
AUGUSTA	9884	248	20.5
ASGROW	RX764	248	20.5
AUGUSTA	9813	246	19.6
PIONEER BRAND	34K77	242	19.2
AUGUSTA	4484	241	20.0
AUGUSTA	4473	236	20.2
ASGROW	RX708	234	19.1
DEKALB	DKC58-52	227	18.2
DEKALB	DK585	227	17.8
NK BRAND	N58-D1	227	19.2
AUGUSTA	9873	218	20.0
ASGROW	RX508YG	216	18.3
Maturity Average		239	19.5
LSD (0.05)		22	
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
AUGUSTA	4487	282	18.9
DEKALB	DK647BtY	277	18.9
PIONEER BRAND	33G26	274	19.7
PIONEER BRAND	33G27(Bt)	273	18.9
PIONEER BRAND	3223	272	19.4
MID-ATLANTIC	8011RR	272	19.2
MID-ATLANTIC	MA9137	266	19.4
PIONEER BRAND	33V08(Bt)	264	17.8
SOUTHERN STATES	EXP80000	263	19.8
AUGUSTA	3685	262	20.9
NK BRAND	N82-J6	261	21.3
MYCOGEN	2833	259	18.9
ASGROW	RX826	258	21.1
AUGUSTA	4585	257	19.6
MID-ATLANTIC	MA9116	256	19.9
AUGUSTA	4485	256	20.3
DEKALB	DKC65-25	256	18.2
AUGUSTA	285	255	19.5
MID-ATLANTIC	MA9121YG	255	19.4
PIONEER BRAND	32K61	254	21.3
PIONEER BRAND	32K62(Bt)	253	20.1
SOUTHERN STATES	729CL	253	19.4
PIONEER BRAND	33K81	252	19.3

Table 9, continued. Yields at MT HOLLY, VA under irrigation in 2000.

<b>Early Maturity, cont'd</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
DEKALB	DKC61-24	251	20.4
AUGUSTA	4587	250	19.0
PIONEER BRAND	34T14(Bt/LL)	250	19.7
NK BRAND	N79-L3	249	21.1
PIONEER BRAND	3394	249	18.9
AUGUSTA	3387	245	20.4
GARST	8362	243	19.5
SOUTHERN STATES	670Bt	240	20.5
NK BRAND	N75-K6	238	20.3
AUGUSTA	6462	236	21.3
MYCOGEN	2799IMI	236	19.2
DEKALB	DK611	234	18.6
SOUTHERN STATES	EXP78351	234	21.5
SOUTHERN STATES	710	232	18.5
AUGUSTA	3673	230	20.9
NK BRAND	NX7528	227	19.7
Maturity Average		253	19.7
LSD (0.05)		27	
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3163	288	22.0
PIONEER BRAND	31B13(Bt)	281	20.1
PIONEER BRAND	31G98	265	19.8
SOUTHERN STATES	EXP78406	248	20.9
SOUTHERN STATES	849CL	247	20.0
AUGUSTA	2062	247	21.1
PIONEER BRAND	31G20	246	21.7
GARST	8341	244	21.2
AUGUSTA	9561	243	22.4
AUGUSTA	3661	240	22.6
AUGUSTA	3762	237	23.2
MID-ATLANTIC	MA9181	190	25.5
SOUTHERN STATES	859CL	152	24.9
Maturity Average		241	21.9
LSD (0.05)		25	
Location Average		247	20.1

**Table 10. Two-year average yields at MT HOLLY, VA under irrigation in 1999 and 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	34K78(Bt)	234	22.5
AUGUSTA	9884	223	21.3
PIONEER BRAND	34K77	218	21.5
DEKALB	DK585	216	19.0
AUGUSTA	9873	208	20.7
Maturity Average		220	21.0
LSD (0.05)		15	1.5
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	33G27(Bt)	252	20.9
PIONEER BRAND	3223	248	21.2
PIONEER BRAND	32K62(Bt)	245	21.7
PIONEER BRAND	33G26	243	21.6
PIONEER BRAND	33V08(Bt)	240	20.3
PIONEER BRAND	34T14(Bt/LL)	238	20.9
PIONEER BRAND	3394	237	20.1
PIONEER BRAND	32K61	237	22.1
AUGUSTA	285	236	21.0
NK	N79-L3	234	23.2
PIONEER BRAND	33K81	230	20.5
SOUTHERN STATES	729CL	226	21.4
DEKALB	DK611	225	19.6
Maturity Average		238	21.1
LSD (0.05)		17	1.5
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3163	249	22.4
PIONEER BRAND	31B13(Bt)	247	22.1
PIONEER BRAND	31G20	229	23.6
AUGUSTA	9561	223	22.8
AUGUSTA	2062	210	23.2
AUGUSTA	6462	209	22.0
SOUTHERN STATES	859CL	171	24.6
Maturity Average		218	23.1
LSD (0.05)		16	2.0
Location Average		229	21.6

**Table 11. Three-year average yields at MT HOLLY, VA under irrigation in 1998, 1999, and 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	34K77	231	20.4
AUGUSTA	9873	216	19.2
Maturity Average		224	19.8
LSD (0.05)		10	2.1
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3223	251	20.8
PIONEER BRAND	33V08(Bt)	242	19.9
PIONEER BRAND	33G26	242	21.1
PIONEER BRAND	3394	237	19.9
NK	N79-L3	235	22.6
PIONEER BRAND	32K61	233	21.0
AUGUSTA	285	230	20.4
Maturity Average		239	20.8
LSD (0.05)		15	1.4
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	31B13(Bt)	252	22.1
PIONEER BRAND	3163	251	22.1
PIONEER BRAND	31G20	232	23.6
AUGUSTA	2062	216	22.8
Maturity Average		238	22.6
LSD (0.05)		12	1.1
Location Average		236	21.2

Very Early Maturity		Yield	Moist	Test Wt	Days To
Brand/Company	Hybrid	bu/A	%	lb/bu	Silk
DEKALB	DK567	175	18.0	57.3	57
DEKALB	DKC58-52	167	18.0	57.5	57
ASGROW	RX708	164	18.9	55.9	58
ASGROW	RX508YG	163	17.6	56.5	57
GARST	8585GLS/IT	161	18.6	57.3	57
ASGROW	RX764	161	19.9	56.7	58
DEKALB	DK585	156	18.8	57.1	57
ASGROW	RX637	152	17.7	57.4	57
Maturity Average		149	18.6	56.9	58
LSD (0.05)		19	0.7	1.0	1
Early Maturity		Yield	Moist	Test Wt	Days To
Brand/Company	Hybrid	bu/A	%	lb/bu	Silk
ASGROW	RX826	180	21.6	56.4	59
MYCOGEN	2833	179	20.5	51.3	57
PIONEER BRAND	33G26	179	21.2	58.7	59
MYCOGEN	2799IMI	177	20.7	53.1	58
DEKALB	DKC61-24	177	19.8	55.7	59
PIONEER BRAND	3223	177	20.6	56.5	63
PIONEER BRAND	33J56	175	19.6	57.4	59
PIONEER BRAND	33V08(Bt)	170	19.9	57.7	59
GARST	8362	169	19.8	57.5	58
DEKALB	DK647BtY	169	21.0	55.1	59
DEKALB	DKC65-25	168	21.3	56.1	59
DEKALB	DK611	166	20.3	59.4	59
GARST	8464	156	21.7	56.7	57
Maturity Average		164	20.8	56.3	59
LSD (0.05)		22	1.2	0.9	1
Medium Maturity		Yield	Moist	Test Wt	Days To
Brand/Company	Hybrid	bu/A	%	lb/bu	Silk
PIONEER BRAND	31G98	190	22.0	56.3	61
PIONEER BRAND	31B13(Bt)	181	21.1	56.8	60
PIONEER BRAND	31G20	164	23.7	58.6	58
GARST	8341	162	22.3	55.7	59
Maturity Average		164	22.4	56.8	60
LSD (0.05)		20	0.9	1.8	1
Mid-Full Maturity		Yield	Moist	Test Wt	Days To
Brand/Company	Hybrid	bu/A	%	lb/bu	Silk
PIONEER BRAND	31R88	166	25.4	54.0	60
Location Average		169	20.4	56.5	58

Table 13. Two-year average yields at BLACKSTONE, VA in 1999 and 2000.

<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	3223	164	21.0	57.9
PIONEER BRAND	33V08(Bt)	154	20.3	59.1
PIONEER BRAND	33G26	154	20.9	59.3
Maturity Average		157	20.7	58.8
LSD (0.05)		17	0.8	0.8
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	31B13(Bt)	155	22.0	57.5
PIONEER BRAND	31G20	154	23.3	59.0
Maturity Average		155	22.6	58.3
LSD (0.05)		11	0.6	0.9
Location Average		156	21.5	58.6

Table 14. Three-year average yields at BLACKSTONE, VA in 1998, 1999, and 2000.

<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3223	165	20.0
PIONEER BRAND	33V08(Bt)	155	19.2
PIONEER BRAND	33G26	150	19.6
Maturity Average		157	19.6
LSD (0.05)		12	0.5
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	31B13(Bt)	161	21.0
PIONEER BRAND	31G20	154	21.9
Maturity Average		158	21.4
LSD (0.05)		10	0.3
Location Average		157	20.3

Table 15. Yields at ORANGE, VA in 2000.

Very Early Maturity		Yield	Moist	Days To	Ear Ht
Brand/Company	Hybrid	bu/A	%	Silk	inches
AUGUSTA	4584	203	19.6	69	49
AUGUSTA	9884	202	18.3	67	46
AUGUSTA	4484	200	18.6	68	48
DOEBLERS	638XYG	200	17.6	67	52
DEKALB	DK585	198	16.1	65	45
ASGROW	RX637	197	14.8	67	49
DEKALB	DK567	192	15.8	67	47
PIONEER BRAND	34K77	191	16.9	67	47
DEKALB	DKC58-52	188	16.3	67	45
NK BRAND	N58-D1	188	16.4	67	48
AUGUSTA	9873	187	14.7	67	50
PIONEER BRAND	34K78(Bt)	180	17.0	67	52
ASGROW	RX764	176	18.6	68	45
ASGROW	RX708	174	17.0	67	49
GARST	8585GLS/IT	171	16.3	66	42
ASGROW	RX508YG	153	14.8	67	44
Maturity Average		187	16.8	67	47
LSD (0.05)		12	1.2	2	3
Early Maturity		Yield	Moist	Days To	Ear Ht
Brand/Company	Hybrid	bu/A	%	Silk	inches
AUGUSTA	4587	219	19.7	67	50
PIONEER BRAND	33J56	213	18.4	68	50
PIONEER BRAND	33G27(Bt)	210	18.6	67	51
PIONEER BRAND	3223	206	19.9	72	57
AUGUSTA	4487	206	18.9	67	51
NK BRAND	N82-J6	204	21.4	69	52
SOUTHERN STATES	670Bt	204	17.9	70	57
CHEMGRO	7796	203	21.3	72	60
PIONEER BRAND	33G26	202	18.4	67	51
DEKALB	DKC61-24	201	15.8	67	50
AUGUSTA	3387	200	18.1	67	46
DEKALB	DKC65-25	200	17.9	67	49
NK BRAND	N79-L3	199	19.9	67	48
MID-ATLANTIC	MA9116	198	20.0	69	50
PIONEER BRAND	33K81	198	18.0	68	47
SOUTHERN STATES	EXP78351	196	18.1	67	48
ASGROW	RX826	196	19.4	67	48
PIONEER BRAND	33Y09(Bt)	195	16.7	67	51
CHEMGRO	7311	193	19.9	70	50
SOUTHERN STATES	729CL	193	19.1	70	55
CHEMGRO	7596	190	20.8	69	56
PIONEER BRAND	34T14(Bt/LL	190	17.2	67	53
MID-ATLANTIC	MA9137	190	19.3	68	50
DEKALB	DK611	189	17.0	67	52
PIONEER BRAND	33V08(Bt)	187	17.3	68	54
NK BRAND	NX7528	186	19.4	67	48
MID-ATLANTIC	MA9121YG	185	19.0	68	50

Table 15, continued. Yields at ORANGE, VA in 2000.

<b>Early Maturity, cont'd</b>		<b>Yield</b>	<b>Moist</b>	<b>Days To</b>	<b>Ear Ht</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>Silk</b>	<b>inches</b>
MID-ATLANTIC	8011RR	180	18.7	63	47
GARST	8362	180	20.3	67	51
DEKALB	DK647BTY	179	19.9	70	52
NK BRAND	N75-K6	176	18.9	68	50
SOUTHERN STATES	710	175	16.9	68	51
PIONEER BRAND	3394	172	16.9	68	49
GARST	8342GLS/IT	172	20.7	67	46
SOUTHERN STATES	EXP80000	166	20.5	69	45
Maturity Average		193	18.8	68	51
LSD (0.05)		14	1.0	1	3
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Days To</b>	<b>Ear Ht</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>Silk</b>	<b>inches</b>
PIONEER BRAND	31B13(Bt)	216	20.5	71	55
PIONEER BRAND	31G98	212	21.2	70	53
BIO GENE	BG316	209	21.4	67	49
AUGUSTA	9552	206	22.8	74	57
AUGUSTA	2513	205	25.6	71	49
PIONEER BRAND	31G20	205	20.5	69	51
SOUTHERN STATES	849CL	205	22.6	70	50
SOUTHERN STATES	859CL	205	22.2	71	48
PIONEER BRAND	3163	202	23.6	73	50
BIO GENE	BG407	202	20.2	70	54
BIO GENE	BT4220	202	21.8	70	54
SOUTHERN STATES	EXP78406	199	21.1	71	54
AUGUSTA	2062	198	21.9	70	54
MID-ATLANTIC	MA9181	195	22.9	73	57
DOEBLERS	818XYG	192	20.7	71	51
AUGUSTA	3661	190	22.9	71	50
DOEBLERS	765XYG	189	18.4	69	53
DOEBLERS	851XY	187	21.2	71	54
AUGUSTA	9561	185	22.5	70	50
DOEBLERS	747XY	175	20.8	71	50
BIO GENIE	BG408	170	21.4	71	55
BIO GENE	BG422	169	20.7	70	53
Maturity Average		196	21.7	70	52
LSD (0.05)		12	1.3	1	3
<b>Mid-Full Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Days To</b>	<b>Ear Ht</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>Silk</b>	<b>inches</b>
PIONEER BRAND	31R88	211	21.9	71	55
PIONEER BRAND	3156	196	21.8	71	54
DOEBLERS	859XY	180	22.7	72	53
Maturity Average		196	22.1	71	54
LSD (0.05)		12	2.1	2	4
Location Average		193	19.4	69	50

Table 16. Two-year average yields at ORANGE, VA in 1999 and 2000.

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
AUGUSTA	9884	147	19.1
DEKALB	DK585	142	17.3
PIONEER BRAND	34K78(Bt)	138	18.9
AUGUSTA	9873	137	16.7
PIONEER BRAND	34K77	131	17.4
Maturity Average		139	17.9
LSD (0.05)		10	0.6
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3223	143	21.2
PIONEER BRAND	33J56	140	20.0
PIONEER BRAND	33G27(Bt)	137	19.6
PIONEER BRAND	33Y09(Bt)	136	18.4
PIONEER BRAND	34T14(Bt/LL)	134	19.0
PIONEER BRAND	33G26	132	19.4
PIONEER BRAND	33K81	131	18.7
SOUTHERN STATES	729CL	131	20.2
DEKALB	DK611	129	18.0
PIONEER BRAND	3394	129	18.4
PIONEER BRAND	33V08(Bt)	128	19.4
BIO GENE	BG316	119	22.1
MID-ATLANTIC	MA9121YG	108	19.8
Maturity Average		127	19.5
LSD (0.05)		9	0.8
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	31B13(Bt)	157	22.0
PIONEER BRAND	31G20	142	21.4
AUGUSTA	2062	142	22.5
PIONEER BRAND	3163	141	22.9
BIO GENE	BG407	140	20.2
SOUTHERN STATES	859CL	139	22.6
AUGUSTA	2513	139	25.3
SOUTHERN STATES	849CL	138	23.1
AUGUSTA	9561	132	22.6
DOEBLERS	851XY	131	21.2
BIO GENE	BG408	129	21.7
DOEBLERS	765XYG	129	19.0
BIO GENE	BG422	127	21.3
Maturity Average		140	22.0
LSD (0.05)		8	1.0

Table 16, continued. Two-year average yields at ORANGE, VA in 1999 and 2000.

Mid-Full Maturity		Yield	Moist
Brand/Company	Hybrid	bu/A	%
PIONEER BRAND	3156	134	23.3
DOEBLERS	859XY	126	23.1
Maturity Average		130	23.2
LSD (0.05)		9	1.6
Location Average		135	20.5

Table 17. Three-year average yields at ORANGE, VA in 1998, 1999, and 2000.

Very Early Maturity		Yield	Moist
Brand/Company	Hybrid	bu/A	%
AUGUSTA	9873	136	17.8
PIONEER BRAND	34K77	131	18.7
Maturity Average		134	18.3
LSD (0.05)		12	0.7
Early Maturity		Yield	Moist
Brand/Company	Hybrid	bu/A	%
PIONEER BRAND	33Y09(Bt)	133	20.7
PIONEER BRAND	3223	133	24.3
PIONEER BRAND	33V08(Bt)	131	21.7
PIONEER BRAND	33G26	128	20.1
PIONEER BRAND	3394	124	19.4
Maturity Average		130	21.2
LSD (0.05)		9	1.1
Medium Maturity		Yield	Moist
Brand/Company	Hybrid	bu/A	%
PIONEER BRAND	31B13(Bt)	145	26.1
PIONEER BRAND	31G20	137	24.0
PIONEER BRAND	3163	132	25.4
AUGUSTA	2062	128	25.4
SOUTHERN STATES	849CL.	120	25.5
Maturity Average		133	25.3
LSD (0.05)		8	1.3
Mid-Full Maturity		Yield	Moist
Brand/Company	Hybrid	bu/A	%
PIONEER BRAND	3156	126	25.1
Location Average		131	22.6

Table 18. Yields at AUGUSTA, VA in 2000.

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
DOEBLERS	638XYG	237	21.7
DEKALB	DK585	234	20.7
PIONEER BRAND	34K77	233	20.0
ASGROW	RX708	229	20.3
DEKALB	DKC58-52	219	20.7
ASGROW	RX764	215	21.6
AUGUSTA	9884	214	21.2
NK BRAND	N58-D1	213	19.7
DEKALB	DK567	213	20.8
PIONEER BRAND	34K78(Bt)	211	20.2
GARST	8585GLS/IT	202	20.2
AUGUSTA	9873	196	20.0
ASGROW	RX508YG	177	20.6
ASGROW	RX637	174	18.3
Maturity Average		212	20.4
LSD (0.05)		31	
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
DEKALB	DK647BtY	262	22.6
PIONEER BRAND	33J56	258	19.5
MID-ATLANTIC	8011RR	255	22.5
MID-ATLANTIC	MA9137	253	22.3
AUGUSTA	4585	243	21.0
CHEMGRO	7311	240	20.9
NK BRAND	NX7528	238	23.3
PIONEER BRAND	33Y09(Bt)	236	19.7
NK BRAND	N82-J6	236	24.3
MID-ATLANTIC	MA9121YG	234	21.2
AUGUSTA	4485	234	21.8
SOUTHERN STATES	670Bt	233	22.0
AUGUSTA	285	232	20.7
MID-ATLANTIC	MA9116	230	21.6
PIONEER BRAND	33G27(Bt)	230	22.5
SOUTHERN STATES	EXP80000	229	21.6
GARST	8464	228	21.2
ASGROW	RX826	227	23.7
SOUTHERN STATES	EXP78351	226	20.3
PIONEER BRAND	33K81	226	22.4
AUGUSTA	3685	224	22.8
GARST	8362	223	21.9
PIONEER BRAND	32K61	223	20.6
PIONEER BRAND	33G26	222	23.0
DEKALB	DKC61-24	221	20.8
CHEMGRO	7596	217	22.8
DEKALB	DK611	215	21.2
SOUTHERN STATES	710	214	21.3
SOUTHERN STATES	729CL	213	22.3
NK BRAND	N79-L3	213	24.3

Table 18, continued. Yields at AUGUSTA, VA in 2000.

<b>Early Maturity, cont'd</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
CHEMGRO	7796	211	23.8
DEKALB	DKC65-25	211	21.9
PIONEER BRAND	32K62(Bt)	204	22.4
NK BRAND	N75-K6	186	22.8
Maturity Average		228	22.0
LSD (0.05)		29	
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	31G98	268	24.9
PIONEER BRAND	31G20	246	25.4
DOEBLERS	818XYG	243	23.2
SOUTHERN STATES	859CL	240	24.6
SOUTHERN STATES	EXP78406	238	23.6
AGRIPRO	9616	235	22.7
MID-ATLANTIC	MA9181	234	24.6
AGRIPRO	9696	232	22.8
AUGUSTA	9552	230	23.9
GARST	8341	229	23.2
AUGUSTA	2062	228	25.2
SOUTHERN STATES	849CL	225	26.4
AUGUSTA	3762	222	25.6
DOEBLERS	747XY	216	22.7
DOEBLERS	765XYG	215	22.1
AUGUSTA	2513	210	27.7
Maturity Average		232	24.3
LSD (0.05)		28	
<b>Mid-Full Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3156	245	25.3
PIONEER BRAND	31R88	222	25.1
DOEBLERS	859XY	210	26.0
DOEBLERS	887V2	193	28.5
MID-ATLANTIC	MA9200	192	27.9
Maturity Average		212	26.6
LSD (0.05)		25	
Location Average		224	22.5

Table 19. Two-year average yields at AUGUSTA, VA in 1999 and 2000.

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	34K78(Bt)	157	21.7
PIONEER BRAND	34K77	151	20.3
Maturity Average		154	21.1
LSD (0.05)		46	3.4
 <b>Early Maturity</b>		 <b>Yield</b>	 <b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
AUGUSTA	285	173	19.8
PIONEER BRAND	33J56	172	19.5
PIONEER BRAND	32K61	167	21.0
MID-ATLANTIC	MA9121YG	165	21.7
PIONEER BRAND	33G27(Bt)	159	23.0
PIONEER BRAND	33K81	159	21.8
GARST	8464	155	20.3
PIONEER BRAND	33Y09(Bt)	155	21.2
PIONEER BRAND	33G26	152	20.8
DEKALB	DK611	152	20.3
PIONEER BRAND	32K62(Bt)	144	22.8
SOUTHERN STATES	729CL	141	24.5
NK	N79-L3	133	24.8
Maturity Average		156	21.6
LSD (0.05)		22	3
 <b>Medium Maturity</b>		 <b>Yield</b>	 <b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	31G20	172	25.0
AUGUSTA	2062	169	27.1
SOUTHERN STATES	859CL	160	25.3
DOEBLERS	747XY	145	22.2
SOUTHERN STATES	849CL	140	25.9
DOEBLERS	765XYG	132	23.6
Maturity Average		153	24.8
LSD (0.05)		26	3.8
 <b>Mid-Full Maturity</b>		 <b>Yield</b>	 <b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
DOEBLERS	859XY	143	27.6
DOEBLERS	887V2	131	28.5
MID-ATLANTIC	MA9200	129	28.2
PIONEER BRAND	3156	126	29.8
Maturity Average		133	28.4
LSD (0.05)		23	2.8
Location Average		151	23.5

**Table 20. Three-year average yields at AUGUSTA, VA in 1998, 1999, and 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	34K77	160	19.4
<b>Early Maturity</b>			
<b>Brand/Company</b>	<b>Hybrid</b>	<b>Yield</b>	<b>Moist</b>
PIONEER BRAND	285	179	20.0
GARST	32K61	175	20.8
GARST	8464	166	20.1
PIONEER BRAND	33Y09(Bt)	163	21.3
PIONEER BRAND	33G26	160	20.8
Maturity Average		169	20.6
LSD (0.05)		20	2.1
<b>Medium Maturity</b>			
<b>Brand/Company</b>	<b>Hybrid</b>	<b>Yield</b>	<b>Moist</b>
PIONEER BRAND	31G20	179	24.7
GARST	2062	174	25.5
PIONEER BRAND	849CL	153	24.7
Maturity Average		169	24.9
LSD (0.05)		17	2.5
<b>Mid-Full Maturity</b>			
<b>Brand/Company</b>	<b>Hybrid</b>	<b>Yield</b>	<b>Moist</b>
PIONEER BRAND	MA9200	158	26.7
PIONEER BRAND	3156	149	27.2
Maturity Average		154	26.9
LSD (0.05)		32	2.4
Location Average		165	22.8

Table 21. Yields at BLACKSBURG, VA in 2000.

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
GARST	8585GLS/IT	180	19.4	59.7
AUGUSTA	9884	178	20.3	59.6
DOEBLERS	636XY	177	17.3	57.2
NK BRAND	N63-G7	172	19.2	58.6
NK BRAND	N58-D1	157	19.2	59.2
PIONEER BRAND	34K78(Bt)	149	19.2	59.8
Maturity Average		169	19.1	59.0
LSD (0.05)		21	2.2	1.3
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	33J56	210	20.6	60.1
SOUTHERN STATES	EXP78351	205	21.5	58.1
PIONEER BRAND	32K61	205	22.1	62.4
PIONEER BRAND	32K62(Bt)	202	22.8	61.4
SOUTHERN STATES	EXP80000	197	21.1	58.6
SOUTHERN STATES	710	190	19.0	57.5
SOUTHERN STATES	670Bt	185	21.0	57.7
SOUTHERN STATES	729CL	183	21.3	59.5
GARST	8362	183	22.2	58.5
PIONEER BRAND	33G26	180	20.2	61.3
NK BRAND	N79-L3	176	23.2	61.5
PIONEER BRAND	33K81	175	21.4	60.4
PIONEER BRAND	33Y09(Bt)	174	20.5	61.2
DOEBLERS	642XP	173	19.5	60.3
AUGUSTA	285	172	20.5	56.7
NK BRAND	N75-K6	159	22.1	59.9
Maturity Average		186	21.2	59.7
LSD (0.05)		21	1.0	2.1
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	3163	218	22.8	57.7
SOUTHERN STATES	849CL	206	23.4	50.6
PIONEER BRAND	31G98	205	21.6	58.2
AUGUSTA	2062	200	22.1	59.0
NK BRAND	N83-Z8	199	25.2	58.6
BIO GENE	BG407	196	21.8	58.6
AUGUSTA	9552	193	20.1	57.5
NK BRAND	N83-N5	192	23.2	59.7
BIO GENE	BT4220	190	23.0	59.1
SOUTHERN STATES	EXP78406	185	23.1	57.8
AUGUSTA	2513	183	26.0	51.2
DOEBLERS	747XY	181	21.0	56.5
DOEBLERS	851XY	179	22.3	58.5
BIO GENE	BG316	179	20.7	56.5
SOUTHERN STATES	859CL	179	23.6	54.9
BIO GENE	BG422	174	22.8	59.6

Table 21, continued. Yields at BLACKSBURG, VA in 2000.

Medium Maturity, continued		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
BIO GENE	BG408	159	20.4	56.9
GARST	8341	146	21.1	56.9
Maturity Average		187	22.4	57.1
LSD (0.05)		21	1.3	1.3
Mid-Full Maturity		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
PIONEER BRAND	31R88	216	23.3	56.4
DOEBLERS	887V2	208	25.1	51.0
DOEBLERS	859XY	201	22.8	58.5
PIONEER BRAND	3156	184	21.4	56.9
Maturity Average		203	23.1	55.7
LSD		19	1.4	0.8
Location Average		185	21.6	58.2

Table 22. Two-year average yields at BLACKSBURG, VA in 1999 and 2000.

Very Early Maturity		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
DOEBLERS	636XY	149	17.6	56.2
PIONEER BRAND	34K78(Bt)	140	19.9	58.8
Maturity Average		145	18.7	57.5
LSD (0.05)		17	1.6	0.5
Early Maturity		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
PIONEER BRAND	32K62(Bt)	173	22.1	60.0
PIONEER BRAND	33J56	163	20.1	57.5
PIONEER BRAND	32K61	161	21.0	59.7
SOUTHERN STATES	729CL	156	20.2	56.9
AUGUSTA	285	153	19.1	55.0
BIO GENE	BG316	153	20.2	55.5
PIONEER BRAND	33K81	152	20.7	59.1
PIONEER BRAND	33G26	151	19.9	58.6
PIONEER BRAND	33Y09(Bt)	145	19.7	58.3
NK	N79-L3	141	21.7	59.7
Maturity Average		150	20.4	57.9
LSD (0.05)		19	0.9	1.6
Medium Maturity		Yield bu/A	Moist %	Test Wt lb/bu
Brand/Company	Hybrid			
NK	N83-Z8	172	24.4	56.6
PIONEER BRAND	3163	172	21.6	56.0
AUGUSTA	2513	165	24.7	51.6
SOUTHERN STATES	849CL	164	22.4	51.0

<b>Medium Maturity, continued</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
AUGUSTA	2062	163	22.5	57.0
BIO GENE	BG407	157	21.2	56.5
NK	N83-N5	156	22.7	56.5
BIO GENE	BG422	153	22.6	56.5
SOUTHERN STATES	859CL	152	22.4	53.6
DOEBLERS	851XY	151	21.3	56.4
DOEBLERS	747XY	144	19.7	54.7
BIO GENE	BG408	142	20.0	54.8
Maturity Average		159	22.1	55.1
LSD (0.05)		20	1.0	1.6
<b>Mid-Full Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
DOEBLERS	887V2	161	23.4	51.2
DOEBLERS	859XY	157	22.2	55.8
PIONEER BRAND	3156	148	21.7	55.0
Maturity Average		156	22.4	54.0
LSD (0.05)		11	1.0	1.5
Location Average		155	21.3	56.2

**Table 23. Three-year average yields at BLACKSBURG, VA in 1998, 1999, and 2000.**

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
DOEBLERS	636XY	156	18.3
<b>Early Maturity</b>			
<b>Brand/Company</b>	<b>Hybrid</b>	<b>Yield</b>	<b>Moist</b>
PIONEER BRAND	32K61	165	20.9
PIONEER BRAND	33G26	163	20.6
AUGUSTA	285	158	19.6
NK	N79-L3	159	22.5
PIONEER BRAND	33Y09(Bt)	157	19.8
Maturity Average		160	20.7
LSD (0.05)		13	1.0
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3163	169	22.2
SOUTHERN STATES	849CL	167	23.9
NK	N83-N5	159	22.7
BIO GENE	BG407	159	22.1
AUGUSTA	2062	158	22.5
BIO GENE	BG408	144	20.7
Maturity Average		159	22.4
LSD (0.05)		17	0.8

Table 23, continued. Three-year average yields at BLACKSBURG, VA in 1998, 1999, and 2000.

Mid-Full Maturity		Yield	Moist
Brand/Company	Hybrid	bu/A	%
DOEBLERS	859XY	163	22.6
PIONEER BRAND	3156	158	22.3
Maturity Average		160	22.4
LSD (0.05)		11	1.3
Location Average		160	21.5

Table 24. Yields at WYTHE, VA in 2000.

<b>Very Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
NK BRAND	N58-D1	207	23.1	54.3
NK BRAND	N63-G7	206	22.9	54.4
DOEBLERS	636XY	204	23.4	52.6
PIONEER BRAND	34K78(Bt)	186	22.6	56.5
Maturity Average		201	23.0	54.5
LSD (0.05)		9	0.7	1.4
<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	33J56	225	24.3	55.9
PIONEER BRAND	32K62(Bt)	217	24.8	56.7
SOUTHERN STATES	EXP80000	214	25.6	50.7
MYCOGEN	2799IMI	210	23.4	53.6
PIONEER BRAND	32K61	208	24.8	56.2
PIONEER BRAND	33G27(Bt)	208	23.5	58.4
SOUTHERN STATES	670Bt	205	23.8	53.4
PIONEER BRAND	33Y09(Bt)	201	24.1	57.4
SOUTHERN STATES	EXP78351	201	25.1	54.5
NK BRAND	N79-L3	198	25.7	55.4
MYCOGEN	2833	196	24.4	51.4
SOUTHERN STATES	729CL	195	24.0	55.0
SOUTHERN STATES	710	191	22.8	53.5
PIONEER BRAND	33K81	185	25.6	55.1
DOEBLERS	642XP	171	24.8	54.2
NK BRAND	N75-K6	161	25.4	54.2
Maturity Average		199	24.5	54.7
LSD (0.05)		17	1.4	1.6
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>	<b>Test Wt</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>	<b>lb/bu</b>
PIONEER BRAND	31G98	238	25.8	52.9
NK BRAND	N83-N5	222	27.0	53.8
SOUTHERN STATES	859CL	217	27.3	49.6
NK BRAND	N83-Z8	215	27.3	53.4
AUGUSTA	2062	210	27.2	53.1
PIONEER BRAND	3163	206	27.6	52.9
PIONEER BRAND	31G20	206	28.4	54.6
AUGUSTA	9552	205	26.0	53.0
SOUTHERN STATES	849CL	202	27.9	48.0
SOUTHERN STATES	EXP78406	190	26.4	52.9
AUGUSTA	2513	190	30.9	47.8
DOEBLERS	747XY	186	25.5	51.8
DOEBLERS	851XY	165	27.2	52.5
Maturity Average		204	27.3	52.0
LSD (0.05)		18	1.8	1.4

Table 24, continued. Yields at WYTHE, VA in 2000.

Mid-Full Maturity		Yield	Moist	Test Wt
Brand/Company	Hybrid	bu/A	%	Ib/bu
PIONEER BRAND	31R88	211	28.5	53.8
PIONEER BRAND	3156	208	25.8	52.3
DOEBLERS	859XY	187	26.8	53.3
Maturity Average		202	27.0	53.2
LSD (0.05)		22	3.5	2.3
Location Average		201	25.5	53.6

Table 25. Two-year average yields at WYTHE, VA in 1999 and 2000.

Very Early Maturity		Yield	Moist	Test Wt
Brand/Company	Hybrid	bu/A	%	Ib/bu
PIONEER BRAND	34K78(Bt)	172	22.7	57.9
Early Maturity		Yield	Moist	Test Wt
Brand/Company	Hybrid	bu/A	%	Ib/bu
PIONEER BRAND	33J56	190	23.2	57.0
PIONEER BRAND	33G27(Bt)	183	23.0	58.5
PIONEER BRAND	32K61	183	23.6	57.9
PIONEER BRAND	32K62(Bt)	183	24.0	57.5
PIONEER BRAND	33Y09(Bt)	169	22.9	58.4
NK	N79-L3	169	24.8	56.2
PIONEER BRAND	33K81	162	24.0	56.5
DOEBLERS	642XP	154	22.8	56.1
Maturity Average		174	23.5	57.3
LSD (0.05)		13	0.7	1.1
Medium Maturity		Yield	Moist	Test Wt
Brand/Company	Hybrid	bu/A	%	Ib/bu
NK	N83-N5	186	25.5	55.4
NK	N83-Z8	183	25.9	54.9
PIONEER BRAND	31G20	180	27.1	56.3
PIONEER BRAND	3163	180	25.0	54.7
SOUTHERN STATES	859CL	179	25.1	51.1
SOUTHERN STATES	849CL	178	25.7	50.6
DOEBLERS	851XY	160	25.0	54.5
Maturity Average		178	25.8	53.9
LSD (0.05)		16	1.1	0.9
Mid-Full Maturity		Yield	Moist	Test Wt
Brand/Company	Hybrid	bu/A	%	Ib/bu
PIONEER BRAND	3156	176	25.1	53.6
DOEBLERS	859XY	171	25.3	55.3
Maturity Average		173	25.2	54.4
LSD (0.05)		14	1.3	1.4
Location Average		175	24.5	55.7

**Table 26. Three-year average yields at WYTHE, VA in 1998, 1999, and 2000.**

<b>Early Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	32K61	149	23.8
PIONEER BRAND	33Y09(Bt)	147	22.6
Maturity Average		148	23.2
LSD (0.05)		11	0.5
<b>Medium Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
NK	N83-N5	152	24.8
PIONEER BRAND	3163	150	24.2
SOUTHERN STATES	849CL	146	25.2
PIONEER BRAND	31G20	145	26.6
Maturity Average		148	25.2
LSD (0.05)		13	1.1
<b>Mid-Full Maturity</b>		<b>Yield</b>	<b>Moist</b>
<b>Brand/Company</b>	<b>Hybrid</b>	<b>bu/A</b>	<b>%</b>
PIONEER BRAND	3156	142	24.4
Location Average		147	24.5

## SECTION II. CORN HYBRIDS GROWN FOR SILAGE IN VIRGINIA IN 2000.

**Table 27. Corn silage varieties at the Shenandoah Valley in VA in 2000 (thanks to Dennis Showalter and Family of Montezuma, VA).**

Maturity Group	Brand	Hybrid	Dry Matter 35% dry matter tons/acre	Yield at Harvest as harvested tons/acre	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %	
E	Pioneer Brand	32K61	34.98	32.1	6.7	67.7	0.68	0.44	25.7	44.7	78.0	50.0	
E	Pioneer Brand	33J56	34.58	33.6	6.4	68.9	0.69	0.46	24.0	46.1	76.7	48.0	
E	Chemgro	7722	30.59	30.0	5.5	67.6	0.67	0.44	26.5	45.0	74.0	41.1	
E	Chemgro	7007EF	28.48	36.7	5.9	69.3	0.69	0.46	22.4	41.6	78.5	47.2	
E	NK Brand	N79-L3	28.19	29.1	33.95	7.4	69.1	0.69	0.46	22.9	36.9	79.7	45.1
E	Mid Atlantic	MA9116	27.02	31.6	29.90	7.0	68.8	0.69	0.46	24.1	41.5	77.6	45.8
E	Doeblers	638XYG	26.43	26.6	34.82	7.9	66.4	0.66	0.42	29.2	48.5	70.4	38.9
Maturity Average			30.04	31.4	33.64	6.8	68.3	0.68	0.45	25.0	43.5	76.4	45.2
LSD (0.05)			5.19	7.2	4.47	1.0	4.9	0.05	0.07	11.2	17.4	9.6	7.3
CV			11.62	9.4	8.94	6.7	2.9	184	52.99	16.4	52	6.6	
Maturity Group	Brand	Hybrid	Dry Matter 35% dry matter tons/acre	Yield at Harvest as harvested tons/acre	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %	
M	Augusta	5635	38.33	34.9	38.52	6.8	68.5	0.68	0.45	24.7	37.6	74.7	33.8
M	Pioneer Brand	31G98	37.07	30.5	42.60	6.7	69.5	0.70	0.47	21.8	36.8	76.1	35.5
M	Pioneer Brand	3130	36.33	31.4	40.42	7.0	67.1	0.67	0.43	27.5	41.9	71.6	30.9
M	NK Brand	N83-N5	36.08	32.8	38.71	7.1	70.0	0.70	0.47	20.7	34.8	79.8	41.8
M	Agipro	9646	35.74	34.2	36.59	6.9	69.0	0.69	0.46	23.7	40.8	78.6	47.3
M	Augusta	2062	34.26	33.1	36.22	7.2	68.9	0.69	0.46	22.7	42.0	73.6	36.6
M	Dekalb	DK697	33.71	39.2	30.12	6.9	67.9	0.67	0.44	26.0	42.6	72.2	33.4
M	Cargill	7511FQ	33.54	34.2	34.35	7.0	68.9	0.69	0.45	23.9	40.4	74.1	35.6
M	Pioneer Brand	31R88	33.27	27.3	42.66	7.6	67.7	0.68	0.44	26.5	41.1	73.9	36.5
M	Augusta	9552	31.64	30.5	36.40	7.5	66.6	0.66	0.42	28.6	46.9	73.2	42.0
M	Southern States	859IT	31.14	30.4	35.91	7.1	69.2	0.69	0.46	23.3	36.3	75.7	33.6
M	Doeblers	747XXY	30.15	33.4	31.54	6.9	68.8	0.68	0.45	24.2	38.3	78.8	44.2
M	Augusta	3556	29.71	30.5	34.01	6.7	68.1	0.68	0.44	25.6	45.5	72.2	38.4

Table 27, continued. Corn silage varieties at the Shenandoah Valley in VA in 2000.

Maturity Group	Brand	Hybrid	Yield			Crude Protein			TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility			NDI %
			35% dry matter tons/acre	Dry Matter at Harvest %	Yield as harvested tons/acre	Protein %	Crude Protein %	Whole Plant Digestibility %						Digestibility %	Whole Plant Digestibility %		
M	Dekalb	DK687	29.43	26.2	39.33	7.8	68.6	0.68	0.45	24.5	40.8	78.2	46.4	45.0	77.6	45.0	
M	Mid Atlantic	MA9174	29.31	31.4	32.73	7.4	68.4	0.68	0.45	22.4	41.4	77.6	45.0	45.0	77.6	45.0	
M	Pioneer Brand	3172	29.28	26.6	38.46	7.1	66.2	0.66	0.42	29.5	47.3	69.7	36.0	36.0	72.6	41.6	
M	Doeblers	75X2	29.12	28.8	35.35	7.8	68.3	0.68	0.45	25.1	41.4	76.5	40.2	40.2	72.6	40.2	
M	Southern States	849IT	28.63	29.5	33.98	8.0	67.1	0.67	0.43	27.6	46.6	72.6	40.2	40.2	72.6	40.2	
M	Cargill	7512	28.16	25.1	39.27	8.6	69.8	0.70	0.47	21.4	37.3	80.1	46.7	46.7	80.1	46.7	
M	Bio Gene	TL112	27.88	28.3	34.51	7.5	67.5	0.67	0.44	26.9	44.6	73.7	40.7	40.7	73.7	40.7	
M	Augusta	3562	27.60	27.1	35.72	7.7	66.8	0.66	0.43	28.3	45.1	75.8	41.2	41.2	75.8	41.2	
M	Asgrow	RX889	26.91	32.0	29.47	7.0	69.2	0.69	0.46	23.2	38.6	77.4	41.3	41.3	77.4	41.3	
M	Augusta	2513	26.82	28.0	33.57	8.2	69.2	0.69	0.46	23.2	39.5	76.0	39.0	39.0	76.0	39.0	
M	Garst	8222IT	26.80	29.4	31.92	7.5	69.2	0.69	0.46	23.3	38.8	76.2	38.5	38.5	76.2	38.5	
M	Southern States	897	26.05	27.9	32.61	7.0	67.7	0.67	0.44	26.4	46.7	74.2	44.9	44.9	74.2	44.9	
Maturity Average		31.08	30.5	35.80	7.3	68.3	0.68	0.45	24.8	41.3	75.3	39.6	39.6	75.3	39.6		
LSD (0.05)		4.03	6.8	3.81	1.3	2.6	0.03	0.03	6.2	9.4	6.4	10.0	10.0	4.1	12.1	12.9	
Maturity Group	Brand	Hybrid	Dry Matter Yield	Dry Matter at Harvest %	Yield as harvested tons/acre	Protein %	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	Digestibility %	Whole Plant Digestibility %	NDF %	
L	Doeblers	858XMD	35.50	34.4	36.09	6.4	67.9	0.67	0.44	26.1	45.7	75.7	47.1	47.1	75.7	47.1	
L	Mid Atlantic	MA9200	33.29	32.7	35.78	7.3	69.5	0.69	0.47	22.6	41.7	78.0	47.8	47.8	78.0	47.8	
L	NK Brand	82-J6	32.21	33.1	33.91	6.9	70.0	0.70	0.47	21.5	40.1	80.3	50.5	50.5	80.3	50.5	
L	Southern States	1150	31.30	30.7	35.69	7.3	66.3	0.66	0.42	29.4	51.4	72.1	45.6	45.6	72.1	45.6	
L	NK Brand	N91-R9	30.86	28.1	38.52	6.1	65.0	0.65	0.40	32.1	54.4	70.8	47.4	47.4	70.8	47.4	
L	Mid Atlantic	MA9201	29.81	32.2	32.42	7.5	69.1	0.69	0.46	23.1	40.9	79.5	51.4	51.4	79.5	51.4	
L	Cargill	8681FQ	28.68	31.9	31.46	7.0	68.3	0.68	0.45	25.3	41.0	79.1	49.3	49.3	79.1	49.3	
L	Doeblers	859XY	28.17	29.2	33.63	7.2	67.7	0.67	0.44	26.4	45.3	74.7	44.6	44.6	74.7	44.6	
L	Cargill	8511FQ	25.93	28.9	31.43	7.0	68.5	0.68	0.45	24.7	41.3	78.8	49.0	49.0	78.8	49.0	
Maturity Average		30.64	31.2	34.32	7.0	68.0	0.68	0.44	25.7	44.7	76.6	48.1	48.1	76.6	48.1		
LSD (0.05)		4.56	6.8	4.41	0.9	3.0	0.03	0.04	6.4	9.6	5.6	14.3	14.3	5.6	14.3		

**Yields are reported as harvested (at the dry matters indicated) and as adjusted to 35% dry matter. Adjusted yields are better for making hybrid comparisons.** **Hybrids have been ordered by descending yields adjusted to 65% moisture. The Least Significant Differences (LSDs) are an indicator of the amount of variation that was observed across the samples within maturity groups. For each characteristic, we can be 95% sure that two varieties are truly different only if they differ by the amount of the LSD or more. It is recommended that in selecting corn varieties for silage, select first those with good yield potential from the relative maturity group you need and then rank those high-yielding varieties for fiber digestibility. For corn silage, whole plant moisture is our best indicator of maturity at harvest and can have a dramatic impact on fiber quality. In comparing digestibilities, consider the dry matter % at harvest as well.**

CV (L Mat)

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8.79 5.9 1.9

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**Table 28. Corn silage varieties at Blackstone, VA in 2000 (thanks to the Southern Piedmont AREC).**

Maturity Group	Brand	Hybrid	Yield 35% dry matter tons/acre	Dry Matter at Harvest %	Yield tons/acre	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %
E	Mid-Atlantic	MA9116	26.13	38.6	24.26	7.5	65.9	0.66	0.42	30.2	53.3	71.3	46.8
E	Doeblers	638XYG	25.50	39.3	24.03	6.5	67.1	0.67	0.43	27.6	49.0	76.4	52.6
E	Pioneer Brand	33J56	25.42	38.8	23.73	7.0	68.0	0.68	0.44	25.8	47.4	71.9	40.2
E	Pioneer Brand	32K61	24.54	39.9	22.42	6.4	65.4	0.65	0.41	31.2	54.7	70.6	46.8
E	NK Brand	N79-L3	24.36	39.3	21.75	6.7	68.3	0.68	0.45	25.3	47.2	74.4	44.3
Maturity Average			25.19	39.2	23.24	6.8	66.9	0.66	0.43	28.0	50.3	72.9	46.1
LSD (0.05)			3.08	5.3	3.14	1.4	3.1	0.04	0.04	6.5	13.8	9.2	14.5
			7.45	4.9	8.76	7.4	1.7	1.91	3.19	8.4	9.9	4.4	11.3
Maturity Group	Brand	Hybrid	Yield 35% dry matter tons/acre	Dry Matter at Harvest %	Yield tons/acre	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %
M	NK Brand	N83-N5	28.55	31.4	27.36	6.8	64.5	0.64	0.40	33.2	53.7	69.3	43.1
M	Pioneer Brand	31R88	28.37	37.4	27.40	6.5	67.9	0.68	0.44	26.1	46.7	71.6	38.6
M	Southern States	8591T	27.97	36.6	26.83	6.6	66.7	0.66	0.43	28.4	49.0	70.9	40.9
M	Augusta	9552	27.88	39.5	26.32	6.5	68.0	0.68	0.44	25.7	44.4	75.2	44.6
M	Pioneer Brand	3172	27.41	37.5	26.07	6.5	66.1	0.66	0.42	29.7	49.9	70.0	39.2
M	Pioneer Brand	31G98	27.01	36.2	27.26	6.4	67.7	0.68	0.44	26.4	46.6	73.7	43.2
M	Dekalb	DK687	26.28	36.6	25.66	7.4	67.4	0.67	0.43	26.9	50.3	72.7	44.8
M	Pioneer Brand	3130	26.27	38.4	24.89	6.4	65.0	0.65	0.40	32.1	53.7	68.0	40.4
M	Augusta	5635	26.03	34.4	25.46	6.5	66.5	0.66	0.42	28.9	49.2	71.1	40.8
M	Dekalb	DK697	25.43	39.3	23.26	6.6	66.1	0.66	0.42	29.7	53.3	66.9	35.0
M	Augusta	3556	25.38	37.4	24.49	6.5	66.3	0.66	0.42	29.3	47.9	76.5	53.1
M	Augusta	3562	24.97	37.0	24.56	7.1	66.3	0.66	0.42	29.4	52.5	71.5	44.7
M	Southern States	8491T	24.53	37.7	23.43	7.4	67.6	0.67	0.44	26.7	49.1	75.9	51.5
M	Mid-Atlantic	MA9174	24.11	35.1	25.18	7.2	66.9	0.67	0.43	28.1	48.1	73.3	44.2
M	Doeblers	747XY	24.08	36.1	23.02	7.1	66.8	0.66	0.43	28.4	49.7	73.8	47.9
M	Augusta	2062	23.71	36.6	23.20	6.3	65.9	0.65	0.42	30.2	52.5	71.3	43.9

**Table 28, continued. Corn silage varieties at Blackstone, VA in 2000.**

Maturity Group	Brand	Hybrid	Yield 35% dry matter tons/acre	Dry Matter at Harvest %	Crude Yield tons/acre	Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %
M	Asgrow	RX889	23.29	33.9	24.64	6.9	66.0	0.66	0.42	29.9	52.5	72.5	46.2
M	Augusta	2513	23.04	37.2	23.01	7.3	65.1	0.65	0.41	31.8	54.4	69.8	44.6
M	Doeblers	75X2	22.89	35.4	22.43	7.0	66.5	0.66	0.42	28.9	47.8	73.6	46.2
M	Southern States	897	21.47	35.8	21.96	8.0	67.7	0.67	0.44	26.5	47.5	75.1	47.9
Maturity Average		25.43	36.5	24.82	6.8	66.5	0.66	0.42	28.8	49.9	72.1	44.0	
LSD (0.05)		4.15	5.8	3.83	1.2	3.0	0.03	0.04	6.2	9.0	6.7	9.1	
		11.51	7.6	10.90	8.5	2.1	2.42	4.67	10.3	8.6	4.4	9.9	
Maturity Group	Brand	Hybrid	Yield 35% dry matter tons/acre	Dry Matter at Harvest %	Crude Yield tons/acre	Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %
L	NK Brand	N91-R9	27.18	32.9	29.32	6.2	64.9	0.64	0.40	32.2	52.9	70.0	44.1
L	Doeblers	858XMD	24.88	38.5	23.30	6.4	65.0	0.65	0.41	32.0	54.4	68.9	41.2
L	Mid-Atlantic	MA9201	24.03	34.4	24.50	7.2	66.9	0.67	0.43	28.0	48.9	73.9	48.4
L	Southern States	1150	23.68	32.8	25.26	7.9	65.5	0.65	0.41	31.0	56.2	70.3	47.5
L	Mid-Atlantic	MA9200	22.98	34.0	24.27	7.8	69.1	0.69	0.46	23.5	44.1	76.8	47.9
L	Doeblers	859XY	22.04	35.8	21.92	6.6	66.1	0.66	0.42	29.8	50.4	71.5	43.9
Maturity Average		24.13	34.7	24.76	7.0	66.3	0.66	0.42	29.4	51.1	71.9	45.5	
LSD (0.05)		3.74	5.9	3.06	1.4	2.1	0.02	0.03	4.3	9.3	9.0	14.9	
		10.30	6.6	8.20	7.6	1.2	1.20	2.71	5.7	7.1	4.8	12.8	

Yields are reported as harvested (at the dry matters indicated) and as adjusted to 35% dry matter. Adjusted yields are better for making hybrid comparisons. Hybrids have been ordered by descending yields adjusted to 65% moisture. The Least Significant Differences (LSDs) are an indicator of the amount of variation that was observed across the samples within maturity groups. For each characteristic, we can be 95% sure that two varieties are truly different only if they differ by the amount of the LSD or more. It is recommended that in selecting corn varieties for silage, select first those with good yield potential from the relative maturity group you need and then rank those high-yielding varieties for fiber digestibility. For corn silage, whole plant moisture is our best indicator of maturity at harvest and can have a dramatic impact on fiber quality. In comparing digestibilities, consider the dry matter % at harvest as well.

**Table 29. Corn silage varieties at Wythe County, VA in 2000 (thanks to the Huffard Dairy Farm).**

Maturity Group	Brand	Hybrid	Yield tons/acre	Dry Matter % 35% dry matter	Yield tons/acre	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %
E	Pioneer Brand	33J56	30.36	32.6	32.55	6.8	69.2	0.69	0.46	23.3	41.0	75.3	40.0
E	Mycogen	TMF114	28.60	30.5	32.86	6.7	67.2	0.67	0.43	27.5	46.6	74.2	44.7
E	Doeblers	638XYG	26.65	28.3	32.92	6.8	68.6	0.68	0.45	24.6	43.4	78.4	50.5
E	Pioneer Brand	32K61	25.80	28.8	31.30	6.5	66.7	0.67	0.43	28.6	47.1	72.6	41.9
E	NK Brand	N79-L3	25.51	29.7	29.93	7.3	68.1	0.68	0.45	25.7	44.3	77.6	48.9
E	Mid-Atlantic	MA9116	22.01	26.9	28.63	7.7	68.2	0.68	0.45	25.5	45.3	77.8	49.9
Maturity Average			26.49	29.5	31.36	7.0	68.0	0.68	0.44	25.9	44.6	76.0	46.0
LSD (0.05)			4.09	8.6	3.12	1.3	2.1	0.02	0.02	4.5	7.6	4.6	14.8
			10.25	11.4	6.01	7.1	1.2	1.43	2.19	6.7	6.6	2.3	12.5
Maturity Group	Brand	Hybrid	Yield tons/acre	Dry Matter % 35% dry matter	Yield tons/acre	Crude Protein %	TDN %	NE <sub>(L)</sub> Mcal/lb	NE <sub>(G)</sub> Mcal/lb	ADF %	NDF %	Whole Plant Digestibility %	NDF Digestibility %
M	Pioneer Brand	31G98	32.27	29.7	38.15	6.3	68.1	0.68	0.44	25.5	42.0	75.6	41.9
M	Augusta	3556	30.48	32.5	32.79	7.2	69.7	0.69	0.46	22.3	38.1	81.5	52.0
M	Augusta	2062	29.85	32.7	31.99	6.6	69.1	0.69	0.46	22.9	39.5	78.5	46.2
M	NK Brand	N83-N5	29.56	32.4	31.92	6.7	69.4	0.69	0.46	22.5	39.6	81.2	53.1
M	Pioneer Brand	3130	29.38	29.8	34.54	6.9	68.6	0.68	0.45	24.4	43.9	79.0	52.5
M	Southern States	8591T	27.98	27.8	35.28	6.8	67.6	0.67	0.44	26.6	47.3	74.4	46.4
M	Augusta	2513	27.86	30.3	32.30	7.0	68.5	0.68	0.45	24.8	45.2	76.4	49.0
M	Augusta	9552	26.83	29.4	31.92	6.8	66.4	0.66	0.42	27.6	43.8	77.6	50.8
M	Mid-Atlantic	MA9174	26.25	28.7	32.05	7.3	69.3	0.69	0.46	22.8	44.1	77.5	49.2
M	Pioneer Brand	31R88	25.88	26.6	34.23	6.4	67.5	0.67	0.44	26.9	44.8	76.9	50.0
M	Augusta	3552	25.60	27.7	32.36	6.8	66.4	0.66	0.42	29.1	50.7	76.6	56.2
M	Doeblers	747XY	24.96	31.7	27.38	6.9	68.8	0.69	0.46	23.8	39.5	79.8	49.3
M	Dekalb	DK697	24.87	28.5	30.55	6.2	68.4	0.68	0.45	24.1	42.7	77.8	47.2
M	Southern States	897	24.84	27.7	31.36	7.2	68.9	0.69	0.45	24.0	43.2	77.1	46.6
M	Pioneer Brand	3172	24.72	27.2	31.86	7.2	66.8	0.67	0.43	28.2	49.5	73.6	48.3

**Table 29, continued. Corn silage varieties at Wythe County, VA in 2000.**

Maturity Group	Brand	Hybrid	Dry Matter Yield 35% dry matter tons/acre	%	Dry Matter at Harvest tons/acre	%	Crude Protein as harvested %	Crude Protein %	TDN	NE <sub>L</sub> Mcal/lb	NE <sub>G</sub> Mcal/lb	ADF	NDF	Whole Plant Digestibility %	NDF Digestibility %
M	Augusta	5635	23.78	28.2	29.56	7.0	67.9	0.67	0.44	26.0	44.5	78.3	52.4		
M	Southern States	849IT	23.65	29.7	28.44	6.8	69.1	0.69	0.46	22.8	43.5	80.2	56.1		
M	Asgrow	RX889	22.13	27.7	28.00	7.3	67.9	0.68	0.44	26.1	45.8	75.2	45.9		
M	Doeblers	75X2	21.36	26.1	28.63	6.8	66.6	0.66	0.43	28.8	50.9	75.3	53.2		
M	Dekalb	DK687	18.74	23.0	28.56	7.0	65.5	0.65	0.41	30.9	50.5	75.1	53.2		
Maturity Average			26.05	28.9	31.59	6.9	68.0	0.68	0.44	25.5	44.5	77.4	50.0		
LSD (0.05)			3.89	6.8	4.36	1.2	3.6	0.04	0.05	8.4	12.6	7.7	8.0		
Maturity Group	Brand	Hybrid	Dry Matter Yield 35% dry matter tons/acre	%	Dry Matter at Harvest tons/acre	%	Crude Protein as harvested %	Crude Protein %	TDN	NE <sub>L</sub> Mcal/lb	NE <sub>G</sub> Mcal/lb	ADF	NDF	Whole Plant Digestibility %	NDF Digestibility %
L	Mid-Atlantic	MA9200	26.17	30.3	30.31	7.4	68.4	0.68	0.45	24.5	42.5	78.6	49.0		
L	Doeblers	858XMD	25.64	29.7	30.37	6.8	67.2	0.67	0.43	27.4	44.8	72.8	39.5		
L	Mid-Atlantic	MA9201	25.23	29.4	29.99	7.0	68.4	0.68	0.45	24.9	41.5	78.1	47.5		
L	Doeblers	859XY	24.17	29.3	28.87	7.5	68.6	0.68	0.45	24.6	42.3	77.6	47.5		
L	Southern States	1150	24.12	28.4	29.68	7.3	66.6	0.66	0.43	28.7	51.5	72.8	46.2		
L	NK Brand	N91-R9	23.85	25.6	32.61	6.8	65.6	0.65	0.41	30.8	49.7	71.7	42.5		
Maturity Average			24.86	28.8	30.31	7.2	67.5	0.67	0.44	26.8	45.40	75.3	45.4		
LSD (0.05)			3.63	7.3	3.20	1.3	3.1	0.03	0.04	6.9	12.80	6.2	5.4		
			9.70	9.9	7.01	7.2	1.8	1.86	3.80	10.1	11.0	3.2	4.6		

**Yields are reported as harvested (at the dry matters indicated) and as adjusted to 35% dry matter. Adjusted yields are better for making hybrid comparisons. Hybrids have been ordered by descending yields adjusted to 65% moisture. The Least Significant Differences (LSDs) are an indicator of the amount of variation that was observed across the samples within maturity groups. For each characteristic, we can be 95% sure that two varieties are truly different only if they differ by the amount of the LSD or more. It is recommended that in selecting corn varieties for silage, select first those with good yield potential from the relative maturity group you need and then rank those high-yielding varieties for fiber digestibility. For corn silage, whole plant moisture is our best indicator of maturity at harvest and can have a dramatic impact on fiber quality. In comparing digestibilities, consider the dry matter % at harvest as well.**

### SECTION III. VIRGINIA WHITE CORN HYBRID TRIALS IN 2000.

Table 30. White corn hybrid yields at HOLLAND, VA in 2000.

Brand	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu
PIONEER	33T17	211	23.0	53.9
ZIMMERMAN	Z64W	209	27.2	51.4
ZIMMERMAN	1851W	203	25.5	52.4
ZIMMERMAN	Z62W	198	22.4	52.4
PIONEER	32K72	196	25.4	53.6
ZIMMERMAN	Z74W	189	25.2	53.9
PIONEER	32Y52	188	24.8	53.7
ASGROW	RX901W	185	25.6	54.7
PIONEER	32H39	183	23.4	53.5
DEKALB	DK665W	181	23.7	53.6
ASGROW	RX776W	181	23.6	54.1
ASGROW	RX921W	174	26.5	54.1
Location Average		192	24.7	53.4
LSD (0.05)		29	1.3	0.9

Table 31. White corn hybrid yields at MT HOLLY, VA under irrigation in 2000.

Brand	Hybrid	Yield bu/A	Moist %	Test Wt lb/bu
PIONEER	32K72	232	20.0	57.2
ZIMMERMAN	Z64W	230	20.2	52.9
PIONEER	32Y52	224	20.3	56.9
PIONEER	33T17	221	19.8	58.7
ZIMMERMAN	Z62W	214	19.3	56.4
ZIMMERMAN	Z74W	211	20.1	56.7
ASGROW	RX776W	198	19.3	56.3
ZIMMERMAN	1851W	185	20.4	54.1
PIONEER	32H39	184	20.6	57.3
ASGROW	RX901W	163	21.6	57.6
ASGROW	RX921W	158	20.8	57.6
DEKALB	DK665W	137	21.1	56.8
Location Average		197	20.3	56.5
LSD (0.05)		35	1.3	1.2

**Table 32. RESISTANCE AND AGRONOMIC CHARACTERS OF CORN HYBRIDS UNDER NATURAL GRAY LEAF SPOT DISEASE PRESSURE, MONTGOMERY CO., VA, 2000:** Gray leaf spot disease ratings, grain harvest moisture, bushel weights, and grain yields were obtained for 40 corn hybrids and a known high-yielding susceptible check hybrid, Pioneer Brand 3394 (highlighted in gray in the table below), grown under high gray leaf spot disease pressure on VPI&SU's Whitethorne-Kentland Experimental Farm, Montgomery Co., VA. Prior to planting on a Hayter silt loam, pH 6.7, a fertilizer containing 200 lb N, 45 lb P and 25 lb K per acre was broadcast. The experimental design was a randomized complete block replicated four times with plots consisting of four 25-ft rows spaced 30 in. apart and seeded at a rate of 25,000 seeds/A. The plots were no-tillage planted on 5 May into a field continuously cropped to corn since 1986 and abundantly covered with corn debris naturally infested with *Cercospora zeae-maydis*, the causal agent of gray leaf spot. Leaf blighting or gray leaf spot (GLS) reaction was assessed four times and is reported as a GLS Severity Index (0-5) read in 0.1 units. Hybrids were also rated for percentage stalks lodged just prior to harvest, grain moisture at harvest, bushel weight, and grain yield adjusted to 15.5% moisture. Grain was mechanically harvested on 27 Oct with a Massey Ferguson 8XP plot combine.

Moisture in the soil profile at planting and weather for thirty days after planting provided conditions favorable for vigorous stand establishment. GLS lesions were first observed on the lower leaves of susceptible hybrids by mid-June. From late June through August temperatures were mild to warm with abundant rainfall. These conditions were generally favorable for disease development. GLS lesions had moved to the ear leaf and above on the more susceptible hybrids by 13 Jul and to the top of these hybrids by 7 Aug. Significant differences in GLS ratings among hybrids were apparent at all rating periods. At harvest, statistically significant differences among hybrids occurred in grain yield, grain moisture at harvest, and bushel weights. Generally those hybrids that blighted least had the higher yields. The susceptible check hybrid, Pioneer Brand 3394, the most heavily blighted, ranked 40<sup>th</sup> for grain yield of the 41 hybrids evaluated and yielded 61 bushels less than the highest yielding hybrid in the test.

Hybrid <sup>1</sup>	GLS Severity Index (0-5) <sup>2</sup>			Grain <sup>3</sup>	Bu wt <sup>4</sup>	Yield <sup>5</sup>
	13 Jul	7 Aug	22 Aug	H <sub>2</sub> O 27 Oct	in lbs 27 Oct	Bu/A 27 Oct
DEKALB DK647 .....	1.30q-s	2.13pq	3.53j-l	9.4h-k	54.3i-n	146.8a <sup>6</sup>
NK BRAND NX6909 .....	1.53l-p	2.25k-p	3.60i-k	13.6b-g	57.4de	146.1a
PIONEER BRAND 33Y18 ..	1.83d-h	2.28j-o	3.35mn	14.3b-d	59.9ab	138.3ab
FFR COOPERATIVE SS729CL	1.53l-p	2.33h-m	3.53j-l	13.0b-h	59.2a-c	136.2a-c
DEKALB DK585 .....	1.58j-n	2.28j-o	3.48k-m	10.1e-k	56.1e-g	135.0a-d
NK BRAND NX7939 .....	1.40o-s	2.23l-p	3.43l-n	15.9b	60.1a	134.9a-d
DEKALB RX826 .....	1.68h-l	2.45d-h	3.65h-j	8.8i-m	54.5i-m	133.8a-d
NK BRAND N63-G7 .....	1.55k-o	2.30i-n	3.73g-i	5.3l-n	54.9g-k	130.3b-e
NK BRAND NX7129 .....	1.43n-r	2.18n-p	3.33mn	16.3b	59.2a-c	129.0b-f
DEKALB RX764 .....	1.45m-q	2.28j-o	3.65h-j	9.5g-k	56.1e-h	127.7b-g
NK BRAND NX5928 .....	1.78e-i	2.40e-j	4.05c-e	5.2mn	52.4pq	125.1b-h
NK BRAND NX5319 .....	1.58j-n	2.35g-l	3.78f-h	7.2j-n	53.3l-p	124.2b-i
DEKALB RX889 .....	1.15t-v	2.18n-p	3.30n	11.3c-j	55.6f-j	122.9b-j
NK BRAND N83-28 .....	1.65i-l	2.30i-n	3.60i-k	16.4b	60.5a	122.7b-j
NK BRAND N83-N5 .....	1.63i-l	2.25k-p	3.43l-n	14.9bc	60.1a	121.7b-k
DEKALB DK617 .....	1.73f-j	2.28j-o	3.88fg	6.1k-n	54.3i-m	121.6c-k
NK BRAND NX6569 .....	1.60j-m	2.50c-f	4.18bc	11.2c-j	55.7f-I	120.3c-l
PIONEER BRAND 31R88 ..	1.33q-s	2.20m-p	3.38l-n	22.3a	57.8d	119.2d-m
NK BRAND NX5768 .....	1.60j-m	2.40e-j	4.10cd	9.7g-k	54.1j-o	114.1e-n
NK BRAND N58D1 .....	1.60j-m	2.48c-g	4.08cd	7.7j-n	53.1m-p	113.7f-n
PIONEER BRAND 33J56 ..	1.98cd	2.60bc	4.30b	9.0h-m	54.9g-k	113.3f-n
PIONEER BRAND 32K61 ..	1.70g-k	2.38f-k	3.83fg	13.9b-f	59.4ab	113.2f-n
DEKALB DK683 .....	1.13uv	2.20m-p	3.13o	15.6b	57.9cd	112.6f-n
NK BRAND NX8349 .....	1.05v	2.15op	3.33mn	14.4b-d	50.9r	111.9g-n
FFR COOPERATIVE SS943	1.05v	2.03q	2.90p	17.0b	52.8n-q	111.6g-n
NK BRAND N75-K6 .....	1.65i-l	2.28j-o	3.63i-k	16.5b	60.2a	111.0g-n

PTR COOPERATIVE SS3897	1.25s-u	2.10n-p	3.55mm		14.00-i	55.8k-p	108.2i-n
PIONEER BRAND 33Y09 ..	1.88c-f	2.58cd	4.03de		10.4d-j	56.2e-g	107.4i-n
FFR COOPERATIVE SS900Bt	1.60j-m	2.73b	3.83fg		9.3h-l	52.6pq	107.3j-n
NK BRAND N91-R9 .....	1.38p-s	2.28j-o	3.08o		21.2a	58.6b-d	107.0j-n
PIONEER BRAND 33G26 ..	2.15b	2.60bc	3.85fg		10.2e-k	56.5ef	106.2j-o
PIONEER BRAND 31G98 ..	2.00c	2.53c-e	3.83fg		10.0e-k	54.6h-l	105.5k-o
NK BRAND N79-P4 .....	1.85c-g	2.33h-m	3.85fg		16.6b	60.6a	104.6l-o
FFR COOPERATIVE SS849CL	1.58j-n	2.25k-p	3.40l-n		14.5b-d	51.5qr	103.4l-o
NK BRAND N79-L3 .....	...	1.90c-e	2.43e-i	3.88fg	14.0b-e	59.3a-c	
102.4m-o DEKALB DKC65-25 .....		1.55k-o	2.45d-h	4.08cd	7.0j-n	54.2j-o	
101.lno FFR COOPERATIVE SS859CL	1.58j-n	2.60bc	3.93ef		9.9f-k	53.6k-p	
100.2n-p							
PIONEER BRAND 3156 ....	1.98cd	2.43e-i	3.88fg		13.0b-i	55.0f-k	90.7o-q
PIONEER BRAND 3394 ....	2.38a	3.45a	4.58a		4.0n	52.8o-q	85.8pq
PIONEER BRAND 3172 ....	1.73f-j	2.45d-h	3.73g-i		9.0h-m	53.8k-p	82.6q
LSD (P≤0.05)	=	0.14	0.12	0.13	3.5	1.2	13.7
Standard Deviation	=	0.098	0.083	0.094	2.467	0.891	9.793
Coefficient of Variation	=	6.14	3.52	2.57	20.87	1.59	8.44

<sup>1</sup>Hybrid entry planted in four 25-foot rows spaced 2.5 feet apart and replicated four times.

<sup>2</sup>GLS Disease Severity Index: 0 = no gray leaf spot lesions; 1 = trace of lesions below ear, none above; 2 = many lesions below ear, trace above; 3 = severe lesion development below ear, all leaves above with lesions; 4 = all leaves with severe lesion development, but green tissue still visible; 5 = all leaves dry and dead.

<sup>3</sup>Grain moisture at harvest expressed in percent.

<sup>4</sup>Bushel weight expressed in pounds at a standard 15.5% grain moisture.

<sup>5</sup>Yield expressed in bushels per acre at a standard 15.5% grain moisture.

<sup>6</sup>Means with letters in common do not differ statistically (P≤0.05) by Duncan's Multiple Range Test.

**LEAF SPOT DISEASE PRESSURE, WYTHE CO., VA, 2000:** Gray leaf spot (GLS) ratings, yield, harvest grain moisture, and lodging ratings were obtained for 48 corn hybrids and one known high yielding, susceptible check hybrid, Pioneer Brand 3394 (highlighted in gray in the table below) grown under moderately heavy gray leaf spot disease pressure on a farmer cooperator's field in Wythe Co., VA. Prior to planting on a clay silt loam, pH 6.8, a fertilizer containing 170 lb N, 40 lb P, and 25 lb K per acre was broadcast. The experimental design was a randomized complete block replicated four times with plots consisting of four 25-ft rows spaced 30 in. apart and seeded at a rate of 25,000 seeds/A. The plots were no-tillage planted with an Almaco two-row cone planter on 5 May into a field that has been no-tillage planted every year to corn since 1965 and abundantly covered with corn debris naturally infested with *C. zea-maydis*. Leaf blighting was assessed one time and is reported as a disease severity index (0-5). Hybrids were also rated for percentage stalks lodged just prior to harvest, grain moisture at harvest, bushel weight, and grain yield in bu/A adjusted to 15.5% moisture. Grain was harvested on 20 Oct with a Massey-Ferguson 8XP plot combine.

Growing conditions early in the season were good with moderate temperatures and moisture. From June through early-September the weather was unseasonably wet with moderate temperatures. These conditions were favorable for the early development of disease, however, the frequent rains throughout the July and August appeared to retard continued development of GLS. Despite this reduced disease pressure, differences in blighting among hybrids were apparent. Statistically significant ( $P \leq 0.05$ ) differences among hybrids occurred for bushel weight, grain yield, grain moisture, and blighting. The susceptible check hybrid, Pioneer Brand 3394, the most heavily blighted, ranked 40<sup>th</sup> for grain yield of the 41 hybrids evaluated and yielded 69.5 bushels less than the highest yielding hybrid in the test.

Hybrid <sup>1</sup>	GLS Severity Index (0-5) <sup>2</sup> 25 Jul	Grain <sup>3</sup>	Bu wt <sup>4</sup>	Yield <sup>5</sup>
		H <sub>2</sub> O 20 Oct	in lbs 20 Oct	Bu/A 20 Oct
PIONEER BRAND 33Y18 .....	1.65b-g <sup>6</sup>	15.7j-p	60.5a-d	192.0a
DEKALB DK647 .....	1.33j-q	15.8j-p	56.3h-l	188.9ab
PIONEER BRAND 31R88 .....	1.50d-m	23.8a	56.4g-l	185.5a-c
DEKALB DK585 .....	1.45f-n	16.0j-o	58.5b-i	182.3a-d
NK BRAND NX7129 .....	1.28l-q	21.2a-e	58.6b-i	181.8a-d
NK BRAND NX6909 .....	1.58c-j	16.8i-n	59.9a-h	169.8a-e
NK BRAND N63-G7 .....	1.50d-m	12.5qr	58.1b-j	167.6b-f
NK BRAND NX7939 .....	1.43f-o	21.1a-e	61.5ab	166.2b-f
NK BRAND NX5768 .....	1.55d-k	13.6o-r	58.6b-i	165.6b-f
NK BRAND N83-N5 .....	1.35i-p	21.8a-d	60.3a-d	165.2b-f
DEKALB RX889 .....	1.18o-q	20.1c-h	58.1b-j	163.3c-f
DEKALB RX764 .....	1.48e-m	15.7j-p	59.2a-h	159.7d-g
DEKALB RX826 .....	1.58c-j	15.5k-q	57.2d-k	156.2e-h
NK BRAND NX5928 .....	1.38h-p	14.5m-r	56.6e-l	155.8e-h
PIONEER BRAND 33J56 .....	1.75b-d	13.8o-r	59.1a-i	154.6e-h
NK BRAND N83-28 .....	1.53d-l	21.4a-e	60.2a-c	152.6e-h
FFR COOPERATIVE SS729CL .....	1.40g-p	17.7g-l	59.5a-h	151.4e-i
FFR COOPERATIVE SS849CL .....	1.33j-q	21.8a-d	54.8j-m	149.8e-j
NK BRAND N58D1 .....	1.60b-i	11.9r	56.9d-l	148.3e-k
FFR COOPERATIVE SS943 .....	1.08q	22.4a-c	52.2mn	147.9e-l
NK BRAND NX6569 .....	1.43f-o	16.8i-m	59.2a-h	147.6e-l
NK BRAND N75-K6 .....	1.55d-k	19.8c-h	60.1a-f	147.3e-l
DEKALB DK617 .....	1.58c-j	13.5o-r	57.2d-k	146.2e-l
PIONEER BRAND 33Y09 .....	1.68b-f	13.8n-r	58.6b-i	146.0e-l
DEKALB DK697 .....	1.48e-m	17.4h-m	57.2d-k	144.6e-l
FFR COOPERATIVE SS897 .....	1.20n-q	20.8b-f	53.6i-n	144.5e-l
PIONEER BRAND 31G98 .....	1.83bc	13.5o-r	58.6b-i	144.0f-l
NK BRAND N79-P4 .....	1.73b-e	20.1c-h	62.3a	142.2f-m
NK BRAND N79-L3 .....	1.65b-g	20.6b-f	61.4ab	137.3g-m
FFR COOPERATIVE SS859CL .....	1.53d-l	18.0f-k	56.3h-l	136.6g-m
PIONEER BRAND 32K61 .....	1.75b-d	15.8j-p	60.9a-c	135.8g-m
FFR COOPERATIVE SS900Bt .....	1.53d-l	16.1j-o	54.3k-m	135.5g-m
DEKALB DKC65-25 .....	1.50d-m	15.2k-q	57.4c-k	134.8g-m
NK BRAND N91-R9 .....	1.35i-p	23.2ab	59.0a-i	134.0g-m
NK BRAND NX8349 .....	1.25m-q	19.3d-i	50.7n	134.0g-m
PIONEER BRAND 33G26 .....	1.85ab	12.9p-r	58.8a-i	131.0h-m
PIONEER BRAND 3156 .....	1.75b-d	18.5e-j	60.0a-g	126.6i-m
NK BRAND NX5319 .....	1.30k-q	12.6qr	55.5i-l	125.2j-m
DEKALB DK683 .....	1.15pq	20.5b-g	56.5f-l	124.0k-m

PIONEER BRAND 3394 .....	2.05a	12.7qr	57.1d-k	122.5lm
PIONEER BRAND 3172 .....	1.63b-h	14.9l-r	56.3h-l	117.8m

<sup>1</sup>Hybrid entry planted in four 25-foot rows spaced 2.5 feet apart and replicated four times.

<sup>2</sup>GLS Disease Severity Index: 0 = no gray leaf spot lesions; 1 = trace of lesions below ear, none above; 2 = many lesions below ear, trace above; 3 = severe lesion development below ear, all leaves above with lesions; 4 = all leaves with severe lesion development, but green tissue still visible; 5 = all leaves dry and dead.

<sup>3</sup>Grain moisture at harvest expressed in percent.

<sup>4</sup>Bushel weight expressed in pounds at a standard 15.5% grain moisture.

<sup>5</sup>Yield expressed in bushels per acre at a standard 15.5% grain moisture.

<sup>6</sup>Means with letters in common do not differ statistically ( $P<0.05$ ) by Duncan's Multiple Range Test.

1. VIRGINIA, 2000. Gray leaf spot (GLS) ratings, yield, harvest grain moisture, and lodging ratings were obtained for 15 fungicide treatments and a non-treated control on a known high yielding, susceptible hybrid, Pioneer Brand 3394, grown under heavy gray leaf spot disease pressure on the University's Whitethorne-Kentland Experimental Farm, Montgomery Co., VA. Prior to planting on a Hayter silt loam, pH 6.8, a fertilizer containing 200 lb N, 45 lb P, and 25 lb K per acre was broadcast. The experimental design was a randomized complete block replicated four times with plots consisting of four 25-ft rows spaced 30 in. apart and seeded at a rate of 25,000 seeds/A. The plots were no-tillage planted with an Almaco@ two-row cone planter on 13 May into a field continuously cropped to corn since 1986 and abundantly covered with corn debris naturally infested with *Cercospora zeae-maydis*, the causal agent of gray leaf spot. On 21 Jul the first applications of fungicides were made when lesions had developed from the base of plants to half way to the ear leaf. At this time 5% of plants were silking. Spray solutions were applied in a volume of 27 gal/A with a single Tee Jet@ 8004 flat fan nozzle at 40 psi. Additional application(s) of some of the fungicides were made on 10 Aug, depending on protocol. Leaf blighting or GLS reaction was assessed five times and is reported as a disease severity index (0-5) read in 0.1 units. Plots were also rated for percentage stalks lodged just prior to harvest, grain moisture at harvest, bushel weight, and grain yield in bu/A adjusted to 15.5% moisture. Grain was harvested on 19 Oct with a Massey Ferguson 8XP-plot combine.

Moisture in the soil profile at planting and weather for thirty days after planting provided conditions favorable for vigorous stand establishment. GLS lesions were first observed on the lower leaves of the susceptible hybrid by mid-June. From late June through August temperatures were mild to warm with abundant rainfall. These conditions were generally favorable for disease development. GLS lesions had moved from the ear leaf to nearly the top of the plants on the non-treated control by 8 Aug rating. For all fungicide treatments blighting did not increase significantly beyond the ear leaf by the 8 Aug rating. Significant differences ( $P \leq 0.05$ ) in GLS ratings between were apparent at the 22 Aug rating period. At harvest, statistically significant differences among treatments occurred in grain yield, grain moisture at harvest, 1000 kernel weights and bushel weights. Single fungicide applications increased bushel weights (1.2 to 4.0 lbs / bu), 1000 kernel weight (30.5 to 67.6 g), grain yield (17 to 39.9 bu/A) over the non-treated control. Fungicide applications increased increased bushel weights (4.1 to 7.0 lbs / bu), 1000 kernel weight (72.8 to 137.3 g), grain yield (44.1 to 72.8 bu/A) over the non-treated control. All fungicide applications, either single or double, provided statistically significant ( $P \leq 0.05$ ) reduction in blighting at all rating dates. No phytotoxicity was observed for any fungicide treatment.

Treatment in oz ai/A and application timing <sup>1</sup>	GLS Severity Index (0-5) <sup>2</sup>		Grain <sup>3</sup> H <sub>2</sub> O 19 Oct	Bu wt <sup>4</sup> in lbs 19 Oct	1000 K <sup>5</sup> in g 9 Nov	Yield <sup>6</sup> Bu/A 19 Oct
	8 Aug	22 Aug				
Non-treated .....	--	2.80a	4.08a	7.9g	53.2h	183.1g
Tilt 3.6E 28.8 .....	1	2.28b	3.65bc	10.8f	54.7g	213.6f
Tilt 3.6E 28.8 .....	2	2.13cd	3.23f	14.2cd	57.3de	255.9cd
Stratego 250E 28.16 .....	1	2.15bc	3.63bc	11.1f	55.6fg	226.5ef
Stratego 250E 28.16 .....	2	2.05cd	3.15fg	14.0cd	58.2cd	271.2bc
Stratego 250E 41.76 .....	1	2.15bc	3.45de	11.8ef	56.5ef	239.8de
Stratego 250E 41.76 .....	2	2.08cd	3.13fg	15.5c	58.9bc	277.1bc
BAS 500 00F 2.09E 38.4 ...	1	2.03cd	3.55cd	13.0de	56.6ef	241.5de
BAS 500 00F 2.09E 38.4 ...	2	2.10cd	3.05g	19.7a	59.7ab	320.4a
Quadris 2.08SC 38.4 .....	1	2.08cd	3.45de	12.9de	57.2de	240.9de
Quadris 2.08SC 38.4 .....	2	2.03cd	3.08g	17.2b	59.5ab	293.8b
Quadris 2.08SC 57.6 .....	1	2.08cd	3.38e	13.1de	57.5de	250.7c-e
Quadris 2.08SC 57.6 .....	2	2.00d	3.08g	19.0a	60.2a	273.1bc
Folicur 3.6F 43.2 .....	1	2.28b	3.70b	11.0f	54.4g	208.9f
+ Induce 0.125% V/V						
Least Significant Difference ( $P \leq 0.05$ ) =		0.13	0.13	1.6	1.2	24.3
Standard Deviation =		0.089	0.093	1.120	0.833	16.988
Coefficient of Variation =		4.07	2.75	8.20	1.46	6.80
						7.16

<sup>1</sup>Treatment and timing: Fungicide(s) applied in oz ai/A. Timing of applications was as follows: 1 = a single application (21 Jul) at 5% silking; 2 = an application at 5% silking (21 Jul) followed by a second application 14 days later (10 Aug).

<sup>2</sup>GLS Disease Severity Index: 0 = no gray leaf spot lesions; 1 = trace of lesions below ear, none above; 2 = many lesions below ear, trace above; 3 = severe lesion development below ear, all leaves above with lesions; 4 = all leaves with severe lesion development, but green tissue still visible; 5 = all leaves dry and dead.

<sup>3</sup>Grain moisture at harvest expressed in percentage.

<sup>4</sup>Bushel weight in pounds at a standard 15.5% grain moisture.

<sup>5</sup>1000 Kernel weight in grams.

<sup>6</sup>Yield in bushels per acre at a standard 15.5% grain moisture.

<sup>7</sup>Means with letters in common do not differ statistically ( $P \leq 0.05$ ) by Duncan's Multiple Range Test.

