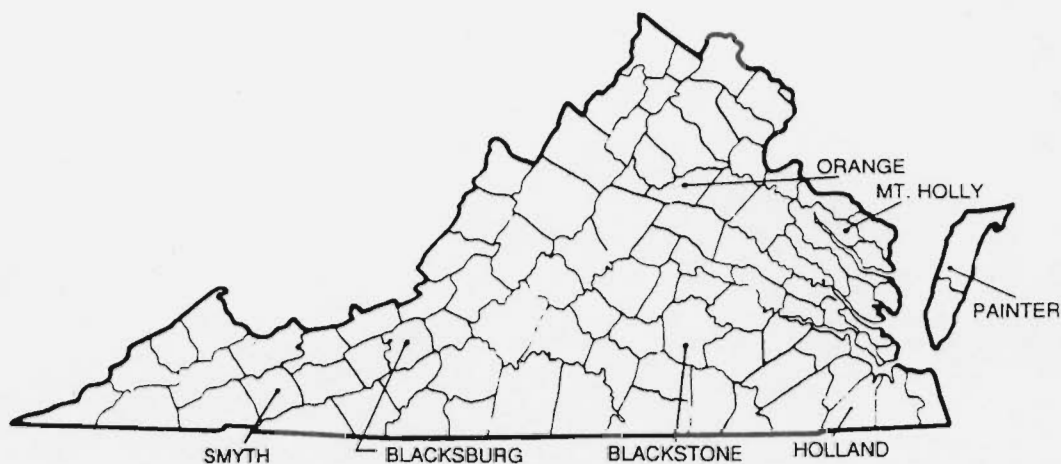


Virginia Corn Performance Trials in 1993



Virginia Cooperative Extension



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Companies Participating in the 1993 Corn Performance Trials

Company	Brand	Address
AG-CHEM INC.	ICI SEEDS	PO BOX 2178 SALISBURY MD 21802
AGRATECH SEEDS INC.	AGRATECH	5559 N. 500 W. McCORDSVILLE ID 46055
ASGROW SEED CO.	ASGROW/O'S GOLD	7000 PORTAGE RD KALAMAZOO MI 49001
AUGUSTA SEED CORPORATION	AUGUSTA	RT 2 BOX 16B MT. SOLON VA 22843
BEACHLEY-HARDY SEED CO.	HYTEST	510-2 SPRINGSIDE DR SHILLINGTON PA 19607
BECK'S SUPERIOR HYBRIDS	BECK'S	RR 2 BOX 142 ATLANTA IN 46031
CARGILL HYBRID SEEDS	CARGILL	PO BOX 5645 MINNEAPOLIS MN 55440
CAVERNDAL FARM INC.	CAVERNDAL	1921 BLUEGRASS RD DANVILLE KY 40422-9293
CROW'S HYBRID CORN CO.	CROW'S	PO BOX 306 MILFORD IL 60953
DEKALB PLANT GENETICS	DEKALB	3100 SYCAMORE RD DEKALB IL 60115
DOEBLER'S PA. HYBRIDS, INC.	DOEBLER'S	RD 1 BOX 424 JERSEY SHORE PA 17740
HOFFMAN SEEDS, INC.	FUNK'S	144 MAIN ST LANDISVILLE PA 17536
HYPERFORMER SEED CO.	HYPERFORMER	5100 POPLAR AVE SUITE 3200 MEMPHIS TN 38137
LONGEST SEED CO., INC.	LONGEST	PO BOX 45 ST STEPHENS CHURCH VA 23148
LYNKS SEED CO.	LYNKS	BOX 637 MARSHALLTOWN IA 50158
MYCOGEN PLANT SCIENCES	AGRIGENE	720 ST CROIX ST PRESCOTT WI 54021
MYCOGEN PLANT SCIENCES	JACQUES	720 ST CROIX ST PRESCOTT WI 54021
NORTHROP KING CO.	NORTHROP KING	317 330TH ST STANTON MN 55018-4308
PIONEER HI-BRED INT., INC.	PIONEER BRAND	1000 W. JEFFERSON ST TIPTON IN 46072
PRAIRIE STREAM FARMS, INC.	PRAIRIE STREAM	RR3 BOX 333 FRANKFORT IN 46041
SEEDWAY INC.	EASTLAND	1734 RAILROAD PLACE PO BOX 250 HALL NY 14463
SOUTHERN STATES COOP., INC.	SS	6606 W. BROAD ST RICHMOND VA 23630
STINE SEED CO.	STINE	PO BOX 231 SHERIDAN IN 46069
WILSON SEEDS, INC.	WILSON	PO BOX 391 HARLAN IA 51537

VIRGINIA CORN PERFORMANCE TRIALS IN 1993

Summarized by D. W. Ball, H. Behl, E. R. Bender and D. E. Brann
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Performance trials of commercial corn hybrids were conducted at seven locations in Virginia in 1993. A list of the companies is shown in the table accompanying this information. At Mt. Holly, the hybrids were evaluated under irrigation. At Blackstone, all hybrids were planted at 18,000 and 22,000 plants/acre.

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 and location to support the Corn Performance Trials.

All locations except Orange were planted with an Almaco two row plot planter at the desired population. Orange was planted by hand and thinned to the desired population. All locations except Orange and Painter were harvested with a Gleaner E-Series combine that has been modified for plot harvest. Orange and Painter were hand harvested and shelled to obtain grain weights. Lodging notes were taken just prior to harvest. Yields have been adjusted to 15.5% moisture.

Production practices for each location follow the one year information. Rates are on a per acre basis.

Yield Differences

Experimental plots are subject to variation which cannot be totally 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 chance 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 and are indicated by NS.

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 any one particular location. For these reasons it is important, whenever possible, to also look at a hybrid's average across locations when making hybrid selections. 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 hybrid yield potential compared to other hybrids.

1993 RELATIVE YIELD of hybrids entered in three or more locations.

EARLY MATURITY

BRAND	HYBRID	BLACKS- BURG	BLACKSTONE		HOLLAND	MT HOLLY		PAINTER	SMYTH	MEAN
			LOW	HIGH		IRR	ORANGE			
PIONEER	3525	105	152	141	-	107	102	-	94	117
AUGUSTA	A613aa	-	-	-	131	106	114	-	-	117
DEKALB	DK646	101	-	-	133	113	-	-	-	116
PIONEER	3394	110	163	117	118	98	94	-	-	116
AUGUSTA	A513	91	-	-	106	100	109	133	-	108
PIONEER	3245	-	101	88	125	113	116	-	102	107
SOUTHERN STATES	SS742A	107	116	91	112	108	115	98	101	106
BECK'S	54XA	101	-	-	114	99	-	-	-	105
DOEBLER'S	73XP	110	-	-	104	97	102	-	-	103
FUNK'S G	4473	-	-	-	110	94	-	102	-	102
NORTHRUP KING	N7989	107	-	-	96	104	103	-	104	102
AUGUSTA	A505	102	-	-	93	103	105	-	-	101
DOEBLER'S	62XP	89	-	-	112	99	99	-	-	100
AUGUSTA	A618	-	-	-	100	94	103	-	-	99
HYTEST	HB6407	-	-	-	-	95	99	96	-	97
PIONEER	3523	94	-	-	-	103	113	-	78	97
PIONEER	3241	101	-	-	-	-	96	-	92	96
PIONEER	3527	104	95	94	-	89	85	-	103	95
FUNK'S G	5133X	-	-	-	75	99	98	106	-	94
AUGUSTA	A605	-	-	-	77	102	97	-	-	92
HY-PERFORMER	HY9610	-	-	-	88	89	-	98	-	92
BECK'S	58	89	-	-	82	94	101	-	-	91
NORTHRUP KING	N6330	89	-	-	92	-	98	-	81	90
HYTEST	HT7510	-	-	-	-	97	94	64	-	85
AUGUSTA	A705	-	-	-	76	91	85	-	-	84

MEDIUM MATURITY

BRAND	HYBRID	BLACKS- BURG	BLACKSTONE LOW	HIGH	HOLLAND	MT HOLLY IRR	ORANGE	PAINTER	SMYTH	MEAN
SOUTHERN STATES	SS793	-	131	152	96	108	96	135	-	120
CARGILL	8527	86	120	121	136	-	-	-	-	116
PIONEER	3140	123	134	155	77	104	103	-	114	116
SOUTHERN STATES	SS853	-	109	126	94	98	-	117	-	109
CARGILL	9027	-	104	120	-	-	100	-	-	108
DEKALB	DK678	108	-	-	110	106	-	-	-	108
HY-PERFORMER	HS9843	118	-	-	110	99	-	96	-	106
SOUTHERN STATES	SS812	120	97	96	112	94	103	100	121	105
DOEBLER'S	82XP	96	-	-	125	100	100	-	-	105
BECK'S	68	101	-	-	-	107	-	-	104	104
NORTHROP KING	X821	111	-	-	86	-	114	-	-	104
AUGUSTA	A614	-	-	-	90	109	112	-	-	104
HY-PERFORMER	HS9704	96	-	-	-	107	-	110	-	104
BECK'S	81MVP	107	-	-	96	98	-	-	104	101
PIONEER	3163	91	89	90	106	114	91	-	119	100
HY-PERFORMER	HS9773	95	-	-	101	93	-	110	-	100
AGRATECH	810	-	95	84	123	-	-	-	-	100
PIONEER	3215	87	-	-	-	-	114	-	98	100
AUGUSTA	A617	-	-	-	117	105	79	-	-	100
AUGUSTA	A616	91	-	-	102	115	90	-	-	99
AUGUSTA	A615	-	-	-	105	98	94	-	-	99
JACQUES	8240	103	66	114	95	101	99	93	-	96
HYTEST	HTX7748	92	101	94	91	97	93	86	107	95
DEKALB	DK689	80	-	-	117	100	84	-	-	95
AUGUSTA	A713	-	-	-	91	96	93	-	-	93
ASGROW	RX743	-	-	-	82	96	98	-	-	92
BECK'S	72X	-	-	-	84	98	95	-	-	92
CARGILL	8327	90	-	-	85	107	87	-	-	92
FUNK'S G	4631	-	-	-	67	104	-	97	-	89
WILSON	DEMAND 119	85	85	88	89	77	59	124	96	88
HY-PERFORMER	HS9848	101	-	-	74	106	-	65	-	87
DOEBLER'S	75X2	87	-	-	78	93	89	-	-	87
HYTEST	HT7728	75	85	90	87	94	77	92	90	86
AGRATECH	757	-	65	65	99	-	-	-	-	76
AGRATECH	787	-	69	64	81	-	-	-	-	71
CAVERNDAL FARM	CF800A	82	59	71	-	-	-	-	73	71
WILSON	DEMAND 116	79	68	62	76	83	60	66	77	71

1993 RELATIVE YIELD of hybrids entered in three or more locations, (continued).

MID-FULL MATURITY

BRAND	HYBRID	BLACKS- BURG	BLACKSTONE LOW	HIGH	HOLLAND	MT HOLLY IRR	ORANGE	PAINTER	SMYTH	MEAN
PIONEER	3154	124	134	97	-	-	138	-	122	123
PIONEER	3165	-	98	128	121	112	137	-	-	119
NORTHRUP KING	N8727	-	-	-	127	114	118	-	107	116
SOUTHERN STATES	SS943	115	91	118	109	-	125	-	124	114
DEKALB	DK743	118	-	-	100	113	122	-	-	113
JACQUES	9220	-	104	115	108	-	124	103	-	111
PIONEER	3156	120	100	103	100	112	131	-	109	111
NORTHRUP KING	N8811	-	-	-	101	104	109	-	103	104
LYNKS	2868	-	-	-	77	102	123	-	-	101
PIONEER	3085	-	83	82	91	-	111	-	106	95
CROWS	SL70	87	90	106	109	88	91	82	103	94

*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 corn hybrids at Blackstone were planted with four replications at 18,000 and four replications at 22,000 plants per acre.

**TWO YEAR AVERAGE RELATIVE YIELD (1992-1993) of
hybrids entered in the same three or more locations.**

Early Maturity

Brand\Company	Hybrid	# Observations	Relative Yield
DEKALB	DK646	24	113
PIONEER	3394	48	111
PIONEER	3245	48	107
AUGUSTA	A513	40	105
BECK'S	54XA	24	103
NORTHRUP KING	N7989	40	103
DOEBLER'S	73XP	32	102
AUGUSTA	A505	32	100
PIONEER	3241	24	100
BECK'S	58	32	97

Medium Maturity

Brand\Company	Hybrid	# Observations	Relative Yield
PIONEER	3140	56	112
PIONEER	3163	56	111
SOUTHERN STATES	SS793	48	111
HY-PERFORMER	HS9843	32	109
HY-PERFORMER	HS9704	24	107
SOUTHERN STATES	SS812	64	106
CARGILL	8527	32	104
DOEBLER'S	82XP	32	104
SOUTHERN STATES	SS853	32	103
HY-PERFORMER	HS9773	32	100
HYTEST	HTX7748	64	100
DEKALB	DK689	24	98
FUNK'S G	4631	24	97
PIONEER	3215	24	97
DOEBLER'S	75X2	32	95
HYTEST	HT7728	40	93
BECK'S	72X	24	93
AGRATECH	757	24	88

Mid-Full Maturity

Brand\Company	Hybrid	# Observations	Relative Yield
SOUTHERN STATES	SS943	24	118
PIONEER	3154	40	117
PIONEER	3165	40	117
JACQUES	9220	40	113
NORTHRUP KING	N8727	32	112
PIONEER	3156	56	110
DEKALB	DK743	24	108
NORTHRUP KING	N8811	32	105
LYNKS	2868	24	101
PIONEER	3085	40	100

**THREE YEAR AVERAGE RELATIVE YIELD (1991-1993) for
hybrids entered in the same three or more locations.**

Early Maturity

Brand\Company	Hybrid	# Observations	Relative Yield
PIONEER	3394	59	107
PIONEER	3245	47	107
BECK'S	54XA	35	104
AUGUSTA	A513	59	102
BECK'S	58	47	98

Medium Maturity

Brand\Company	Hybrid	# Observations	Relative Yield
PIONEER	3140	71	110
SOUTHERN STATES	SS793	59	109
DEKALB	DK689	35	101
HYTEST	HT7728	48	94

Mid-Full Maturity

Brand\Company	Hybrid	# Observations	Relative Yield
PIONEER	3154	48	122
PIONEER	3165	47	119
NORTHRUP KING	N8727	47	112
PIONEER	3085	47	108

BLACKSBURG, VA 1993

Early Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
SOUTHERN STATES	SS682	153	24.6	22738	1	76	39
DOEBLER'S	73XP	145	23.7	22216	0	75	38
PIONEER	3394	145	20.9	23871	1	74	38
CAVERNDAL FARM	CF790	143	25.2	20212	0	76	41
SOUTHERN STATES	SS742A	142	28.9	21867	0	79	36
NORTHRUP KING	N7989	141	26.2	23174	2	78	44
DEKALB	DK623	140	25.5	21955	1	76	35
AUGUSTA	A504	140	26.6	22739	3	77	51
PIONEER	3525	139	20.2	23784	3	73	43
PIONEER	3527	138	20.4	21519	0	73	40
BECK'S	54XA	134	23.8	21693	1	74	37
AUGUSTA	A505	134	24.0	20735	0	75	38
DEKALB	DK646	133	24.7	22739	1	76	37
PIONEER	3241	133	24.5	23000	2	75	44
PRAIRIE STREAM	SX425	129	25.1	22477	0	77	38
DOEBLER'S	69XP	129	24.9	22042	1	77	37
PIONEER	3523	124	20.6	23087	0	74	41
AUGUSTA	A513	120	26.2	21345	1	77	41
NORTHRUP KING	N6330	118	24.0	23523	0	75	33
BECK'S	58	117	25.8	21954	0	77	36
DOEBLER'S	62XP	117	21.7	19863	1	73	41

Maturity Average

134

24.2

22216

1

75

39

LSD (0.05)

36

1.7

2

2

6

Medium Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	162	26.8	22128	1	77	48
SOUTHERN STATES	SS812	159	26.1	21170	0	77	48
HY-PERFORMER	HS9843	156	26.3	22826	1	78	47
SOUTHERN STATES	SS883	152	30.3	22651	1	78	43
NORTHRUP KING	X821	146	26.1	19689	1	77	47
CAVERNDAL FARM	CF953	143	25.9	21693	0	78	36
SOUTHERN STATES	SS883A	143	29.6	20560	0	76	39
DEKALB	DK678	143	24.7	21954	0	77	38
BECK'S	81MVP	141	27.5	21519	0	78	43
ICI SEEDS	8310	141	23.7	21693	0	76	40
JACQUES	8240	135	27.1	20822	1	78	45
BECK'S	68	133	25.0	22303	0	76	36
HY-PERFORMER	HS9848	133	25.8	22041	0	79	44
FUNK'S G	4671	133	28.0	23087	1	77	44
PRAIRIE STREAM	SX751	132	25.1	19950	1	77	41
DOEBLER'S	82XP	127	26.5	22477	1	79	44
HY-PERFORMER	HS9704	126	26.3	22390	1	77	43
HY-PERFORMER	HS9773	125	27.9	21519	4	77	46
HYTEST	HTX7748	122	25.6	20996	1	79	46
AUGUSTA	A616	120	26.7	21693	0	80	41

Medium Maturity (continued)		Yield	Moist	Plants/ A	Lodg	DaysTo	EarHt
Brand\Company	Hybrid	bu/A	%		%	Silk	in
PIONEER	3163	120	29.4	21345	1	80	35
CARGILL	8327	119	26.7	22477	1	79	41
PRAIRIE STREAM	SX752	117	31.8	18905	1	83	44
PRAIRIE STREAM	SX701	117	27.4	22651	5	78	43
DOEBLER'S	75X2	115	25.6	21867	1	79	43
PIONEER	3215	115	28.4	20648	2	81	43
CARGILL	8527	114	26.9	22564	0	78	42
WILSON	DEMAND 119	112	28.1	21780	1	79	38
FUNK'S G	4672	109	27.1	19167	1	79	42
CAVERNDAL FARM	CF800A	108	25.6	22129	1	80	41
DEKALB	DK689	105	29.5	17076	2	79	41
WILSON	DEMAND 116	105	29.1	22216	0	81	33
HYTEST	HT7728	99	26.8	20822	0	81	38

Maturity Average		128	27.2	21375	1	76	42
LSD (0.05)		37	2.0		2	2	6

Mid-Full Maturity		Yield	Moist	Plants/ A	Lodg	DaysTo	EarHt
Brand\Company	Hybrid	bu/A	%		%	Silk	in
PIONEER	3154	163	28.2	23261	8	77	47
PIONEER	3156	159	29.2	21344	2	77	46
DEKALB	DK743	156	30.4	21954	8	77	48
SOUTHERN STATES	SS943	152	29.9	22041	2	77	42
JACQUES	EXP3121	143	28.6	22303	0	78	48
CROWS	SL70	115	26.4	20212	8	75	44

Maturity Average		148	28.8	21853	5	77	46
LSD (0.05)		42	2.0		7	2	4

Location Average		132	26.3	21711	1	76	41
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Blacksburg	Whitethorne Farm	Pesticide:	3qt Lasso MT + 1.5lb Atrazine + 1lb Princep
Planted:	May 10, 1993	Fertilization:	30lb N + 60lb P ² O ⁵ - 60lb K ² O before planting + 150lb N sidedressed June 24
Harvested:	October 4, 1993	Plot Size:	2 rows 25' x 30" 4 replications
		Soil Series:	Hayter
		Cooperators:	D. Paulette and J. Wooge

BLACKSBURG, VA 1992/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
DEKALB	DK646	166	26.0	22216	1	75	40
PIONEER	3394	162	20.9	22869	1	75	41
AUGUSTA	A505	158	23.8	20081	0	74	42
DOEBLER'S	73XP	155	24.1	21693	2	75	41
PIONEER	3241	155	25.1	22172	1	75	46
NORTHRUP KING	N7989	154	27.7	22434	1	79	44
DOEBLER'S	69XP	153	24.8	22346	0	77	39
BECK'S	54XA	152	23.6	21388	0	74	41
BECK'S	58	151	25.0	21824	0	76	40
AUGUSTA	A513	150	26.5	21432	0	76	44
PIONEER	3525	148	19.9	22913	2	74	46
PIONEER	3527	145	20.5	20386	0	74	41
PIONEER	3523	134	20.3	22346	0	74	44
Maturity Average		153	23.7	21854	1	75	42
LSD (0.05)		NS	1.1	1491	NS	1	4
Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
SOUTHERN STATES	SS812	168	26.4	21737	0	77	48
BECK'S	81MVP	167	28.7	21432	0	78	45
PIONEER	3140	167	28.1	21519	1	78	50
BECK'S	68	163	27.6	23000	0	76	38
HY-PERFORMER	HS9843	162	26.2	21998	1	78	50
PIONEER	3163	161	29.3	21562	1	79	39
FUNK'S G	4671	154	28.7	21693	1	77	48
SOUTHERN STATES	SS883	154	31.6	21780	1	77	46
HY-PERFORMER	HS9704	151	27.3	22216	1	76	45
DOEBLER'S	75X2	150	27.2	21780	1	78	46
HY-PERFORMER	HS9773	147	26.8	21344	5	77	49
CAVERNDAL FARM	CF800A	147	27.2	21736	1	78	46
DOEBLER'S	82XP	147	26.5	21780	1	79	47
HYTEST	HT7728	141	27.6	21257	0	78	43
CARGILL	8527	140	26.7	21693	0	79	45
HYTEST	HTX7748	139	26.1	20996	1	78	48
PIONEER	3215	136	29.7	20822	1	81	47
DEKALB	DK689	134	31.1	18600	1	79	44
Maturity Average		151	27.9	21497	1	78	46
LSD (0.05)		23	1.4	1352	2	1	5
Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
DEKALB	DK743	177	32.0	21475	5	77	50
PIONEER	3154	172	30.6	22085	4	78	48
PIONEER	3156	159	29.3	20734	1	76	49
Maturity Average		169	30.6	21431	3	77	49
LSD (0.05)		NS	1.9	NS	NS	1	NS
Location Average		153	26.6	21628	1	77	45

BLACKSBURG, VA 1991/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
DEKALB	DK646	154	23.5	22506	0	73	38
PIONEER	3394	152	19.7	22971	0	72	40
PIONEER	3241	149	23.2	22680	1	72	45
BECK'S	58	146	22.9	22303	0	74	38
BECK'S	54XA	146	21.9	22070	0	71	39
DOEBLER'S	69XP	146	22.6	22913	0	74	37
AUGUSTA	A513	140	24.2	20531	0	73	42
PIONEER	3527	138	19.1	21490	0	71	39
Maturity Average		146	22.1	22183	0	72	40
LSD (0.05)		NS	0.8	1042	NS	1	3

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	159	25.2	21867	0	75	46
BECK'S	68	154	24.6	23377	0	73	36
BECK'S	81MVP	150	25.4	22158	0	76	42
DOEBLER'S	75X2	144	24.5	22680	0	76	43
HYTEST	HT7728	140	24.8	22361	0	75	42
DEKALB	DK689	134	27.2	20212	1	76	42
Maturity Average		147	25.3	22109	0	75	42
LSD (0.05)		NS	0.9	962	NS	1	3

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3154	172	26.9	22651	3	75	46
Location Average		148	23.7	22185	0	74	41

BLACKSTONE, VA 1993 Population - 18,000 plants/acre

Early Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3394	83	14.4	18121	2	66	37
PIONEER	3525	78	14.5	18121	6	65	40
SOUTHERN STATES	SS742A	59	15.3	18121	2	70	38
PIONEER	3245	51	14.3	18121	3	70	33
ICI SEEDS	8310	49	15.5	18121	4	69	34
PIONEER	3527	48	13.2	18121	1	65	38
Maturity Average		61	14.5	18121	3	67	37
LSD (0.05)		33	0.9		5	1	2
Medium Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	68	17.4	18121	9	70	39
SOUTHERN STATES	SS793	67	17.3	18121	6	69	35
CARGILL	8527	61	16.5	18121	3	71	39
LONGEST	L15A	58	15.7	18121	3	70	31
SOUTHERN STATES	SS853	56	18.0	18121	1	70	35
CARGILL	9027	53	18.6	18121	1	70	35
HYTEST	HTX7748	52	17.6	18121	1	72	37
SOUTHERN STATES	SS812	50	17.8	18121	2	71	38
AGRATECH	810	49	16.9	18121	2	72	32
PIONEER	3163	45	16.3	18121	8	71	33
HYTEST	HT7728	44	16.9	18121	4	72	37
WILSON	DEMAND 119	43	18.6	18121	11	70	33
ICI SEEDS	8513	42	15.7	18121	2	67	31
AGRATECH	787	35	16.9	18121	2	73	34
WILSON	DEMAND 116	35	17.8	18121	1	71	31
JACQUES	8240	34	17.2	18121	3	73	36
AGRATECH	757	33	16.9	18121	3	72	36
CAVERNDAL FARM	CF800A	30	17.0	18121	2	72	35
Maturity Average		47	17.2	18121	4	71	35
LSD (0.05)		16	1.3		4	1	2
Mid-Full Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3154	68	18.2	18121	11	70	37
JACQUES	9220	53	19.1	18121	4	70	38
PIONEER	3156	51	18.6	18121	3	70	40
PIONEER	3165	50	19.2	18121	9	72	39
SOUTHERN STATES	SS943	46	18.5	18121	2	70	32
CROWS	SL70	46	17.3	18121	16	68	35
PIONEER	3085	42	17.8	18121	4	73	40
Maturity Average		51	18.4	18121	7	70	37
LSD (0.05)		18	1.1		5	2	2
Location Average		51	16.9	18121	4	70	36

Blackstone Southern Piedmont Ag Res and Ext Center
 Planted: May 4, 1993
 Harvested: September 13, 1993
 Pesticide: 2.2 qt Bicep 6L
 Fertilization: 1000lb 10-10-10 pre-plant incorporated + 40lb N sidedressed

Plot Size: 1 row 25' x 30" 4 replications each for each population (18,000 and 22,000 plants/acre)
 Soil Series: Dothan-Norfolk
 Irrigation: 1.00" July 13
 Cooperators: W. B. Wilkinson and R. R. Wilmouth

BLACKSTONE, VA 1992/1993 Population - 18,000 plants/acre

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3394	128	13.8	18121	2	74	42
PIONEER	3245	110	14.2	18121	2	79	39
Maturity Average		119	14.0	18121	2	77	40
LSD (0.05)		NS	NS		NS	1	1

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3163	122	15.5	18121	5	79	40
SOUTHERN STATES	SS793	114	15.7	18121	4	76	41
PIONEER	3140	112	16.0	18121	5	79	46
HYTEST	HTX7748	107	16.0	18121	1	79	45
SOUTHERN STATES	SS812	105	15.8	18121	2	78	45
SOUTHERN STATES	SS853	105	16.7	18121	1	77	40
HYTEST	HT7728	104	15.7	18121	2	79	43
AGRATECH	757	100	15.4	18121	2	79	45
CARGILL	8527	96	15.6	18121	3	80	44
Maturity Average		107	15.8	18121	3	78	43
LSD (0.05)		12	0.7	NS	3	1	2

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3154	126	16.8	18121	7	77	45
PIONEER	3165	125	17.8	18121	5	81	46
JACQUES	9220	115	17.6	18121	4	80	45
PIONEER	3156	113	16.6	18121	4	79	47
PIONEER	3085	101	16.2	18121	6	82	48
Maturity Average		116	17.0	18121	5	80	46
LSD (0.05)		14	0.7	NS	4	1	1
Location Average		111	16.0	18121	3	79	44

BLACKSTONE, VA 1993 Population - 22,000 plants/acre

Early Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3525	54	14.3	22303	6	65	39
PIONEER	3394	44	14.6	22303	2	66	36
PIONEER	3527	36	13.1	22303	1	66	36
SOUTHERN STATES	SS742A	35	14.8	22303	2	72	36
PIONEER	3245	33	14.5	22303	2	71	32
ICI SEEDS	8310	33	15.2	22303	6	70	34
Maturity Average		39	14.4	22303	3	68	35
LSD (0.05)		11	0.9		4	1	2

Medium Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	59	17.6	22303	4	71	39
SOUTHERN STATES	SS793	58	16.3	22303	7	69	35
SOUTHERN STATES	SS853	48	17.0	22303	1	70	33
CARGILL	9027	46	18.0	22303	5	71	35
CARGILL	8527	46	17.1	22303	2	71	38
JACQUES	8240	44	17.0	22303	1	72	39
SOUTHERN STATES	SS812	37	17.5	22303	3	72	37
HYTEST	HTX7748	36	16.5	22303	1	72	38
PIONEER	3163	34	15.6	19864	5	71	35
ICI SEEDS	8513	34	12.1	22303	2	67	31
LONGEST	L15A	34	16.5	22303	1	71	31
HYTEST	HT7728	34	16.8	22303	5	72	37
WILSON	DEMAND 119	33	19.0	22303	2	72	33
AGRATECH	810	32	17.4	22303	2	73	33
CAVERNDAL FARM	CF800A	27	16.8	22303	3	73	35
AGRATECH	757	25	16.3	22303	4	73	35
WILSON	DEMAND 116	24	17.8	22303	2	72	30
AGRATECH	787	24	16.7	22303	2	73	33
Maturity Average		37	16.8	22167	3	71	35
LSD (0.05)		12	1.1		5	1	2

Mid-Full Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3165	49	20.4	22303	5	72	39
SOUTHERN STATES	SS943	45	18.6	22303	5	71	33
JACQUES	9220	44	19.4	22303	9	72	38
CROWS	SL70	40	17.6	22303	17	69	35
PIONEER	3156	39	18.1	22303	12	71	39

Mid-Full Maturity (continued) Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3154	37	17.8	22303	13	71	38
PIONEER	3085	31	18.3	22303	3	73	40
Maturity/Average		41	18.6	22303	9	71	37
LSD (0.05)		20	1.5		9	1	2
Location Average		38	16.7	22224	4	71	36
Blackstone Planted: Harvested: Pesticide:	Southern Piedmont Ag Res and Ext Center May 4, 1993 September 13, 1993 2.2 qt Bicep 6L		Fertilization: Plot Size: Soil Series: Irrigation: Cooperators:	1000lb 10-10-10 pre-plant incorporated + 40lb N sidedressed 1 row 25' x 30" 4 replications each for each population (18,000 and 22,000 plants/acre) Dothan-Norfolk 1.00" July 13 W. B. Wilkinson and R. R. Wilmouth			

Two Year Averages

BLACKSTONE, VA 1992/1993 Population - 22,000 plants/acre

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3394	117	14.1	22303	1	75	41
PIONEER	3245	108	14.0	22303	2	79	39
Maturity Average		112	14.0	22303	2	77	40
LSD (0.05)		NS	NS		NS	1	2
Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER							
PIONEER	3140	124	16.4	22303	2	80	48
PIONEER	3163	120	14.9	21083	3	78	43
SOUTHERN STATES	SS793	114	15.9	22303	4	76	42
SOUTHERN STATES	SS812	111	15.8	22303	2	79	46
HYTEST	HTX7748	108	15.4	22303	0	79	46
HYTEST	HT7728	103	15.6	22303	3	80	44
SOUTHERN STATES	SS853	103	16.1	22303	1	78	39
CARGILL	8527	101	16.1	22129	1	80	44
AGRATECH	757	99	15.0	22303	3	81	43
Maturity Average		109	15.7	22148	2	79	44
LSD (0.05)		13	0.9	NS	NS	1	1
Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3165	130	17.8	22303	3	81	48
JACQUES	9220	125	18.0	22303	5	81	45
PIONEER	3154	124	16.8	22303	7	78	46
PIONEER	3156	112	16.3	22303	7	78	46
PIONEER	3085	110	16.4	22303	3	82	48
Maturity Average		120	17.1	22303	5	80	47
LSD (0.05)		16	1.2	NS	5	1	2
Location Average		113	15.9	22216	3	79	44

BLACKSTONE, VA 1991/1993 Population - 22,000 plants/acre

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3394	90	13.8	22768	1	76	36
PIONEER	3245	81	13.8	22768	2	80	35
Maturity Average		86	13.8	22768	2	78	36
LSD (0.05)		NS	NS		NS	2	1
Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	100	15.5	22303	2	80	44
SOUTHERN STATES	SS793	92	15.1	22303	6	77	38
CARGILL	8527	81	15.3	22187	1	81	41
HYTEST	HT7728	78	14.8	22303	2	82	41
Maturity Average		87	15.2	22274	3	80	41
LSD (0.05)		11	NS	NS	4	1	1
Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3165	109	16.5	22303	2	81	44
JACQUES	9220	108	16.6	22303	5	80	42
PIONEER	3085	93	15.8	22303	3	82	45
PIONEER	3154	99	15.7	22303	7	79	42
Maturity Average		102	16.1	22303	4	80	43
LSD (0.05)		NS	NS	NS	NS	1	1
Location Average		93	15.3	22384	3	80	41

HOLLAND, VA 1993

Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
DEKALB	DK646	91	18.2	19747	10	74
AUGUSTA	A613aa	89	16.8	20038	11	74
PIONEER	3245	85	16.2	19965	6	75
PIONEER	3394	80	15.5	20618	3	73
BECK'S	54XA	78	15.7	19167	7	73
HY-PERFORMER	HS9502	76	16.3	20909	4	74
SOUTHERN STATES	SS742A	76	16.6	20401	4	75
DOEBLER'S	62XP	76	15.4	20328	10	73
FUNK'S G	4473	75	16.3	19239	7	74
AUGUSTA	A513	72	17.3	19747	7	74
DOEBLER'S	73XP	71	16.3	20546	6	74
AUGUSTA	A618	68	16.6	21199	4	74
AGRIGENE	AG7588	66	16.5	19892	2	74
NORTHRUP KING	N7989	65	17.4	21417	7	75
AUGUSTA	A505	63	17.0	20981	4	73
NORTHRUP KING	N6330	63	16.3	20110	6	74
ICI SEEDS	8285	62	18.6	20110	6	74
AGRATECH	GK750	61	16.7	20691	10	73
HY-PERFORMER	HY9610	60	16.9	20256	6	74
BECK'S	58	56	16.7	20183	4	74
AUGUSTA	A605	52	17.4	18005	7	74
AUGUSTA	A705	52	16.9	19167	13	74
FUNK'S G	5133X	51	15.9	19893	4	73

Maturity Average
LSD (0.05)

69 16.7 20113 6 74
26 1.3 7 1

Medium Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
CARGILL	8527	92	17.8	19312	10	78
DOEBLER'S	82XP	85	17.3	19602	3	78
LONGEST	L15	83	16.4	19530	9	77
AGRATECH	810	83	16.7	19893	10	79
HY-PERFORMER	HS9905	82	17.3	19166	7	78
AUGUSTA	A617	80	17.0	19457	3	78
DEKALB	DK689	79	18.7	19094	4	78
WILSON	E3513	78	18.7	19094	4	78
SOUTHERN STATES	SS812	76	16.6	20183	6	78
HY-PERFORMER	HB836002	76	20.5	17642	10	78
AGRIGENE	AG7935	76	19.2	18803	14	79
DEKALB	DK678	75	15.9	18659	1	78
HY-PERFORMER	HS9843	75	17.4	19530	4	78
PIONEER	3163	72	16.9	20038	10	78
NORTHRUP KING	N8702	72	17.7	17860	10	79
NORTHRUP KING	S8645	71	17.7	18949	10	78
AUGUSTA	A615	71	17.2	20183	6	78
ICI SEEDS	8543	70	16.4	19747	3	78
AUGUSTA	A616	70	16.6	19602	6	80
HY-PERFORMER	HS9773	68	16.9	19747	14	78
AGRATECH	757	67	17.2	19384	10	78

Medium Maturity (continued)						
Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	Days To Silk
JACQUES	8240	65	17.6	20764	5	78
WILSON	E11961	65	19.5	19094	7	79
BECK'S	81MVP	65	16.7	19021	1	78
SOUTHERN STATES	SS793	65	16.7	19094	9	78
SOUTHERN STATES	SS853	64	17.4	19675	7	78
AUGUSTA	A713	62	17.2	19892	16	78
HYTEST	HTX7748	62	17.5	20473	9	79
AUGUSTA	A614	62	16.4	19021	5	78
WILSON	DEMAND 119	61	19.9	19530	14	78
NORTHRUP KING	X821	59	18.0	19820	6	78
HYTEST	HT7728	59	16.9	18150	9	80
CARGILL	8327	58	18.4	19530	9	78
BECK'S	72X	57	16.4	18731	22	78
ASGROW	RX743	56	16.7	19675	9	79
WILSON	E11835	56	19.1	19747	14	78
AGRATECH	787	55	16.8	18295	6	79
DOEBLER'S	75X2	53	16.3	19312	15	78
WILSON	DEMAND 116	52	18.6	18804	10	80
AGRIGENE	AG7890	52	17.7	19021	5	78
PIONEER	3140	52	17.5	19457	16	79
HY-PERFORMER	HS9848	51	16.2	19457	12	79
FUNK'S G	4631	46	18.4	19530	5	78

Maturity Average		67	17.5	19339	8	78
LSD (0.05)		25	1.4		8	2

Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	Days To Silk
NORTHRUP KING	N8727	86	19.6	19675	3	83
HY-PERFORMER	HS9944	82	18.0	20691	8	83
PIONEER	3165	82	20.7	20691	8	83
SOUTHERN STATES	SS943	74	18.8	20328	5	82
CROWS	SL70	74	16.7	20110	24	82
JACQUES	9220	73	20.3	19675	17	83
ASGROW	RX919	72	19.3	19602	13	83
DOEBLER'S	86XA2	71	18.0	19893	4	83
NORTHRUP KING	N8811	69	19.2	19820	13	83
PIONEER	3156	68	18.6	19747	16	83
DEKALB	DK743	68	20.6	20111	11	83
PIONEER	3085	62	19.1	19892	18	82
HY-PERFORMER	HB737001	61	18.3	21780	8	82
DOEBLER'S	87XP	59	16.6	20619	4	82
LYNKS	2868	52	17.8	20255	6	83

Maturity Average		70	18.8	20192	10	83
LSD (0.05)		22	1.4		9	1

Location Average		68	17.5	19717	8	78
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Holland	Tidewater Ag Res and Ext Center	Fertilization:	500lb 5-10-30 + 130 lb N sidedressed
Planted:	April 20, 1993	Plot Size:	2 rows 25' x 3' 4 replications
Harvested:	September 9, 1993	Soil Series:	Nansemond fine sandy loam
Pesticide:	3 qt Lariat	Cooperator:	J. J. Riddick

HOLLAND, VA 1992/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
PIONEER	3245	134	19.4	21308	3	80
DEKALB	DK646	133	21.2	21163	5	80
PIONEER	3394	123	17.8	21635	1	79
DOEBLER'S	73XP	122	18.9	21562	3	80
HY-PERFORMER	HS9502	122	19.1	21671	2	79
BECK'S	54XA	119	18.1	20982	4	79
AUGUSTA	A513	117	20.5	20981	4	80
NORTHRUP KING	N7989	116	19.5	21889	4	80
BECK'S	58	113	19.5	21562	2	80
AGRATECH	GK750	111	18.6	21635	5	79
AUGUSTA	A505	107	19.4	21707	2	79
Maturity Average		120	19.3	21463	3	79
LSD (0.05)		16	1.2	551	NS	NS

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
PIONEER	3163	135	21.0	21381	5	82
CARGILL	8527	131	21.5	21018	5	81
AUGUSTA	A616	129	20.2	21199	3	82
DOEBLER'S	82XP	128	20.2	21272	2	81
HY-PERFORMER	HS9843	126	20.2	21236	2	81
HY-PERFORMER	HS9905	126	19.8	21054	3	81
DEKALB	DK689	126	22.4	20873	2	82
SOUTHERN STATES	SS812	122	20.2	21417	3	81
HYTEST	HTX7748	116	20.6	21489	4	82
PIONEER	3140	115	20.7	20473	8	82
AGRATECH	757	115	19.6	21163	5	82
NORTHRUP KING	S8645	115	21.5	20873	5	81
SOUTHERN STATES	SS853	115	21.3	20909	3	81
SOUTHERN STATES	SS793	114	19.7	20582	5	81
HY-PERFORMER	HS9773	114	21.6	21090	7	81
BECK'S	72X	110	20.8	20836	11	82
DOEBLER'S	75X2	109	19.0	20872	7	82
FUNK'S G	4631	101	21.0	20909	3	82
Maturity Average		119	20.6	21036	5	82
LSD (0.05)		16	1.4	NS	4	NS

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
PIONEER	3165	134	24.0	21599	4	84
PIONEER	3156	133	20.7	21453	8	84
NORTHRUP KING	N8727	128	21.4	21308	2	84
SOUTHERN STATES	SS943	128	23.6	21417	2	84

Mid-Full Maturity (continued)		Yield	Moist	Plants/ A	Lodg	DaysTo
Company/Brand	Hybrid	bu/A	%		%	Silk
NORTHRUP KING	N8811	125	22.0	21236	7	84
JACQUES	9220	124	22.8	21272	9	84
DEKALB	DK743	122	22.8	21671	5	84
ASGROW	RX919	117	24.1	21054	6	84
PIONEER	3085	113	23.9	21417	9	84
LYNKS	2868	102	21.1	21490	3	84
Maturity Average		122	22.6	21392	5	84
LSD (0.05)		19	1.3	NS	5	NS
Location Average		120	20.8	21248	4	82

Three Year Averages

HOLLAND, VA 1991/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
DEKALB	DK646	137	20.6	21569	4	79
PIONEER	3245	132	19.5	21727	2	80
PIONEER	3394	124	17.8	21965	1	79
BECK'S	54XA	124	17.9	21437	3	79
BECK'S	58	117	19.0	21886	2	80
AUGUSTA	A513	117	20.4	20090	3	79
AUGUSTA	A505	110	18.9	21912	1	79
Maturity Average		123	19.1	21512	2	79
LSD (0.05)		15	0.9	498	NS	1

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
CARGILL	8527	136	21.1	21516	4	81
ASGROW	RX919	134	21.0	22942	2	80
DEKALB	DK689	130	22.0	21437	2	81
HY-PERFORMER	HS9773	124	21.0	21463	6	80
SOUTHERN STATES	SS793	123	19.7	21173	4	80
NORTHRUP KING	S8645	122	21.0	21463	4	81
PIONEER	3140	122	20.6	20988	7	81
AGRATECH	757	118	19.3	21463	4	81
BECK'S	72X	115	20.4	21226	9	80
FUNK'S G	4631	111	20.9	21173	2	80
Maturity Average		123	20.7	21370	4	81
LSD (0.05)		NS	1.1	667	4	1

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
PIONEER	3165	135	23.4	21859	4	83
NORTHRUP KING	N8727	133	21.2	21701	2	83
ASGROW	RX919	117	24.1	21054	6	84
PIONEER	3085	114	23.5	21727	7	83
Maturity Average		125	23.0	21624	5	83
LSD (0.05)		18	1.3	NS	3	1
Location Average		123	20.6	21467	4	81

1993 HYBRID CORN TEST

MT HOLLY, VA 1993 (Irrigated)

Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
DEKALB	DK646	224	22.9	27617	4	73	49
PIONEER	3245	223	22.7	28140	6	75	49
SOUTHERN STATES	SS742A	213	21.7	28488	9	74	49
PIONEER	3525	211	21.4	27181	3	72	52
AUGUSTA	A613aa	209	23.5	28227	11	73	50
SOUTHERN STATES	SS682	207	22.0	28750	6	72	45
DEKALB	DK623	205	23.2	27094	4	72	45
NORTHRUP KING	N7989	205	20.6	28140	15	74	53
BECK'S	57	204	21.1	27356	8	71	51
PIONEER	3523	204	21.2	28314	2	72	53
AUGUSTA	A505	204	21.8	26659	16	71	46
HY-PERFORMER	HY9487	204	22.4	29011	10	72	49
AUGUSTA	A605	202	22.4	27443	10	73	48
AUGUSTA	A513	199	23.7	26833	9	72	51
BECK'S	54XA	196	21.6	27268	13	71	42
DOEBLER'S	62XP	196	21.8	28140	5	72	49
FUNK'S G	5133X	196	21.5	27617	3	71	48
HY-PERFORMER	HS9502	195	21.2	27791	10	73	49
PIONEER	3394	194	20.4	28053	2	72	50
DOEBLER'S	73XP	193	22.6	27704	2	72	49
HYTEST	HT7510	193	22.1	28140	5	73	48
ICI SEEDS	8285	190	23.2	28488	10	74	55
HYTEST	HB6407	188	23.0	26746	13	72	51
BECK'S	58	187	21.9	29447	7	73	47
FUNK'S G	4473	186	20.7	25091	6	72	52
AUGUSTA	A618	185	23.7	28053	11	74	51
AUGUSTA	A705	181	22.1	22564	4	73	48
HY-PERFORMER	HY9610	177	23.9	26484	5	74	52
JACQUES	EXP3010	177	21.4	28227	5	70	46
PIONEER	3527	177	20.6	27094	6	72	52
JACQUES	EXP3113	176	21.3	26484	7	72	52
HY-PERFORMER	HS9490	175	21.3	26136	3	71	39
Maturity Average		196	22.0	27462	7	72	49
LSD (0.05)		25	1.7		11	1	3

Medium Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
AUGUSTA	A616	227	23.0	28314	11	76	56
PIONEER	3163	224	25.3	27966	28	74	53
EASTLAND	7810	221	22.6	27791	2	72	42
AUGUSTA	A614	215	22.0	28314	2	74	48
SOUTHERN STATES	SS793	214	23.6	28053	3	72	53
BECK'S	68	213	22.9	26920	10	72	44
HY-PERFORMER	HS9704	212	23.6	27791	3	72	49
CARGILL	8327	211	22.0	28314	11	74	53
LYNKS	2812	209	23.8	27443	7	73	51
LONGEST	L20	208	22.1	28140	1	73	45
DEKALB	DK678	208	22.9	27791	3	72	49
HY-PERFORMER	HS9848	208	21.5	27617	7	74	51
AUGUSTA	A617	208	22.0	27617	3	73	45
FUNK'S G	4631	206	23.2	27356	6	73	57
PIONEER	3140	204	24.6	25701	6	76	61
HY-PERFORMER	HS9905	202	25.0	28575	4	74	47
JACQUES	8240	199	22.8	27878	1	74	53
DOEBLER'S	82XP	198	22.5	27007	3	75	54
DEKALB	DK689	198	24.3	28314	13	75	54
HY-PERFORMER	HS9843	196	23.7	28053	3	74	53
BECK'S	81MVP	195	21.6	25875	5	74	49
SOUTHERN STATES	SS853	194	24.1	28488	25	74	48
AUGUSTA	A615	194	24.1	28314	8	75	54
BECK'S	72X	193	23.9	26920	13	73	54
HYTEST	HTX7748	192	23.5	28837	7	74	54
ASGROW	RX743	190	21.8	28053	2	73	47
AUGUSTA	A713	190	23.7	27878	14	74	52
HYTEST	HT7728	187	21.5	25962	10	74	53
SOUTHERN STATES	SS812	186	23.0	28576	8	74	54
LONGEST	L10	186	20.9	28314	0	71	39
ICI SEEDS	8501	186	20.9	27617	2	71	48
DOEBLER'S	75X2	185	21.6	27269	7	74	52
HY-PERFORMER	HS9773	184	24.9	26920	26	73	55
EASTLAND	799	174	22.3	26136	10	72	51
WILSON	DEMAND 116	164	26.4	26572	7	76	44
WILSON	DEMAND 119	153	24.7	26833	16	73	49
Maturity Average		198	23.1	27598	8	73	50
LSD (0.05)		23	1.7		11	1	4

Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
NORTHRUP KING	N8727	225	24.7	28314	7	75	46
DEKALB	DK743	224	25.2	27530	1	74	54
PIONEER	3165	222	26.7	28140	36	77	56
PIONEER	3156	221	26.1	27443	15	75	59
NORTHRUP KING	N8811	205	26.1	26746	6	75	50
DOEBLER'S	86XA2	204	25.0	28314	2	73	44

Mid-Full Maturity (continued) Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
ASGROW	RX945	204	27.2	26049	13	75	57
DOEBLER'S	87XP	203	23.7	26746	3	74	45
LYNKS	2868	201	21.9	28750	6	74	56
CROWS	SL70	174	23.6	25787	12	71	50
Maturity Average		208	25.0	27382	10	74	52
LSD (0.05)		27	1.7		11	1	5
Location Average		198	22.9	27514	8	73	50

Mt. Holly (Irr.) Virginia Crop Improvement Association Farm
 Planted: April 19, 1993
 Harvested: September 8, 1993
 Pesticide: 1.8 qt Bicep 6L + 1 pt Atrazine preplant
 Fertilization: 100lb N + 40lb P₂O₅ + 80lb K₂O at planting
 92 lb N + 11 lb S + 1 lb boron through irrigation

Irrigation: 1.0" June 21
 0.4" 27
 0.4" July 2
 1.0" 9
 0.6" 14
 0.7" 15
 1.1 19
 1.1 26
 1.2 31

Plot Size: 2 rows 25' x 30" 4 replications
 Soil Series: State fine sandy loam
 Cooperator: Bruce Beahm

Two Year Averages

MT HOLLY, VA 1992/1993 (Irrigated)

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3245	228	22.6	26920	3	78	50
DEKALB	DK646	222	23.0	26267	2	76	52
NORTHRUP KING	N7989	220	22.1	27236	8	78	55
PIONEER	3394	213	20.8	27007	2	75	53
SOUTHERN STATES	SS682	207	21.9	27312	4	76	50
BECK'S	54XA	207	21.3	26291	8	74	48
DOEBLER'S	73XP	206	22.9	27791	3	76	53
PIONEER	3525	205	20.6	26975	3	75	56
AUGUSTA	A505	203	21.5	25962	10	74	49
HY-PERFORMER	HS9502	202	21.7	27486	6	76	51
PIONEER	3523	197	20.1	27189	2	75	56
BECK'S	58	194	21.9	27748	6	76	49
AUGUSTA	A513	192	23.5	26702	8	76	54
PIONEER	3527	183	20.3	26702	3	76	54
Maturity Average		206	21.7	26971	5	76	52
LSD (0.05)		16	1.2	1134	NS	1	2

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3163	232	25.7	26267	14	78	55
AUGUSTA	A616	222	22.9	27312	5	79	59
BECK'S	68	221	23.3	27312	5	76	49
EASTLAND	7810	221	22.6	26876	1	76	46
SOUTHERN STATES	SS793	215	23.8	27125	2	76	54
PIONEER	3140	211	24.1	25566	4	79	63
LYNKS	2812	209	23.4	26833	4	76	55
HY-PERFORMER	HS9843	208	23.5	27015	3	77	57
AUGUSTA	A617	206	22.6	26528	3	76	51
FUNK'S G	4631	204	23.5	26028	6	76	59
HY-PERFORMER	HS9905	204	24.8	26937	2	77	51
HY-PERFORMER	HS9704	201	23.4	26062	3	76	54
DOEBLER'S	82XP	200	23.0	27051	2	78	56
HYTEST	HTX7748	200	23.3	26920	5	78	57
AUGUSTA	A615	198	24.1	26267	6	78	57
SOUTHERN STATES	SS812	195	23.0	27598	7	77	57
DOEBLER'S	75X2	192	22.3	26267	4	77	55
EASTLAND	799	189	23.2	26659	5	76	56
BECK'S	72X	177	23.8	26397	14	77	57
AUGUSTA	A713	174	26.0	27261	8	78	59
HY-PERFORMER	HS9773	160	24.3	26528	23	77	57
Maturity Average		202	23.6	26705	6	77	55
LSD (0.05)		17	1.0	NS	7	1	3

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
NORTHRUP KING	N8727	228	25.0	28270	5	78	52
PIONEER	3156	219	25.7	27399	10	78	60
PIONEER	3165	215	26.4	26767	26	81	59
NORTHRUP KING	N8811	214	25.7	25265	5	78	53
LYNKS	2868	205	22.9	27399	5	77	58
Maturity Average		216	25.1	27020	10	79	56
LSD (0.05)		NS	1.2	NS	11	1	3
Location Average		205	23.2	26837	6	77	54

MT HOLLY, VA 1991/1993 (Irrigated)

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3245	217	22.6	26688	2	75	50
PIONEER	3394	200	20.8	27123	1	73	53
BECK'S	54XA	197	21.0	27023	6	72	48
AUGUSTA	A505	193	21.1	26281	7	72	49
HY-PERFORMER	HS9502	192	21.2	27617	4	75	51
BECK'S	58	187	21.5	27704	4	74	49
AUGUSTA	A513	184	22.9	25323	6	74	54
PIONEER	3527	170	20.3	26978	2	73	54
Maturity Average		193	21.4	26842	4	74	51
LSD (0.05)		12	1.1	920	NS	1	3

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
AUGUSTA	A616	214	22.9	27646	4	76	59
BECK'S	68	209	22.7	27443	3	74	49
EASTLAND	7810	207	22.1	26775	1	73	46
PIONEER	3140	205	23.4	25872	3	77	63
SOUTHERN STATES	SS793	204	23.2	26969	1	74	54
AUGUSTA	A615	197	22.9	26688	4	76	57
AUGUSTA	A617	196	22.0	26659	2	74	51
HY-PERFORMER	HS9704	193	22.8	25826	2	74	54
EASTLAND	799	188	22.4	27181	3	74	56
DOEBLER'S	75X2	186	21.5	27065	2	76	55
Maturity Average		200	22.6	26812	3	75	54
LSD (0.05)		14	0.9	NS	NS	1	4

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
NORTHROP KING	N8727	213	24.2	28053	4	76	52
PIONEER	3165	212	25.7	27079	17	78	59
Maturity Average		213	25.0	27566	11	77	56
LSD (0.05)		NS	1.2	889	13	1	4
Location Average		198	22.4	26900	4	74	53

1993 HYBRID CORN TEST

ORANGE, VA 1993

Early Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
ICI SEEDS	8260	134	15.9	23232	68	40
CARGILL	7997	129	15.3	23232	65	36
PIONEER	3245	128	15.9	23232	70	37
DOEBLER'S	69XP	127	14.7	23232	69	38
SOUTHERN STATES	SS742A	127	14.9	23232	71	39
AUGUSTA	A613aa	125	15.3	23232	69	38
AGRIGENE	AG7588	125	15.0	23232	71	41
PIONEER	3523	124	14.6	23232	68	38
AUGUSTA	A513	120	15.0	23232	68	39
AUGUSTA	A505	116	15.0	23232	66	34
FUNK'S G	4584	116	15.5	23232	71	38
CARGILL	7897	115	15.6	23232	70	38
ASGROW	RX801	115	15.2	23232	70	40
AUGUSTA	A618	113	14.9	23232	70	40
NORTHRUP KING	N7989	113	15.2	23232	73	40
PIONEER	3525	112	16.1	23232	68	39
DOEBLER'S	73XP	112	15.0	23232	67	38
BECK'S	58	111	15.0	23232	70	39
DOEBLER'S	62XP	109	14.4	22506	66	41
HYTEST	HB6407	109	14.9	23232	67	37
FUNK'S G	5133X	108	14.8	23232	69	37
NORTHRUP KING	N6330	108	14.7	23232	66	35
DOEBLER'S	66XP	108	14.1	23232	66	32
AUGUSTA	A605	106	14.6	22797	70	38
PIONEER	3241	105	15.9	23232	69	37
PIONEER	3394	104	15.3	23232	69	36
HYTEST	HT7510	103	14.8	23232	71	38
AUGUSTA	A413	103	16.1	23232	71	40
BECK'S	57	102	14.9	22651	67	38
PIONEER	3527	93	14.7	23232	68	36
AUGUSTA	A705	93	15.8	22797	72	38
Maturity Average		113	15.1	23162	69	38
LSD (0.05)		17	1.1		2	4
Medium Maturity Brand\Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
PIONEER	3215	126	16.5	23232	75	42
NORTHRUP KING	X821	125	15.6	23232	72	43
AUGUSTA	A614	123	16.3	23232	71	37
FUNK'S G	4672	115	16.7	23232	74	42
SOUTHERN STATES	SS812	113	15.7	23232	71	42
PIONEER	3140	113	16.1	23232	71	44
NORTHRUP KING	N8702	112	16.6	23232	73	41
AGRIGENE	AG7935	111	16.9	23232	71	39
DOEBLER'S	82XP	110	15.4	23232	72	43
CARGILL	9027	109	17.0	23232	71	39
JACQUES	8240	109	16.0	23232	72	42

Medium Maturity (continued) Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	Days To Silk
EASTLAND	7810	109	16.3	23232	69	36
ASGROW	RX743	107	14.9	23232	70	38
SOUTHERN STATES	SS793	106	16.1	23232	69	38
BECK'S	72X	105	16.6	23232	71	40
ICI SEEDS	8326	104	15.0	23232	67	34
AUGUSTA	A615	104	15.4	23232	73	43
AUGUSTA	A713	102	15.8	23232	72	36
HYTEST	HTX7748	102	16.1	22942	72	41
PIONEER	3163	100	16.4	23232	72	39
ASGROW	RX876	100	14.7	23232	72	37
AUGUSTA	A616	99	15.0	23232	75	37
LYNKS	2812	99	15.3	23232	70	36
DOEBLER'S	75X2	98	15.3	23232	73	39
AGRIGENE	AG7720	97	15.4	23232	67	36
NORTHRUP KING	S8645	97	16.6	23232	70	40
CARGILL	8327	96	16.1	23232	72	44
DEKALB	DK689	93	17.6	22651	72	38
ASGROW	RX897	92	15.8	23232	73	40
AUGUSTA	A617	87	17.8	23232	73	37
HYTEST	HT7728	84	15.5	23087	74	38
EASTLAND	799	83	15.8	22651	69	38
FUNK'S G	4671	67	16.1	23232	72	38
WILSON	DEMAND 116	66	16.2	23232	75	30
WILSON	DEMAND 119	65	16.8	23232	75	34
LONGEST	L12	62	14.8	23232	68	35

Maturity Average		100	16.0	23188	71	39
LSD (0.05)		27	1.2		2	4

Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	Days To Silk
PIONEER	3154	152	18.4	23232	71	45
PIONEER	3165	150	19.5	23232	74	45
PIONEER	3156	144	17.1	23232	71	47
SOUTHERN STATES	SS943	137	19.0	23232	70	40
JACQUES	9220	136	17.4	23232	70	44
LYNKS	2868	135	15.6	23232	72	43
DEKALB	DK743	134	17.8	23232	70	43
NORTHRUP KING	N8727	130	18.1	23232	71	36
ASGROW	RX919	127	17.1	23232	74	46
PIONEER	3085	123	17.7	23232	76	45
NORTHRUP KING	N8811	120	17.2	22797	70	37
CROWS	SL70	101	15.9	22216	68	36

Maturity Average		132	17.6	23111	71	42
LSD (0.05)		17	1.1		1	4

Location Average		110	15.9	23100	70	39
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Orange: Northern Piedmont Ag Res and Ext Center

Planted: May 10, 1993

Harvested: Oct 14-15, 1993

Pesticide: 3 qt Bicep preemerge + 1.5 pt Lorsban (to control corn borers)

Fertilization: 1000lb 10-10-10 preplant + 100lb N sidedressed

Plot Size: 1 row 30' x 30" 4 replications

Soil Series: Davidson silty clay

Cooperator: D. E. Starnes

ORANGE, VA 1992/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
AUGUSTA	A513	144	16.6	22651	0	73	45
PIONEER	3245	142	16.9	22651	1	74	42
CARGILL	7997	142	17.0	22651	1	71	42
DOEBLER'S	69XP	141	16.2	22651	0	73	44
AUGUSTA	A413	138	17.4	22651	0	74	48
NORTHRUP KING	N7989	136	16.4	22651	0	76	46
PIONEER	3241	135	17.6	22651	1	72	45
AUGUSTA	A505	134	16.2	22651	0	71	41
HYTEST	HT7510	129	16.0	22651	0	75	44
PIONEER	3394	129	16.1	22651	1	73	43
BECK'S	58	127	16.5	22651	0	74	45
DOEBLER'S	73XP	127	16.6	22651	0	72	45
Maturity Average		135	16.6	22651	0	73	44
LSD (0.05)		12	0.7		NS	1	2

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	148	18.1	22651	1	76	49
PIONEER	3163	147	19.2	22651	0	75	45
SOUTHERN STATES	SS812	141	17.5	22651	0	75	48
PIONEER	3215	140	18.0	22651	0	78	46
DOEBLER'S	82XP	134	17.1	22651	0	76	47
HYTEST	HTX7748	132	17.3	22506	0	76	47
SOUTHERN STATES	SS793	132	17.1	22651	1	73	43
BECK'S	72X	131	17.6	22651	2	74	47
EASTLAND	7810	131	17.9	22651	0	74	40
CARGILL	9027	130	18.9	22651	0	75	44
DEKALB	DK689	129	19.3	22361	0	75	45
DOEBLER'S	75X2	128	16.4	22651	0	76	46
NORTHRUP KING	S8645	127	18.8	22651	1	75	44
LYNKS	2812	127	17.3	22651	0	75	43
ASGROW	RX897	126	17.2	22651	0	76	46
HYTEST	HT7728	115	16.7	22578	0	77	45
EASTLAND	799	104	17.1	22361	0	73	44
FUNK'S G	4671	102	18.3	22651	0	76	44
Maturity Average		129	17.8	22607	0	75	45
LSD (0.05)		16	0.8	NS	NS	1	2

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3156	164	18.6	22651	0	74	51
PIONEER	3165	159	21.4	22651	1	78	47
SOUTHERN STATES	SS943	159	21.5	22651	0	74	44
PIONEER	3154	157	19.7	22651	0	76	47
JACQUES	9220	157	20.2	22651	0	75	48
NORTHRUP KING	N8727	156	19.9	22651	0	75	41
LYNKS	2868	148	17.0	22651	0	75	48
PIONEER	3085	142	22.5	22651	1	79	50
ASGROW	RX919	141	19.3	22651	0	78	51
DEKALB	DK743	132	19.3	22651	1	75	45
NORTHRUP KING	N8811	129	19.4	22433	1	75	43
Maturity Average		149	19.9	22631	0	76	47
LSD (0.05)		11	0.8	NS	NS	1	2
Location Average		136	18.0	22626	0	75	45

Three Year Averages

ORANGE, VA 1991/1993

Early Maturity Company\Brand	Yield Hybrid	Moist bu/A	Plants/A %	Lodg %	DaysTo Silk	EarHt In	
AUGUSTA	A413	165	17.3	22457	1	73	48
PIONEER	3245	162	16.8	22457	1	73	41
CARGILL	7997	159	16.6	22457	1	70	42
DOEBLER'S	69XP	158	16.2	22457	0	72	44
AUGUSTA	A513	155	16.8	22361	0	72	44
HYTEST	HT7510	151	16.0	22457	0	73	43
BECK'S	58	149	16.4	22457	1	73	43
PIONEER	3241	146	17.3	22457	1	70	46
PIONEER	3394	143	15.8	22457	1	71	43
Maturity Average		154	16.6	22447	1	72	44
LSD (0.05)		9	0.6	NS	NS	1	2
Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
PIONEER	3140	161	18.2	22457	1	74	50
BECK'S	72X	157	17.5	22457	3	73	48
CARGILL	9027	153	18.3	22457	1	74	44
SOUTHERN STATES	SS793	150	16.8	22457	0	72	44
DEKALB	DK689	149	18.7	22264	2	74	46
EASTLAND	7810	149	17.2	22457	1	72	41
NORTHRUP KING	S8645	147	18.3	22457	1	73	44
HYTEST	HT7728	142	16.4	22409	1	75	47
EASTLAND	799	129	16.6	22264	0	72	45
FUNK'S G	4671	126	17.6	22457	2	75	46
Maturity Average		146	17.6	22414	1	73	45
LSD (0.05)		12	0.7	NS	NS	1	2

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk	EarHt in
JACQUES	9220	177	20.2	22457	1	74	49
PIONEER	3165	174	21.1	22457	1	76	47
NORTHRUP KING	N8727	173	19.9	22457	1	73	40
PIONEER	3154	170	19.1	22457	3	75	49
PIONEER	3085	169	21.6	22457	5	77	51
Maturity Average		173	20.4	22457	2	75	47
LSD (0.05)		NS	0.7		2	1	2
Location Average		155	17.8	22435	1	73	45

1993 HYBRID CORN TEST

PAINTER, VA 1993

Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
AUGUSTA	A513	84	15.7	20038	3	71
FUNK'S G	5133X	67	14.3	18295	1	74
FUNK'S G	4473	64	14.0	17947	4	73
HY-PERFORMER	HY9610	62	14.3	17947	0	76
SOUTHERN STATES	SS742A	62	15.0	17947	1	76
HYTEST	HB6407	60	14.0	18818	5	74
AUGUSTA	A413	45	15.2	13765	6	76
HYTEST	HT7510	40	15.1	16379	12	76
Maturity Average		62	15.1	17618	4	75
LSD (0.05)		19	1.0		7	2

Medium Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
SOUTHERN STATES	SS793	85	15.6	19864	3	72
WILSON	DEMAND 119	78	18.1	20386	2	75
SOUTHERN STATES	SS853	74	16.7	18992	1	75
HY-PERFORMER	HB836002	71	17.5	16901	4	76
HY-PERFORMER	HS9704	70	14.9	19167	3	71
HY-PERFORMER	HS9773	69	15.3	17598	3	75
SOUTHERN STATES	SS812	63	15.7	20909	1	77
FUNK'S G	4631	61	16.1	20038	3	75
HY-PERFORMER	HS9843	61	15.1	19515	2	77
JACQUES	8240	59	16.1	20212	2	77
HYTEST	HT7728	58	14.9	20038	2	77
HYTEST	HTX7748	55	15.8	18470	5	77
HY-PERFORMER	HS9848	41	15.1	20038	3	77
WILSON	DEMAND 116	41	15.4	16204	1	77
Maturity Average		64	16.2	19036	3	76
LSD (0.05)		13	0.6		4	1

Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
JACQUES	9220	65	18.1	18470	2	77
HY-PERFORMER	HB737001	65	17.3	17773	4	75
CROWS	SL70	51	13.9	18295	2	71
Maturity Average		60	16.4	18179	2	74
LSD (0.05)		13	1.9		5	2
Location Average		63	15.9	18488	3	75

Painter Eastern Shore Ag Res and Ext Center
 Planted: April 20, 1993
 Harvested: September 13, 1993

Pesticide: 1qt Princep 4L + 3.5qt Bullet + 0.5pt 2,4-D + 1.5pt
 Paraquat April 21 0.25qt Pounce 2.3EC June 7
 Fertilization: 500lb 5-10-10 preplant + 106lb N dribbled on June 4
 Plot Size: 1 row 25' x 30" 4 replications
 Soil Series: Local Collovum over clay
 Cooperator: T. Custis

Two Year Averages

PAINTER, VA 1992/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
AUGUSTA	A513	103	19.9	18644	3	71
AUGUSTA	A413	80	21.7	15072	8	76
Maturity Average		92	20.8	16858	5	74
LSD (0.05)		11	NS	2900	NS	2
Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
HY-PERFORMER	HS9773	114	21.1	18905	2	75
HY-PERFORMER	HS9704	110	19.9	19341	4	71
HY-PERFORMER	HS9843	105	20.0	19864	1	77
SOUTHERN STATES	SS793	101	20.1	19515	5	72
SOUTHERN STATES	SS812	101	20.1	19602	0	77
FUNK'S G	4631	99	20.6	19951	3	75
HYTEST	HTX7748	95	20.1	18905	3	77
SOUTHERN STATES	SS853	92	21.9	18905	2	75
Maturity Average		102	20.5	19373	3	75
LSD (0.05)		14	0.7	NS	NS	1
Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
JACQUES	9220	108	23.3	19079	2	77
Location Average		101	20.8	18889	3	75

Three Year Averages

PAINTER, VA 1991/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
AUGUSTA	A513	90	19.8	16959	3	71
AUGUSTA	A413	79	20.9	16727	6	76
Maturity Average		84	20.4	16843	4	74
LSD (0.05)		10	NS	NS	NS	2
Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/ A	Lodg %	DaysTo Silk
HY-PERFORMER	HS9773	102	20.5	19108	5	75
HY-PERFORMER	HS9704	99	19.6	18644	3	71
SOUTHERN STATES	SS793	93	19.9	19108	4	72
Maturity Average		98	20.0	18954	4	73
LSD (0.05)		NS	NS	NS	NS	1
Location Average		92	20.1	18109	4	73
			31			

SMYTH, VA 1993

Early Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
NORTHRUP KING	N7989	101	24.5	18295	0
PIONEER	3527	100	21.1	19341	2
PIONEER	3245	99	24.5	19167	0
SOUTHERN STATES	SS742A	98	25.1	19776	0
PIONEER	3525	91	19.6	20560	4
PIONEER	3241	89	22.7	20125	1
CAVERNDAL FARM	CF790	85	24.6	18382	0
NORTHRUP KING	N6330	79	22.9	19079	1
PIONEER	3523	75	21.3	18382	1
Maturity Average		90	23.9	19114	1
LSD (0.05)		22	1.2		3

Medium Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
SOUTHERN STATES	SS883A	120	27.2	18121	1
SOUTHERN STATES	SS812	118	24.9	21344	0
PIONEER	3163	115	25.4	17860	0
PIONEER	3140	111	25.4	17773	1
HYTEST	HTX7748	104	26.4	19863	0
BECK'S	68	101	25.4	18644	0
BECK'S	81MVP	101	25.9	18208	0
SOUTHERN STATES	SS883	100	27.0	21432	0
PIONEER	3215	95	27.1	18905	1
WILSON	DEMAND 119	93	28.0	18557	0
HYTEST	HT7728	87	24.8	19515	0
WILSON	DEMAND 116	75	26.5	19428	0
CAVERNDAL FARM	CF800A	71	25.4	18644	1
LONGEST	L25W	63	28.9	22129	0
Maturity Average		96	26.7	19312	0
LSD (0.05)		21	1.6		1

Mid-Full Maturity Brand/Company	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
SOUTHERN STATES	SS943	121	28.4	18470	1
PIONEER	3154	119	27.2	19689	0
PIONEER	3156	105	26.3	18295	2
NORTHRUP KING	N8727	104	27.0	19776	0
PIONEER	3085	103	30.0	20037	0
NORTHRUP KING	N8811	99	26.9	19428	0
CROWS	SL70	99	24.7	15943	2
Maturity Average		107	27.2	18805	1
LSD (0.05)		20	1.8		2

Location Average 97 25.9 19139 0

Smyth County

Planted: May 12, 1993

Harvested: October 15, 1993

Pesticide: 1.5 pt Gramoxone + 3 qt Bicep + 8.5 oz Asana April 30
0.67 oz Accent June 11

Fertilization: 100 lb N April 30

50 lb N sidedressed

Plot Size: 2 rows 25' x 30" 4 replications

Cooperator: W. J. Robinson and J. Waddle

Two Year Averages

SMYTH, VA 1992/1993

Early Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
NORTHRUP KING	N7989	117	26.5	20125	0
PIONEER	3245	115	25.0	20822	0
PIONEER	3241	109	23.7	21649	2

Maturity Average		113	25.1	20865	1
LSD (0.05)		NS	1.2	NS	1

Medium Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
PIONEER	3163	140	27.4	20299	0
PIONEER	3140	132	27.2	20299	2
SOUTHERN STATES	SS812	131	26.0	22259	0
HYTEST	HTX7748	125	26.9	21039	0
SOUTHERN STATES	SS883	123	28.4	21693	0
BECK'S	81MVP	118	27.5	20299	0
HYTEST	HT7728	116	26.1	20517	0
PIONEER	3215	105	28.1	20822	1
CAVERNDAL FARM	CF800A	93	26.8	19602	3

Maturity Average		120	27.2	20759	1
LSD (0.05)		20	1.2	NS	2

Mid-Full Maturity Company/Brand	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
SOUTHERN STATES	SS943	137	31.8	19994	0
PIONEER	3154	130	29.1	21388	1
PIONEER	3085	128	32.7	21693	0
NORTHRUP KING	N8811	125	29.9	21083	0
PIONEER	3156	123	27.5	20168	1
NORTHRUP KING	N8727	115	29.8	21126	0

Maturity Average		126	30.1	20909	0
LSD (0.05)		NS	1.2	NS	NS

Location Average		121	27.8	20826	1
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Three Year Averages

SMYTH, VA 1991/1993

Medium Maturity Company\Brand	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
PIONEER	3140	143	24.9	21054	2
BECK'S	81MVP	130	25.1	21054	1
HYTEST	HT7728	129	24.4	21403	0
Maturity Average		134	24.8	21170	1
LSD (0.05)		NS	NS	NS	1

Mid-Full Maturity Company\Brand	Hybrid	Yield bu/A	Moist %	Plants/A	Lodg %
PIONEER	3154	154	26.5	21809	1
PIONEER	3085	143	29.5	22419	0
NORTHRUP KING	N8727	131	27.2	21925	0
Maturity Average		143	27.8	22051	0
LSD (0.05)		17	1.1	NS	NS
Location Average		138	26.3	21611	0

Table 1. Responses of corn hybrids to MDM virus inoculation, Accent®, and Beacon® at Blacksburg Virginia 1993

BRAND	YIELD HYBRID	CONTROL	MDM	BEACON	ACCENT	% H2O	
						CONTROL	
SOUTHERN STATES	XP49923	177	173	155	179	30.8	a
DEKALB	DK743	170	146 *	150	144	29.1	abc
SOUTHERN STATES	SS943	153	149	148	159	28.9	bcd
HYTEST	93C10X	150	154	161	143	29.2	abc
CAVERNDAL FARM	CF900A	148	149	140	139	29.2	abc
JACQUES	8240	148	135	145	148	25.2	hi
AUGUSTA	A605	142	122	138	144	22.8	j
SOUTHERN STATES	SS883	140	134	152	131	30.8	a
ASGROW	RX919	140	139	126	131	28.8	bcd
NORTHRUP KING	X751	137	111 *	138	135	25.7	ghi
AUGUSTA	A614	134	116	152	144	25.2	hi
HYTEST	HT686	134	139	129	145	26.2	e-i
NORTHRUP KING	N8702	131	129	131	126	27.6	cde
AUGUSTA	A617	128	111 *	131	124	24.8	i
HYTEST	HT797	123	104	106	118	27.7	cde
BECK'S	85MDM	123	122	119	131	29.1	abc
DEKALB	DK689	122	101	115	98	27.6	cde
WILSON	DEMAND 116	120	103	117	115	27.0	e-h
STINE	1230	119	148	122	128	26.6	e-h
NORTHRUP KING	S8645	111	114	115	89	25.8	f-i
JACQUES	EXP3121	106	74 *	106	107	29.6	ab
HYTEST	93C22X	104	101	87	109	29.0	bcd
BECK'S	87MDM	97	69 *	93	94	30.3	ab
WILSON	DEMAND 119	97	93	93	121	27.2	d-g
SUSCEPTIBLE	CHECK	90	84	103	109	22.7	j
	AVERAGE	130	121 127	128	27.5		

Accent® and Beacon® are post-emergence herbicides that are applied to control johnsongrass in corn when the corn is 12 to 20 inches in height. As the Johnsongrass dies in response to the herbicide, the aphids and leaf hoppers move from johnsongrass to the corn. Virus infection at this early stage greatly reduces yield of a susceptible hybrid. In order to avoid serious losses from the corn viruses, maize dwarf mosaic virus (MDMV) in particular, growers should plant hybrids with a high level of MDMV-resistance. The hybrids tested in these plots were selected by the corn companies to determine their degree of MDMV resistance. The test was unique in that the tolerance of the selected hybrids to Accent® and Beacon® was also evaluated. Each of the hybrids was planted in 8 row plots 25 feet long with 4 replications. Two rows of each hybrid were inoculated with MDMV virus when the corn was 16 inches tall. Two rows of each hybrid were sprayed with a 2X rate of Accent® and two rows were sprayed with a 2X rate of Beacon®. The remaining two rows of each hybrid were not inoculated with virus or sprayed with a herbicide (CHECK). The plots were rated for virus and herbicide reaction. All plots were harvested with a 2 row plot combine.

*Means differ significantly from the control (Dunnett's T test (0.10)).

Treatments did not significantly affect grain moistures. Therefore only the grain moistures of the control plots are reported.

Accent® and Beacon® are the registered trade names for 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-3-pyridinecarboxamide; E.I. du Pont de Nemours & Co., Inc., Wilmington, DE and 3-[4,6-Bis-(difluoromethoxy)-pyrimidin-2-yl)-1-(2-methoxycarbonylphenyl)sulfonyl]urea; CIBA-Geigy Corp., Greensboro, NC, respectively.

Unpublished research by Mr. Dale Ball, Dr. Erik Stromberg, Dr. Scott Hagood and Dr. Dan Brann, Sr. Research Associate, Plant Pathologist, Weed Scientist and Extension Agronomist respectively.

Table 2. Hybrid Reaction to MDMV Inoculation at Blacksburg, Virginia 1993

BRAND	HYBRID	MDMV		MDMV	
		1-9 7-23-93		1-9 9-2-93	
STINE	1230	1.13	h	1.94	ghi
HYTEST	HT686	1.38	gh	1.25	ij
HYTEST	93C10X	2.51	de	2.81	def
NORTHROP KING	S8645	1.27	gh	1.50	hij
CAVERNDAL FARM	CF900A	1.05	h	1.50	hij
BECK'S	85MDM	1.20	gh	1.63	g-j
ASGROW	RX919	1.38	gh	1.00	j
NORTHROP KING	N8702	1.10	h	1.55	hij
SOUTHERN STATES	XP49923	3.50	bc	2.44	efg
SOUTHERN STATES	SS943	1.31	gh	1.56	hij
HYTEST	93C22X	2.06	efg	1.50	hij
WILSON	DEMAND 119	1.00	h	1.06	ij
SOUTHERN STATES	SS883	2.44	def	2.19	fgh
SUSCEPTIBLE	CHECK	3.88	ab	5.50	a
JACQUES	8240	2.06	efg	3.06	de
AUGUSTA	A617	4.44	a	5.25	a
AUGUSTA	A614	3.63	abc	4.75	ab
WILSON	DEMAND 116	3.00	bcd	3.25	de
AUGUSTA	A605	3.75	abc	5.38	a
DEKALB	DK743	1.60	fgh	3.06	de
HYTEST	HT797	1.15	gh	1.88	g-j
DEKALB	DK689	1.25	gh	1.31	hij
NORTHROP KING	X751	1.27	gh	1.25	ij
BECK'S	87MDM	2.94	cd	3.63	cd
JACQUES	EXP3121	3.44	bc	4.38	bc
LSD (0.05)		0.78		0.76	

The yields of hybrids Dekalb DK743, Northrup King X751, Augusta A617, Jacques EXP3121 and Beck's 87MDM were reduced by MDMV (see Table 1).

In order to simulate MDMV virus pressure all corn hybrids evaluated were uniformly and mechanically inoculated with the virus when plants were 16 inches tall. This produced a test that had plants uniformly and consistently infected with the virus. All hybrids were rated twice on a 1-9 scale where: 1=No symptoms; 2=Few very light chlorotic streaks suggestive of MDMV; 3=Mild chlorosis in a characteristic mosaic pattern, usually confined to two or three leaves; 4=Moderate to severe chlorosis usually confined to upper half of plant with height reduction up to one-fourth; 6=Moderate to severe chlorosis over most of leaf area, height reduction one-fourth; 7=Severe chlorosis, height reduction one-fourth to one-half, ear shoot development affected; 8=Severe chlorosis, height one-half, poor ear shoot development; 9=Severe chlorosis, height reduction more than one-half, little if any ear shoot development.

Means followed by the same letter(s) are not significantly different using Duncan's MRT (0.05).

Table 3. Response of corn hybrids to Beacon® and® Accent applied at a 2X rate at Blacksburg, Virginia 1993

BRAND	HYBRID	BEACON®		ACCENT®	
		HERB	HERB	HERB	HERB
		INJURY 6-25-93	INJURY 8-5-93	INJURY 6-25-93	INJURY 8-5-93
SUSCEPTIBLE	CHECK	0.50 bcd	0.00 c	0.25 cd	0.00 b
AUGUSTA	A614	0.00 d	0.00 c	0.00 d	0.00 b
SOUTHERN STATES	SS883	0.25 cd	0.00 c	0.25 cd	0.00 b
HYTEST	93C10X	0.00 d	0.00 c	0.00 d	0.00 b
NORTHRUP KING	S8645	0.25 cd	0.00 c	0.25 cd	0.00 b
STINE	1230	0.75 abc	0.00 c	0.50 bc	0.00 b
AUGUSTA	A617	0.25 cd	0.00 c	0.00 d	0.00 b
NORTHRUP KING	X751	0.75 abc	0.00 c	0.25 cd	0.00 b
NORTHRUP KING	N8702	0.00 d	0.25 b	0.00 d	0.00 b
JACQUES	EXP3121	0.25 cd	0.00 c	0.00 d	0.00 b
WILSON	DEMAND 116	1.00 ab	0.00 c	0.75 ab	0.25 ab
JACQUES	8240	0.25 cd	0.00 c	0.00 d	0.00 b
SOUTHERN STATES	SS943	0.25 cd	0.00 c	0.00 d	0.00 b
AUGUSTA	A605	1.00 ab	0.50 ab	0.75 ab	0.00 b
BECK'S	85MDM	0.50 bcd	0.00 c	0.25 cd	0.25 ab
BECK'S	87MDM	0.00 d	0.00 c	0.00 d	0.00 b
WILSON	DEMAND 119	0.75 abc	0.00 c	0.75 ab	0.00 b
HYTEST	HT686	0.25 cd	0.00 c	0.00 d	0.00 b
CAVERNDAL FARM	CF900A	0.25 cd	0.50 ab	0.25 cd	0.00 b
DEKALB	DK689	1.00 ab	0.00 c	0.75 ab	0.00 b
ASGROW	RX919	1.25 a	0.00 c	0.50 bc	0.00 b
SOUTHERN STATES	XP49923	0.25 cd	0.75 a	0.00 d	0.00 b
DEKALB	DK743	0.00 d	0.00 c	0.00 d	0.00 b
HYTEST	HT797	0.50 bcd	0.00 c	0.00 d	0.00 b
HYTEST	93C22X	1.00 ab	0.00 c	1.00 a	0.00 b

Yields were not significantly affected by herbicide treatment (see Table 1.).

Herbicide injury resulting from 2X rates (1.52 oz/acre Beacon® or 1.33 oz/acre Accent®) applied 6-17-93 and evaluated on a 0-10 scale where 0=no visual injury and 10=death of plant.

Means followed by the same letter(s) are not significantly different, using Dunnett's test (0.10).

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