

1957

VIRGINIA

CORN

PERFORMANCE

TESTS

BY

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Corn Performance Tests in Virginia in 1957

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The results of the 1957 corn hybrid performance tests conducted in Virginia are presented in this report. The tests were designed primarily to evaluate, under Virginia conditions, corn hybrids which are available to the farmers for planting in Virginia. Included in these tests are privately controlled hybrids of the commercial seed companies, commercial hybrids developed and released to the seed companies by state and Federal agencies, and experimental hybrids developed by the Virginia Agricultural Experiment Station.

Recommendations of hybrids for planting for the 1957 season which are given in this report are based on the results obtained in the tests reported herein and similar tests conducted in previous years. Hybrids must be tested in Virginia at least two years before they are eligible for recommendation.

An attempt is being made to test for one or more years all hybrids grown in Virginia. There is no intent to imply that hybrids not included in these tests will not perform well under Virginia conditions.

Areas of Virginia

The State of Virginia is divided into five regions due to various differences in elevation, soils and climatic conditions. These differences are great enough to develop different growing conditions and hybrid corn often responds differently under these different conditions.

Most Important Corn Diseases in Virginia

Plant diseases are one of the major problems in corn production in Virginia. Under summer conditions of high temperatures and high humidity, common in the Coastal Plain area, stalk rot results in serious breakage in most years and particularly in years of hurricane damage. Southern leaf blight has been serious on susceptible hybrids in the area in years of normal or excessive rainfall.

Stalk rot is probably the most serious disease of corn in the Piedmont area. Northern leaf blight is the most serious disease west of the Blue Ridge, particularly in the lower parts of the valleys where dew fall is heavy and the plants do not dry quickly in the morning. Severe leaf blight seems to make the plants more susceptible to stalk and ear diseases. Ear rots are prevalent in all areas.

The corn disease complex is much more severe than in areas of the Corn Belt using hybrids of similar maturity, and most of the imported hybrids have shown objectionable susceptibility to corn diseases in Virginia.

Yields have undoubtedly been affected by susceptibility to prevalent diseases, but the susceptibility to ear rot organisms, which is reflected primarily in the quality ratings, is the principle disease factor used directly in considering eligibility for recommendation.

Experimental Procedure

Every effort was made to obtain unbiased comparisons of the hybrids being tested. Cultural practices used in each test were largely determined by the cooperator who conducted the test. Cooperators' names and pertinent cultural data are included at the end of the table for each location.

Two or more tests with the same entries were planted in each of the regions of the State. All of these tests contained 81 entries which were planted in a nine by nine triple lattice design using three replications of one row plots approximately 30 feet long. All plots were planted and thinned by hand.

Seed of privately controlled hybrids were obtained directly from the companies developing those hybrids and seed of open pedigree commercial hybrids was obtained principally from certified seed growers.

Data were recorded as follows:

1. Yield - Yields were recorded as bushels per acre of shelled corn at 15 1/2% moisture.
2. Moisture at harvest - Kernels were removed from 6 to 8 ears per plot by a hand sheller. The 6 to 8 ears were chosen at random. The average moisture for each hybrid was used in calculating its yield.
3. Lodged and broken stalks - Plants were counted as lodged if they leaned 45 degrees or more from the vertical. Plants were counted as broken only if they were broken below the ear.
4. Quality of grain - After the corn was harvested from the plot it was weighed and placed on the ground at the end of the row. Quality of grain was then rated by visual observation.

Interpretation of Data

Data are reported in estimated order of maturity for each test based on moisture at harvest. Differences in yield necessary for significance were calculated by the multiple range test method.

Location of Tests and List of Cooperators

Southern Coastal Plain (South of James River)

Holland, Va.	Marshall Clark and M. W. Alexander
Petersburg, Va.	M. T. Carter

Northern Coastal Plain (North of James River)

Painter	E. M. Dunton
Warsaw	H. M. Camper

Southern Piedmont (South of James River)

Charlotte Courthouse	R. D. Sears
Chatham	E. M. Matthews and M. J. Rogers

Northern Piedmont

Middleburg	H. T. Bryant
Orange	G. D. Jones

West of Blue Ridge

Blacksburg	J. L. Tramel
Emory	F. S. McClaugherty
Steeles Tavern	W. H. McClure

Corn Hybrids Recommended for Planting in Virginia in 1958

Southern Coastal Plain (South of James River)

Yellow

Early:	VPI 426; Ohio C54; Southern States Pocahontas; Funk G91
Medium early:	VPI 648; VPI 646; VPI 645 ⁽¹⁾ ; Funk G134; US 505
Full season:	VPI 653; Wood V44; Funk G704
Late:	Pioneer 309A; US 262A ⁽¹⁾ ; US 578 ⁽¹⁾
Promising: (4)	Pioneer 301A; Pioneer 1363; Funk G144; Va. 339; Va. 126T

White:

Medium early:	VPI 730W; Wood V125W; US 523W; Pioneer 510 ⁽¹⁾
Late:	VPI 900W ⁽¹⁾

Silage: (3)

NC 1032; Dixie 33; or any full season or medium
early hybrid which is recommended for grain.

Northern Coastal Plain (North of James River)

Yellow:

Early:	VPI 426; Ohio C54; Southern States Pocahontas; Funk G91
Medium early:	VPI 648; VPI 646; VPI 645 ⁽¹⁾ ; US 505; Funk G134
Full season:	VPI 653; Funk G704; Wood V44
Late:	US 262A ⁽¹⁾ ; Pioneer 309A ⁽¹⁾
Promising: (4)	Pioneer 1363; Va. 339; Funk G144; Pioneer 312A; Va. 126T

White:

Medium early:	US 523W; Wood V125W; Pioneer 510 ⁽¹⁾ ; VPI 730W ⁽¹⁾
Late:	VPI 900W ⁽¹⁾

Silage: (3)

US 578; or any full season or medium early hybrid
which is recommended for grain.

Southern Piedmont (South of James River)

Yellow:

Early:

VPI 426; Ohio C54; Funk G91; Southern States

Pocahontas

Medium early:

VPI 648; VPI 646; VPI 645⁽¹⁾; US 505⁽¹⁾; Funk
G134; Pioneer 301A

Full season:

VPI 653; Funk G704; Wood V44; Pioneer 312A

Late:

US 262A⁽¹⁾

Promising:

Pa. 711; Va. 339; Pioneer 1363; PAG 444; Va. 126T

White:

Full season:

Wood V125W; Southern States 903W; VPI 730W⁽¹⁾

Silage:

(3) US 578; or any full season or medium early hybrid
which is recommended for grain.

Northern Piedmont (North of James River)

There were not data obtained in 1957 and

consequently there are no changes in recommendations.

Yellow:

Medium early:

VPI 426; Funk G76; Ohio C54; Ohio W64⁽¹⁾

Full season:

VPI 648; VPI 645; US 505; Funk G134; Wood V44;
DeKalb 630; Pioneer 301A; Funk G91; VPI 646

White:

Full season:

Pioneer 510; Southern States 903W

Silage:

(3) US 262 or US 262A; US 578; or any full season
hybrid recommended for grain.

West of Blue Ridge

Yellow:

Early:

(For higher elevations - will generally mature
two weeks earlier than US 13) Wisc. 412; Wisc. 355;
Pa. 444

Medium early:

Pioneer 342A; Ohio W64; Ohio C54; Funk G76; VPI 426

Full season:

VPI 648; Funk G91; Funk G134; US 13⁽¹⁾

Late:

VPI 645; VPI 646; US 505

Promising:

Pioneer 329; Va. 502; Va. 126T; Va. 339; Va. 514c

Silage:

(3) US 262A⁽²⁾; US 578⁽²⁾; or any full season hybrid
recommended for grain.

(1) Will not be recommended after 1958.

(2) For low elevations with long growing seasons.

(3) Full season hybrids when used for silage and
planted at around 16,000 plants per acre have
produced as much total feed per acre as later
hybrids and the silage has contained a somewhat
higher percentage of grain.

(4) Promising hybrids: These varieties have performed
well in tests in this area for the past two years.

Performance of Corn Hybrids Tested at Holland, Va. - 1957

Hybrid	Plants	Plants	Days to mid-silk	Moisture	Quality Score	Yield	
	Lodged %	Broken %		at Harvest %		Bu/A	% of Check
Todd 602	1	14	63	19.9	3.2	74.0*	96
Pa. 711	10	5	63	19.9	3.3	87.3*	114
Funk G76	14	13	63	20.0	3.3	88.1*	115
Pioneer 330A	11	9	67	20.1	3.0	86.3	112
Va. 514C	4	7	65	20.2	2.7	77.4	101
SS Pocahontas	13	6	66	20.2	2.7	77.7	101
Todd 870	2	7	67	20.5	2.3	70.0*	91
Todd 642	12	13	66	20.5	3.0	85.8*	112
Va. 502	2	5	62	20.5	3.0	77.1	100
Va. 533	9	5	65	20.6	3.3	88.0*	114
Pioneer 301A	14	13	64	20.8	3.0	83.9*	109
Va. 148C	8	14	65	21.0	2.8	90.2	117
Funk G95A	9	9	64	21.0	3.0	71.8	93
Va. 529	23	7	67	21.0	2.5	73.2	95
PAG 403	7	8	64	21.0	2.8	71.6*	93
DeKalb 855	7	4	66	21.0	2.8	79.1*	103
Va. 126C	2	10	64	21.0	3.3	86.5	112
Pioneer 510	15	8	70	21.1	2.7	70.3	91
Wood V26Y	7	13	65	21.2	2.8	76.7	100
Funk G134	6	4	67	21.2	2.8	82.8*	103
DeKalb 660	7	5	63	21.3	3.5	83.4	115
Tenn 5001	2	5	66	21.3	2.8	68.6	89
VPI 426	2	17	66	21.3	3.2	75.8	99
Todd 620B	1	4	66	21.4	2.5	72.9	95
VPI 653	20	7	65	21.4	3.0	71.1*	92
VPI 645	10	4	66	21.5	2.7	81.0*	105
US 505	24	13	69	21.5	3.2	86.9	113
Va. 126t	12	1	64	21.5	3.7	96.6*	126
Ky. 203	12	13	73	21.5	2.5	48.6*	63
III. 200	15	12	66	21.6	2.8	77.9*	101
Va. 519	10	3	66	21.6	3.5	90.5	118
Hofmeyer 101	7	9	67	21.6	2.0	52.6	68
Pioneer 1363	0	13	70	21.7	2.8	73.1*	95
Funk G144	21	12	65	21.7	3.0	79.0	103
Tenn. 4406B	10	9	68	21.7	2.8	76.5*	99
Va. 6106	8	4	67	21.7	2.8	78.9	103
Pioneer 313D	18	15	68	21.7	2.7	69.0*	90
DeKalb 803	7	3	67	21.8	3.3	95.3*	124
N.C. 4057	24	16	71	21.8	2.5	87.0*	113
Wood 1027	3	14	64	21.9	3.0	86.1	112
Pioneer 317A	0	4	66	21.9	3.8	65.7	85
Va. 699	14	6	67	21.9	2.8	68.5*	89
Pioneer 312A	12	15	66	21.9	2.8	81.8*	106
Wood V44	20	7	69	21.9	3.7	86.7*	113
Ky. 105	22	6	73	21.9	2.3	72.6	94

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Holland Test (Cont'd)

Hybrid	Plants Lodged %	Plants Broken %	Days to Mid-silk	Moisture at Harvest %	Quality ⁽¹⁾ Score	Bu/A	Yield % of check
Funk G704	0	6	70	21.9	2.5	69.6	91
Va. 346B	15	13	67	22.0	2.5	70.5*	92
SS 903W	26	13	69	22.0	3.3	101.1	131
VPI 648	9	4	67	22.0	3.0	74.4*	97
Va. 339	9	11	67	22.0	3.5	88.9*	120
VPI 730W	16	6	67	22.0	2.8	85.2*	111
Va. 462	5	6	66	22.1	3.5	79.9	104
Va. 6105	24	4	67	22.1	2.7	76.0	99
Va. 461	16	10	69	22.1	3.0	74.7	97
DeKalb 804A	13	11	65	22.2	2.8	90.5*	104
Funk G21	0	0	65	22.2	2.8	81.8*	106
DeKalb 837	4	14	69	22.2	2.3	65.4	85
Ohio C54	13	14	62	22.3	3.8	77.0	100
Va. 401	26	17	67	22.3	2.7	61.3*	80
Va. 126d	8	10	64	22.3	3.7	95.4	124
Wood V125W	32	7	71	22.3	3.2	73.0*	95
DeKalb 925W	20	13	70	22.4	2.8	83.0*	103
DeKalb 893	22	13	73	22.4	2.7	67.9	86
Va. 6108	37	8	70	22.4	2.8	70.1	91
US 523W	18	11	71	22.4	2.7	66.4	86
Wood V30	22	6	64	22.5	3.3	77.0	100
DeKalb 1051	31	14	73	22.5	3.0	71.0*	92
US 13	20	17	66	22.5	2.8	84.2*	109
Pioneer 309B	11	7	71	22.6	3.0	56.2	773
VPI 646	13	1	68	22.6	2.5	70.3*	91
Va. 528	22	10	66	22.6	2.8	85.9	112
DeKalb 630	5	16	66	22.8	3.0	75.7	93
Kenworthy 55	21	13	65	22.8	3.2	90.3*	117
US 578	39	9	72	22.9	2.5	70.6	92
PAG 444	17	9	66	23.0	3.0	72.4	94
Funk G512W	32	14	71	23.0	3.0	71.1	92
N.C. 5022	7	4	69	23.0	2.7	72.3	94
Pioneer 309A	9	0	71	23.0	2.7	72.8	95
Tenn 4114	11	8	71	23.1	2.7	65.0	85
Pioneer 1097	4	11	72	23.3	3.0	75.9	99
US 262A	33	14	71	23.7	2.5	69.5	90

* Not significantly different in yield from top yielding hybrid.

(1) Quality Scored from 1 = very poor to 5 = very good.

(2) Check = average of all recommended varieties=76.9 Bu/A

Cooperator: M. W. Alexander

Date harvested: Sept. 3, 1957

Date planted: April 23, 1957

Planting rate: 15,000 plants/acre

Three reps, rows 3' x 30'

Fertilization: 100 # 5-10-10 plus 80# N applied as side dressing

Growing conditions: Dry last part of June until August 10, 1957.

Performance of Corn Hybrids Tested at Petersburg Va. - 1957

Hybrid	Plants	Plants	Days to	Moisture	Quality (1)	Yield		Ears	%	Ear (3)	Plant (3)
	Lodged %	Broken %				% Score	Bu/A	Check %	Per 100 Plant	Sound Ears	Height
Todd 602	0	4	59	20.0	3.0	37.7	104	87	72	3	3
Va. 502	1	0	60	20.9	3.3	38.0	105	98	79	3	4
Todd 642	2	8	63	21.4	2.3	35.5	98	75	54	3	2
DeKalb 855	1	1	61	21.5	3.7	42.8*	118	82	70	3	4
VPI 426	1	4	61	21.6	2.7	39.7	110	88	74	2	5
Va. 126t	0	3	62	21.9	4.3	46.5*	128	92	84	3	4
Funk G95A	1	2	65	22.2	2.0	35.5	98	89	46	3	4
Kenworthy 55	0	7	66	22.2	2.0	45.8*	127	79	57	4	3
US 13	7	4	65	22.2	3.0	43.4*	120	70	81	4	5
Funk G76	1	2	63	22.3	3.3	48.9*	135	95	78	3	3
Va. 126C	0	0	62	22.6	3.7	50.6*	140	93	82	3	4
Tenn. 5001	2	3	64	22.6	3.3	41.5*	115	93	84	4	4
Pioneer 301A	4	3	65	22.6	2.3	29.8	82	58	60	3	3
SS Pocahontas	6	6	65	22.8	2.3	45.2*	125	78	72	3	4
Tenn. 4406B	0	4	62	22.8	4.0	45.3*	125	97	85	5	4
Va. 533	2	1	64	23.0	2.3	37.2	103	63	64	3	4
Pa. 711	1	0	64	23.0	4.0	43.2*	119	93	87	2	4
Va. 519	9	0	65	23.0	2.7	35.8	99	53	63	4	5
US 505	0	1	67	23.0	2.7	29.6	82	73	42	4	4
VPI 646	2	3	64	23.2	2.0	34.2	94	72	72	4	4
Va. 148C	0	3	67	23.3	3.3	35.2	97	92	51	3	3
Todd 870	1	2	68	23.3	3.0	31.4	87	65	43	4	4
Ohio C54	3	2	64	23.3	3.7	37.4	103	85	79	3	4
Pioneer 338A	3	8	62	23.3	2.7	34.6	96	70	54	2	3
DeKalb 837	3	3	66	23.5	2.3	25.6	71	63	52	3	4
Funk G91	0	2	64	23.6	2.7	33.6	93	80	73	3	4
PAG 403	0	1	66	23.9	2.7	39.3	109	80	62	3	3
VPI 653	6	6	63	24.0	2.0	25.8	71	46	63	3	4
VPI 730W	6	3	68	24.1	2.7	26.2	72	60	60	4	4
Va. 529	4	2	67	24.2	2.0	31.9	88	65	58	5	3

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Petersburg Test (Cont'd)

Hybrid	Plants	Plants	Days to Mid-silk	Moisture at Harvest	Quality ⁽¹⁾ Score	Yield		Ears Per 100 Plants	% Sound Ears	Ear ⁽³⁾ Height Score	Plant ⁽³⁾ Height Score
	Lodged %	Broken %				Bu/A	% Check				
VPI 645	4	2	66	24.2	2.3	29.9	83	47	54	4	4
DeKalb 630	2	4	63	24.3	2.7	29.1	80	68	73	4	4
Wood V30	4	4	64	24.3	1.7	29.7	82	65	60	3	5
Va. 461	1	4	62	24.4	2.3	35.7	99	92	55	4	4
Va. 528	2	8	64	24.6	3.0	38.7	107	78	82	3	5
Va. 6106	3	1	66	24.7	2.3	31.3	86	57	50	4	5
Va. 126d	1	2	65	24.7	2.7	35.6	98	78	57	3	3
Funk G144	1	0	64	24.8	3.0	44.6*	123	100	73	3	4
DeKalb 803A	0	1	65	24.9	2.0	33.9	94	75	54	3	4
Wood V1027	1	6	67	25.0	2.7	34.0	94	77	63	3	3
Va. 339	3	2	69	25.0	2.3	32.2	89	72	46	3	4
Wood V125W	3	3	72	25.0	2.0	23.6	65	43	39	5	5
Va. 462	1	0	65	25.2	2.7	23.6	65	50	64	4	4
DeKalb 803	7	2	70	25.2	2.0	30.2	83	45	33	4	4
Pioneer 1363	2	1	66	25.2	2.7	36.6	101	78	76	4	4
DeKalb 660	0	0	65	25.3	4.3	51.3*	142	100	84	2	4
Funk G134	4	1	70	25.4	2.3	30.8	85	93	56	3	4
Funk G512W	6	1	72	25.4	2.0	30.3	84	52	49	5	5
Hofmeyer 101	2	0	66	25.4	1.3	18.6	51	42	24	4	4
Va. 646B	6	1	70	25.5	2.7	30.0	83	67	23	4	5
Pioneer 317A	4	1	67	25.5	3.0	32.7	90	65	69	3	4
Va. 401	3	1	71	25.6	2.7	25.2	70	48	65	4	4
Pioneer 313D	0	1	71	25.6	1.7	30.7	85	65	44	3	2
Va. 514C	0	0	67	25.7	2.7	34.8	96	77	64	4	4
Pioneer 510	2	1	77	25.7	1.3	14.4	40	38	17	4	4
Pioneer 312A	1	1	70	25.7	2.3	36.8	102	70	49	4	5
Wood V26Y	0	0	66	25.9	2.7	29.5	81	78	61	4	4
Va. 6105	1	0	70	26.0	3.0	32.5	90	55	53	4	5
Wood V44	3	6	68	26.1	2.0	23.6	65	42	44	4	5
Ky. 203	2	2	82	26.1	1.3	17.8	49	25	27	4	4

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Petersburg Test(Cont'd)

<u>Hybrid</u>	<u>Plants Lodged</u>	<u>Plants Broken</u>	<u>Days to mid-silk</u>	<u>Moisture at Harvest</u>	<u>Quality⁽¹⁾ Score</u>	<u>Yield</u>		<u>Ears Per 100 Plants</u>	<u>% Sound Ears</u>	<u>Ear⁽³⁾ Height</u>	<u>Plant⁽³⁾ Height</u>
	<u>%</u>	<u>%</u>		<u>%</u>		<u>Bu/A</u>	<u>Check</u>				
VPI 648	3	1	69	26.2	2.0	26.8	74	57	40	3	5
DeKalb 925W	11	3	75	26.3	3.0	40.5	112	72	54	5	4
Ky. 105	0	3	73	26.3	1.7	26.1	72	60	30	4	5
N.C. 5022	0	3	66	26.5	3.3	26.8	74	52	67	4	5
SS 903W	0	0	72	27.5	2.3	30.3	84	58	38	5	5
Va. 6108	10	3	79	27.7	1.3	30.7	85	58	29	4	5
PAG 444	1	3	66	27.7	2.7	41.8*	115	82	59	4	4
III. 200	6	2	68	27.8	2.3	33.3	92	63	66	4	5
DeKalb 1051	4	1	76	27.8	2.7	24.0	66	70	61	5	5
Tenn. 4114	1	2	66	27.8	2.7	33.6	93	63	66	3	4
Va. 699	9	0	70	28.5	2.3	24.8	69	70	29	3	4
Funk G704	0	2	70	28.7	2.3	30.0	83	50	50	3	5
Funk G711	0	8	76	29.0	2.0	27.1	75	63	40	4	5
US 523W	0	4	68	29.1	3.0	40.5	112	50	33	4	5
DeKalb 893	0	3	73	29.5	1.7	18.7	52	52	36	4	5
US 578	4	2	80	29.5	2.7	30.5	86	88	53	4	5
Pioneer 309A	1	3	73	30.4	3.0	31.2	86	72	56	5	5
US 262A	0	7	70	31.2	2.7	33.6	93	72	47	4	5
Pioneer 309B	1	0	73	32.0	3.3	37.6	104	77	51	4	4
N.C. 4057	4	1	71	32.2	2.0	25.2	70	48	60	4	5
Pioneer 1097	0	2	83	35.6	2.7	23.0	64	52	54	4	4

* Not significantly different in yield from top yielding hybrid.

(1) Quality scored from 1 = very poor to 5 = very good.

(2) Check = average of all recommended varieties = 32.6 Bu. per acre.

(3) Ear Height Score from 1 = shortest to 5 = tallest.

(3) Plant Height Score from 1 = shortest to 5 = tallest.

Cooperator: M. T. Carter

Date planted: Apr. 30, 1957

Three reps, rows 3.3' x 31'

Fertilization: 600# 10-10-10 One-half disced in and one-half in drill

150" Sodium Nitrate as side dressing

Growing conditions: Dry at planting date through May 20. Adequate moisture May 20 to June 15.

Very hot and dry from mid June to July 23. First silk counts made June 28. Some plots never reached 50% silked. (Col1 rainy weather in August).

Date harvested: Sept. 11 & 12 1957

Plants per acre: 12,250

Average Performance of Corn Hybrids Tested in the Southern Coastal Plain of Virginia - 1957 (Holland and Petersburg)

<u>Hybrids</u>	<u>Plants</u>	<u>Plants</u>	<u>Moisture</u>		<u>Quality⁽¹⁾</u>	<u>Yield</u>	
	Lodged %	Broken %	Days to mid-silk	at Harvest %		Score	Bu/A
Todd 602	1	9	61	20.0	3.1	55.9	101
Va. 502	2	3	61	20.7	3.2	57.6	104
Todd 642	7	11	65	21.0	2.7	60.7	110
Funk G76	8	8	63	21.2	3.3	68.5	124
DeKalb 855	4	3	64	21.3	3.3	61.0	111
Pa. 711	6	3	64	21.5	3.7	65.3	118
SS Pocahontas	10	6	66	21.5	2.5	61.5	111
VPI 426	2	11	64	21.5	3.5	57.8	105
Funk G95A	5	6	65	21.6	2.5	53.7	97
Pioneer 338A	7	9	65	21.7	2.9	60.5	110
Pioneer 301A	9	8	65	21.7	2.7	56.9	103
Va. 126t	6	2	63	21.7	4.0	71.6	130
Va. 533	6	3	65	21.8	2.8	62.6	113
Va. 126C	1	5	63	21.8	3.5	68.6	124
Todd 870	2	5	68	21.9	2.2	50.7	92
Tenn. 5001	2	4	65	22.0	3.1	55.1	100
Va. 148C	4	9	66	22.2	3.1	62.7	114
US 505	12	7	68	22.3	3.0	58.3	106
Va. 519	10	2	66	22.3	3.1	63.2	114
Tenn. 4406B	5	7	65	22.3	3.4	60.9	110
US 13	14	11	66	22.4	2.9	63.8	116
PAG 403	4	5	65	22.5	2.0	55.5	101
Kenworthy 55	11	10	66	22.5	2.6	68.1	123
Va. 529	14	5	67	22.6	2.3	52.6	95
VPI 653	17	7	64	22.7	2.5	48.5	88
Ohio C54	11	8	63	22.8	3.8	57.2	104
VPI 645	7	3	66	22.9	2.5	55.5	101
Funk G91	4	1	65	22.9	2.8	57.7	105
DeKalb 837	4	9	68	22.9	2.3	45.5	82
VPI 646	8	2	66	22.9	2.3	52.3	95
Va. 514C	2	4	66	23.0	3.7	56.1	102
VPI 730!	11	6	68	23.1	2.8	55.7	101
Va. 6106	8	3	67	23.2	2.6	55.1	100
Funk G134	5	3	69	23.3	2.6	56.8	103
DeKalb 660	4	3	64	23.3	3.9	69.9	127
Funk G144	11	6	65	23.3	3.0	61.8	112
Va. 461	9	7	66	23.3	2.7	55.2	100
Pioneer 510	9	5	74	23.4	2.0	42.4	77
Wood V30	13	5	64	23.4	2.5	53.4	97
Hofmeyer 101	5	5	67	23.5	1.7	35.6	64
Pioneer 1363	5	7	68	23.5	2.8	54.9	99
DeKalb 803	7	3	69	23.5	2.7	62.8	114
Wood V1027	5	10	66	23.5	2.9	60.1	109
Va. 339	6	7	68	23.5	2.9	60.6	110
Va. 126d	5	6	65	23.5	3.2	65.5	119

Continued on next page.

Southern Coastal Plain Test (Cont'd)

<u>Hybrid</u>	<u>Plants</u>	<u>Plants</u>	<u>Days to</u>	<u>Moisture</u>	<u>Quality</u> ⁽¹⁾	<u>Yield</u>	
	Lodged %	Broken %		mid-silk		Bu/A	% of Check
Wood V26Y	4	9	66	23.6	2.8	53.1	96
DeKalb 803A	7	6	65	23.6	2.4	62.2	113
Va. 528	12	9	65	23.6	2.9	62.3	113
DeKalb 630	4	10	65	23.6	2.9	52.4	95
Pioneer 313D	9	8	70	23.7	2.2	49.9	90
Pioneer 317A	6	3	67	23.7	3.4	49.2	89
Va. 462	3	3	66	23.7	3.1	51.8	94
Wood V125W	18	5	72	23.7	2.6	48.3	88
Ky. 203	7	8	78	23.8	1.9	33.2	60
Pioneer 312A	7	8	68	23.8	2.6	59.3	107
Va. 646B	11	7	69	23.8	2.6	50.3	91
Wood V44	12	7	69	24.0	2.9	55.2	100
Va. 401	15	9	69	24.0	2.7	43.3	78
Ky. 105	11	5	76	24.1	2.0	49.4	89
VPI 648	6	3	68	24.1	2.5	50.6	92
Va. 6105	13	2	69	24.1	2.9	54.3	98
Funk G512W	19	8	72	24.2	2.5	50.7	92
DeKalb 925W	16	8	73	24.4	2.9	61.8	112
III. 200	11	7	67	24.7	2.6	55.6	101
SS 903W	13	7	71	24.8	2.8	65.7	119
N.C. 5022	4	4	68	24.8	3.0	49.6	90
Va. 6108	24	6	75	25.1	2.1	50.4	91
Va. 699	12	3	69	25.2	2.6	46.7	85
DeKalb 1051	18	8	75	25.2	2.9	47.5	86
Funk G704	4	4	70	25.3	2.4	49.8	90
PAG 444	9	6	66	25.4	2.9	57.1	103
Tenn. 4114	6	5	69	25.5	2.7	49.3	89
US 523W	9	8	70	25.8	2.9	53.5	97
DeKalb 893	11	8	73	26.0	2.2	43.3	78
US 578	22	6	76	26.2	2.6	50.6	92
Pioneer 309A	5	6	72	26.7	2.9	52.0	94
N.C. 4057	14	9	71	27.0	2.3	56.1	102
Pioneer 309B	6	4	72	27.3	3.2	46.9	85
US 262A	17	11	71	27.5	2.6	51.6	93
Pioneer 1097	2	7	78	29.5	2.9	49.5	90

Average of
Recommended
Hybrids

9 6 68 23.9 2.8 55.2 100

(1) Quality scored from 1 = very poor to 5 = very good.

(2) Check = average of all recommended hybrids.

Performance of Corn Hybrids Tested at Warsaw, Va. - 1957

Hybrid	Plants	Plants	Days to mid-silk	Moisture At Harvest %	Quality Score	Ears per 100 Plants	Yield	
	Lodged %	Broken %					Bu/A	% of Check
Va. 126C	0	0	72	14.9	3.5	84	58.4	113
Pioneer 342A	0	5	69	15.9	4.3	92	47.7	93
Funk G76	5	5	71	16.2	3.8	87	52.4	102
Supercrost 850	3	3	73	16.3	3.0	89	50.5	98
Pa. 711	5	2	72	16.3	3.0	93	56.2	109
Todd 602	2	3	71	16.4	3.7	87	50.6	100
Funk G134	12	2	74	16.4	3.7	88	60.2	117
Pioneer 510	11	0	79	16.5	3.0	62	38.2	74
DeKalb 630	8	11	73	16.5	3.8	94	61.3	119
Pioneer 301A	2	11	75	16.6	3.3	91	54.8	106
Pioneer 338A	5	6	76	16.6	3.5	91	53.5	104
Supercrost 660	2	10	72	16.7	3.7	94	51.4	100
Funk G95A	0	5	73	16.7	2.5	97	53.7	104
VPI 426	8	2	71	16.8	3.7	91	55.8	108
Wood 1027	3	2	72	16.9	4.7	89	55.4	108
Wood V26Y	11	0	75	16.9	3.2	82	50.1	97
Funk G91	0	2	73	17.0	2.8	80	50.1	97
SS Pocahontas	5	2	73	17.2	4.0	96	52.9	103
PAG 403	5	3	73	17.2	3.5	83	54.0	105
Va. 514C	3	2	74	17.2	3.8	85	52.9	103
Hofmeyer Early Harvest	0	2	74	17.3	3.3	90	49.7	97
Ohio C54	0	2	71	17.3	3.7	80	52.3	102
US 13	13	7	75	17.3	3.7	89	54.1	105
VPI 648	18	3	77	17.3	3.5	84	50.0	97
Va. 502	5	3	72	17.4	3.8	93	57.2	111
Va. 126t	2	0	72	17.4	3.2	91	61.0	118
Supercrost 1005A	3	3	76	17.4	3.2	85	49.2	96
DeKalb 837	3	6	73	17.5	3.5	93	52.5	102
Pioneer 332-2A	12	3	76	17.8	3.7	89	56.3	109
Va. 417	6	3	76	17.8	3.0	86	47.7	93
Funk G144	12	5	74	17.8	4.3	89	59.2	115
Pioneer 313D	18	5	77	17.9	3.2	82	45.2	88
Va. 533	11	10	73	18.0	4.0	91	53.3	103
Supercrost 840	5	2	73	18.0	3.6	95	56.8	110
DeKalb 803	14	5	75	18.0	4.0	92	55.0	107
SS Mohawk	33	5	76	18.2	3.2	85	46.7	91
Va. 339	14	3	74	18.2	3.3	87	55.5	108
III. 200	6	12	76	18.2	3.5	89	54.2	105
Va. 646B	37	3	78	18.2	2.3	76	44.4	86
Kenworthy 55	6	3	74	18.3	3.5	84	51.6	100
VPI 646	18	6	75	18.3	2.5	79	48.3	94
VPI 730W	11	5	78	18.3	3.0	78	41.8	81
Va. 488	9	4	76	18.3	3.8	79	53.0	103
Funk G512W	29	19	77	18.4	3.3	89	47.3	92

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Warsaw Test (Cont'd)

Hybrid	Plants	Plants	mid-silk	Moisture at Harvest %	Quality* Score	Ears per 100 Plants	Yield	
	Lodged %	Broken %					Bu/A	% of Check
Pioneer 1363	8	2	77	18.4	3.7	85	49.1	95
Goldline 378	6	11	77	18.6	3.5	80	45.2	88
Funk G704	11	2	76	18.6	3.2	82	53.9	105
Wood V125W	48	5	79	18.8	3.2	75	49.8	97
PAG 444	8	2	75	18.8	3.5	95	56.7	110
Pioneer 312A	12	2	78	18.8	3.7	83	53.9	105
Va. 462	5	10	77	19.0	3.3	79	48.9	95
DeKalb 855	3	3	73	19.0	3.8	97	53.7	104
Va. 519	25	10	77	19.2	3.3	91	57.2	111
Va. 126d	10	1	75	19.3	3.8	87	53.9	105
Va. 461	10	0	74	19.3	4.3	91	56.3	109
Va. 148C	10	5	75	19.4	3.8	89	53.7	104
Va. 6106	23	2	77	19.6	3.3	89	51.6	100
Va. 529	35	8	76	19.7	4.3	86	55.0	107
Ky. 103	18	16	77	19.8	3.0	76	47.1	91
Wood V44	27	0	77	19.8	3.7	79	49.2	96
Hofmeyer 101	8	2	79	20.0	2.2	68	31.1	60
DeKalb 925W	32	11	77	20.1	4.0	85	52.8	103
Va. 528	12	2	77	20.3	3.7	84	51.9	101
VPI 645	10	2	75	20.3	2.7	81	50.4	98
Va. 699	11	2	77	20.5	3.7	80	55.8	108
SS 903W	31	2	81	20.6	2.7	67	40.0	78
US 505	23	2	76	20.6	3.3	80	49.6	96
Va. 6105	48	2	79	20.6	3.2	68	49.2	96
VPI 653	3	5	74	20.6	4.3	87	59.6	116
Va. 6122	44	3	79	20.7	2.3	58	39.8	77
Va. 676	14	2	76	21.0	3.5	88	54.3	105
US 523W	31	10	78	21.1	3.3	84	48.9	95
DeKalb 1051	46	0	83	21.5	2.8	66	37.8	73
Va. 401	8	10	79	21.5	3.7	83	44.1	86
Ky. 105	0	5	78	21.9	2.5	82	46.2	90
Pioneer 309A	11	0	80	22.0	3.5	78	53.0	103
US 578	15	10	77	22.2	2.7	78	42.7	83
US 262A	33	6	79	22.3	3.2	89	52.7	102
DeKalb 893	26	11	79	22.9	2.7	70	42.9	83
Pioneer 1097	5	2	79	22.9	2.7	64	41.4	80
Va. 6108	54	0	82	23.5	2.7	63	32.9	64

* Quality Score from 1 = very poor to 5 = very good

Cooperator: H. M. Camper

Date harvested: Oct. 3, 4 and 7, 1957

Date planted: May 1, 1957

Planting rate: 1 1/2,100 plants per acre

Fertilization: 146# N turned under with rye cover crop April 8.

54# N, 156# P₂O₅, 98# K₂O broadcast before planting April 30.
60# N side dressing July 1.

Growing conditions: Dry latter part of April until May 19.

Rainfall ample and fairly well distributed in June.

Drought periods July 1-9 and July 11 - Aug. 15.

Ample rainfall Aug 15 to Aug 30, however rains were too late to help most corn.

Performance of Corn Hybrids Tested at Chatham, Va. - 1957

Hybrid	Plants	Plants	mid-silk	Moisture at Harvest %	Quality Score*	Yield	
	Lodged %	Broken %				Bu/A	% of Check
Farmworth 88-1	0	36	68	15.2	3.8	74.0	102
Hofmeyer Early Harvest	0	54	67	15.2	3.8	73.3	102
SS Pocahontas	0	15	68	15.3	3.8	74.8	104
Funk G76	0	32	67	15.3	3.8	70.1	97
Pioneer 332-2A	0	33	68	15.4	3.3	73.4	102
Funk G144	0	32	68	15.4	3.8	79.0	110
VPI 645	0	30	68	15.5	3.5	69.3	96
Va. 126t	0	23	68	15.5	4.2	75.2	105
Farmcraft 68	0	71	67	15.5	3.2	69.4	97
DeKalb 837	0	66	67	15.5	4.0	69.0	96
Hofmeyer 101	0	23	68	15.5	2.5	51.4	71
Funk G95A	0	32	67	15.5	3.0	69.0	96
Pa. 711	0	32	68	15.6	3.8	70.0	97
Pioneer 330A	0	32	68	15.6	3.5	75.1	104
Pioneer 313D	0	60	69	15.7	3.2	64.1	89
VPI 730W	3	34	69	15.7	3.5	63.6	88
Funk G704	0	19	69	15.7	3.5	68.3	95
Va. 533	0	26	67	15.7	3.8	78.9	110
Tenn. 5001	0	41	67	15.8	4.2	69.3	97
Ky. 203	2	45	71	15.8	3.3	56.6	79
Va. 126d	0	42	67	15.8	4.2	77.3	108
SS 903W	0	26	71	15.8	3.8	71.0	99
Funk G91	0	64	67	15.8	3.3	76.3	106
Ohio C54	0	53	67	15.8	3.3	71.1	99
PAG 444	0	16	68	15.8	3.7	72.0	100
Va. 646B	0	26	68	15.8	3.0	69.2	96
Pioneer 510	0	31	70	15.9	3.8	55.3	77
Va. 514C	0	32	68	15.9	3.8	66.3	92
Pioneer 317A	0	33	68	15.9	3.7	76.6	107
Pioneer 342A	3	47	67	15.9	3.5	72.3	101
Wood V125W	0	21	71	16.0	4.0	71.0	100
PAG 403	0	67	67	16.0	3.2	59.6	83
N.C. 5022	0	24	68	16.0	3.2	57.2	80
Va. 6106	0	3	68	16.0	4.0	31.7	114
Wood V30	0	27	67	16.0	3.7	78.1	109
Farmcraft 66T	0	65	67	16.0	3.2	71.6	100
US 262A	6	25	72	16.0	3.5	57.3	80
US 505	1	14	68	16.0	3.7	77.1	107
Wood 1027	0	57	67	16.0	3.8	62.5	87
DeKalb 925W	0	22	69	16.0	3.7	67.7	94
Tenn. 4114	1	14	67	16.0	4.0	75.7	105
Va. 148C	0	7	67	16.0	3.5	72.7	101
Wood V26Y	0	26	68	16.1	4.2	69.9	97
Tenn. 4406B	0	29	67	16.1	4.2	74.1	103
VPI 653	1	23	68	16.1	4.0	74.1	103

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Chatham Test (Cont'd)

Hybrid	Plants	Plants	Days to mid-silk	Moisture at Harvest %	Quality Score *	Yield	
	Lodged %	Broken %				Bu/A	% of Check
Va. 529	0	37	68	16.1	3.7	75.0	104
Va. 6105	3	12	70	16.2	4.5	74.1	103
Va. 339Tb	0	25	68	16.2	3.8	73.5	102
Va. 462	0	18	67	16.2	3.5	72.7	101
Funk G512W	6	21	70	16.2	3.8	68.1	95
Pioneer 1363	0	25	68	16.2	3.3	67.7	94
VPI 648	2	12	68	16.2	4.3	83.5	116
Va. 126C	0	55	67	16.2	3.7	76.1	106
DeKalb 660	0	45	67	16.3	4.0	81.7	114
Va. 401	7	4	68	16.3	4.3	73.7	103
DeKalb 803A	0	44	68	16.3	3.8	75.0	104
DeKalb 893	2	16	71	16.3	3.3	60.0	83
Wood V44	0	29	69	16.3	4.3	73.7	103
Va. 699	2	10	68	16.3	4.3	74.2	103
Pioneer 301A	0	30	68	16.4	3.5	68.8	96
DeKalb 803	1	57	67	16.4	4.0	74.3	103
DeKalb 855	0	27	67	16.4	3.8	79.0	110
Pioneer 309A	0	11	71	16.4	3.8	66.7	93
VPI 426	0	75	67	16.4	3.5	71.3	99
N.C. 4057	3	11	72	16.4	3.2	58.4	81
Va. 339	0	13	67	16.4	3.7	75.0	104
Va. 6108	18	9	70	16.4	3.5	65.6	91
Va. 528	3	34	68	16.5	3.5	66.2	92
US 13	0	66	67	16.5	3.3	70.4	93
Va. 417	0	26	69	16.5	3.7	66.9	93
SS Mohawk	3	30	68	16.6	4.0	78.7	109
III. 200	0	42	68	16.6	3.5	69.7	97
DeKalb 630	3	62	67	16.6	3.7	69.8	97
VPI 646	0	42	68	16.6	3.8	70.4	98
Funk G134	0	34	68	16.7	4.2	82.3	114
Va. 502	0	45	67	16.8	3.5	66.2	92
Va. 519	0	42	68	16.9	4.2	69.9	97
Pioneer 312A	0	43	69	17.2	3.8	67.0	93
US 523W	0	25	71	17.3	3.5	70.5	98
Pioneer 1097	0	5	74	17.3	3.8	75.0	104
Va. 6122	0	18	73	17.3	3.8	65.0	90

* Quality Score from 1 = very poor to 5 = very good.

Cooperator: M. J. Rogers

Date harvested: Oct. 14, 1957

Date planted: April 19, 1957

Planting rate: 14,000 plants per acre

Size of plot: 38' x 31.65'

Fertilization: 700# 2-12-12 per acre broadcast before planting.

50# per acre 2 1/2% Chloradane broadcast and disced in.

66# N per acre from Cal-nitro topdressing applied when corn was knee-high.

Growing Conditions: Good rains from time of planting until middle of June.

Six weeks dry period from middle of June to August 1st.

Performance of Corn Hybrid Test at Blacksburg, Va. - 1957

Hybrid	Plants Lodged	Plants Broken	Days to mid-silk	Moisture at Harvest	Quality*	Bu/A	% of Check	Suckers per 100 Plants	Shank (2) Length	Husk (2) Length
	%	%		%	Score					
Va. 503	2	5	71	17.3	3.0	73.7	103	16	s	m
Pioneer 354	0	6	77	18.1	3.0	71.7	105	14	m	m
Pioneer 352A	2	16	73	18.2	2.3	69.0	101	23	ms	m
Va. 613	0	13	73	18.2	2.6	67.7	99	11	s	m
Va. 509	0	21	72	18.3	2.5	67.5	99	28	s	m
DeKalb 3 x 3	2	9	78	18.3	2.3	73.2	107	6	ms	m
Va. 612	1	12	76	18.4	3.0	67.4	99	16	s	mgd
Pioneer 345	0	10	76	18.5	2.0	65.7	102	24	m	m
N.J. 8	1	13	80	18.5	2.8	71.2	104	9	ms	m
Todd 409	0	16	77	18.6	2.8	66.4	100	17	ms	m
Pocahontas	2	9	79	18.6	3.0	75.6	111	17	m	m
Va. 611	1	5	75	18.7	2.0	70.5	103	19	s	m
VPI 426	1	8	76	18.7	3.3	74.5	109	5	ms	mgd
Va. 608	1	7	77	18.7	2.7	67.2	98	15	s	m
DeKalb 609	1	9	76	18.9	2.9	69.5	102	13	m	m
Funk G50	2	13	77	19.1	2.7	72.2	106	16	ms	m
Va. 126C	2	4	78	19.2	2.9	72.4	106	3	ms	mgd
Todd 602	0	14	76	19.2	2.9	69.7	102	21	ms	m
Va. 514C	0	11	82	19.3	2.9	63.3	83	11	s	m
Muncy Chief H276	2	10	74	19.3	3.0	68.2	100	13	m	gd
Va. 617	0	10	78	19.4	2.5	63.6	93	21	ms	m
Funk G91	0	14	79	19.4	2.5	73.1	107	10	m	m
Farmcraft 66T	0	25	78	19.5	2.7	69.2	101	13	ms	m
Broadbent 402A	1	13	81	19.6	2.2	64.7	95	7	s	m
Ohio W 64	5	7	74	19.6	3.0	71.5	105	15	ms	m
Todd 642	0	13	79	19.6	2.9	64.0	94	9	m	m
Va. 618	0	13	78	19.6	3.2	64.8	95	29	ms	m
Todd 250	2	10	75	19.6	3.0	64.7	95	13	m	m
Muncy Chief H520	1	7	78	19.7	2.4	67.3	98	12	s	m
Va. 606	2	9	77	19.7	3.0	67.8	99	9	s	mgd
Funk G76	0	9	76	19.8	2.9	69.6	102	13	s	m
Va. 619	1	10	81	19.8	3.1	60.2	88	23	s	m
III. 200	1	14	81	19.8	3.0	70.5	103	23	m	gd
W.Va. 325	0	15	75	19.8	3.1	64.7	95	16	ms	m
Va. 491	0	6	75	19.9	3.1	70.2	103	16	s	m

Blacksburg Test (Cont'd)

Hybrid	Plants	Plants	Days to	Moisture	Quality*	Yield		Suckers	Shank	Husk
	Lodged	Broken				Bu/A	% of Check			
	%	%		%	Score			Plants	Length	length
DeKalb 414	0	10	77	19.9	2.8	65.1	95	11	ms	m
Park 400	1	15	76	20.0	2.9	72.9	107	6	ms	mgd
Farmcraft 83	1	17	77	20.0	2.9	74.8	100	9	m	mgd
Iowa 4059	0	17	80	20.0	2.6	57.5	84	16	s	m
Pioneer 329	1	12	80	20.2	3.0	66.8	98	15	m	m
Ruff 160	2	8	78	20.2	3.1	69.2	101	11	ms	mgd
Ward 666	1	18	77	20.2	2.8	73.7	108	18	ms	m
Kenworthy 39	0	8	75	20.2	3.3	66.3	97	18	s	mgd
DeKalb 423	1	11	76	20.3	2.5	66.1	97	12	m	mgd
Pa. 711	1	10	77	20.3	3.3	68.6	100	19	s	m
Wood V26Y	2	10	80	20.3	2.3	66.1	97	5	ms	m
US 13	1	11	81	20.3	3.0	70.1	103	23	s	mgd
VPI 653	2	9	80	20.4	3.5	69.1	101	12	s	m
VPI 648	1	10	81	20.4	2.7	66.6	97	7	s	m
DeKalb 630	1	21	79	20.4	3.3	72.6	106	9	m	m
Va. 502	2	5	77	20.4	3.0	65.1	95	15	s	m
VPI 730W	2	10	80	20.4	3.4	60.7	87	25	s	m
Ohio 654	2	11	78	20.5	2.8	63.3	93	12	s	m
Va. 512	0	13	77	20.5	3.1	70.3	103	20	s	mgd
DeKalb 803	1	16	81	20.6	3.2	72.5	106	7	m	mgd
Funk G134	3	3	79	20.6	2.8	66.6	97	8	s	gd
Wood 1027	0	11	80	20.6	3.3	66.7	98	11	ms	mgd
Pioneer 338A	0	5	81	20.7	2.3	63.4	93	8	s	m
DeKalb 837	2	12	78	20.7	2.7	70.2	103	17	ms	m
Va. 417	2	12	81	20.8	3.1	62.7	92	6	ms	mgd
Ruff 108	0	14	77	20.9	3.7	72.6	106	8	s	m
Kenworthy 55	1	9	80	20.9	2.8	73.0	107	13	s	m
Va. 46L	1	7	81	21.0	3.3	62.3	91	17	s	m
DeKalb 660	1	7	74	21.2	3.6	77.4	113	14	ms	m
Buchanan 680	0	18	79	21.2	3.2	71.2	104	13	ms	m
Va. 310	1	14	79	21.2	3.3	69.6	102	19	s	m
VPI 646	0	7	81	21.2	2.7	67.0	98	14	ms	m

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Blacksburg Test (Cont'd)

<u>Hybrid</u>	<u>Plants Lodged %</u>	<u>Plants Broken %</u>	<u>Days to mid-shk</u>	<u>Moisture at Harvest %</u>	<u>Quality* Score</u>	<u>Yield Bu/A</u>	<u>% of Check</u>	<u>Suckers Per 100 Plants</u>	<u>Shank (2) Length</u>	<u>Husk (2) Length</u>
Funk G95A	0	13	79	21.2	2.4	64.5	94	17	s	m
Va. 554	1	13	80	21.3	2.4	73.7	108	10	s	m
Ohio L94	2	4	82	21.4	2.6	67.4	90	21	s	m
Wood V44	3	10	83	21.4	3.3	62.5	91	20	s	mgd
Funk G144	1	10	79	21.4	3.3	76.2	111	11	s	mgd
Funk G99	0	12	82	21.5	2.6	61.1	89	19	s	m
Va. 529	3	10	80	21.6	3.5	72.9	107	13	s	m
Va. 481	0	6	77	21.6	3.2	72.1	105	9	s	m
Va. 339	0	10	81	21.7	3.7	71.6	105	17	s	m
Va. 126d	1	4	80	21.7	2.3	75.5	110	6	m	m
Wood V30	5	11	81	21.8	3.0	66.3	97	8	ms	m
Farmcraft 88-1	3	20	81	21.9	2.3	63.9	93	17	ms	mgd
US 505	0	8	81	22.1	3.7	63.3	100	26	ms	mgd
VPI 645	1	8	81	22.3	2.7	63.9	93	9	s	m

* Quality Score from 1 = very poor to 5 = very good.

Date planted: May 2, 1957

Date harvested: Oct. 10, 1957

Fertilization: 200# 21-52-0

Rate of planting: 13,600 plants per acre

(2) Shank length - Husk length: s = short, m = medium, gd = good

Performance of Hybrid Corn Test at Emory, Va. - 1957

<u>Hybrid</u>	<u>Plants Lodged %</u>	<u>Plants Broken %</u>	<u>Days to mid-silk</u>	<u>Moisture at Harvest %</u>	<u>Quality Score*</u>	<u>Yield Bu/A</u>	<u>Percent of check</u>
Va. 612	0	22	71	17.8	3.0	78.3	101
Ohio W64	0	18	69	18.5	4.2	69.0	89
Todd 252	0	21	71	18.6	3.5	65.0	84
Funk G91	1	6	74	18.6	3.5	83.9	109
W.Va. B25	2	33	70	18.7	3.2	73.3	95
Todd 409	1	22	73	19.0	3.3	64.5	83
Pioneer 342A	3	21	70	19.0	3.0	78.6	102
Va. 491	1	8	69	19.0	4.5	88.4	114
Iowa 4059	0	21	74	19.2	2.7	62.6	81
Muncy Chief H276	3	20	70	19.3	3.3	63.8	83
Va. 509	2	13	70	19.4	3.3	69.2	90
DeKalb 609	0	26	72	19.5	3.5	72.3	94
Funk G50	0	19	73	19.7	4.0	72.9	94
Va. 611	0	5	70	19.7	3.7	74.9	97
Va. 508	0	11	69	19.8	3.0	77.8	101
Pioneer 354	0	17	70	19.9	4.5	88.6	115
VPI 730!	0	4	76	20.0	2.8	69.6	90
Ohio C54	0	1	71	20.0	3.5	79.0	102
Muncy Chief H520	0	6	74	20.1	3.0	83.9	109
Broadbent 402A	1	18	75	20.1	2.7	70.6	91
Va. 481	0	8	72	20.1	3.7	86.8	112
Funk G99	0	13	77	20.1	2.5	69.1	89
Farmcraft 66T	0	45	74	20.1	3.2	76.5	99
Pa. 711	0	12	73	20.1	4.5	83.3	108
Farmcraft 88-1	1	13	76	20.1	2.0	73.7	95
DeKalb 3 x 3	1	10	76	20.4	3.0	75.1	97
N.J. 8	0	17	76	20.5	2.7	70.7	91
Va. 617	0	15	73	20.5	3.5	74.3	96
Wood V26Y	1	9	76	20.5	3.2	83.3	108
Todd 602	1	20	71	20.6	3.2	77.8	101
Farmcraft 88	0	39	74	20.6	3.0	77.9	101
Ruff 108	1	17	73	20.6	4.3	88.1	114
Pioneer 329	0	3	75	20.7	3.7	85.8	111
DeKalb 837	3	10	76	20.7	3.7	80.0	103
Va. 618	0	13	74	20.8	3.2	73.9	96
Va. 502	2	2	70	20.8	4.2	78.1	101
Va. 613	1	11	74	20.9	3.5	72.5	94
Va. 514C	0	17	75	21.0	4.0	83.7	108
Va. 417	0	21	77	21.0	3.0	75.1	97
DeKalb 423	0	25	69	21.0	3.3	70.2	91
Park 400	1	10	72	21.1	4.0	87.3	113

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Emory Test Cont'd

<u>Hybrid</u>	<u>Plants</u>	<u>Plants</u>	<u>Days to</u>	<u>Moisture</u>	<u>Quality*</u>	<u>Yield</u>	
	Lodged %	Broken %	mid-silk	at Harvest %		Bu/A	Percent of check
Va. 512	0	11	72	21.2	4.2	75.7	93
SS Pocahontas	0	11	77	21.3	4.3	80.5	104
Va. 619	0	18	72	21.3	3.5	74.2	96
Wood 1027	0	12	75	21.3	4.3	87.1	113
VPI 646	0	9	78	21.4	2.0	73.6	95
DeKalb 803	2	13	77	21.4	3.2	72.7	94
Wood 130	2	6	75	21.4	2.7	76.3	99
Pioneer 345	0	21	73	21.5	4.2	77.9	101
US 13	0	22	76	21.5	3.2	70.6	91
DeKalb 630	0	13	75	21.5	3.5	79.7	103
DeKalb 414	0	15	72	21.5	4.2	75.2	97
Funk G25A	0	11	74	21.6	2.0	74.5	96
Ward 666	1	17	75	21.6	3.5	79.7	103
Ruff 100	0	2	75	21.7	3.5	79.7	103
Va. 608	0	15	72	21.7	4.3	85.4	110
Funk G76	0	7	72	21.8	3.5	79.7	103
Pioneer 338A	0	10	76	21.8	2.2	73.2	95
Buchanan 680	1	20	74	21.9	3.5	71.6	93
VPI 426	2	12	74	22.0	4.3	88.6	115
Va. 606	0	5	71	22.0	4.5	78.4	101
Todd 642	1	24	75	22.1	3.5	78.3	101
DeKalb 660	1	4	69	22.1	3.0	90.9	113
VPI 648	0	2	78	22.2	2.7	77.0	100
Va. 339	0	10	74	22.2	4.0	87.6	113
Kenworthy 55	0	12	76	22.3	4.0	88.4	114
Va. 310	0	14	72	22.3	4.5	88.7	115
Va. 529	1	10	77	22.6	3.5	83.6	108
Funk G134	1	13	76	22.6	2.6	71.9	93
III. 200	0	12	79	22.6	2.8	69.2	90
Ohio L94	0	5	78	22.7	2.5	82.7	107
Wood 144	0	5	78	23.0	3.2	77.2	100
Funk G144	0	12	76	23.2	3.5	80.3	104
VPI 645	0	3	79	23.3	2.0	76.6	102
US 505	2	4	79	23.4	2.5	71.6	93
VPI 653	4	10	75	23.5	3.3	76.1	98
Va. 554	1	12	77	23.6	2.3	78.4	101
Kenworthy 39	0	23	73	23.8	3.2	67.3	87
Va. 126d	0	3	75	23.9	3.3	91.2	113
Va. 126c	0	5	74	24.1	3.3	80.6	104
Va. 462	0	5	78	24.8	2.7	72.2	93

* Quality Score from 1 = very poor to 5 = very good

Cooperator: F. S. McClaugherty

Date planted: May 2, 1957

Fertilizer applied: 800# 10-10-10

Size of plot: 3' x 33'

Date harvested: Oct. 9, 1957

Rate of planting: 14,500 plants
per acre

Average
Performance of Corn Hybrid Tests West of Blue Ridge
(Blacksburg and Emory) - 1957

<u>Hybrid</u>	<u>Plants</u>	<u>Plants</u>	<u>Days to</u>	<u>Moisture</u>	<u>Quality</u>	<u>Yield</u>	
	Lodged %	Broken %		mid-silk		Score	Bu/A
Va. 612	1	17	7 $\frac{1}{4}$	18.1	3.4	72.9	100
Va. 508	1	8	70	18.6	3.0	75.8	104
Pioneer 342A	3	19	74	18.6	3.3	73.8	101
Todd 409	1	19	75	18.8	3.1	66.5	91
Va. 509	1	17	71	18.9	2.9	63.4	94
Funk G91	1	10	77	19.0	3.0	78.5	108
Pioneer 354	0	12	74	19.0	3.8	80.1	110
Ohio W64	3	13	72	19.1	3.6	70.3	96
Todd 252	1	16	73	19.1	3.3	64.9	89
Va. 611	1	5	73	19.2	3.3	72.7	100
DeKalb 609	1	18	74	19.2	3.2	70.9	97
Muncy Chief H276	3	15	72	19.3	3.2	66.0	90
N.Va. B25	6	24	73	19.3	3.2	69.0	95
DeKalb 3 x 3	2	10	77	19.4	2.7	74.2	102
Funk G50	1	16	75	19.4	3.4	72.6	99
N.J. 8	1	15	78	19.5	2.8	71.0	97
Va. 491	1	7	72	19.5	3.8	79.3	109
Va. 613	1	12	76	19.6	3.1	70.1	96
Iowa 4059	0	19	77	19.6	2.7	60.1	82
Farmcraft 66T	0	35	76	19.8	3.0	72.9	100
Todd 602	1	17	74	19.9	3.1	73.8	101
Broadbent 402A	1	16	78	19.9	2.5	67.7	93
Muncy Chief H520	1	7	76	19.9	3.1	75.6	104
Pioneer 345	0	13	74	20.0	3.6	73.8	101
SS Pocahontas	1	10	73	20.0	3.7	78.1	107
Va. 617	0	13	76	20.0	3.0	69.0	95
Va. 608	1	11	75	20.2	3.5	76.3	105
Va. 514C	0	14	79	20.2	3.5	73.5	101
Va. 618	0	13	76	20.2	3.2	69.4	95
Pa. 711	1	11	75	20.2	3.9	76.0	104
VPI 730V	1	7	78	20.2	3.1	65.2	89
Farmcraft 88	1	28	76	20.3	3.0	76.4	105
Ohio C54	1	6	75	20.3	3.2	71.2	98
VPI 426	2	10	75	20.4	3.8	81.6	112
Wood V26Y	1	10	78	20.4	2.7	74.7	104
Pioneer 329	1	8	78	20.5	3.4	76.3	105
Va. 619	1	14	77	20.6	3.3	67.2	92
Park 400	1	17	74	20.6	3.5	80.1	110
Va. 502	2	4	74	20.6	3.6	71.6	98
DeKalb 414	0	13	75	20.7	3.5	70.2	96
DeKalb 423	1	18	73	20.7	2.9	68.2	93
DeKalb 837	3	11	77	20.7	3.2	57.1	103
Funk G76	0	8	74	20.8	3.2	74.7	102
Ruff 108	1	16	75	20.8	4.0	80.4	110
Funk G99	0	13	80	20.8	2.6	65.1	89

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West of Blue Ridge Test (Cont'd)

<u>Hybrid</u>	<u>Plants Lodged %</u>	<u>Plants Broken %</u>	<u>Days to mid-stk</u>	<u>Moisture at Harvest %</u>	<u>Quality* Score</u>	<u>Yield % Bu/A of Check</u>	
						Bu/A	% of Check
Todd 642	1	21	77	20.9	3.2	71.2	98
Va. 606	1	7	74	20.9	3.8	73.1	100
Ward 666	1	18	76	20.9	3.2	76.7	105
US 13	1	17	79	20.9	3.1	70.4	96
Va. 512	0	12	75	20.9	3.7	73.0	100
Va. 417	1	17	79	20.9	3.1	68.9	94
Va. 481	0	7	75	20.9	3.5	79.5	109
Ruff 183	1	5	77	21.0	3.3	74.5	102
DeKalb 630	1	17	77	21.0	3.4	76.2	104
DeKalb 803	2	15	79	21.0	3.2	72.6	99
Wood 1027	0	12	78	21.0	3.8	76.9	105
Farmcraft 88-1	2	17	79	21.0	2.2	68.8	94
III. 200	1	13	80	21.2	2.9	69.9	96
VPI 648	1	6	80	21.3	2.7	71.8	98
Pioneer 338A	0	8	79	21.3	2.3	68.3	94
VPI 646	0	8	80	21.3	2.4	70.3	96
Funk G95A	0	12	77	21.4	2.6	69.5	95
Funk G134	2	8	78	21.6	2.7	69.3	95
Kenworthy 55	1	11	78	21.6	3.4	80.7	111
Buchanan 680	1	19	77	21.6	3.4	71.4	98
Wood V30	4	9	78	21.6	2.9	71.3	98
Va. 126C	1	5	76	21.7	3.1	76.5	105
DeKalb 660	1	6	72	21.7	3.7	77.9	107
Va. 310	1	14	76	21.8	3.9	79.2	108
VPI 653	3	10	78	22.0	3.4	72.6	99
Va. 339	0	10	78	22.0	3.9	79.6	109
Kenworthy 39	0	16	74	22.0	3.3	66.8	92
Ohio L94	2	5	80	22.1	2.6	75.1	103
Va. 529	2	10	79	22.1	3.5	78.3	107
Wood V44	2	8	81	22.2	3.3	69.9	96
Funk G144	1	11	78	22.3	3.4	78.3	107
Va. 554	1	13	79	22.5	2.9	76.1	104
Va. 126d	1	4	78	22.8	3.1	83.4	114
US 505	1	6	80	22.8	3.1	70.0	96
VPI 645	1	6	80	22.8	2.4	71.3	98
Va. 462	1	6	80	22.9	3.0	67.3	92

* Quality Score from 1 = very poor to 5 = very good.

Holland Early Hybrid Corn Test - 1957

Hybrid	Days to mid-silk	Plants	Plants	Moisture	Quality * Score	Yield	
		Lodged %	Broken %	at Harvest %		Bu/A	% of Check
Pioneer 342A	62	12	7	18.8	3.3	83.6	93
Pioneer 354	63	14	1	18.8	3.3	90.4	100
Va. 613	64	10	6	19.2	2.9	86.3	96
Todd 620B	64	3	4	19.3	3.1	91.5	101
Pioneer 345	63	7	1	19.4	3.1	86.1	95
Pa. 711	64	8	1	19.8	3.1	75.9	84
Va. 608	64	5	4	19.9	2.9	73.0	81
Va. 618	63	7	10	19.9	3.2	84.5	94
Funk G77A	63	13	11	19.9	2.9	88.6	98
VPI 426	64	4	2	20.0	3.4	95.1	105
Funk G50	64	13	5	20.1	3.1	93.3	103
Funk G76	62	13	6	20.3	3.4	96.0	106
Va. 126C	64	8	10	20.4	3.1	91.3	101
Va. 606	64	15	7	20.4	3.0	74.0	82
Va. 126d	64	16	3	20.5	3.3	89.3	99
Va. 617	64	7	15	20.6	3.3	78.6	87
Va. 310	63	2	11	20.7	3.3	90.2	100
Va. 502	63	1	8	20.8	3.1	74.4	82
SS Pocahontas	65	16	5	20.9	3.0	91.8	102
DeKalb 630	64	3	10	21.0	3.0	90.7	101
WVa. B25	62	7	4	21.0	2.9	76.3	85
Ohio C54	63	13	4	21.5	3.5	83.8	93
DeKalb 423	62	1	5	21.6	2.9	69.5	77
Todd 635	64	1	7	21.9	3.1	94.4	105
Va. 126t	65	11	1	21.9	3.1	93.6	104

* Quality Score from 1 = very poor to 5 = very good

Cooperator: M. W. Alexander.

Rate of planting: 15,000 plants per acre.

Date planted: Apr. 23, 1957.

Date harvested: Sept. 3, 1957.

Size of plot: 3' x 30'!

Fertilization: 100# 5-10-10 plus 80# N applied as side dressing.

Growing conditions: Dry last part of June until Aug. 10, 1957.

Carrol County Corn Hybrid Test - 1957

Hybrid	Plants	Plants	Moisture	Quality (1)	Yield	
	Lodged %	Broken %	at Harvest %		Bu/A	Percent of Check
Pioneer 342A	1	18	20.8	3.0	85.1	92
SS Pocahontas	1	13	20.8	3.6	92.1	99
Funk G50	1	22	20.8	3.4	81.7	88
Pa. 444	0	47	21.1	3.6	71.0	77
Va. 611	0	10	21.2	3.0	80.1	86
Ohio W 64	0	13	21.4	3.8	76.9	83
DeKalb 423	0	20	21.4	3.5	80.1	86
US 13	4	9	21.9	3.0	89.5	97
Pa. 711	2	18	22.0	3.4	74.1	80
Ohio C54	0	2	22.1	3.0	84.5	91
Funk G76	0	12	22.2	3.3	90.4	98
Park 400	0	12	22.7	3.9	97.2	105
W. Va. 825	1	42	22.7	3.0	86.7	94
Va. 402	0	14	22.7	4.1	87.0	94
Pioneer 338A	0	9	22.9	4.0	93.3	101
OP Turner - Yellow Dent	2	32	23.0	4.1	94.9	102
N.J. 8	0	20	23.1	4.4	90.8*	98
Funk G91	0	13	23.1	4.1	103.2	111
DeKalb 630	0	24	23.1	4.3	96.6	104
Va. 427	0	10	23.2	4.1	91.5	99
VPI 646	0	9	23.3	4.1	112.0*	121
Wood 726Y	0	4	23.6	4.0	93.5	101
Va. 126C	0	8	23.7	4.0	80.7	87
Ill. 200	0	16	23.9	3.3	88.5	95
OP Golden Queen	12	43	24.6	3.5	95.2	103

(1) Quality Score from 1 = very poor to 5 = very good

* Significantly better than other hybrids in the test.

Cooperators: Turner, Turner and Price

Date planted: May 6, 1957

Date harvested: Oct. 15, 1957

Performance of Hybrid Corn Test at Floyd, Va. - 1957

Hybrid	Plants	Plants	Moisture	Quality*	Yield	
	Lodged %	Broken %	at Harvest %		Bu./A	Percent of Check
Va. 608	7	13	18.2	3.7	73	90
Pioneer 342A	16	35	18.5	3.8	80	99
Ohio W64	10	6	19.3	3.8	78	96
US 13	3	18	19.3	3.3	75	93
Park 400	7	22	19.4	3.0	70	86
Va. 618	3	13	19.4	3.7	76	94
Va. 613	4	21	19.5	4.2	72	89
VPI 426	7	12	19.8	3.8	82	101
Funk G91	1	21	19.8	3.2	85	105
SS Pocahontas	6	18	19.8	3.5	77	95
Va. 310	0	16	19.9	3.2	80	99
Va. 606	1	9	19.9	4.0	82	101
Va. 514C	0	27	20.4	3.5	81	100
DeKalb 423	2	36	20.5	4.0	72	89
Va. 502	2	8	20.5	3.8	79	98
Va. 617	3	16	20.5	3.7	72	89
Ohio C54	11	17	20.6	3.7	78	96
Pioneer 330A	3	20	20.6	3.8	78	96
Wood V26Y	8	11	20.7	2.8	77	95
Funk G50	1	17	20.8	3.0	76	94
Funk G76	1	7	20.9	3.7	79	98
DeKalb 630	0	31	21.4	3.8	76	94
VPI 648	2	9	21.8	3.8	82	101
VPI 646	3	16	22.3	3.5	91	112
Va. 529	8	15	22.4	2.8	70	86

Cooperator: Nester and Talby

Size of plot: 3 1/2' x 33'

Planting rate: 11,500

* Quality Score from 1 = very poor to 5 = very good.

Performance of Hybrid Corn Test at Dryden, Va. - 1957

<u>Hybrid</u>	<u>Plants Lodged</u>	<u>Plants Broken</u>	<u>Moisture at Harvest</u>	<u>Quality⁽¹⁾ Score</u>	<u>Yield Bu/A.</u>	<u>Percent of check</u>
	%	%	%			
Pioneer 342A	0	4	19.5	2.5	71.6*	80
Broadbent 402A	0	10	20.3	2.8	101.1*	113
Pioneer 301A	0	8	20.5	2.8	93.0*	104
VPI 426	1	2	20.5	3.5	109.9*	122
Ohio W64	0	11	20.6	3.0	69.3	77
US 13	0	4	20.7	3.8	93.1*	104
Funk G134	0	2	20.7	3.8	94.2*	105
DeKalb 630	0	15	20.8	2.8	73.3	82
Tenn. 4406B	1	6	20.9	3.8	92.6	103
Funk G76	0	0	21.3	3.3	93.0	104
Funk G91	1	13	21.3	2.3	91.8*	102
VPI 645	0	10	21.5	3.3	105.0*	117
Tenn 5001	0	5	21.6	4.3	97.2	108
Broadbent 406	0	5	21.6	2.3	78.0*	87
Broadbent 235AW	1	1	22.2	3.5	94.3*	106
Broadbent 404	0	11	22.2	2.3	72.7	82
VPI 640	0	4	22.3	2.8	90.0*	101
VPI 730W	0	2	22.7	4.0	94.5*	105
US 505	1	5	22.7	3.5	80.8	90
VPI 653	0	4	23.3	3.0	87.8	90
VPI 646	0	5	23.6	3.0	97.2*	108
Broadbent 405	0	3	23.7	3.3	94.4*	105
Ohio C54	0	1	23.9	3.3	81.1*	90
Tenn 4114W	0	1	23.9	4.3	97.8*	109
Pioneer 309A	0	3	25.2	2.3	73.1	87

(1) Quality Score from 1 = very poor to 5 = very good.

* Not significantly different from top-yielding hybrid in test.

Cooperators: C. H. Coomer, J. P. Lyle

Date planted: May 9, 1957

Date harvested: Oct. 7, 1957

Size of plot: 3' x 33'

Rate of planting: 14,500 plants per acre