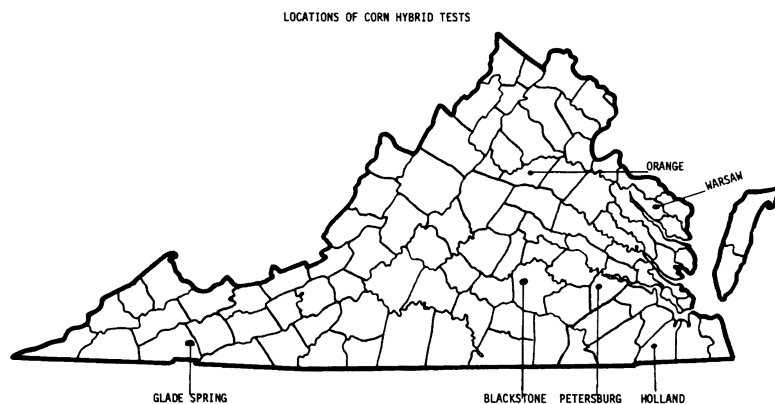


VIRGINIA CORN PERFORMANCE TRIALS IN 1977

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M.T. Carter, S. L. Crews, R. L. Harrison, G.D. Jones, L.A. Link,
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Department of Agronomy
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia 24061
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VIRGINIA CORN PERFORMANCE TRIALS IN 1977

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Major tests of commercial corn hybrids were planted at six locations in Virginia in 1977. In addition, a test of virus-resistant hybrids was grown at Wingina and small tests to evaluate commercial hybrids for resistance to gray leaf spot disease were grown at Blacksburg and Bridgewater. Both the Blacksburg and Bridgewater tests were artificially inoculated twice with dry leaf tissue from plants which were severely infected with gray leaf spot in 1976.

Drouth generally prevailed in central and eastern areas of Virginia in 1977 and yields at Holland, Warsaw, and Orange were low as a result. The test at Blackstone was irrigated four times. The test at Petersburg was not harvested.

Test variability is always greater in dry years and results obtained in 1977 reflect this variability. Experimental errors -- differences needed for significance -- are higher than we would like.

Hybrids entered in the Virginia commercial hybrid tests are primarily those which have been submitted by commercial companies, but a few experimental and commercial hybrids of particular interest to professional workers in Virginia were also entered.

The locations at which the hybrids are tested and the rate of planting for each hybrid at each location tested are specified by the company entering the hybrid for test. Seed was packaged at Blacksburg with about 20% more seed packaged than desired for the final stand. Plots were thinned to the desired stand for each hybrid as possible.

As nearly as we could determine, hybrids were arranged so that hybrids of similar maturity, planting rate, and growth type would be planted in adjacent rows. Within these limitations, hybrids were randomized within each replication.

Cooperators, plot sizes, fertilizer applications, cultural practices used, and growing conditions are given as footnotes to the various tables.

Unfortunately, some hybrids are always misclassified relative to maturity. Later hybrids, particularly in the early group, tend to be at an advantage because later plants are usually taller and taller plants have a competitive advantage when growing adjacent to shorter ones. Shorter hybrids growing adjacent to taller ones are at a comparable disadvantage. We try to correct these errors as data become available.

Plots were planted and harvested by hand. Erect plants were recorded just prior to harvest. Ear height was measured to the top ear-bearing node. Yield was reported at 15.5% moisture. Grain quality was visually rated at some locations. Silage yield and percent ears were recorded at Orange.

"Relative yield" is a percentage of the average yield for the test. A hybrid with a relative yield of 105 was thus 5% more productive than the average of that particular test.

Virus trial -- Several companies again submitted seed of hybrids for comparison under virus conditions. These were grown in three replications at Wingina in an area containing virus-infected johnsongrass. Some hybrids were highly resistant to the virus(es) but some were very late and very high-eared. Data are reported in Table 11.

The brand names of the commercial hybrids entered in the 1977 tests and the sources of seed follow:

<u>Hybrid or Brand Name</u>	<u>Source of Seed</u>
Asgrow	Asgrow Seed Co., 9001 Hickman Rd., Des Moines, Iowa 50053
Beck	Beck Hybrids, Atlanta, IN 46031
Clark	Clark Seed Co., Inc., Kenton, DE 19955
Coker	Coker Pedigreed Seed Co., Hartsville, SC 29550
DeKalb	DeKalb Agricultural Association, DeKalb, IL 60115
Dennis	Dennis Hybrids, Windfall, IN 46076
Ellis	T.B. Ellis, Box 83, Carrollton, VA 23314
Funk G	A. H. Hoffman Seed, Inc., Landisville, PA 17538
Golden Harvest	Columbiana Seed Co., Eldred Ill. 62027
Hofmeyer	A. N. Hofmeyer, RFD 1, Box 183, Williamsburg, VA 23185
Kenworthy	Kenworthy Seed Co., Greenfield, OH 45123
Longest	George M. Longest, St. Stephens Church, VA 23148
McNair	McNair Seed Co., Box 706, Laurinburg, NC 28352
Midstates	N. J. Crop Imp, Coop. Assn., Inc., Allentown, NJ 08501
Muncy Chief	Muncy Chief Hybrids, Muncy, PA 17756
Northrup-King	Northrup-King and Co., P. O. Box 959, Minneapolis, MN 55440
PAG	PAG Seeds, Box 9480, Dept. 16, Minneapolis, MN 55440
Pioneer	Pioneer Corn Co., Inc., 221 N. Main Street, Tipton, IN 46072
Ring Around	Ring Around Products, Inc., P. O. Box 1629, Plainview, TX 79072
Southern States	Southern States Coop., P. O. Box 1656, Richmond, VA 23213
Taylor-Evans	Taylor-Evans Seed Co., Box 480, Tulia, TX 79088
Thompson	G. C. Thompson & Son, Rt. 1, Eagle Rock, VA 24085
Todd	Todd Hybrid Sales, Burlington, Ind. 46915
Trojan	Trojan Seed Co., Box 367, Windfall, IN 46076
USS Agri-Chemicals	USS Agri-Chemicals, P. O. Box 1380, Wilmington, NC 28401
Voris	Voris Seeds, Inc., Box 457, Windfall, IN 46076
Watson	Watson Seed Farm, Rocky Mount, NC 27801
Wood	Wood Bros., Wingina, VA 24599
Wilstar	Helena Chemical Co. P. O. Box 977 W. Columbia, S.C. 29169

TABLE 3. CORN PERFORMANCE, WARSAW, 1977.

	Hybrid Type	Plants Acre	Yield BU/A	Relative Yield	Percent Water	Percent Erect	Days to Silk	Ear Ht. In.	Mid-Full Season Maturity	Hybrid Type	Plants Acre	Yield BU/A	Relative Yield	Percent Water	Percent Erect	Days to Silk	Ear Ht. In.	
Early Maturity																		
DEKALB XL25	2X	24062	75	173	24.5	100	71	30	ASGROW RX94	3X	19824	31	71	21.9	93	83	38	
DEKALB XL35	2X	23910	57	132	28.5	100	73	34	BECK 65X	2X	22094	46	106	19.0	96	77	39	
DEKALB XL43A	2X	24062	62	143	27.3	100	73	33	BECK 70X	2X	21186	38	88	18.9	98	78	37	
FUNKS G4445	2X	24062	69	159	25.7	100	72	36	BECK 8812	2X	21943	32	72	18.5	97	80	32	
FUNKS G4321A	2X	20884	68	156	25.5	100	72	35	CLARK SX260	2X	20732	50	115	19.6	99	76	37	
MUNCY CHIEF SX220	2X	24062	64	148	17.2	98	66	32	CLARK SX770	2X	20732	66	152	17.6	72	76	36	
MUNCY CHIEF 3X553	3X	24062	68	110	25.6	100	75	35	CLARK SX770A	2X	20430	55	126	19.6	96	76	38	
NORTHROP-KING PX32	2X	23759	74	170	23.3	100	72	35	CLARK SX777C	2X	20732	39	89	16.2	99	77	39	
NORTHROP-KING PX34	2X	24062	52	120	22.8	100	74	38	COKER 16	M2X	23154	36	82	17.8	97	77	37	
NORTHROP-KING PX46	2X	22548	59	135	24.7	100	73	36	COKER 18	2X	21489	31	72	20.8	99	83	38	
PIONEER BRAND 3591	M2X	24062	74	170	21.9	100	75	36	COKER 22	3X	21338	33	75	21.9	96	79	37	
PIONEER BRAND 3780		24062	66	151	21.3	100	72	33	DEKALB XL72B	2X	23154	25	56	19.3	97	80	35	
SOUTHERN STATES 335A		24062	66	152	19.2	99	68	37	DEKALB XL75A	M2X	23154	20	46	20.9	99	85	39	
TODD M59	2X	22548	53	122	27.1	100	75	40	DEKALB XL78	2X	23154	38	86	20.2	93	78	37	
TROJAN TXS102A	2X	23759	50	115	24.5	100	73	36	DENNIS DS37	2X	21489	40	93	20.5	95	77	39	
TROJAN TXS105A	2X	23759	68	156	23.1	100	73	39	DENNIS DS39	2X	21489	40	92	21.1	96	77	39	
TROJAN TXS108A	2X	23759	37	85	30.4	100	77	37	DENNIS DS69	2X	20127	60	138	18.5	75	77	37	
USS AGRI-CHEMICALS 0010	2X	23759	54	123	26.9	100	73	35	GOLDEN HARVEST H2500	2X	17857	53	121	19.2	96	76	40	
Group Averages		23624	61	140	24.4	100	73	35	GOLDEN HARVEST H2655	M2X	20430	47	107	18.1	99	76	36	
L.S.D. (.05)			12						GOLDEN HARVEST H2666	2X	19976	48	111	19.7	90	78	39	
Medium Maturity																		
BECK 44X	2X	22094	63	145	26.4	99	74	35	GOLDEN HARVEST H2775	M2X	20581	24	54	20.7	96	81	41	
BECK L4X	2X	22246	31	72	30.1	100	80	37	FUNKS G4611	M2X	20127	22	51	18.1	100	78	37	
COKER 6065	3X	22700	60	139	28.1	99	75	32	FUNKS G4636	2X	22548	31	71	19.6	97	79	36	
DEKALB XL54	2X	21640	61	140	26.5	99	75	35	LONGEST 3X1	M3X	20430	33	76	18.6	99	77	37	
DEKALB XL64B	2X	23456	43	99	27.0	100	77	35	LONGEST SX2	M2X	21338	45	103	17.5	99	77	37	
DENNIS DS11	2X	24062	64	146	24.6	100	73	31	LONGEST SX4	M2X	21035	34	77	20.7	97	79	39	
DENNIS DS37E	2X	21489	41	93	28.9	99	77	38	MCNAIR X194	2X	19522	40	92	21.2	95	77	38	
DENNIS DS47A	2X	21943	62	142	28.0	100	77	33	MCNAIR X233	2X	18765	30	68	21.3	98	86	43	
DENNIS DS48	2X	21640	36	84	25.2	100	79	35	MCNAIR S338	3X	18311	19	43	20.2	97	84	41	
FUNKS G4520	2X	20430	45	103	28.9	100	77	34	MID-STATES 747A	2X	19673	51	116	19.4	98	77	40	
MCNAIR X170	2X	19522	54	124	25.5	100	75	35	MID-STATES 869	M2X	19522	43	99	19.0	99	77	37	
PIONEER BRAND 3517	M2X	21943	46	106	25.4	100	75	31	MID-STATES 879	2X	19522	39	89	20.6	94	77	36	
PIONEER BRAND 3535	5X	21338	65	149	26.0	100	74	37	MID-STATES 900	M2X	19522	53	122	17.7	91	77	38	
PIONEER BRAND 3571	M2X	21489	47	108	23.8	100	76	35	MUNCY CHIEF SX662	2X	22548	23	53	17.9	97	77	36	
RING AROUND 1501	2X	21489	54	123	29.9	100	77	39	MUNCY CHIEF SX777	2X	22094	44	101	18.9	91	78	36	
RING AROUND 1502	2X	21338	44	102	29.1	100	77	39	MUNCY CHIEF SX808A	2X	21943	20	46	18.7	98	80	37	
SOUTHERN STATES 522	M2X	22094	42	95	26.3	100	76	35	MUNCY CHIEF SX808B	2X	23154	21	48	19.9	99	81	37	
SOUTHERN STATES 636P	2X	22246	51	116	26.6	100	77	35	MUNCY CHIEF SX878	2X	21186	24	55	22.0	97	82	39	
SOUTHERN STATES 698	5P	18614	54	125	27.2	100	74	34	MUNCY CHIEF 3X898	3X	21035	20	46	20.1	96	80	37	
TAYLOR-EVANS 6995	2X	23154	48	110	30.0	100	77	39	NORTHROP-KING PX74	2X	21338	34	79	19.0	99	78	40	
TODD MX73	2X	21338	58	133	30.5	100	77	39	NORTHROP-KING PX76	2X	21338	43	99	18.2	96	77	37	
TODD M75	2X	21489	30	70	28.8	100	80	38	NORTHROP-KING PX79	2X	21186	21	47	17.7	100	80	39	
TROJAN TXS114	2X	22246	44	100	29.5	100	79	38	NORTHROP-KING PX95	2X	21338	27	61	23.7	93	86	41	
USS AGRI-CHEMICALS 0555A	3X	20430	46	105	28.3	100	77	35	PAG 314	2X	22851	26	60	19.3	97	77	39	
VORIS 2502	2X	22851	42	95	25.3	100	78	34	PIONEER BRAND 3184	2X	19976	32	72	22.0	99	83	39	
VORIS 2532	2X	23002	40	91	30.6	100	78	39	PIONEER BRAND 3369A	2X	19522	59	136	17.8	95	77	39	
WILSTAR 5555	2X	24062	61	139	24.9	100	73	33	SOUTHERN STATES SS727	2X	19673	35	80	20.0	99	78	38	
Group Averages		21864	49	113	27.4	100	76	36	SOUTHERN STATES SS730P	2X	21035	32	73	18.6	96	81	36	
L.S.D. (.05)			13						SOUTHERN STATES SS745P	5P	20278	48	109	18.1	93	77	38	
Cooperator: H. M. Camper, Jr. Eastern Virginia Research Station, Warsaw, Virginia																		
Date Planted: April 14, 1977																		
Dates Harvested: Early Maturity-August 15																		
Medium-August 18																		
Mid-Full-September 14																		
Plot Size: 1 row 3' X 30' with 3 replications																		
Growing Conditions: Extreme drought mid-May through August. Total precipitation was 12.35 inches below normal.																		
Group Averages												21137	36	83	19.6	96	79	38
L.S.D. (.05)												12						
Experiment Averages												21722	43	100	22.3	97	77	37
L.S.D. (.05)												12						

TABLE 5. CORN PERFORMANCE, BLACKSTONE, 1977.

Medium Maturity	Hybrid Type	Plants Acre	Yield BU/A	Relative Yield	Percent Water	Percent Erect	Days to Silk	Ear Ht.In.
DENNIS DS11	2X	22548	96	102	23.7	83	71	33
DENNIS DS37E	2X	23305	91	97	27.4	68	72	41
DENNIS DS47A	2X	21640	103	109	26.2	95	73	31
DENNIS DS48	2X	21943	87	92	24.9	88	74	38
FUNKS G4321A	2X	19522	86	91	25.7	84	71	38
FUNKS G4520	2X	20732	102	109	28.8	88	71	39
MCNAIR X170	2X	19219	91	96	27.4	95	70	38
PIONEER BRAND 3517	M2X	21035	91	97	24.3	95	71	34
PIONEER BRAND 3535	5X	22548	93	98	27.0	95	72	38
PIONEER BRAND 3571	M2X	21792	96	102	24.7	94	72	36
PIONEER BRAND 3591	M2X	21943	83	89	20.6	90	70	34
RING AROUND 1501	2X	21792	85	90	27.4	80	73	41
RING AROUND 1502	2X	21186	89	94	29.7	86	74	43
SOUTHERN STATES 522	M2X	21943	89	94	24.1	86	71	39
SOUTHERN STATES 636P	2X	22548	95	101	28.1	92	73	35
SOUTHERN STATES 698	5P	20581	91	97	28.1	90	71	39
TAYLOR-EVANS 6995	2X	19219	98	104	27.2	89	72	43
TROJAN TXS114	2X	22246	109	115	26.8	80	73	40
USS AGRI-CHEMICALS 0555A	3X	20127	82	87	26.0	93	74	38
WILSTAR 5555	2X	24364	85	91	24.1	90	72	34
Group Averages		21511	92	98	26.1	88	72	38
L.S.D. (.05)			16					
Mid-Full Season Maturity								
ASGROW RX94	3X	19673	98	105	23.9	76	75	42
ASGROW RX101	3X	19673	87	92	23.4	84	76	39
COKER 16	M2X	20581	95	101	21.6	88	73	41
COKER 18	2X	16798	89	95	22.2	77	74	43
COKER 22	3X	21338	89	95	22.2	68	75	39
DEKALB XL72B	2X	21943	98	105	21.6	94	74	38
DEKALB XL75A	M2X	22094	118	125	22.5	88	75	43
DEKALB XL78	2X	22548	107	114	22.4	73	72	41
DEKALB XL394	3X	23154	96	102	25.3	92	79	46
DENNIS DS37	2X	21035	105	111	21.3	89	73	40
DENNIS DS39	2X	21792	109	116	21.8	73	71	40
DENNIS DS69	2X	20430	102	108	21.8	71	72	39
ELLIS 91	3X	19219	94	100	21.2	88	73	40
GOLDEN HARVEST H2500	2X	16495	88	94	22.1	83	73	41
GOLDEN HARVEST H2655	M2X	20732	100	107	21.1	86	72	40
GOLDEN HARVEST H2666	2X	20581	92	97	22.4	72	74	40
GOLDEN HARVEST H2775	M2X	20732	101	107	26.0	76	76	41
FUNKS G4611	M2X	20278	92	98	21.6	90	75	41
FUNKS G4636	2X	21792	107	114	23.7	87	72	40
MCNAIR X194	2X	19219	75	80	21.2	77	72	41
MCNAIR X233	2X	19219	88	94	24.4	75	84	36
MCNAIR S338	3X	17857	94	100	24.9	75	77	43
MUNCY CHIEF SX662	2X	21640	77	82	20.8	83	71	38
MUNCY CHIEF H764	4X	22246	93	99	20.9	68	74	41
MUNCY CHIEF SX777	2X	21035	93	99	21.7	73	74	37
MUNCY CHIEF SX808A	2X	21792	98	104	21.8	82	73	42
MUNCY CHIEF SX808B	2X	20430	80	85	21.5	84	76	38
MUNCY CHIEF SX878	2X	21338	83	89	23.1	55	75	39
NORTHRUP-KING PX74	2X	20127	97	104	21.0	69	73	38
NORTHRUP-KING PX79	2X	20278	91	97	20.7	90	75	40
NORTHRUP-KING PX95	2X	19219	91	96	22.7	66	75	43
NORTHRUP-KING PX675	3X	19824	83	88	20.6	83	74	40
PAG 314	2X	22700	113	120	20.7	73	70	42
PIONEER BRAND 3184	2X	19824	88	93	23.4	86	74	39
PIONEER BRAND 3368A	M2X	19370	90	95	21.4	69	74	39
PIONEER BRAND 3369A	2X	20127	90	95	21.1	60	73	39
SOUTHERN STATES 727	2X	18916	79	84	21.0	78	74	39
SOUTHERN STATES 730P	2X	18614	80	85	22.6	81	75	38
SOUTHERN STATES 795	3X	20884	91	97	21.2	71	73	39
SOUTHERN STATES 830	3X	21035	100	106	22.4	82	73	40
SOUTHERN STATES 849P	3X	20127	83	88	22.8	66	75	37
TAYLOR-EVANS 6968	2X	22094	104	111	22.1	95	72	39
TAYLOR-EVANS 6980	2X	19522	100	106	23.1	85	74	40
TAYLOR-EVANS 6992	2X	19673	110	117	20.5	90	74	42
TROJAN TXS113	2X	22246	92	98	21.7	90	71	38
TROJAN TXS115A	2X	20884	98	104	20.6	84	73	41
WILSTAR 6663	2	22851	98	105	22.4	75	73	41
WILSTAR 9990	2	19370	97	103	23.9	74	75	41
Group Averages		20486	94	100	22.2	79	74	40
L.S.D. (.05)			19					
Experiment Averages		20787	94	100	23.3	82	73	39

Cooperators: W. B. Wilkinson and R. R. Wilmouth

Planting Date: April 14, 1977

Fertilization: 800 lbs. 10-10-10 + 100 lb. N/A

Weed Control: Bladex and Sutan

Harvest Dates: Medium Hybrids - August 30, 1977

Full-Season Hybrids - September 16, 1977

Irrigation: June 20, 1977 - 1 1/2"

June 29, 1977 - 1 1/2"

July 5, 1977 - 1 1/2"

July 18, 1977 - 2"

Growing Conditions: Record high temperatures

Record drought: 10 3/4" of rainfall from planting to harvest

Table 6. Corn Performance, Blackstone, 1976.

	PLANTS /ACRE	YIELD BU/A	RELA- TIVE YIELD*	PCT WATER	PCT ERECT	DAYS TO SILK	EAR HT. IN.																		
TESTED IN EARLY MATURITY GROUP																									
ASGROW RX80	2X	23310	59.0	94	23.1	96	79	29	MUNCY CHIEF H764	4X	24670	57.5	91	23.7	94	79	29								
ASGROW RX90	2X	22400	69.9	111	22.6	97	78	30	MUNCY CHIEF SX777	2X	23610	58.9	94	24.8	97	81	28								
DENNIS 47A	2X	21340	69.0	110	23.0	96	78	26	MUNCY CHIEF SX808A	2X	16950	41.8	67	27.0	96	80	26								
DENNIS 47	2X	22090	64.1	102	23.0	95	77	29	MUNCY CHIEF SX808B	2X	14530	35.8	57	25.9	98	80	29								
FUNKS G4520	2X	21790	60.2	96	21.9	94	78	28	MUNCY CHIEF SX878	2X	18920	57.3	91	25.7	94	79	28								
MIDSTATES 747A	2X	20730	51.8	83	22.8	97	79	29	NORTHRUP KING PX74	2X	19220	92.5	147	22.5	97	76	34								
MUNCY CHIEF SX662	2X	24820	58.4	93	22.7	91	77	28	NORTHRUP KING PX76	2X	19980	57.2	91	23.6	96	77	28								
PIIONEER BRAND 3517	M2X	21190	46.2	74	22.7	98	79	24	NORTHRUP KING PX79	2X	18770	78.2	125	22.0	98	78	33								
PIIONEER BRAND 3535	5X	21640	57.9	92	23.4	98	78	27	PIONEER BRAND 3369A	2X	22090	75.6	120	24.1	92	76	32								
PIIONEER BRAND 3571	M2X	23760	60.3	96	22.8	97	78	27	PIONEER BRAND 3368A	M2X	22700	70.6	112	26.0	92	78	31								
PIIONEER BRAND 3709	M2X	22850	52.7	84	22.3	95	76	26	PIONEER BRAND 3321	M2X	21340	60.3	96	25.4	97	79	28								
RING AROUND RA1501	2X	23610	79.2	126	22.2	97	78	31	RING AROUND RA2502	M2X	22250	74.2	118	25.0	97	77	29								
RING AROUND RA1502	2X	24820	69.0	110	25.1	95	79	30	RING AROUND RA2601	M2X	17550	58.0	92	31.2	99	80	29								
SOUTHERN STATES SS322	M2X	20430	67.0	107	22.3	98	77	24	RING AROUND RA2602W	M2X	19370	65.9	105	27.8	100	84	36								
SOUTHERN STATES SS698	SP	19980	51.5	82	22.9	92	77	27	RING AROUND SX2766	M2X	22090	60.5	96	25.7	90	81	31								
TAYLOR-EVANS 6995	2X	24820	77.7	124	22.9	97	78	31	RING AROUND RA3502	3X	26180	53.6	85	24.0	97	79	26								
TROJAN TXS111	2X	14230	50.9	81	22.8	99	80	26	RING AROUND RA3602	3X	23610	56.2	89	24.5	97	81	33								
USS AGR I-CHEMICALS U555A	3X	23150	77.6	124	23.8	95	77	32	SOUTHERN STATES SS727	2X	21040	64.4	102	22.3	96	78	32								
GROUP AVERAGES																									
L.S.D.(.05)		22050	62.4	99	22.9	96	78	28	SOUTHERN STATES SS750	SP	25270	52.5	94	23.7	89	79	26								
TESTED IN MID-SEASON MATURITY GROUP																									
COKER 16	M2X	26030	55.9	89	25.1	97	79	27	SOUTHERN STATES SS775	2X	23910	60.2	96	25.8	95	77	28								
COKER 18	2X	21940	66.7	106	23.8	97	79	30	SOUTHERN STATES SS795P	3X	21190	82.0	131	24.4	99	77	31								
COKER 22	3X	19370	55.5	88	24.9	88	78	33	SOUTHERN STATES SS840	4X	20230	73.6	117	23.9	93	80	35								
DEKALB XL72B	2X	22850	62.2	99	24.8	93	78	24	SOUTHERN STATES SS875	4X	21340	78.8	126	24.6	90	77	34								
DEKALB XL394	3X	22550	69.0	110	27.6	95	84	39	TAYLOR-EVANS 6935	2X	24520	57.9	92	25.4	97	80	29								
DEKALB XL78	2X	24210	53.6	85	25.1	92	77	27	TAYLOR-EVANS 6965	2X	23000	48.3	77	24.5	95	81	25								
DENNIS 37	2X	21340	67.3	107	23.6	97	77	31	TAYLOR-EVANS 6968	2X	26030	67.5	108	25.2	99	77	25								
DENNIS 69	2X	22700	68.7	109	24.1	92	77	31	TAYLOR-EVANS 6980	2X	23310	55.4	88	24.6	94	80	26								
FUNKS G4611	2X	25270	64.8	103	22.6	95	79	26	TAYLOR-EVANS 6992	2X	24970	60.9	97	23.0	96	79	29								
FUNKS G4646	2X	25880	58.9	94	24.6	98	79	29	TROJAN TXS113	2X	25880	66.1	105	23.9	97	78	25								
HOFMEYER SX71	2X	24820	48.5	77	24.3	96	82	25	TROJAN TXS115A	2X	24520	57.0	91	22.7	91	78	28								
HOFMEYER BINBUSTER 3	4X	23760	65.0	103	25.4	90	79	26	USS AGR I-CHEMICALS U510	2X	19820	75.0	119	23.4	97	76	29								
MCNAIR X170	2X	19930	56.9	91	23.5	95	76	30	GROUP AVERAGES																
MCNAIR X194	2X	20880	70.9	113	23.0	99	77	32	L.S.D.(.05)																
MCNAIR S237	3X	22090	66.5	106	24.5	91	80	36	22170 63.0 100 24.6 94 79 30																
MIDSTATES 869	M2X	20730	65.6	105	24.0	97	79	29	EXPERIMENT AVERAGES																
MIDSTATES 879	2X	21340	62.6	100	24.5	80	76	30	L.S.D.(.05)																
MIDSTATES 900	M2X	21490	72.9	116	25.1	92	78	32	22140 62.8 100 24.2 95 79 29																

*RELATIVE YIELD = (HYBRID YIELD/TEST AVERAGE) x 100.

COOPERATOR: W. B. WILKINSON III.
 DATE PLANTED: MAY 6. DATE HARVESTED: OCT. 7-11.
 FERTILIZER APPLIED: 80-80-80 PLUS 68 LBS N.
 WEED CONTROL: BLADEX PLUS SUTAN.
 GROWING CONDITIONS: VERY DRY AFTER MAY.
 MOST RAINFALL IN JUNE AND JULY CAME IN TWO STORMS.
 AUGUST RAINFALL: 0.21".
 IRRIGATION: JUNE 4: 1"; JULY 15: 2"; JULY 19: 1"; JULY 22: 1".

TABLE 9. CORN PERFORMANCE, GLADE SPRING, 1977.

Medium Maturity	Hybrid Type	Plants Acre	Yield BU/A	Relative Yield	Percent Water	Percent Erect	Days to Silk	Ear Ht. In.
BECK 65X	2X	20127	135	111	20.9	91	76	52
DEKALB XL54	2X	20430	130	106	19.8	94	76	49
DEKALB XL64B	2X	21943	112	92	19.8	91	77	43
DENNIS DS11	2X	24062	104	85	17.6	84	76	39
DENNIS DS37E	2X	21338	123	101	20.2	86	75	48
DENNIS DS47A	2X	21489	132	108	19.6	92	77	42
DENNIS DS48	2X	21338	115	95	19.6	87	77	50
PIONEER BRAND 3535	5X	20581	120	98	18.4	95	76	52
PIONEER BRAND 3571	M2X	21338	105	86	18.2	89	77	43
PIONEER BRAND 3591	M2X	21338	104	85	18.5	95	75	44
RING AROUND 1501	2X	20884	109	89	21.0	92	77	53
RING AROUND 1502	2X	21338	123	100	21.4	96	78	48
SOUTHERN STATES 522	M2X	22246	125	103	17.9	94	76	44
SOUTHERN STATES 636P	2X	22246	116	95	18.1	90	75	44
SOUTHERN STATES 698	SP	20430	104	85	20.2	92	77	45
TAYLOR-EVANS 6995	2X	19522	136	111	21.1	91	78	51
TROJAN T1120	2X	21338	119	98	19.2	91	78	46
WILSTAR 4445	2X	24062	116	96	18.1	96	76	48
WILSTAR 5550	2X	23910	82	67	17.9	92	76	40
WILSTAR 5555	2X	23608	96	79	17.9	91	75	37
Group Averages		21678	115	94	19.3	92	76	46
L.S.D. (.05)			28					
Mid-Full Season Maturity								
BECK 85X	2X	20430	118	97	22.3	77	80	47
COKER 16	M2X	21338	148	121	20.1	87	77	47
COKER 18	2X	17252	122	100	23.3	93	81	49
COKER 22	3X	19370	152	124	23.4	100	79	56
DEKALB XL72B	2X	21338	128	105	22.3	93	79	49
DEKALB XL75A	M2X	22094	130	106	22.6	95	80	59
DEKALB XL78	2X	22246	144	118	21.5	95	79	48
DENNIS DS37	2X	21338	129	106	21.6	85	79	51
DENNIS DS39	2X	21338	136	112	22.4	91	79	49
DENNIS DS69	2X	20430	153	125	21.9	90	78	50
FUNKS G4520	2X	19522	141	116	21.5	95	78	44
FUNKS G4611	M2X	19522	140	115	21.1	88	79	53
FUNKS G4636	2X	21338	142	116	22.2	89	79	53
FUNKS G4776	2X	21338	111	91	22.2	98	82	65
FUNKS G5757	4X	19522	117	96	23.7	92	81	48
KENWORTHY KLX55	3X	19522	119	98	20.1	92	77	50
KENWORTHY KLX68A	2X	17857	110	90	21.2	93	78	48
KENWORTHY KLX70	2X	21338	101	83	23.8	84	81	50
KENWORTHY KL88X	2X	21035	124	101	20.1	90	77	52
KENWORTHY KL447	3X	21338	128	105	19.5	91	78	45
MCNAIR X170	2X	17554	117	96	20.2	91	75	48
MCNAIR X233	2X	17252	90	74	24.0	96	82	61
MCNAIR S338	3X	17252	95	77	23.7	96	81	57
MUNCY CHIEF SX662	2X	22548	96	79	20.6	87	79	52
MUNCY CHIEF SX777	2X	21338	118	97	21.7	95	79	47
MUNCY CHIEF SX878	2X	20732	120	98	23.6	92	81	51
NORTHRUP-KING PX74	2X	20430	152	125	20.7	95	77	48
NORTHRUP-KING PX76	2X	20430	128	105	20.6	96	77	47
NORTHRUP-KING PX79	2X	20430	126	103	22.4	94	78	49
NORTHRUP-KING PX95	2X	20430	138	113	25.1	98	79	64
PIONEER BRAND 3179	M2X	19522	123	101	22.5	98	81	55
PIONEER BRAND 3184	2X	19522	120	98	22.9	98	80	59
PIONEER BRAND 3369A	2X	19522	158	129	20.8	93	78	50
SOUTHERN STATES 727	2X	19370	136	112	21.5	91	79	50
SOUTHERN STATES 745P	SP	19370	101	83	21.3	87	78	47
SOUTHERN STATES 775	2X	20732	139	114	20.7	91	77	44
SOUTHERN STATES 840	4X	19370	108	88	21.4	87	79	46
SOUTHERN STATES 919P	2X	18008	98	80	25.9	96	81	45
TAYLOR-EVANS 6947	2X	17252	98	80	23.9	96	81	58
TAYLOR-EVANS 6968	2X	21338	148	121	20.2	93	78	49
TAYLOR-EVANS 6980	2X	18311	104	85	23.5	86	79	48
TAYLOR-EVANS 6992	2X	19522	117	96	21.6	95	79	52
THOMPSON 219A	4X	19522	119	97	22.6	94	80	51
THOMPSON 220B	M2X	19522	75	61	21.8	92	80	52
THOMPSON 221	2X	21338	133	109	20.7	96	79	56
TROJAN TXS113	2X	22246	135	111	20.5	94	78	46
TROJAN TXS115A	2X	19824	136	112	20.4	90	78	49
WILSTAR 6663	2X	23456	120	99	21.1	93	78	49
Group Averages		20117	124	101	21.9	92	79	51
L.S.D. (.05)			34					
Experiment Averages		20576	121	100	21.1	92	78	49
L.S.D. (.05)			32					

Cooperator: L.A. Link, Southwest Virginia Research Station, Glade Spring, Virginia

Planted: April 26, 1977

Plot Size: 1 row 3' X 30' with 3 replications

Fertilizer Applied: 175-60-90 preplant

Growing Conditions: Very dry through May and first of June. Over 6.0 inches of rain in late part of June. Moderately dry during July with good moisture during August and September.

Table 10. Corn Performance, Glade Spring, 1976.

	PLANTS /ACRE	YIELD BU/A	RELA- TIVE YIELD	PCT WATER	PCT ERECT	DAYS TO SILK	EAR HT. IN.
TESTED IN EARLY MATURITY GROUP							
BECK 65X	2X 17860	161.6	97	26.7	97	84	57
DEKALB XL54	2X 22250	161.5	97	22.7	86	77	52
DENNIS 37	2X 18610	178.1	107	26.1	98	81	60
DENNIS 47	2X 18610	164.0	98	22.0	86	80	61
KENWORTHY KLX55	3X 17860	177.1	106	25.3	97	83	63
KENWORTHY KLX68	2X 19370	196.1	117	28.1	94	82	59
KENWORTHY KL88X	2X 19070	166.8	100	24.5	94	82	57
PIONEER BRAND 3535	5X 19820	177.1	106	23.1	97	79	62
PIONEER BRAND 3571	M2X 20580	173.1	104	22.6	94	79	51
PIONEER BRAND 3709	M2X 18310	157.0	94	22.9	98	77	57
RING AROUND RA1501	2X 19370	189.4	113	26.6	92	84	57
RING AROUND RA1502	2X 21790	195.2	117	28.8	99	83	62
SOUTHERN STATES SS450	2X 17250	157.9	94	22.4	95	79	61
SOUTHERN STATES SS522	M2X 19220	166.5	100	22.9	96	83	59
SOUTHERN STATES SS698	SP 21340	176.2	105	25.8	93	81	57
TAYLOR-EVANS MARKETMAKER	2X 18920	152.6	91	23.8	95	79	57
TAYLOR-EVANS 6995	2X 20430	188.0	112	26.5	97	81	63
TROJAN TXS105A	2X 20430	167.8	100	21.6	93	81	58
TROJAN TXS111	2X 17860	148.6	89	24.3	97	79	61
GROUP AVERAGES	19390	171.3	102	24.6	94	81	59
L.S.D.(.05)		23.6					
TESTED IN MID-SEASON MATURITY GROUP							
COKER 16	M2X 21190	185.6	111	25.9	91	80	63
COKER 18	2X 17250	166.2	99	28.0	89	84	58
COKER 22	3X 18010	169.7	101	30.2	94	82	56
DEKALB XL64	2X 19670	138.0	83	24.1	76	78	49
DEKALB XL72B	2X 19370	168.5	101	25.7	98	81	52
DEKALB XL78	2X 21190	204.1	122	26.8	90	80	63
DENNIS 31E	M2X 17550	156.3	93	28.5	93	82	56
DENNIS 69	2X 18610	160.2	96	25.6	79	80	55
FUNKS G4520	2X 18010	192.8	115	25.2	97	80	54
FUNKS G4611	2X 20430	187.4	112	26.0	95	82	58
FUNKS G4646	2X 19980	188.4	113	25.4	84	79	55
KENWORTHY KLX69A	2X 17710	152.4	91	26.1	87	81	57
KENWORTHY KL88XB	M2X 18610	159.0	95	26.3	76	79	54
MCNAIR X170	2X 17250	164.7	99	25.5	97	79	57
MCNAIR X194	2X 17250	153.5	92	27.0	99	81	60
MUNCY CHIEF SX662	2X 19980	163.1	98	25.2	84	79	55
NORTHRUP-KING PX74	2X 17250	170.4	102	25.7	100	81	57
NORTHRUP-KING PX76	2X 17710	160.9	96	26.0	96	79	59
NORTHRUP-KING PX79	2X 17100	165.0	99	27.8	99	84	57
PIONEER BRAND 3321	M2X 17710	176.6	106	29.4	92	81	54
PIONEER BRAND 3369A	2X 17400	186.2	111	26.9	97	81	49
RING AROUND RA2501	M2X 21790	170.5	102	27.7	81	82	61
RING AROUND RA2502	M2X 17100	143.3	86	29.8	96	82	58
RING AROUND SX2766	M2X 18310	164.2	98	27.6	82	82	55
SOUTHERN STATES SS715	3X 17250	189.1	113	26.7	97	84	59
SOUTHERN STATES SS750	SP 19820	169.6	101	24.8	86	82	61
SOUTHERN STATES SS775	2X 18160	171.9	103	26.9	92	81	57
SOUTHERN STATES SS840	4X 17400	141.0	84	26.5	86	83	59
SOUTHERN STATES SS875	4X 17250	167.4	100	26.6	98	82	49
TAYLOR-EVANS 6965	2X 17250	124.6	75	28.9	89	83	55
TAYLOR-EVANS 6968	2X 20430	174.8	105	26.2	90	82	57
TAYLOR-EVANS 6980	2X 19980	155.8	93	28.2	94	83	55
TAYLOR-EVANS 6992	2X 19220	180.3	108	24.8	96	82	59
TROJAN TXS113	2X 18460	165.4	99	25.4	93	80	52
TROJAN TXS115A	2X 18610	206.8	124	26.2	69	80	55
WHEELER 30J	M3X 18770	160.8	96	25.6	89	82	59
GROUP AVERAGES	18560	168.2	101	26.6	91	81	56
L.S.D.(.05)		24.2					
TESTED IN FULL SEASON MATURITY GROUP							
FUNKS G4776	3X 17250	170.8	102	29.7	87	87	62
FUNKS G5757	4X 17710	142.9	85	29.7	92	83	57
MUNCY CHIEF SX808A	2X 17250	153.5	92	27.5	78	85	59
MUNCY CHIEF SX808B	2X 17250	144.4	86	28.8	90	85	55
MUNCY CHIEF SX878	2X 17250	171.7	103	27.6	74	84	55
PIONEER BRAND 3179	M2X 17250	157.9	94	25.1	88	85	59
PIONEER BRAND 3184	2X 17250	126.5	76	26.7	91	85	58
THOMPSON 219A	4X 17250	160.0	96	27.1	86	83	59
THOMPSON 220B	M2X 17860	142.4	85	27.9	88	86	63
THOMPSON 221	2X 18920	188.6	113	26.5	94	86	61
GROUP AVERAGES	17520	155.9	93	28.1	87	85	59
L.S.D.(.05)		28.7					
EXPERIMENT AVERAGES	18660	167.2	100	26.3	91	82	57
L.S.D.(.05)		24.4					

COOPERATOR: L. A. LINK, SOUTHWEST VIRGINIA RESEARCH STATION, GLADE SPRING, VIRGINIA.
DATE PLANTED: MAY 4. DATE HARVESTED: NOVEMBER 4.
PLOT SIZE: 1 ROW 3' x 30'. REPLICATIONS: 3.
FERTILIZER APPLIED: 180-100-100 BEFORE PLANTING.
WEED CONTROL: ATRAZINE PRE-EMERGENCE PLUS ONE CULTIVATION.
GROWING CONDITIONS: VERY GOOD THROUGHOUT.

TABLE 11. CORN VIRUS TEST, WINGINA, 1977.

Hybrid	Hybrid Type	Plants with* MDM	MCD	Virus** Score	Yield BU/Acre	Relative Yield	Percent Water	Percent Erect	Grain*** Quality
A239 X N6J	2X	0	0	1.1	81	139	17.1	95	3.0
BECK 87		0	3	1.4	65	112	19.2	86	2.5
DEKALB XL72B	2X	1	7	2.4	72	125	21.2	95	2.5
DEKALB XL394	3X	1	10	2.4	66	115	24.2	97	2.5
FUNKS G4525	2X	0	2	1.1	86	148	17.3	95	1.3
FUNKS G4776	2X	0	4	1.4	54	93	21.8	97	2.2
KENWORTHY KLX73	2X	0	1	1.1	64	111	16.8	95	3.0
MUNCY CHIEF 702	4X	0	7	2.0	49	85	22.1	85	3.0
MUNCY CHIEF 803	2X	0	6	2.8	28	48	19.7	68	3.0
NORTHROP KING PX79	2X	0	14	3.6	41	71	18.2	83	3.7
NORTHROP KING PX95	2X	0	19	4.3	38	67	22.3	63	4.7
NORTHROP KING PX737	3X	0	7	2.2	38	65	23.8	86	3.2
PAG SX17A	2X	0	5	1.7	70	120	21.8	89	2.0
PAG 314	2X	1	11	3.7	37	65	17.8	94	2.7
PAG 246006	2X	1	18	5.0	.	.	.	.	.
PIIONEER BRAND 3145		0	7	2.3	61	106	22.3	97	2.7
PIIONEER BRAND 3147		0	4	1.5	98	169	24.8	96	3.3
PIIONEER BRAND 3179	M2X	0	2	1.3	67	116	21.5	97	2.7
RING AROUND 2601	M2X	0	24	5.7	.	.	.	.	.
RING AROUND 2602W	M2X	1	9	2.4	52	90	21.8	70	2.0
RING AROUND 3602	3X	1	12	3.1	44	77	22.5	83	3.0
RUFFS R434		0	6	2.1	52	89	18.1	78	3.3
SOUTHERN STATES 760	2X	0	6	2.1	97	167	17.3	93	2.2
SOUTHERN STATES 950W	3X	2	5	2.0	46	80	22.4	86	2.8
TAYLOR-EVANS 6947	2X	0	6	2.0	35	61	21.5	87	3.3
THOMPSON 221	2X	0	10	3.0	83	144	20.6	95	2.5
TROJAN 116	2X	0	10	3.0	62	107	18.3	.	.
TROJAN T1191	2X	0	1	1.1	37	65	22.7	99	3.7
WATSON 5215		0	5	1.7	56	97	20.2	95	2.7
WATSON 5273		3	16	4.7	.	.	.	77	.
WATSON 5276		1	20	4.5	39	68	23.9	65	3.7
WATSON 5434		1	8	2.4	50	86	18.7	95	3.0
CCKER 56		3	21	5.8	.	.	.	.	.
PIIONEER BRAND 3364		0	16	4.5	.	.	.	.	.
WOODS SPECIAL	M2X	2	12	3.9	.	.	.	.	.

* These numbers represent the number of plants infected with Maize Dwarf Mosaic (MDM) and Maize Chlorotic Dwarf (MCD) on 7/15/77,

** Data obtained by Dr. C. W. Roane.

*** 1=good; 5=very poor

Cooperator: Cliff Wood, C. F. Genter, C. W. Roane

Planted: May 3, 1977

Plot Size: 1 row 30' long with 3 replications

Table 12. Corn Virus Test, Wingina, 1976.

Hybrid name or brand	Perfect stand*		Plants with symptoms(%)**			Virus sever- ity score**	Yield of grain		H ₂ O at harv. %	Erect plants (%)	Ear ht. (in.)	Grain qual. score**
	6/16	10/19	6/16	7/26	MCD		Bu/A	% of Mean				
Funk's G4525	87	76	26	5	3	1.7	98.0	116	16.8	92	52	1.5
Kenworthy KLX73	84	55	60	28	20	4.0	32.5	39	17.9	84	42	5.0
A239 x N6J	87	83	6	2	0	1.2	118.3	140	18.1	98	48	2.0
N6J x Ex07B-36-221-2	86	82	0	0	8	1.7	108.1	128	18.8	87	43	1.0
N6J x Ex07B-36-4-828	91	87	0	1	2	1.2	102.8	122	19.1	81	47	1.3
Va94 x N6J	93	88	2	0	3	1.3	124.1	147	19.2	93	43	1.0
Kenworthy KLX74	91	74	56	13	6	2.0	87.1	103	19.3	92	48	4.7
Southern States 760	86	79	24	5	8	2.2	116.9	139	19.5	95	49	3.7
Va94 x Ex07B-17-204-2	86	69	13	5	9	2.0	85.4	101	19.9	84	50	1.7
Asgrow RX115A	86	63	18	7	16	2.8	76.0	90	20.0	77	54	2.0
Trojan MDM116	93	82	48	14	21	3.5	92.7	110	20.0	93	56	3.3
Oh514 x Ex07B-36-219	71	61	0	0	3	1.2	74.6	89	20.3	89	50	1.5
Northrup King PX79	90	72	13	0	17	2.5	111.0	132	20.4	90	59	3.2
Va94 x Ex07B-36-4-828	71	62	0	3	8	1.8	87.7	104	20.4	95	48	2.2
Kenworthy Ex3170	88	70	67	37	28	4.0	59.2	70	20.6	79	48	3.7
Ring Around 1502	84	67	74	51	19	4.0	71.1	84	20.8	85	49	3.3
Thompson 221	94	84	15	8	7	2.0	98.0	116	20.9	78	57	2.8
Wood's Special	92	90	5	2	2	1.5	104.9	122	21.0	63	61	1.7
Oh514 x Ex07B-36-221-1	89	80	3	9	5	1.3	94.7	112	21.1	88	49	1.7
Asgrow RX114	77	46	21	14	37	4.3	39.2	46	21.2	55	57	1.8
Ring Around SX2766	87	58	59	37	31	5.0	53.9	64	21.3	68	51	3.0
Northrup King PX91	91	58	38	24	37	5.0	59.9	71	21.5	75	56	1.7
Northrup King PX715	87	44	30	8	30	3.8	62.2	74	21.7	69	59	4.0
Ring Around 3602	81	51	44	16	25	3.7	59.4	70	21.9	79	54	3.3
Funk's G4776	87	83	3	1	6	1.7	92.4	110	22.0	73	68	2.2
T8 x Oh07B	85	80	11	5	10	2.5	99.3	118	22.1	87	60	2.0
Hofmeyer SX66R	59	50	0	10	10	1.8	61.0	72	22.4	88	56	2.3
Pioneer Brand 3179	81	73	9	14	7	1.8	81.0	96	22.4	82	60	2.2
Pioneer Brand 3147	80	68	8	10	16	2.2	85.2	101	22.9	93	60	3.2
Northrup King PX723	83	73	29	9	12	2.5	93.7	111	23.0	92	62	4.7
DeKalb XL72B	71	61	35	24	18	3.0	79.1	94	23.1	94	48	3.3
Southern States 950W	88	70	17	9	7	2.0	75.7	90	23.2	83	61	1.8
Northrup King PX737	82	77	13	1	12	2.7	90.8	108	23.3	71	66	2.0
Northrup King 718W	88	75	20	10	8	2.5	80.0	95	23.7	92	66	1.8
Pioneer Brand 3145	87	83	2	1	7	1.7	106.5	126	23.9	99	63	1.7
Ring Around 2602W	73	63	5	9	23	3.0	84.3	100	23.9	84	65	1.0
DeKalb XL394	92	80	25	11	6	2.2	83.3	99	24.0	90	66	2.3
Pioneer Brand 3145	95	84	4	2	4	1.5	93.4	111	24.1	85	63	1.5
Northrup King PX95	89	67	7	0	20	2.3	92.3	110	24.3	85	64	3.0
Ring Around 2601	80	50	40	15	33	3.8	55.8	66	25.7	88	56	2.2
Mean of experiment	85	70	21	11	14	2.5	84.3	100	21.4	85	55	2.5

*Perfect stand = 34 plants/plot = 22,440 plants/acre.

Many infected johnsongrass plants and a heavy insect population led to severe virus infection.

Many infected plants died before harvest, some outgrew early symptoms.

**Data obtained by Dr. C. W. Roane.

***1 = very good to 5 = very poor. A wet fall contributed to disease and sprouted kernels on ears.

Cooperator: Cliff Wood, C. F. Genter, C. W. Roane.

Date planted: May 4. Date harvested: Oct. 19.

Plot soze: 1 row 20 feet long. Reps: 3.

Fertilizer applied: 150-63-128.

Weed Control: 1 lb. atrazine, 3 lbs. sutan plus one cultivation.

Growing conditions: Cool spring, dry summer, wet fall. Check note under "Perfect stand."

Irrigation: 1 inch early in July

TABLE 13. CORN GRAY LEAF SPOT TEST, BLACKSBURG, 1977.

Hybrid	Hybrid Type	GLS* Score	Yield BU/Acre	Relative Yield	Percent Water	Ear-Ht Inches	Percent Erect
DEKALB XL64B	2X	2.1	112	98	23.8	59	85
DEKALB XL72B	2X	2.3	95	83	26.0	58	83
DEKALB XL75A	M2X	2.0	104	91	26.7	53	89
DEKALB XL78	2X	2.3	132	116	25.3	53	77
DEKALB XL80	2X	2.0	123	108	26.3	60	58
DEKALB XL380	3X	1.6	116	101	27.1	70	62
DEKALB XL394	3X	1.3	97	85	33.9	75	88
FUNKS G4525	2X	1.8	124	108	22.5	54	77
FUNKS G4611	M2X	2.1	122	107	25.0	58	80
FUNKS G4776	2X	1.8	116	101	26.9	71	76
NORTHRUP-KING PX79	2X	1.5	130	114	25.3	61	90
NORTHRUP-KING PX95	2X	1.4	123	107	32.0	54	111
NORTHRUP-KING PX737	3X	1.4	108	95	32.1	67	80
PIONEER BRAND 3145		2.0	99	86	30.3	62	89
PIONEER BRAND 3321	M2X	1.6	98	86	26.3	64	91
RING AROUND 1501	2X	2.0	120	105	24.6	56	90
RING AROUND 1502	2X	2.9	111	97	26.2	55	93
TAYLOR-EVANS 6992	2X	1.9	123	108	25.6	76	80
VALE8 X VA2047	2X	1.4	100	87	30.3	63	40
VALE8 X(VA14X02047)	M2X	1.9	104	91	27.0	54	45
H99 X(VA14X02047)	M2X	1.0	129	113	25.9	51	79
H99 X OH561	2X	0.9	118	104	24.8	48	80
OH561 X(VA14X02047)	3X	1.6	110	96	21.5	46	73

* Gray Leaf Spot Score on 8/25/77 by Dr. C. W. Roane. The higher the score the greater the infection.

Cooperators: C. F. Genter, C. W. Roane

Planted: May 12, 1977

TABLE 14. CORN GRAY LEAF SPOT TEST, BRIDGEWATER, 1977.

Hybrid	Hybrid Type	GLS* Score	Yield BU/Acre	Relative Yield	Percent Water	Ear-Ht Inches	Percent Erect
DEKALB XL64B	2X	3.1	103	86	19.4	40	92
DEKALB XL72B	2X	3.3	108	90	21.1	35	96
DEKALB XL75A	M2X	2.6	118	98	21.4	51	96
DEKALB XL78	2X	2.8	137	114	22.6	49	96
DEKALB XL80	2X	2.4	128	106	19.8	41	95
DEKALB XL380	3X	2.6	120	100	20.8	42	92
DEKALB XL394	3X	2.3	135	112	23.6	47	98
FUNKS G4525	2X	2.1	119	99	17.5	44	97
FUNKS G4611	M2X	2.5	125	104	21.1	45	99
FUNKS G4776	2X	2.1	116	97	21.7	52	91
NORTHRUP-KING PX79	2X	2.0	117	97	22.1	48	96
NORTHRUP-KING PX95	2X	1.6	150	125	22.9	51	95
NORTHRUP-KING PX737	3X	1.6	126	105	23.3	54	96
PIONEER BRAND 3145		1.9	131	109	22.7	52	96
PIONEER BRAND 3321	M2X	2.4	115	96	21.5	35	95
RING AROUND 1501	2X	2.9	122	102	20.6	44	95
RING AROUND 1502	2X	2.9	126	105	22.2	44	98
TAYLOR-EVANS 6992	2X	2.8	131	109	20.4	48	92
VALE8 X VA2047	2X	1.9	91	75	20.3	32	91
VALE8 X(VA14X02047)	M2X	1.5	103	86	22.6	46	90
H99 X(VA14X02047)	M2X	2.1	121	101	21.6	39	96
H99 X OH561	2X	1.9	113	94	19.6	36	99
OH561 X(VA14X02047)	3X	2.5	94	78	16.5	32	96

* Gray Leaf Spot Score on 9/6/77 by Dr. C. W. Roane. The higher the number the greater the infection.

Cooperators: Bill Simmons, C. F. Genter, C. W. Roane

Planted: May 10, 1977