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Part I Corn Hybrids
Part II Corn Silage
Part III Grain Sorghum
Part IV Soybeans

1982

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PERFORMANCE OF CORN HYBRIDS, CORN SILAGE, GRAIN SORGHUM AND SOYBEANS IN NORTH CAROLINA[1/]

INTRODUCTION

With the large number of commercially available and prospective hybrids and varieties of corn, grain sorghum, and soybeans, it becomes difficult for growers to select a superior variety suited for their particular area of the state and their individual farming operations. To make this decision the grower needs up-to-date, unbiased, reliable information. The Official Variety Testing Program, through this report, seeks to provide that type of information.

The first section of this report is concerned with corn hybrids in all production areas of the state. The second section deals with corn silage. The third section includes data on grain sorghum. The fourth section covers data on soybeans. Each part is complete in that is contains information on experimental procedure, locations of the tests, a discussion of the data for 1982[2/], as well as summary tables for the past two and three years.

It is hoped that the organization of this bulletin will provide data in a complete form to those interested in the various crops.

[1/] The Official Variety Testing Program recognizes the cooperative spirit and civic-minded service rendered by the farmers who have furnished, prepared and cultivated the land for these trials. Research technicians Ray Adams, Saunders Bennett, and G. C. Oliver assisted in conducting these tests. Carey Parsons prepared the text and tables for this bulletin.

[2/] Statistical analyses were made in the Statistical Laboratory and Computing Center under the supervision of Dr. John O. Rawlings and Mrs. Sandra Donaghy by John Hackman and Faye Childers.

Comparing Hybrids and Varieties

Performance of a hybrid or variety cannot be tested with absolute precision. Even though the tests are conducted in a uniform manner, as much as possible, uncontrollable variability exists among experimental plots due to soil, fertility, moisture, insects, diseases, and other sources of variation. Because this variability exists, statistics are used as a tool to determine differences among hybrids and varieties. The size of difference among hybrids or varieties which may have been due to chance variation is listed in each table as the L.S.D. (least significant difference) and those hybrids or varieties which do not differ by more than the L.S.D. are statistically not different. Those hybrids or varieties that do differ by more than the L.S.D. are statistically different. The Bayes L.S.D. at the K-ratio of 50 (approximately .10 level of probability) was used.

Hybrid or varietal performance may appear inconsistent among locations within an area or among years in a particular area, thus it is important for the reader to examine results from more than one location within an area or more than one year at a particular area to obtain a more accurate picture of relative hybrid or varietal performance. An effort has been made to facilitate comparisons among locations and across years in this report.

The hybrids or varieties which do not yield significantly less than the highest yielder are denoted by an asterisk (*) next to their yields; the highest yielder is denoted by a double asterisk (**) next to their yield. The relative performance of a hybrid or variety across locations within an area can be easily evaluated by going across the table; those hybrids or varieties which are most frequently marked by an asterisk would be highly desirable. Other agronomic characteristics may be as equally important as yield.

It is suggested that the grower plant a small number of acres in a new variety when first determining if it is adapted to his farm.

COOPERATORS 1982

Corn

Area I - Southern Mountains

Haywood County, Mountain Research Station, J. R. Edwards, Superintendent, Waynesville, N. C., County Extension Chairman, H. E. McCall and assistants cooperating.

Area II Piedmont

Guilford County, Ward Brothers, Route 2, Box 267E, McLeansville, N. C., Agricultural Extension Agent, Chris Ingram, cooperating.
Chatham County, Horace Mann, Route 3, Pittsboro, N. C. Agricultural Extension Agent, Carl Outz, cooperating.
Union County, Earl Haigler, Route 9, Monroe, N. C., Agricultural Extension Agent, Jerry Simpson, cooperating.

Area III - Coastal Plain

Duplin County, Larry and Marvin Knowles, Route 1, Teachey, N. C. Agricultural Extension Agent, J. Michael Moore, cooperating.
Johnston County, San Wood Farms, Route 2, Four Oaks, N. C. Agricultural Extension Agent, H. F. Palmer, cooperating.
Robeson County, Charles Roberts, Box 392, Lumberton, N. C. Agricultural Extension Agent, Everett Davis, cooperating.
Halifax County, Fleming Brothers, Route 3, Enfield, N. C. Agricultural Extension Agent, R. D. Phillips, cooperating.
Pitt County, Harold Flanagan, Route 1, Farmville, N. C. Agricultural Extension Agent, Roger Cobb, cooperating.

Area IV - Tidewater

Chowan County, Robert L. Bunch, Route 2, Edenton, N. C., County Extension Chairman, J. Michael Williams and assistants, cooperating.
Pamlico County, James Spencer, Alliance, N. C., County Extension Chairman, Fred May, cooperating.
Washington County, John Smith, Superintendent, Tidewater Research Station, Plymouth, N. C., Agricultural Extension Agent, Cole Knotts, cooperating.

Corn Silage

Rockingham County
Agricultural Extension Agent, E. Scott Shoulars, cooperating.

Rowan County
Clyde McSwain, Superintendent, Piedmont Research Station, Salisbury, N. C., David Hall and Agricultural Extension Agent, Steve Gatton, cooperating.

Grain Sorghum

Anson County
Bennett Martin, Route 2, Polkton, N. C., County Extension Chairman, Hoover M. Royals and assistants, cooperating.

Guilford County
Gerald Fryar, Route 1, McLeansville, N. C., Agricultural Extension Agent, Chris Ingram, cooperating.

Rowan County
Darryl Corriher, Route 1, China Grove, N. C., Agricultural Extension Agent, Steve Gatton, cooperating.

Johnston County
Paul Dunn, Route 1, Selma, N. C., Agricultural Extension Agent, H. F. Palmer, cooperating.

Pamlico County
James Spencer, Box 1214, Alliance, N. C., County Extension Chairman, Fred May, cooperating.

Soybeans

Duplin County
Larry and Marvin Knowels, Route 1, Teachey, N. C., Agricultural Extension Agent, Snodie Wilson, cooperating.

Rowan County
Edwin Hammill, Route 1, Gold Hill, N. C., Agricultural Extension Agent, Steve Gatton, cooperating.

Robeson County
Charles Roberts, Box 392, Lumberton, N. C., County Extension Chairman John G. Richardson, cooperating.

Washington County
J. W. Smith, Superintendent, Tidewater Research Station, Plymouth, N. C., Agricultural Extension Agent, Cole Knotts, cooperating.

Late Tests After Small Grain

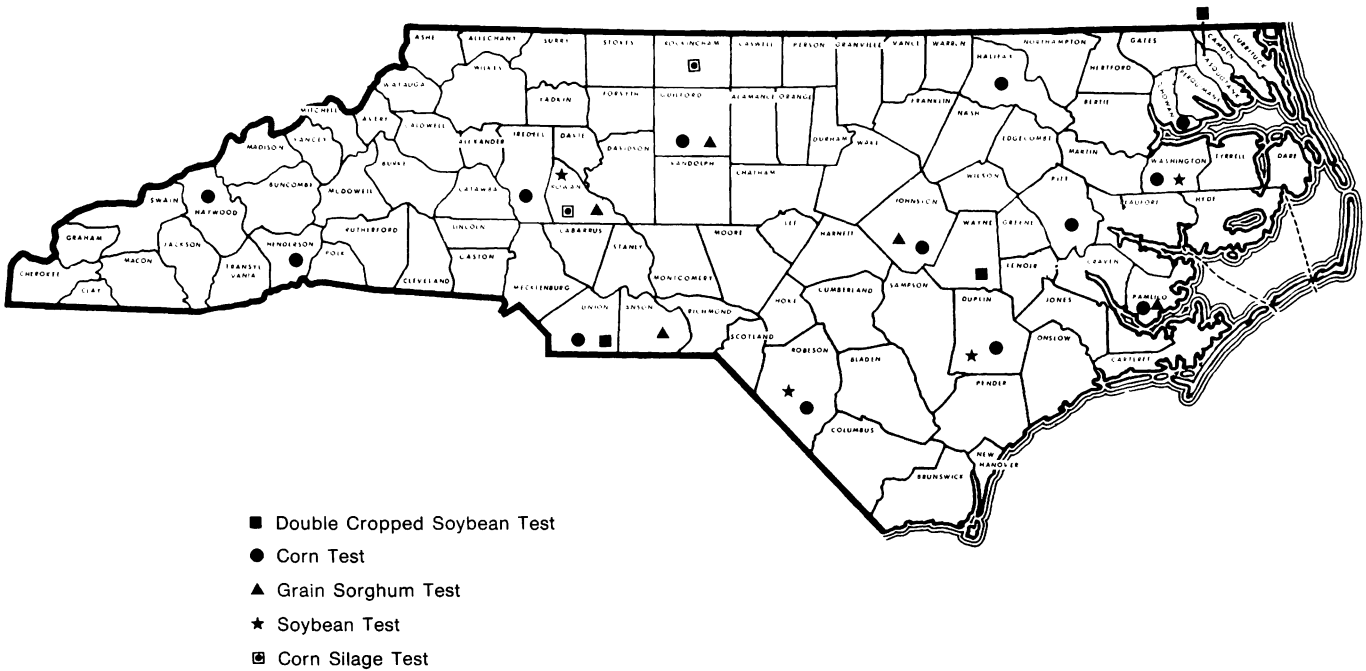
Wayne County
Wayland Price, Route 4, Mt. Olive, N. C., Agricultural Extension Agent, Whitford Jones, cooperating.

Pasquotank County
John Spence, South Mills, N. C., County Extension Chairman, Donald Baker, cooperating.

Union County
Jimmy Duncan, Route 1, Indian Trail, N. C., County Extension Chairman, M. C. Howell, cooperating.

1982

FIGURE 1— LOCATION OF OFFICIAL VARIETY TEST NORTH CAROLINA AGRICULTURAL RESEARCH SERVICE



- ■ Double Cropped Soybean Test
- ● Corn Test
- ▲ Grain Sorghum Test
- ★ Soybean Test
- ⊡ Corn Silage Test

CORN HYBRIDS

The performance of various corn hybrids in different areas of the state depends on their adaptation to the environmental conditions within the area in which they are to be grown. The performance of hybrids in four different areas of North Carolina is reported in this bulletin.

Entries: Any individual or firm may make application for having hybrids tested. A fee is charged on an entry per area basis. Personnel of the testing program may also include entries about which further information is desired.

Early in January each year, rules governing the tests for the ensuing year are distributed to all previous participants and to those who make inquiry.

Agencies or individuals entering hybrids in the Official Variety Tests were requested to designate the area of adaptation of the entry, the population and maturity range desired. Some entries were placed in more than one area.

Agencies sponsoring entries in the 1982 tests are shown in Table 1.

Table 1. Name and address of sponsoring agencies in the 1982 North Carolina Corn Performance Trials along with designation used to identify the hybrids in the trials.

Name	Address	Hybrid Designation
Asgrow Seed Company	Kalamazoo, Michigan	Asgrow
Beam & Beam Farms	Laundale, N. C.	B & B
Coker's Pedigreed Seed Co.	Hartsville, S. C.	Coker
Columbiana Seed Company	Eldred, Illinois	Golden Harvest
DeKalb AgResearch, Inc.	Mt. Olive, N. C.	DeKalb
Funk's Seed International	Bloomington, Illinois	Funk's
Gold Kist Seed Company	Atlanta, Georgia	Gold Kist

Table 1. Continued

Name	Address	Hybrid Designation
Jacques Seed Company	Prescott, Wisconsin	Jacques
McCurdy Seed Company, Inc.	Fremont, Iowa	McCurdy
N. C. Agric. Expt. Sta.	Raleigh, N. C.	N. C.
Northrup King Company	Columbus, Mississippi	NK
O's Gold Seed Company	Parkersburg, Iowa	O's Gold
P-A-G Seeds	Minneapolis, Minnesota	P-A-G
Paymaster Seeds	Plainview, Texas	Paymaster
Pfizer Genetics, Inc.	Richmond, Virginia	Trojan
Pioneer Hi-Bred, Inc.	Tipton, Indiana	Pioneer brand
Premier Hybrids	Indianapolis, Indiana	Premier
Ring Around Products, Inc.	Montgomery, Alabama	RA
Speight Seed Farms	Winterville, N. C.	Speight
Taylor-Evans Seed Company	Tulia, Texas	T-E
Thor-O-Bred	Champaign, Illinois	Thor-O-Bred
USS Agri. Chemical	Atlanta, Georgia	USS
Watson Seed Farms	Rocky Mount, N. C.	Watson

Field Plot Technique: The state is divided into four geographical areas according to soil type, maturity zone and climatic conditions. The various locations are shown in Figure 1. In the Mountains where the acreage of corn is less, one location with five replications was used. Three locations with three replications each, were used in the Piedmont and Tidewater. The Coastal Plain has five locations with three replications at each location. Table 2 lists the cultural practices used.

In field design a lattice was used. Each plot consisted of two rows 22 feet long with a 38" or 36" row width. Alley width was five feet.

In 1982 all tests were planted to one and one-half times the recommended populations. Thinning was to: 25,000 plants/acre for early-maturing hybrids, 22,000 plants/acre for medium-maturing hybrids, and 19,000 plants/acre for late-maturing hybrids.

Seasonal Conditions: A cool-wet spring either delayed planting or slowed seedling growth noticeably. Adequate to excess rainfall was experienced at most test sites. Corn growers harvested record yields throughout the state as a result. Excess rainfall was experienced at all three Piedmont test sites resulting in water damage at the Chatham and Union County locations. The Guilford County Test showed phytotoxic symptoms from a high rate of herbicide EPTC which was thought to be an indirect result of excess rainfall. Consequently, all three Piedmont tests were not harvested.

Data: Data were collected on yield, moisture, lodging, ear height, and resistance to gray leaf spot. Maize Chlorotic Dwarf Virus and Maize Dwarf Mosaic Virus were not evident to the point that reliable readings could be taken; consequently, previous years' data are included for grower information. All plot yields were adjusted to 15.5% moisture. Since moisture content of grain at harvest is a relative index of maturity, moisture percentage was determined for each individual plot. Lodging percentage was determined by observing all plants broken below the ear or leaning more than 45 degrees. Ear height was determined by measuring the distance from the ground to the node where the ear is attached to the stalk. Disease ratings were on a 1-9 scale, 1 being no disease and 9 being dead. Anything equal to 4 or lower is believed to have sufficient tolerance to be acceptable under most conditions in North Carolina. Some hybrids are tolerant to both Maize Chlorotic Dwarf

Virus and Maize Dwarf Mosaic Virus while others are tolerant to only one. Gray leaf spot ratings were on a scale of 0-5 with 0 being no symptoms and 5 being all leaves dry and dead. Phytotoxic ratings (due to EPTC) were taken at the Guilford County location; the number of undamaged plants were counted in all plots and the percent damaged plants was then calculated.

Results: Yield and performance data for the early-maturing hybrids in the Tidewater region are shown in Tables 3, 4, and 5. Lodging was more severe at the Pamlico County location resulting in lower yields than Chowan and Washington County locations (Table 5).

DeKalb EX7979 has led the medium-maturing group in the Tidewater the last two years (Tables 6, 7, and 8) while O's Gold 5509 is the three-year leader (Table 6).

Early-maturing hybrid data for the Coastal Plain are given in Tables 9, 10, and 11. P-A-G SX351 has led the group for the past two and three years (Table 9) while P-A-G 194018 was the 1982 leader.

Golden Harvest H-2680 and RA 1604 led the medium-maturing group of corn hybrids for the Coastal Plain in 1982 with 167 bushels per acre (Tables 12, 13, and 14). Thor-O-Bred is the two year leader with 155 bushels per acre and McCurdy 84AA is the three year leader with 144 bushels per acre (Table 12).

DeKalb EX7979 was the highest yielder in the late-maturing group in the Coastal Plain with 152 bushels per acre while Jacques JX247 was the two and three year leader (Tables 15, 16, and 17).

Results of the Mountain Corn Test are not presented. Root lodging was severe in 1982, ranging from 98% to 21%, due to excessive rainfall; stalk lodging was not detected to any significant degree. The yield data may be deceptive in that those hybrids with large ears or multiple ears per plant tended to be more susceptible to root lodging, and consequently, their yields

were lower than normally can be expected in this area. The B.L.S.D. and the C.V. were excessively high and indicative of the variation due primarily to the root lodging.

Virus resistance ratings are presented in Table 18. These data were collected from 1979 to 1981.

Performance of corn hybrids under gray leaf spot infestation for both yield and disease resistance are shown in Table 19. Paymaster 8951 had a yield of 201 bushels per acre to lead the group while ten other hybrids did not yield significantly less. Gray leaf spot ratings ranged from 0.5 for Watson 572 to 3.0 for Watson 413.

Phytotoxic ratings of the Guilford County Corn Test are shown in Table 20. McCurdy 7978 and Pioneer brand 3160 appeared to show some tolerance to high rates of EPTC.

Designator Changes: The following hybrids have changed from an experimental status to a commercial production status and now have these new designations:

Experimental	Commercial
DeKalb EX7979	DeKalb DK 747
Jacques 2119	Jacques 8400

Table 2. Cultural practices used on the corn test - 1982.

Area and Cooperator	Fertilizer Lbs/A and Grade	Herbicide Preemergence	Topdressing Lbs N/A	Date of Planting	Date of Harvest	Soil Type
Area I - Mountains						
Haywood County Lower Mountain Research Station J. R. Edwards Superintendent	400 10-20-20	AAtrex Sutan +	165	May 17	December 10	Condorus loam
Area II - Piedmont						
Union County Earl Haigler	250 19-19-19 Broadcast 200 8-24-24	AAtrex Lasso	75	April 5	Discarded	
Guilford County Ward Brothers	400 10-20-20 Broadcast	AAtrex Eradicane	160	April 16	Discarded	Enon fine sandy loam
Chatham County Horace Mann	350 10-20-20 Broadcast	AAtrex Lasso	100	May 6	Discarded	
Area III - Coastal Plain						
Duplin County Larry Knowles	80 0-0-60	AAtrex Lasso	160	March 29	September 8	Coxville fine sandy loam
Johnston County Sanwood Farms	125 0-0-60	AAtrex Lasso	150	March 26	September 17	Norfolk Sandy loam

Table 2. (Continued)

Area and Cooperator	Fertilizer Lbs/A and Grade	Herbicide Preemergence	Topdressing Lbs N/A	Date of Planting	Date of Harvest	Soil Type
Robeson County Charles Roberts	400 5-10-30 Broadcast	AAtrex Sutan +	140	April 8	September 23	Norfolk loamy sand
Pitt County Harold Flanagan	300 6-18-36 Broadcast	AAtrex Sutan +	140	March 31	Discarded	Goldsboro sandy loam
Halifax County Fleming Brothers	700 0-10-20 Broadcast	AAtrex Lasso	170	April 7	October 1	
Area IV - Tidewater						
Washington County John Smith Superintendent Tidewater Res. Sta.	3 lbs. Copper	Lasso AAtrex	200	April 13	October 1	Portsmouth sandy loam
Chowan County Bobby Bunch	480 3-9-27 Broadcast	AAtrex Lasso	150	April 3	September 30	State fine sandy loam
Pamlico County Spencer Brothers	200 0-0-60 Broadcast	AAtrex Lasso	135	April 14	October 5	

TABLE 3. DATA COMBINED OVER LOCATION FOR TIDEWATER FOR EARLY MATURING HYBRIDS.
THREE YEAR AVERAGE - 1980, 1981, 1982

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
THOR-O-BRED SX545	142	.169	8	45
PAYMASTER 8201	142	.160	11	43
USS 1010	139	.165	8	44
PREMIER 632	137	.162	3	40
PAYMASTER 7251	135	.165	19	44
DEKALB XL61	120	.166	4	39
PIONEER BRAND 3535	118	.164	3	39
P-A-G SX397	113	.159	13	41
TWO YEAR AVERAGE - 1981, 1982				
FUNK'S G-4522	151	.185	6	44
THOR-O-BRED SX545	151	.186	10	49
PAYMASTER 8201	148	.177	16	47
TROJAN TXS115A	145	.185	11	49
O'S GOLD 6882	145	.189	4	43
USS 1010	144	.184	12	48
PREMIER 632	144	.180	4	43
P-A-G SX333	140	.180	15	48
PAYMASTER 7251	139	.181	28	48
TROJAN T1100	138	.185	5	42
PIONEER BRAND 3535	129	.182	5	42
DEKALB XL61	127	.185	6	41
P-A-G SX397	121	.176	9	45
DEKALB XL32AA	120	.181	9	45

TABLE 4. DATA COMBINED OVER LOCATION FOR TIDEWATER FOR EARLY MATURING HYBRIDS - 1982.

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
O'S GOLD 2570	167	.166	5	52
+PREMIER 636AA	163	.174	3	51
FUNK'S G-4522	163	.166	3	44
RA 1404	158	.170	1	45
PIONEER BRAND 3389	157	.175	4	42
PREMIER 632	155	.166	6	44
FUNK'S G-4514	153	.168	4	48
O'S GOLD 6882	150	.174	5	44
TROJAN TXS115A	149	.168	10	51
THOR-O-BRED SX536	149	.169	5	44
THOR-O-BRED SX545	146	.169	12	49
USS 1010	144	.168	9	48
GOLD KIST 695	144	.170	4	46
TROJAN T1100	144	.170	8	43
PAYMASTER 8201	143	.166	17	48
PREMIER 639-A	143	.171	12	49
+DEKALB EX6060	143	.163	6	45
+DEKALB 19018	139	.173	12	48
+P-A-G 204155	139	.167	2	45
PAYMASTER 7251	138	.164	19	48
JACQUES JX180	137	.166	9	51
MCCURDY 6555	136	.165	6	44
DEKALB XL61	133	.172	5	44
P-A-G SX333	133	.165	16	48
PIONEER BRAND 3535	132	.171	7	43
P-A-G SX397	126	.167	5	47
USS 1009	122	.168	11	45
DEKALB XL32AA	118	.168	4	46
COKER 1054	113	.171	14	39

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION

TABLE 5. INDIVIDUAL LOCATION YIELD DATA FOR TIDEWATER LOCATIONS FOR EARLY MATURING HYBRIDS.

HYBRID	CHOWAN	PAMLICO	WASHINGTON	MEAN
O'S GOLD 2570	193*	123*	185**	167**
+PREMIER 636AA	183	148**	160	163*
FUNK'S G-4522	195*	132*	160	163*
RA 1404	170	136*	168*	158*
PIONEER BRAND 3389	189*	129*	154	157*
PREMIER 632	184	119*	161*	155*
FUNK'S G-4514	187*	117	154	153*
O'S GOLD 6882	171	114	164*	150*
TROJAN TXS115A	184	100	163*	149*
THOR-O-BRED SX536	169	123*	154	149*
THOR-O-BRED SX545	189*	95	154	146*
USS 1010	195*	81	156	144*
GOLD KIST 695	166	119*	148	144*
TROJAN T1100	171	82	178*	144*
PAYMASTER 8201	177	96	157	143*
PREMIER 639-A	194*	80	155	143*
+DEKALB EX6060	178	94	156	143*
+DEKALB 19018	173	88	156	139*
+P-A-G 204155	171	115	130	139*
PAYMASTER 7251	213**	72	131	138*
JACQUES JX180	173	84	153	137
MCCURDY 6555	167	102	138	136
DEKALB XL61	161	101	138	133
P-A-G SX333	175	47	176*	133
PIONEER BRAND 3535	151	111	133	132
P-A-G SX397	150	97	132	126
USS 1009	164	87	114	122
DEKALB XL32AA	133	101	121	118
COKER 1054	154	73	113	113
B.L.S.D. (K=50)	28	31	25	30
C.V. (%)	10	19	11	12

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.
**HIGHEST YIELDER IN TEST.

TABLE 6. DATA COMBINED OVER LOCATION FOR TIDEWATER FOR MEDIUM MATURING HYBRIDS. THREE YEAR AVERAGE - 1980, 1981, 1982

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
O'S GOLD 5509	147	.181	4	45
MCCURDY 8150	147	.180	3	48
JACQUES JX247	144	.181	4	44
PREMIER 636	142	.179	4	45
MCCURDY 7787	142	.182	5	42
P-A-G SX351	140	.170	5	45
MCCURDY 84AA	138	.181	5	45
PAYMASTER 8951	137	.182	3	46
DEKALB XL71	137	.180	2	44
COKER 21	136	.184	4	43
COKER 22	136	.182	5	45
NK PX87	133	.182	5	44
NK PX74	131	.170	11	46
NK PX95	131	.188	2	47
COKER 19A	129	.174	6	45
PIONEER BRAND 3320	127	.178	2	44
NK PX83	127	.178	5	45
COKER 19	125	.170	8	43
PIONEER BRAND 3184	125	.186	2	40
COKER 16	123	.177	4	41
PIONEER BRAND 3382	121	.172	2	40
TWO YEAR AVERAGE - 1981, 1982				
DEKALB EX7979	163	.200	3	51
O'S GOLD 5509	162	.200	4	49
JACQUES JX247	155	.201	4	48
TROJAN T1230	152	.202	4	47
P-A-G SX351	151	.190	6	49
MCCURDY 8150	150	.199	4	53
ASGROW RX909	150	.194	12	45
MCCURDY 7787	149	.199	7	45
PREMIER 636	148	.196	5	49
NK PX87	148	.201	6	49
COKER 22	147	.198	7	49
COKER 21	147	.203	5	47
FUNK'S G-4733	146	.201	3	46
MCCURDY 84AA	146	.198	7	49
DEKALB XL71	146	.198	3	49
O'S GOLD 5291	145	.199	7	44
DEKALB XL73	145	.189	6	44
PAYMASTER 8951	145	.200	4	50
NK PX707	144	.198	7	51
NK PX95	142	.205	3	52
GOLDEN HARVEST H-2775A	142	.202	6	46
ASGROW RX777	138	.192	5	48
COKER 19A	137	.193	8	49
NK PX74	134	.189	16	50
NK PX83	131	.195	6	49
PIONEER BRAND 3184	131	.204	3	42
COKER 16	130	.196	5	45
PIONEER BRAND 3320	130	.198	3	47
PIONEER BRAND 3382	129	.193	3	44
DEKALB XL72B	128	.194	7	43
COKER 19	126	.189	12	46

TABLE 7. DATA COMBINED OVER LOCATION FOR TIDEWATER FOR MEDIUM MATURING HYBRIDS - 1982.

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
+DEKALB EX7979	173	.181	2	49
THOR-O-BRED SX660	172	.183	3	45
RA 1604	171	.173	4	50
MCCURDY 81-82	168	.178	3	47
O'S GOLD 5509	167	.179	3	50
MCCURDY 80-72	163	.180	3	51
NC 31	163	.183	2	48
GOLD KIST 925	163	.174	3	50
MCCURDY 7676	161	.169	4	52
USS 2020	160	.180	1	50
JACQUES JX247	159	.178	3	48
P-A-G SX351	159	.166	7	49
COKER 22	158	.178	4	48
TROJAN T1230	158	.181	5	47
NC 32	157	.182	4	49
NC 33	156	.178	2	43
PAYMASTER 9902	155	.173	4	52
NK PX95	155	.187	1	53
COKER 21	154	.179	5	46
GOLDEN HARVEST H-2680	153	.185	3	45
NK PX707	153	.174	6	52
MCCURDY 8150	152	.179	1	53
WATSON 413	151	.174	4	48
ASGROW RX909	151	.172	12	46
MCCURDY 84AA	150	.179	6	51
FUNK'S G-4733	150	.182	1	46
NK PX87	150	.179	3	48
PREMIER 636	149	.178	1	49
MCCURDY 7787	149	.178	7	46
DEKALB XL71	149	.176	1	50
PAYMASTER 8951	148	.178	6	51
RA 1502	148	.174	2	46
O'S GOLD 5291	146	.178	5	45
DEKALB XL73	145	.167	2	42
WATSON 414	145	.170	2	50
PIONEER BRAND 3320	145	.178	1	48
GOLDEN HARVEST H-2775A	144	.179	2	46
CARGILL 967	141	.168	8	51
ASGROW RX777	141	.170	6	49
COKER 19A	140	.168	5	49
PIONEER BRAND 3198	140	.178	1	42
WATSON 416	139	.180	1	41
JACQUES 8220	137	.177	10	45
PIONEER BRAND 3382	133	.169	4	44
PIONEER BRAND 3358	133	.173	0	45
COKER 16	132	.175	3	47
FUNK'S G-4606	131	.173	8	52
RA 1501	131	.168	8	45
NK PX83	131	.174	6	49
FUNK'S G-4589	130	.178	2	47
NK PX74	129	.161	17	51
WATSON 415	126	.175	4	46
PIONEER BRAND 3184	125	.184	0	43
DEKALB XL72B	117	.179	3	41
COKER 19	117	.163	9	49

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.

TABLE 8. INDIVIDUAL LOCATION YIELD DATA FOR TIDEWATER LOCATIONS FOR MEDIUM MATURING HYBRIDS.

HYBRID	CHOWAN	PAMLICO	WASHINGTON	MEAN
+DEKALB EX7979	196*	152**	172**	173**
THOR-O-BRED SX660	218**	134	165*	172*
RA 1604	206*	141*	167*	171*
MCCURDY 81-82	198*	133	171*	168*
O'S GOLD 5509	199*	132	168*	167*
MCCURDY 80-72	187	142*	161*	163*
NC 31	180	145*	163*	163*
GOLD KIST 925	211*	115	162*	163*
MCCURDY 7676	183	146*	156*	161*
USS 2020	202*	136	143	160*
JACQUES JX247	194	116	168*	159*
P-A-G SX351	193	126	156*	159*
COKER 22	180	140*	155*	158*
TROJAN T1230	199*	133	140	158*
NC 32	173	148*	149*	157
NC 33	178	126	164*	156
PAYMASTER 9902	196*	114	155*	155
NK PX95	177	139*	149*	155
COKER 21	200*	125	136	154
GOLDEN HARVEST H-2680	185	135	137	153
NK PX707	183	127	148*	153
MCCURDY 8150	190	118	148*	152
WATSON 413	188	116	149*	151
ASGROW RX909	195	121	135	151
MCCURDY 84AA	196*	119	136	150
FUNK'S G-4733	177	127	146	150
NK PX87	179	126	144	150
PREMIER 636	182	134	131	149
MCCURDY 7787	178	120	149*	149
DEKALB XL71	169	124	154*	149
PAYMASTER 8951	188	124	132	148
RA 1502	181	132	130	148
O'S GOLD 5291	176	106	157*	146
DEKALB XL73	160	125	150*	145
WATSON 414	172	124	140	145
PIONEER BRAND 3320	165	130	139	145
GOLDEN HARVEST H-2775A	173	113	146	144
CARGILL 967	187	101	136	141
ASGROW RX777	173	97	152*	141
COKER 19A	172	112	135	140
PIONEER BRAND 3198	175	116	128	140
WATSON 416	156	116	144	139
JACQUES 8220	185	95	131	137
PIONEER BRAND 3382	149	123	128	133
PIONEER BRAND 3358	174	101	124	133
COKER 16	159	108	128	132
FUNK'S G-4606	170	84	139	131
RA 1501	170	88	136	131
NK PX83	161	92	139	131
FUNK'S G-4589	173	96	121	130
NK PX74	179	87	122	129
WATSON 415	148	100	132	126
PIONEER BRAND 3184	158	108	107	125
DEKALB XL72B	140	90	120	117
COKER 19	137	94	119	117
B.L.S.D. (K=50)	23	16	26	16
C.V. (%)	9	10	11	8

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.
**HIGHEST YIELDER IN TEST.

TABLE 9. DATA COMBINED OVER LOCATION FOR COASTAL PLAIN FOR EARLY MATURING HYBRIDS.
THREE YEAR AVERAGE - 1980, 1981, 1982

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
P-A-G SX351	152	.146	8	47
P-A-G SX333	143	.146	11	46
DEKALB XL61	128	.149	6	41
P-A-G SX397	125	.142	15	40
TWO YEAR AVERAGE - 1981, 1982				
P-A-G SX351	158	.158	6	52
TROJAN TXS115A	155	.161	4	50
THOR-O-BRED SX536	149	.157	2	49
P-A-G SX333	148	.159	9	50
FUNK'S G-4522	146	.162	5	50
TROJAN T1100	136	.157	2	45
DEKALB XL61	131	.160	6	44
P-A-G SX397	129	.153	9	43

TABLE 10. DATA COMBINED OVER LOCATION FOR COASTAL PLAIN FOR EARLY MATURING HYBRIDS - 1982.

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
+P-A-G 194018	176	.152	2	50
P-A-G SX351	171	.146	5	52
CARGILL 967	170	.143	3	52
PAYMASTER 7951	165	.151	3	54
O'S GOLD 6882	165	.142	1	50
PAYMASTER 8951	162	.151	3	50
TROJAN TXS115A	160	.144	3	52
+DEKALB 19018	158	.148	2	56
P-A-G SX333	156	.143	4	50
RA 1404	155	.147	1	46
JACQUES JX180	154	.145	2	48
FUNK'S G-4522	152	.148	2	52
GOLD KIST 695	152	.144	1	40
TROJAN T1100	152	.143	1	44
MCCURDY 6555	151	.144	0	46
THOR-O-BRED SX536	151	.146	1	52
FUNK'S G-4507A	150	.145	3	44
PREMIER 639-A	149	.148	3	48
+DEKALB EX6060	149	.143	4	44
PIONEER BRAND 3389	147	.150	2	46
USS 1009	137	.142	4	48
DEKALB XL61	137	.152	2	44
COKER 1054	133	.146	4	40
P-A-G SX397	126	.145	4	40

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION

TABLE 11. INDIVIDUAL LOCATION YIELD DATA FOR COASTAL PLAIN LOCATIONS FOR EARLY MATURING HYBRIDS.

HYBRID	HALIFAX	JOHNSTON	ROBESON	DUPLIN	MEAN
+P-A-G 194018	168*	179*	187**	171*	176**
P-A-G SX351	159*	171*	174*	178**	171*
CARGILL 967	174**	162	166*	177*	170*
PAYMASTER 7951	161*	187**	164*	149*	165*
O'S GOLD 6882	146*	173*	165*	176*	165*
PAYMASTER 8951	158*	157	163*	169*	162
TROJAN TXS115A	149*	151	177*	163*	160
+DEKALB 19018	149*	163	158*	161*	158
P-A-G SX333	141*	164	154*	164*	156
RA 1404	151*	154	153*	164*	155
JACQUES JX180	153*	154	150*	158*	154
FUNK'S G-4522	150*	149	144	167*	152
GOLD KIST 695	152*	139	150*	167*	152
TROJAN T1100	150*	158	141	157*	152
MCCURDY 6555	153*	145	145	161*	151
THOR-O-BRED SX536	163*	147	151*	142*	151
FUNK'S G-4507A	145*	150	134	172*	150
PREMIER 639-A	133*	142	170*	151*	149
+DEKALB EX6060	143*	139	152*	161*	149
PIONEER BRAND 3389	137*	145	146	160*	147
USS 1009	115	139	126	170*	137
DEKALB XL61	162*	135	123	127	137
COKER 1054	125	124	129	153*	133
P-A-G SX397	128	120	134	120	126
B.L.S.D. (K=50)	45	22	37	39	13
C.V. (%)	15	10	11	12	7

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.
**HIGHEST YIELDER IN TEST.

TABLE 12. DATA COMBINED OVER LOCATION FOR COASTAL PLAIN FOR MEDIUM MATURING HYBRIDS.
THREE YEAR AVERAGE - 1980, 1981, 1982

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
MCCURDY 84AA	144	.161	8	46
NK PX87	143	.163	6	45
MCCURDY 8150	142	.160	7	49
COKER 21	142	.165	7	46
PREMIER 636	141	.159	9	48
ASGROW RX909	141	.153	16	43
COKER 19A	135	.155	8	45
NK PX74	134	.148	13	48
DEKALB XL71	134	.154	9	45
PAYMASTER 9532	134	.156	9	44
T-E 6995	132	.149	10	47
PIONEER BRAND 3369A	132	.154	11	47
PIONEER BRAND 3320	131	.152	5	43
COKER 22	128	.160	8	46
COKER 16	127	.153	8	45
NK PX79	126	.149	7	44
PIONEER BRAND 3382	125	.146	6	44
NK PX83	124	.156	10	44
T-E 6995-A	120	.148	7	46
TWO YEAR AVERAGE - 1981, 1982				
THOR-O-BRED EXP. 6150	155	.172	10	50
MCCURDY 84AA	154	.171	4	51
TROJAN T1230	152	.173	8	51
O'S GOLD 5291	149	.171	6	48
COKER 21	149	.174	6	52
PREMIER 636	148	.166	7	54
NK PX87	148	.172	5	50
FUNK'S G-4733	147	.174	3	52
ASGROW RX909	146	.164	12	46
MCCURDY 8150	145	.173	6	55
COKER 19A	143	.166	6	49
T-E 6995	142	.161	7	52
GOLDEN HARVEST H-2775A	141	.171	13	50
ASGROW RX777	140	.163	4	50
NK PX74	140	.161	12	53
DEKALB XL73	140	.162	6	47
PIONEER BRAND 3369A	140	.166	7	52
DEKALB XL71	139	.164	7	49
NK PX79	136	.161	6	47
COKER 22	132	.170	5	51
PIONEER BRAND 3320	132	.162	4	46
PAYMASTER 9532	131	.168	5	48
COKER 16	130	.165	7	50
DEKALB XL72B	128	.164	4	44
NK PX83	128	.166	7	49
T-E 6995-A	128	.160	4	51
PIONEER BRAND 3382	127	.159	5	48

TABLE 13. DATA COMBINED OVER LOCATION FOR COASTAL PLAIN FOR MEDIUM MATURING HYBRIDS - 1982.

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
GOLDEN HARVEST H-2680	167	.156	2	48
RA 1604	167	.154	1	48
+THOR-O-BRED EXP. 6150	166	.154	4	48
PREMIER 636	165	.148	2	54
MCCURDY 84AA	165	.150	3	52
PAYMASTER 9902	160	.154	4	58
TROJAN T1230	160	.156	4	52
JACQUES 8220	160	.156	1	46
MCCURDY 81-37	159	.157	2	42
O'S GOLD 2570	159	.147	5	56
WATSON 413	159	.151	1	52
O'S GOLD 5291	159	.153	2	48
THOR-O-BRED SX660	157	.153	2	54
FUNK'S G-4733	157	.155	1	52
SPEIGHT 37	156	.154	2	48
COKER 21	155	.156	3	52
NK PX87	155	.155	2	48
MCCURDY 8150	155	.159	1	52
RA 1501	154	.147	1	50
RA 1502	153	.150	1	48
+JACQUES 8400	152	.152	3	44
ASGROW RX909	151	.148	1	44
PIONEER BRAND 3369A	150	.152	2	54
COKER 19A	150	.149	1	48
T-E 6998	150	.154	2	48
WATSON 414	150	.146	1	56
FUNK'S G-4606	149	.146	3	54
PIONEER BRAND 3198	149	.151	1	44
T-E 6995	149	.146	1	54
GOLDEN HARVEST H-2775A	148	.155	5	48
ASGROW RX777	147	.146	1	52
+THOR-O-BRED 6250	145	.148	1	46
NK PX74	145	.146	4	56
FUNK'S G-4589	144	.152	2	44
DEKALB XL71	143	.149	1	50
TROJAN T1251	143	.154	0	36
COKER 22	142	.153	1	50
PIONEER BRAND 3187	142	.149	1	52
GOLD KIST 868	140	.151	1	46
WATSON 416	140	.154	1	44
NK PX79	139	.148	1	44
PIONEER BRAND 3320	137	.149	1	46
DEKALB XL73	136	.149	3	48
PIONEER BRAND 3358	135	.150	1	46
NK PX83	134	.149	2	46
COKER 16	134	.152	2	52
T-E 6995-A	133	.147	1	52
SPEIGHT 35	132	.150	2	44
USS 1515	132	.150	4	42
ASGROW RX864	132	.148	1	48
PAYMASTER 9532	132	.152	1	44
WATSON 415	131	.152	3	52
PIONEER BRAND 3382	126	.145	3	50
DEKALB XL72B	122	.150	1	40
USS 0555A	118	.149	3	44

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.

TABLE 14. INDIVIDUAL LOCATION YIELD DATA FOR COASTAL PLAIN LOCATIONS FOR MEDIUM MATURING HYBRIDS.

HYBRID	HALIFAX	JOHNSTON	ROBESON	DUPLIN	MEAN
GOLDEN HARVEST H-2680	146*	168*	182**	175*	167**
RA 1604	161*	148	180*	177*	167*
+THOR-O-BRED EXP. 6150	160*	154	162*	186*	166*
PREMIER 636	154*	172**	165*	168	165*
MCCURDY 84AA	160*	166*	164*	169*	165*
PAYMASTER 9902	162*	152	169*	158	160*
TROJAN T1230	144*	143	168*	183*	160*
JACQUES 8220	152*	144	157*	186*	160*
MCCURDY 81-37	145*	158*	157*	175*	159*
O'S GOLD 2570	147*	158*	152	178*	159*
WATSON 413	162*	160*	151	162	159*
O'S GOLD 5291	151*	154	159*	172*	159*
THOR-O-BRED SX660	161*	165*	135	169*	157*
FUNK'S G-4733	150*	138	175*	164	157*
SPEIGHT 37	141*	145	153	187**	156*
COKER 21	152*	144	164*	161	155*
NK PX87	148*	137	161*	173	155*
MCCURDY 8150	135	155	164*	165	155*
RA 1501	149*	133	159*	175*	154
RA 1502	155*	140	148	170*	153
+JACQUES 8400	143*	151	144	168	152
ASGROW RX909	162*	134	145	164	151
PIONEER BRAND 3369A	164**	142	143	153	150
COKER 19A	161*	155	130	155	150
T-E 6998	136	146	159*	159	150
WATSON 414	147*	156*	142	153	150
FUNK'S G-4606	137	148	152	160	149
PIONEER BRAND 3198	147*	150	152	147	149
T-E 6995	143*	142	148	161	149
GOLDEN HARVEST H-2775A	138	145	138	171	148
ASGROW RX777	151*	149	139	148	147
+THOR-O-BRED 6250	154*	118	150	160	145
NK PX74	140*	148	134	160	145
FUNK'S G-4589	140*	134	142	159	144
DEKALB XL71	137	140	147	148	143
TROJAN T1251	136	145	147	143	143
COKER 22	151*	120	143	153	142
PIONEER BRAND 3187	152*	139	133	143	142
GOLD KIST 868	133	137	134	156	140
WATSON 416	152*	136	119	152	140
NK PX79	145*	129	125	158	139
PIONEER BRAND 3320	132	144	119	153	137
DEKALB XL73	145*	118	138	145	136
PIONEER BRAND 3358	135	138	127	142	135
NK PX83	117	135	136	148	134
COKER 16	132	126	122	157	134
T-E 6995-A	143*	123	127	141	133
SPEIGHT 35	135	131	123	140	132
USS 1515	148*	127	125	130	132
ASGROW RX864	150*	138	105	134	132
PAYMASTER 9532	142*	142	106	138	132
WATSON 415	129	139	113	142	131
PIONEER BRAND 3382	127	133	106	139	126
DEKALB XL72B	136	114	108	130	122
USS 0555A	127	113	112	119	118
B.L.S.D. (K=50)	26	17	28	19	13
C.V. (%)	9	8	10	8	7

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.
**HIGHEST YIELDER IN TEST.

TABLE 15. DATA COMBINED OVER LOCATION FOR COASTAL PLAIN FOR LATE MATURING HYBRIDS.
THREE YEAR AVERAGE - 1980, 1981, 1982

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
JACQUES JX247	136	.167	8	49
NK MCNAIR 508	136	.189	9	57
O'S GOLD 5509	132	.168	9	47
PIONEER BRAND 3160	132	.168	7	48
NK PX95	120	.172	9	51
PIONEER BRAND 519(W)	119	.165	7	51
PIONEER BRAND 3184	113	.167	2	45
TWO YEAR AVERAGE - 1981, 1982				
JACQUES JX247	146	.180	8	55
DEKALB EX7979	143	.177	5	58
O'S GOLD 5509	141	.179	9	53
NK MCNAIR 508	140	.195	8	63
PIONEER BRAND 3160	134	.178	7	52
NK PX95	129	.184	9	57
COKER 77B	127	.198	8	61
PIONEER BRAND 519(W)	122	.178	6	57
ASGROW RX114	122	.175	8	55
PIONEER BRAND 3184	116	.178	1	51

TABLE 16. DATA COMBINED OVER LOCATION FOR COASTAL PLAIN FOR LATE MATURING HYBRIDS - 1982.

HYBRID	YIELD BUS/A	MOISTURE	LODGING %	EAR HT IN
+DEKALB EX7979	153	.162	1	56
USS 2020	152	.155	1	48
JACQUES JX247	151	.159	1	54
NK MCNAIR 508	147	.168	3	58
O'S GOLD 5509	147	.157	2	48
PIONEER BRAND 3165	143	.159	3	46
PIONEER BRAND 3160	142	.160	1	48
PIONEER BRAND 519(W)	136	.159	2	56
NK PX95	131	.165	2	56
COKER 77B	131	.175	3	56
ASGROW RX114	130	.155	1	54
MCCURDY 8230	127	.165	0	50
PIONEER BRAND 3184	122	.157	1	42

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.

TABLE 17. INDIVIDUAL LOCATION YIELD DATA FOR COASTAL PLAIN LOCATIONS FOR LATE MATURING HYBRIDS.

HYBRID	HALIFAX	JOHNSTON	ROBESON	DUPLIN	MEAN
+DEKALB EX7979	131*	158**	155*	167*	153**
USS 2020	122*	157*	152*	175*	152*
JACQUES JX247	130*	138	153*	180**	151*
NK MCNAIR 508	133*	141*	160*	152	147*
O'S GOLD 5509	134*	131	166**	158	147*
PIONEER BRAND 3165	144**	130	143*	155	143*
PIONEER BRAND 3160	138*	149*	143*	139	142*
PIONEER BRAND 519(W)	121	135	152*	135	136
NK PX95	116	130	139*	140	131
COKER 77B	120	132	150*	121	131
ASGROW RX114	117	136	138*	126	130
MCCURDY 8230	127*	138	126	117	127
PIONEER BRAND 3184	113	121	126	129	122
B.L.S.D. (K=50)	23	20	31	16	13
C.V. (%)	9	8	9	8	7

+EXPERIMENTALS. SEED OF THESE HYBRIDS MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.
**HIGHEST YIELDER IN TEST.

TABLE 18. HYBRID RATINGS* FOR TOLERANCE TO VIRUS DISEASES.

HYBRID	RATING	HYBRID	RATING
ACCO UC 9585	2.8	MCCURDY 76-23	6.4
UC 9792	4.5	77-15	5.7
UC 9902	5.9	77-28	3.7
ASGROW RX 90	6.0	77-50	3.3
RX 112	3.8	77-51	3.1
RX 114	4.7	77-53	3.3
RX 115A	3.6	77-57	4.3
RX 140A	4.5	7564	5.5
RX 405W	4.5	7978	3.2
RX 450A	4.5	8225	3.2
RX 777	6.0	X890	5.2
RX 813W	5.2	NORTHRUP KING PX 79	4.6
RX 858	7.7	PX 95	4.6
RX 909	6.0	PX 715	5.2
RX 962W	4.8	O'S GOLD SX 3344	4.7
COKER 19	6.6	SX 5255	5.5
DEKALB XL 72B	3.3	SX 5353	4.2
XL 72BB	4.1	TX 311	5.0
XL 394	3.2	P-A-G SX 17A	3.0
FCX FFR 717C	3.0	SX 346	4.6
FFR 929W	4.2	644W	4.2
FFR 955C	3.8	PIONEER BRAND 3145	3.1
FUNK'S G-4525	2.2	3147	3.1
G-2525A	2.8	3160	3.0
G-4740	3.3	3179	3.0
G-4848	3.5	3184	4.3
GOLDEN HARVEST H-2660W	2.2	3328	2.2
H-2745	3.3	3369A	5.5
GUTWEIN 74	6.9	RING AROUND 1503	6.0
2875	5.5	1505	6.3
2910	6.4	1604	6.0
MDM 2885	4.6	SPEIGHT D-14	5.0
JACQUES JX 179	6.0	D-31	5.7
JX 180	6.0	D-33	5.5
JX 187A	5.3	D-34	6.4
JX 192	6.8	TAYLOR EVANS TE 6945	4.2
JX 197	5.0	WATSON 571	3.8
JX 200	5.9	572	4.3
JX 202A	5.8	573	2.5
JX 220	7.7	574	3.0
JX 227	4.8	575	3.3
JX 247	6.2		
JX 250	4.2		
JX 260	6.1		

*DEKALB XL 72B WAS USED AS A STANDARD AND ALL HYBRID RATINGS WERE ADJUSTED TO THE RATING OF THE STANDARD IN THE PARTICULAR YEAR THE HYBRID WAS RATED. THE RATINGS WERE MADE OVER A 3-YEAR SPAN, 1979-1981 RATINGS WERE ON A 1-9 SCALE, 1 BEING NO DISEASE AND 9 BEING DEAD. APPRECIATION GOES TO HARRY DUNCAN, EUGENE KRENZER, AND GARY PAYNE FOR MAKING THESE OBSERVATIONS.

Table 19. Performance of corn hybrids under gray leaf spot infestation Henderson County - 1982.

Hybrid	Yield Bu/A	Disease[1] Rating	Hybrid	Yield Bu/A	Disease[1] Rating
Asgrow RX777	179*	1.6	NK PX83	142	2.3
Coker 16	170	1.6	NK PX87	168	2.0
Coker 19A	180*	1.8	NK PX95	179*	0.8
Coker 21	153	1.6	P-A-G SX17A	123	1.8
Coker 22	180*	1.5	Paymaster 8951	201**	1.0
DeKalb XL71	172	1.8	Paymaster 9532	150	1.3
DeKalb XL73	148	2.4	Pioneer brand 3184	167	2.3
DeKalb XL394	179*	0.9	Pioneer brand 3187	168	1.0
Funk's 4507A	174	2.1	Pioneer brand 3328	157	0.9
Funk's G-4522	181*	1.8	Pioneer brand 3358	190*	1.1
Funk's G-4606	164	1.9	Pioneer brand 3382	153	1.8
Funk's G-4733	162	1.4	Pioneer brand 3535	154	1.3
Funk's 4848	129	0.6	+Pioneer brand X7382	192*	0.9
Jacques JX247	169	1.6	Thor-O-Bred SX660	184*	1.4
Jacques 8220	177	2.3	USS 0555A	155	1.5
McCurdy 7978	155	0.8	USS 1010	161	2.5
McCurdy 81-34	154	1.0	Watson 413	170	3.0
McCurdy 81-35	148	0.9	Watson 414	181*	2.0
McCurdy 8225	155	0.8	Watson 415	141	1.6
NK PX74	161	2.3	Watson 572	172	0.5
B.L.S.D. (K-50)	24				
C.V. (%)	11.3				

[1] The disease rating scale used is as follows: 0 = no symptoms; 1 = trace of lesions below the ear, none above; 2 = many lesions below the ear, trace above; 3 severe lesion development below ear, all leaves above ear with lesions; 4 all leaves with severe lesion development, but green tissue visible; 5 = all leaves dry and dead.

**Highest yielder. *Not significantly different from highest yielder.

+Experimental. Seed of this hybrid may or may not be available next year and may have a different designation.

Table 20. Phytotoxic ratings of medium and late maturing corn hybrids taken at the Guilford County Corn OVT - 1982[1/]

MEDIUM MATURITY

Hybrid	% Damaged Plants	Hybrid	% Damaged Plants
Asgrow RX90	78	NK PX87	82
Asgrow RX777	87	NK PX95	80
Cargill 967	86	NK PX707	84
Coker 16	78	+P-A-G 194018	72
Coker 19	73	P-A-G SX17A	61
Coker 19A	87	P-A-G SX333	89
Coker 21	75	P-A-G SX351	67
Coker 22	76	Paymaster 7951	97
+DeKalb 18029	77	Paymaster 8951	78
+DeKalb 19018	76	Pioneer brand 3187	99
DeKalb XL71	63	Pioneer brand 3198	36
DeKalb XL72B	86	Pioneer brand 3320	58
DeKalb XL73	80	Pioneer brand 3358	28
Funk's G-4522	73	Pioneer brand 3369A	65
Funk's G-4525-A	59	Pioneer brand 3382	66
Funk's G-4733	42	Pioneer brand 3389	84
+Jacques 2119	41	Premier 636	68
Jacques 8220	77	RA 1502	53
Jacques JX227	78	RA 1604	65
McCurdy 81-34	81	Thor-O-Bred 660	74
McCurdy 81-35	86	+Thor-O-Bred 6250	76
McCurdy 84AA	83	USS 1010	95
McCurdy 7978	13	USS 1515	73
McCurdy 8150	64	Watson 413	54
McCurdy 8225	32	Watson 414	83
NK PX74	70	Watson 415	80
NK PX79	67	Watson 416	80

LATE MATURITY

B&B X 100	55	Pioneer brand 3160	6
+DeKalb EX7979	66	Pioneer brand 3165	36
+DeKalb Ex8989	45	Pioneer brand 3184	53
Funk's G-4740	75	USS 2010	81
Jacques JX247	57	USS 2020	77
Pioneer brand 3147	41		

[1/] Seven pints per acre of EPTC applied preplant.
+Experimentals. These hybrids may or may not be available next year and may have a different designation.

CORN SILAGE

Silage is an important part of the beef and dairy cattle industry in North Carolina, particularly in the Piedmont and Mountain regions.

This report presents the results of the North Carolina Official Corn Silage trials for the 1982 season.

Entries: Any individual or firm may make application for having hybrids tested. Personnel of the testing program may also include entries about which further information is desired.

Early in January each year, rules governing the tests for the ensuing year are distributed to all previous participants and to those who make inquiry.

Agencies sponsoring entries in the 1982 tests are shown in Table 21.

Table 21. Name and address of sponsoring agencies in the 1982 North Carolina Corn Silage Performance Trials along with designation used to identify the hybrids in the trials.

Name	Address	Hybrid Designation
Asgrow Seed Company	Kalamazoo, MI	Asgrow
Coker's Pedigreed Seed Company	Hartsville, SC	Coker
Columbiana Seed Company	Eldred, IL	Golden Harvest
DeKalb-Pfizer Genetics	Mt. Olive, NC	DeKalb
Funk's Seed International	Bloomington, IL	Funk's
O's Gold Seed Company	Parkersburg, IA	O's Gold
Pioneer Hi-Bred, Inc.	Tipton, IN	Pioneer brand
Ring Around Products, Inc.	Montgomery, AL	RA
Thor-O-Bred	Champaign, IL	Thor-O-Bred

Field Plot Technique: Two tests were located in the Piedmont; one in Rockingham County on a river bottom and one in Rowan County on an upland soil.

Plots consisted of three rows with the center row harvested. Four replications were planted in a randomized, complete block design. Plots were 22 feet long with five foot alleys.

All plots were planted to a stand with a 115% seeding rate of the desired stand.

Table 22 listes the cultural practices used.

Table 22. Cultural practices used on the corn silage tests - 1982.

Location and Cooperator	Fertilizer lbs/A and Grade	Topdressing lbs N/A	Herbicide	Date of Planting	Date of Harvest
Rockingham County Scott Shoulars	200 0-45-60	150 30%	AAtrex Princep	April 19	August 16
Rowan County Clyde McSwain	500 10-20-20	100 30%	AAtrex Princep	May 4	August 13

Seasonal Conditions: A wet, cool spring delayed planting at Rowan County and caused some germination and emergence problems at the Rockingham County test site. Above normal rainfall continued through June as seen in the following table:

	Rainfall Data (Inches)		
Location	April	May	June
Rockingham County	2.95	2.42	9.76
Rowan County	3.20	6.39	5.25

Data: Data were collected on percent dry matter at harvest, dry matter yield, silage yield, percent crude protein, percent acid detergent fiber, and percent total digestible nutrients.

Stand counts were taken and the average plant population for each hybrid is given in Table 23.

Results: Individual location data are shown in Tables 24 and 25. State average is shown in Table 26. Several plots had poor stands at the Rockingham County location and consequently were not evaluated for yield.

Table 23. Average plant population of corn silage hybrids 1982.

Hybrid	Plants/Acre	Hybrid	Plants/Acre
Asgrow RX450A	20,276	NK PX79	23,849
Coker 56	18,914	NK PX87	21,438
Coker 77B	20,634	NK PX95	23,045
DeKalb XL32AA	21,259	O's Gold 2570	24,028
DeKalb XL61	24,832	O's Gold 5509	24,385
DeKalb XL67	23,313	Pioneer brand 3147	24,296
DeKalb XL70	19,539	Pioneer brand 3165	25,278
DeKalb XL72B	20,991	Pioneer brand 3184	25,278
DeKalb XL390B	20,008	Pioneer brand 3320	27,333
DeKalb XL394	19,279	Pioneer brand 3358	25,100
+DeKalb EX7979	24,117	Pioneer brand 3389	24,475
Funk's 4522	21,795	Pioneer brand 3535	24,385
Funk's 4740	22,152	RA 1604	20,276
Funk's G-4733	20,366	Thor-O-Bred SX544	28,851
Golden Harvest 2686	22,688	Thor-O-Bred SX660	28,405

+Experimental. Seed of this hybrid may or may not be available next year and may have a different designation.

Table 24. Performance of corn silage hybrids at Rockingham County 1982.

Hybrid	% Dry Matter At Harvest	Dry Matter Tons/Acre	Silage Yield Tons/Acre	Crude Protein %	A.D. Fiber %	TDN %
Asgrow RX450A	32	7	20	9.3	39	61
Coker 56	29	--	--	8.5	35	64
Coker 77B	32	--	--	9.3	38	62
DeKalb XL32AA	44	--	--	7.8	34	65
DeKalb XL61	41	9	27	8.4	26	70
DeKalb XL67	43	8	24	7.8	25	71
DeKalb XL70	37	--	--	9.1	24	71
DeKalb XL72B	43	7	20	7.8	25	71
DeKalb XL390B	33	--	--	9.5	30	68
DeKalb XL394	39	8	23	7.3	38	62
+DeKalb EX7979	36	10	29	8.8	28	69
Funk's 4522	35	8	23	8.2	27	69
Funk's 4740	35	6	18	8.2	31	67
Funk's G-4733	46	9	26	8.5	24	71
Golden Harvest 2686	41	9	26	7.8	30	67
NK PX79	41	9	26	8.9	26	70
NK PX87	40	8	23	9.1	23	72
NK PX95	38	11	32**	8.7	25	70
O's Gold 2570	40	9	27	8.0	27	69
O's Gold 5509	38	9	26	8.8	22	73
Pioneer brand 3147	38	10	28	8.2	30	67
Pioneer brand 3165	37	8	22	9.1	31	67
Pioneer brand 3184	36	7	21	7.9	39	61
Pioneer brand 3320	43	9	27	8.4	25	71
Pioneer brand 3358	43	8	24	8.6	25	71
Pioneer brand 3389	41	9	27	8.0	26	70
Pioneer brand 3535	42	7	21	7.8	27	69
RA 1604	42	11	30*	9.3	21	73
Thor-O-Bred SX544	41	8	22	7.8	25	71
Thor-O-Bred SX660	33	9	25	8.3	32	66
BLSD (K-50)			3	NS	8	5
C.V. (%)			12.7	6.8	13.2	3.6

**Highest yielder.
*Not significantly different from highest yielder.
+Experimental. Seed of this hybrid may or may not be available next year and may have a different designation.

Table 25. Performance of corn silage hybrids at Rowan County 1982.

Hybrid	% Dry Matter At Harvest	Dry Matter Tons/Acre	Silage Yield Tons/Acre	Crude Protein %	A.D. Fiber %	TDN %
Asgrow RX450A	26	8	24	8.5	31	67
Coker 56	29	8	22	9.3	33	65
Coker 77B	32	8	23	7.9	28	69
DeKalb XL32AA	40	8	22	8.8	24	72
DeKalb XL61	37	8	24	8.0	25	70
DeKalb XL67	29	7	20	8.6	27	70
DeKalb XL70	30	8	22	8.9	30	67
DeKalb XL72B	37	8	22	9.4	26	70
DeKalb XL390B	25	7	21	9.8	34	65
DeKalb XL394	28	8	22	8.9	30	67
+DeKalb EX7979	34	9	27*	9.7	27	70
Funk's 4522	33	8	23	8.3	24	72
Funk's 4740	32	7	20	9.4	26	70
Funk's G-4733	31	8	23	9.1	27	69
Golden Harvest 2686	35	9	26*	8.8	24	72
NK PX79	35	8	23	8.8	26	70
NK PX87	31	8	22	10.0	26	70
NK PX95	37	8	24	9.7	30	71
O's Gold 2570	37	10	28**	8.2	28	69
O's Gold 5509	30	9	25*	8.6	25	70
Pioneer brand 3147	34	7	21	9.3	25	71
Pioneer brand 3165	36	9	26*	7.9	31	67
Pioneer brand 3184	35	8	23	7.8	27	70
Pioneer brand 3320	34	7	21	8.5	28	69
Pioneer brand 3358	35	8	23	8.7	27	69
Pioneer brand 3389	35	8	23	8.1	28	69
Pioneer brand 3535	34	7	19	8.2	26	70
RA 1604	36	9	26*	9.1	31	67
Thor-O-Bred SX544	37	9	25*	8.4	25	71
Thor-O-Bred SX660	28	8	22	8.6	32	66
BLSD (K-50)			4	NS	NS	NS
C.V. (%)			10.7	8.9	13.2	3.4

**Highest yielder. *Not significantly different from highest yielder.
+Experimental. Seed of this hybrid may or may not be available next year and may have a different designation.

Table 26. Average performance of corn silage hybrids 1982.

Hybrid	% Dry Matter At Harvest	Dry Matter Tons/Acre	Silage Yield Tons/Acre	Crude Protein %	A.D. Fiber %	TDN %
Asgrow RX450A	29	8[1/]	22[1/]	8.9	35	64
Coker 56	29	8[1/]	22[1/]	8.9	34	65
Coker 77B	32	8[1/]	23[1/]	8.6	33	66
DeKalb XL32AA	42	8[1/]	22[1/]	8.3	29	69
DeKalb XL61	39	9	26	8.2	26	70
DeKalb XL67	36	8[1/]	22[1/]	8.2	26	71
DeKalb XL70	34	8[1/]	22[1/]	9.0	27	69
DeKalb XL72B	40	8[1/]	21[1/]	8.6	26	71
DeKalb XL390B	29	7[1/]	21[1/]	9.7	32	67
DeKalb XL394	34	8	23	8.1	34	65
+DeKalb EX7979	35	10	28	9.3	28	70
Funk's 4522	34	8	23	8.3	26	71
Funk's 4740	34	7	19	8.8	29	69
Funk's G-4733	39	9	25	8.8	26	70
Golden Harvest 2686	38	9	26	8.3	27	70
NK PX79	38	9	25	8.9	26	70
NK PX87	36	8	23	9.6	25	71
NK PX95	38	10	28	9.2	28	71
O's Gold 2570	39	10	28	8.1	28	69
O's Gold 5509	34	9	26	8.7	24	72
Pioneer brand 3147	36	9	25	8.8	28	69
Pioneer brand 3165	37	9	24	8.5	31	67
Pioneer brand 3184	36	8	22	7.9	33	66
Pioneer brand 3320	39	8	24	8.5	27	70
Pioneer brand 3358	39	8	24	8.7	26	70
Pioneer brand 3389	38	9	25	8.1	27	70
Pioneer brand 3535	38	7	20	8.0	27	70
RA 1604	39	10	28	9.2	26	70
Thor-O-Bred SX544	39	9	24	8.1	25	71
Thor-O-Bred SX660	31	9	24	8.5	32	66

[1/] Rowan County location only.
+Experimental. Seed of this hybrid may or may not be available next year and may have a different designation.

GRAIN SORGHUM

The majority of the grain sorghum in North Carolina is grown in the Piedmont with increasing acreage being grown in the Coastal Plain. In the Piedmont it is generally grown as a full-season crop while it is often double-cropped behind small grain in the Coastal Plain.

Entries: Any individual or firm may make application for having entries tested. A fee is charged on an entry basis. Personnel of the testing program may also include entries about which further information is desired.

Agencies Sponsoring Entries	Address	Designation
Asgrow Seed Company	Kalamazoo, Michigan	Dorado, Corral Mustang, Topaz
Coker's Pedigreed Seed Company	Lubbock, Texas	Coker
DeKalb-Pfizer Genetics, Inc.	Lubbock, Texas	DeKalb
Funk's Seed, Inc.	Lubbock, Texas	Funk's
Gold Kist	Atlanta, Georgia	Gold Kist
Helena Chemical Company	Memphis, Tennessee	Helena
Northrup King Company	Columbus, Mississippi	NK Brand, Savanna
Paymaster Seeds	Plainview, Texas	Paymaster
Pioneer Hi-Bred, Inc.	Tipton, Indiana	Pioneer brand
Ring Around Products	Montgomery, Alabama	RA
Taylor-Evans Seed Company	Tulia, Texas	T-E
Warner Seed Company	Hereford, Texas	Warner

Test Locations: Three full-season tests were located in the Piedmont with two double-crop tests located in the Coastal Plain (Figure 1).

Field Plot Technique: A lattice design was used with three replications at each test. Plots were two rows 22 feet long on a 38" or 36" row width.

Plots were overseeded and thinned to 5-6 plants per foot if necessary. Cultural practices are shown in Table 27.

Seasonal Conditions: A cool, wet spring delayed planting of the Guilford County test until the first part of June (Table 27). The wet weather also delayed the planting of the double-crop tests. Poor stands were noted at the Johnston County test and thus it was discarded. Optimum weather conditions were observed the remainder of the growing season.

Data: Data were collected on yield, moisture at harvest, head compactness, head exsertion, and plant height. All plot yields were adjusted to 14% moisture and reported in pounds per acre. A description of head type was determined and indicated with "1" denoting a compact head and "3" denoting a loose head. Head exsertion was measured as the distance from the top leaf to the base of the head; this distance gives an indication of the ease with which grain sorghum may be harvested without leaves and plant material hindering the operation.

Results: Two and three-year averages are shown in Tables 28 and 29 for the full-season tests. Combined data for the full season tests are found in Table 32 while individual location yield data are found in Table 31. The Guilford County test suffered severe lodging which accounted for the high C.V. and L.S.D. Table 32 lists the performance data for the Pamlico County late-planted test. Bird damage was minimal at all locations and lodging was only a factor at the Guilford County location. Stands were excellent at all locations except Johnston County which was subsequently discarded.

Table 27. Cultural practices on grain sorghum performance trials, 1982.

Area and Cooperator	Fertilizer Lbs/A and Grade	Herbicide Preemergence	Topdressing Lbs N/A	Date of Planting	Date of Harvest
EARLY PLANTED TESTS					
Anson County J. B. Martin	600 10-10-10 Broadcast Preplant	AAtrex	60	May 5	September 13
Guilford County Gerald Fryar	200 18-46-0 Broadcast Preplant	AAtrex	60	June 3	October 29
Rowan County Darryl Corriher	500 19-18-0 200 18-46-0 } Blend 300 21-0-0 Broadcast Preplant	AAtrex	100	May 4	August 30
LATE PLANTED TESTS					
Johnston County Paul Dunn	200 5-10-30	AAtrex	100	June 15	Discarded
Pamlico County Spencer Brothers	None	AAtrex	90	June 24	October 21

TABLE 28. DATA COMBINED OVER LOCATIONS FOR GRAIN SORGHUM. THREE YEAR AVERAGE - 1980, 1981, 1982.

ENTRIES	YIELD LBS/A	MOISTURE	HEAD COM-PACTNESS	EXSERTION INCHES	PLANT HEIGHT INCHES
PIONEER BRAND 8311	4177	.130	2.0	5	43
COKER 7675	4151	.137	1.6	5	41
PIONEER BRAND B815	4017	.137	1.9	5	48
COKER 7681BR	3936	.136	2.2	4	44
NK BRAND 2670	3871	.132	1.5	6	49
T-E DINERO	3866	.133	1.6	5	43
PAYMASTER DR1085	3864	.133	2.2	5	42
T-E DINERO-R	3767	.134	1.7	5	44
RA 733GB	3753	.137	2.1	6	42
SAVANNA 5	3710	.137	1.3	7	54

TABLE 29. DATA COMBINED OVER LOCATIONS FOR GRAIN SORGHUM. TWO YEAR AVERAGE - 1981, 1982.

ENTRIES	YIELD LBS/A	MOISTURE	HEAD COM-PACTNESS	EXSERTION INCHES	PLANT HEIGHT INCHES
COKER 7723	4810	.139	1.2	7	56
FUNK'S G-522DR	4799	.133	1.2	7	48
COKER 7675	4740	.137	1.3	7	45
PIONEER BRAND B815	4709	.135	2.1	7	53
WARNER 851DR	4708	.138	1.3	6	49
GOLD KIST 8C2G	4703	.133	1.5	7	49
PIONEER BRAND 8311	4690	.128	1.8	6	46
GOLD KIST 712G	4635	.129	1.5	7	45
WARNER 744DR	4579	.135	2.3	6	50
NK BRAND 2670	4569	.132	1.3	7	53
HELENA 1330DR	4518	.139	1.3	7	57
HELENA 1225DR	4513	.134	1.5	6	48
RA 733GB	4487	.136	2.1	8	47
SAVANNA 5	4463	.136	1.4	9	61
COKER 7681BR	4454	.136	2.5	5	48
T-E DINERO	4432	.134	1.3	7	47
T-E DINERO-R	4425	.132	1.5	7	49
DORADO E	4335	.133	1.5	8	47
CORRAL	4294	.129	1.6	9	49
PAYMASTER DR1085	4232	.132	2.1	7	47
MUSTANG	4201	.135	1.5	8	45
COKER 7623	4200	.135	1.1	7	53
GOLD KIST 552G	3955	.133	1.6	9	49

TABLE 30. DATA COMBINED OVER LOCATIONS FOR GRAIN SORGHUM - 1982

ENTRIES	YIELD LBS/A	MOISTURE	HEAD COM- PACTNESS	EXSERTION INCHES	PLANT HEIGHT INCHES
WARNER 744DR	4730	.135	2.0	6	47
FUNK'S G-522DR	4690	.138	1.3	7	49
PAYMASTER DR1125	4665	.138	1.3	5	47
+PIONEER BRAND X8072	4633	.138	2.7	9	49
GOLD KIST 712G	4602	.131	2.0	7	47
T-E Y77	4555	.141	1.7	7	51
COKER 7675	4551	.141	1.7	7	44
DORADO E	4514	.132	2.0	9	49
PAYMASTER R109-A	4377	.138	1.7	6	43
-COKER 7681BR	4369	.135	2.3	6	49
WARNER 851DR	4346	.141	2.0	6	49
GOLD KIST 8C2G	4322	.135	1.7	7	49
HELENA 1225DR	4296	.136	2.0	5	47
TOPAZ	4279	.140	2.3	10	50
PIONEER BRAND 8222	4275	.136	2.0	6	45
PIONEER BRAND 8815	4266	.132	2.3	7	54
RA 733GB	4257	.139	2.0	10	47
+PIONEER BRAND X8071	4215	.139	1.7	6	49
COKER 7605	4205	.130	2.3	6	52
PAYMASTER GR 1138	4180	.134	3.0	8	46
PAYMASTER DR1085	4177	.133	2.0	9	49
COKER 7723	4163	.138	1.7	7	56
NK BRAND 2660	4157	.135	1.7	6	48
-PAYMASTER BRY-93	4143	.141	2.7	8	49
DEKALB DK-61	4142	.138	2.0	7	47
NK BRAND 2670	4137	.136	2.0	10	55
T-E DINERO	4134	.136	1.3	6	47
PIONEER BRAND 8311	4126	.128	2.3	7	48
FUNK'S G-611	4096	.141	2.0	10	51
DEKALB DK-64	4052	.138	2.3	6	49
RA 808GB	4018	.143	1.7	6	52
MUSTANG	3971	.136	1.7	8	46
PIONEER BRAND 8515	3955	.130	1.7	8	49
WILSTAR 1330	3951	.141	2.3	8	56
DEKALB DK-59	3950	.148	2.0	7	51
T-E DINERO-R	3908	.137	2.3	6	49
CORRAL	3860	.130	2.3	7	50
-SAVANNA 5	3710	.135	2.0	8	59
COKER 7623	3701	.138	1.3	6	51
PIONEER BRAND 8303	3673	.134	2.3	6	44
GOLD KIST 552G	3590	.134	2.0	8	49
HELENA 1330DR	3561	.140	2.3	7	56

+EXPERIMENTALS. SEED OF THIS ENTRY MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
-BIRD RESISTANT.

TABLE 31. INDIVIDUAL LOCATION YIELD DATA FOR GRAIN SORGHUM - 1982

ENTRIES	ROWAN	ANSON	GUILFORD	MEAN
WARNER 744DR	5570*	4729*	3890*	4730**
FUNK'S G-522DR	5323*	4686*	4060*	4690*
PAYMASTER DR1125	5384*	4646	3965*	4665*
+PIONEER BRAND X8072	5189*	4319	4389*	4633*
GOLD KIST 712G	4796	4459	4551*	4602*
T-E Y77	5610**	4656	3400*	4555*
COKER 7675	5227*	4515	3911*	4551*
DORADO E	3940	5071*	4530*	4514*
PAYMASTER R109-A	4853	4200	4079*	4377*
-COKER 7681BR	4665	4359	4082*	4369*
WARNER 851DR	5098*	4655	3287*	4346*
GOLD KIST 802G	5256*	4258	3453*	4322*
HELENA 1225DR	4681	4194	4014*	4296*
TOPAZ	5314*	4337	3186	4279*
PIONEER BRAND 8222	5366*	4193	3267*	4275*
PIONEER BRAND 8815	4368	4186	4243*	4266*
RA 733GB	4142	4207	4421*	4257*
+PIONEER BRAND X8071	5123*	4547	2974	4215*
COKER 7605	4233	5359**	3022	4205*
PAYMASTER GR 1138	4018	3895	4628**	4180*
PAYMASTER DR1085	4458	4044	4029*	4177*
COKER 7723	5201*	4073	3214	4163*
NK BRAND 2660	4672	4204	3596*	4157*
-PAYMASTER BRY-93	4767	4473	3190	4143*
DEKALB DK-61	4709	4609	3109	4142*
NK BRAND 2670	5041*	4814*	2557	4137*
T-E DINERO	4872	4273	3257*	4134*
PIONEER BRAND 8311	4725	4119	3535*	4126*
FUNK'S G-611	4373	4048	3868*	4096*
DEKALB DK-64	4370	4372	3413*	4052*
RA 808GB	4364	4634	3056	4018*
MUSTANG	4374	3899	3642*	3971*
PIONEER BRAND 8515	4352	4222	3290*	3955*
WILSTAR 1330	4635	4787*	2430	3951*
DEKALB DK-59	4481	3899	3470*	3950*
T-E DINERO-R	4611	4213	2901	3908*
CORRAL	4054	4338	3189	3860*
-SAVANNA 5	4042	4355	2732	3710*
COKER 7623	4161	4312	2629	3701*
PIONEER BRAND 8303	4401	3885	2732	3673*
GOLD KIST 552G	4169	3693	2909	3590*
HELENA 1330DR	4242	3795	2646	3561*
B.L.S.D.	620	690	1408	NS
C.V. (%)	9	9	22	11

+EXPERIMENTALS. SEED OF THIS ENTRY MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY ALSO HAVE A DIFFERENT DESIGNATION.
-BIRD RESISTANT.
**HIGHEST YIELDER IN TEST.

Table 32. Performance data for late-planted grain sorghum - Pamlico County 1982.

Entries	Yield Lbs/A	Moisture	Head Compactness	Exsertion Inches	Plant Height Inches
Coker 7681BR	5214**	.216	2	6	50
Wilstar 1330	4806*	.209	1	8	62
DeKalb DK-64	4483	.209	1	7	54
Pioneer hybrid B815	4392	.194	2	5	62
Helena 1330DR	4344	.221	2	9	58
+Pioneer brand X8071	4224	.208	2	7	56
-Warner 744DR	4098	.223	1	8	52
Pioneer hybrid 8303	4072	.201	2	6	58
+Pioneer brand X8072	4029	.221	2	8	46
Funk's G-1701	3993	.209	1	4	48
DeKalb DK-38	3870	.191	1	8	54
Gold Kist 802G	3850	.212	1	5	46
Warner 839DR	3798	.212	2	7	48
Coker 7675	3759	.210	1	9	48
Helena 1225DR	3710	.208	1	7	46
T-E Y101-G	3604	.205	3	14	54
Pioneer brand 8222	3571	.202	1	6	46
Pioneer hybrid 8515	3531	.201	6	12	58
Coker 7623	3529	.190	1	10	56
Paymaster DR-1035	3478	.191	2	8	46
Gold Kist 552G	3412	.196	2	10	56
T-E Y-45-G	3265	.209	2	12	58
DeKalb DK-42	3252	.193	3	8	46
Pioneer hybrid 8311	3232	.194	1	6	46
Coker 7605	3196	.196	2	12	54
NK 2300	3058	.180	2	7	48
+Warner 684DR	2863	.196	1	8	50
RA 433A	2793	.189	1	8	48
NK 2244	2756	.185	2	12	50
Paymaster R-980	2265	.194	1	8	44
BLSD (K-50)	682				
C.V. (%)	13				

+Experimental. Seed of this entry may or may not be available in 1983 and may also have a different designation.
-Bird Resistant.
**Highest yielder in test.
*Not significantly different from highest yielder.

SOYBEANS

There are several high yielding soybean varieties available to the producer from which he may choose according to desired maturity date, lodging, pest resistance, etc. Information on the performance of commercial varieties and experimental lines grown in different locations in the state is provided in this report.

Entries: Experimental lines and commercial varieties developed by both public and private agencies are included in this program. Any individual or firm may make application for having entries included. A fee is charged on an entry basis. Personnel of the testing program may include entries about which further information is desired.

Agencies Sponsoring Entries	Address	Designation
Asgrow Seed Company	Kalamazoo, MI	A
Coker's Pedigreed Seed Company	Hartsville, SC	Coker
Delta & Pine Land Company	Scott, MS	Deltapine
Helena Chemical Company	Memphis, TN	HB, Wilstar, Brysoy
North American Plant Breeders	West Memphis, AR	Agripro, NAPB
Northrup King Company	Bolivar, TN	NK, McNair
N. C. Agric. Res. Ser. & USDA	Raleigh, NC	N
Pioneer Hi-Bred Int., Inc.	Waterloo, IA	Pioneer brand
Ring Around Products, Inc.	Montgomery, AL	RA, RAX

Test Locations: One full-season test was located in the Piedmont and three in the Coastal Plain; two late-planted tests were located also in the Coastal Plain and one in the Piedmont.

Field Plot Technique: For the full-season tests, plots consisted of four rows 22 feet long with a 38" or 36" row width; alleys were five feet. The center two rows were harvested to determine plot weight. For the

late-planted tests, plots consisted of five rows 22 feet long with a 38" or 30" row width; alleys were five feet. The center three rows were harvested to determine plot weight. Cultural practices are found in Table 32.

The tests were planted in a lattice design with three replications per location. The entries were divided into three major maturity groups--Group V, VI, and VII. The Group VII's included a few Group VIII entries. All entries in the full-season tests were not included in the late-planted tests and a few entries in the late-planted tests were not included in the full-season tests.

Seasonal Conditions: Weather conditions allowed normal planting of full-season tests although the spring continued to be cool and wet through most of June. The cool, wet spring and early summer may have been responsible for the earlier than normal flowering. High rainfall in certain parts of the state, particularly the Piedmont, delayed harvest of small grains and subsequent planting of soybeans; the Union County test was not planted until July 15. Adequate rainfall was experienced through most of the growing season except for a dry spell in August and September which affected certain test locations, e.g. Rowan County. Harvest conditions were not ideal. High rainfall delayed harvest of some tests until December and January. Insects did not appear to be a major problem at any test site in 1982. Soybean mosaic and bean pod mottle were observed at several locations. Phytophtoria root rot was observed at the Pasquotank location and appeared to be devastating to those entries not resistant.

Data: Data were collected on yield, moisture, lodging, plant height, date of 50% flower, date of pod maturity, seed size, and oil percent. Yields were calculated on plot weight and adjusted to 14% moisture. Moisture was

determined on each plot in the combine with a GAC-II moisture tester. Lodging was scored on a scale of 1-5 with 1 being no lodging and 5 being completely lodged. Plant height was determined by measuring from the ground to the top of the plant prior to harvest. Flowering date was determined when 50% of the plants had flowers in the top four nodes. Date of pod maturity was observed when 95% of the pods turned brown. Oil percent was determined at the USDA Soybean Laboratory.[3/]

Results: Group V soybeans are referred to as early-maturing soybeans; Group VI is the medium-maturing soybeans; and Groups VI and VIII comprise the late-maturing soybeans in the following discussion and tables. The full-season tests will be discussed first.

Table 34 lists a number of varieties and their characteristics all of which may not have been tested in 1982.

Asgrow A5474 and Bay were the top yielders with 30 bushels each in the early-maturing full-season tests with 23 others not significantly different (Table 36). The Rowan County test was quite variable due to the dry spell experienced during pod set. Deltapine 105 was the three and two-year leader (Table 35).

Coker 156 leads the medium-maturing group in the three and two-year average (Table 37). Centennial was the 1982 yield leader (Table 38) although 18 others did not yield significantly less.

Agripro AP71 was the three-year yield leader while Coker 368 and McNair 700 were the two-year yield leaders in the late-maturing group (Table 39). There were not any significant differences in yield, averaged across locations, in 1982 (Table 40).

[3/]Appreciation goes to Joe Burton and Linda Caldwell for their cooperation.

Forrest, Asgrow A5474, and Deltapine 105 were the two-year and one-year yield leaders in the late-planted, early-maturing tests (Tables 41 and 42). Yields were extremely low in Union County due primarily to its late-planting date (July 15). Yields were exceptional at Pasquotank County for a late-planted test.

Davis continues to be the yield leader for the medium-maturing group planted late (Tables 43 and 44). Moistures were exceptionally low for the tests harvested in January but deterioration and shattering wasn't noticeable.

Coker 368 and Deltapine 417 were the top yielders in the late-planted test at Wayne County for the late-maturing group (Table 46) while the Union County test appeared quite variable. Coker 368 is the two-year leader for this group (Table 45).

Flowering data appears incomplete for the full-season tests due to earlier-than-normal flowering which apparently was caused by either cool nights or the cloudy weather experienced in June and early July (Table 47).

Oil percentage appeared to be considerably higher than in 1981, a dry year, (Table 48). Seed size ranged from small seed of McNair 700 (27 grams/100) to the large seed of N79-2317 (10grams/100).

Table 33 Cultural practices for soybean performance trials - 1982.

County and Cooperator	Fertilizer Lbs/A	Herbicide	Soil Type	Date of Planting	Date of Harvest
		EARLY PLANTED TESTS			
Rowan County Edwin Hammill				May 14	January 18
Robeson County Charles Roberts	250 3-9-30	Treflan Vernam	Rains sandy loam	May 13	November 11
Duplin County Larry and Marvin Knowels	1 truck load turkey litter/A	Dyanap Lasso	Norfolk fine sandy loam	May 10	November 10
Washington County John Smith	3 lbs. copper	Lasso Blazer 2-4 DB	Portsmouth sandy loam	May 12	December 22
		LATE PLANTED TESTS			
Wayne County Wayland Price		Lasso	Exum very fine sandy loam	June 24	November 10
Pasquotank County John Spence		Lasso Lorox	Elkton fine sandy loam	June 28	November 11
Union County Jimmy Duncan		Dyanap		July 15	January 17

Table 34 Characteristics of soybean varieties in North Carolina.†

Variety	Maturity			Resistance			Height	Seed	Color		
	Group	Relative	Date¶	Shatter	Lodge	Nema§	Inches	Size	Flower	Pub.#	Hilum
A 5474	V	Early	Oct. 5-9	Ex.	Ex.	C1,3,4	30-34	Large	White	Tawny	Black
A 5618	V	Early	Oct. 11-15	Good	Ex.		31-35	Large	Purple	Gray	Buff
A 5939	V	Early	Oct. 10-14	Good	Good	C1,3,4	34-38	Med.	Purple	Tawny	Black
A 7372	VII	Late	Oct. 23-27	Ex.	Good	Ri	34-38	Med.	White	Tawny	Black
AgriPro 55	V	Early	Oct. 5-9	Good	Good		36-40	Small	Purple	Tawny	Black
AgriPro 70	VII	Late	Oct. 27-31	Ex.	Fair	Ri	43-47	Small	White	Tawny	Black
AgriPro 71	VII	Late	Oct. 25-29	Ex.	Fair	Ri	40-44	Med.	White	Gray	Buff
Bay	V	Early	Oct. 4-8	Good	Ex.		32-36	Large	Purple	Gray	Varies
Bedford	V	Early	Oct. 8-12	Good	Good	C3,4Ri,a	39-43	Small	White	Tawny	Black
Bragg	VII	Late	Oct. 26-30	Ex.	Fair	Ri	40-44	Med.	White	Tawny	Black
Braxton	VII	Late	Oct. 28-Nov. 2	Good	Fair	Ri,a	39-43	Large	Purple	Tawny	Black
Brooks	VII	Late	Oct. 25-29	Ex.	Fair		39-43	Med.	White	Brown	Brown
Brysoy 9	VI	Medium	Oct. 20-24	Ex.	Fair		40-44	Med.	Purple	Tawny	Black
Centennial	VI	Medium	Oct. 20-24	Ex.	Fair	C1,3Ri	36-40	Med.	Purple	Tawny	Black
Coker 136	V	Early	Oct. 10-14	Ex.	Good		36-40	Small	Purple	Gray	Buff
Coker 156	VI	Medium	Oct. 23-27	Good	Good		36-40	Small	White	Gray	Buff
Coker 237	VII	Late	Oct. 27-31	Good	Good		36-40	Med.	White	Tawny	Black
Coker 317	VII	Late	Oct. 27-31	Good	Good	C3,L	38-42	Med.	Purple	Gray	Varies
Coker 338	VIII	V. Late	Nov. 4-8	Good	Good		40-44	Large	White	Tawny	Brown
Coker 368	VIII	V. Late	Nov. 4-8	Good	Good	C3,Ri,L	40-44	Med.	White	Gray	Buff
Coker 488	VIII	V. Late	Nov. 4-8	Ex.	Ex.		41-45	Med.	Purple	Tawny	Brown
Dare	V	Early	Oct. 8-12	Fair	Good		32-36	Small	White	Gray	Buff
Davis	VI	Medium	Oct. 20-24	Fair	Fair		38-42	Med.	White	Gray	Buff
Deltapine 105	V	Early	Oct. 12-16	Good	Good		36-40	Med.	Purple	Gray	Varies
Deltapine 246	VI	Medium	Oct. 19-23	Good	Fair		34-38	Med.	Purple	Tawny	Black
Deltapine 345	V	Early	Oct. 13-17	Good	Ex.		39-43	Large	Purple	Tawny	Black
Deltapine 417	VII	Late	Oct. 29-Nov. 3	Good	Good		40-44	Med.	White	Gray	Buff
Deltapine 497	VII	Late	Oct. 26-30	Good	Good		40-44	Small	White	Tawny	Black

Table 34 Continued.

Variety	Maturity			Resistance			Height	Seed	Color		
	Group	Relative	Date¶	Shatter	Lodge	Nema§	Inches	Size	Flower	Pub.#	Hilum
Deltapine 506	VI	Medium	Oct. 22-26	Good	Fair		39-43	Med.	White	Tawny	Black
Duocrop	VII	Late	Oct. 26-30	Ex.	Good		45-49	Large	White	Gray	Buff
Essex	V	Early	Oct. 2-6	Good	Ex.		28-32	Small	Purple	Gray	Buff
FFR 557	V	Early	Oct. 10-14	Ex.	Good		35-39	Small	White	Tawny	Black
FFR 666	VI	Medium	Oct. 20-24	Ex.	Fair		31-35	Small	Purple	Tawny	Black
FFR 668	VI	Medium	Oct. 23-27	Good	Ex.		38-42	Med.	Purple	Gray	Varies
FFR 777	VII	Late	Oct. 26-30	Fair	Good		39-43	Med.	Purple	Gray	Buff
Forrest	V	Early	Oct. 8-12	Good	Good	C1,3,Ri	34-38	Small	White	Tawny	Black
Foster	VIII	V. Late	Nov. 4-8	Ex.	Fair	C3,Ri	35-39	Med.	Purple	Gray	Brown
GaSoy 17	VII	Late	Nov. 1-5	Ex.	Fair		41-45	Med.	White	Gray	Buff
Govan	VII	Late	Oct. 26-30	Ex.	Fair	Ri,a	38-42	Med.	White	Gray	Varies
Hutton	VIII	V. Late	Nov. 4-8	Ex.	Good	Ri	36-40	Large	Purple	Tawny	Black
Jeff	VI	Medium	Oct. 19-23	Good	Fair	C1,3,4	36-40	Med.	Purple	Tawny	Brown
Kershaw	VI	Medium	Oct. 20-24	Good	Fair		38-42	Med.	White	Gray	Buff
Lancer	VI	Medium	Oct. 17-23	Good	Ex.		37-41	Small	Purple	Gray	Black
Lee 74	VI	Medium	Oct. 20-24	Ex.	Fair	Ri	34-38	Small	Purple	Tawny	Black
McNair 500	V	Early	Oct. 12-16	Ex.	Good		35-39	Small	Purple	Tawny	Brown
McNair 600	VI	Medium	Oct. 20-24	Ex.	Fair		35-39	Small	Purple	Tawny	Black
McNair 700	VII	Late	Oct. 23-27	Good	Good		36-40	Med.	Purple	Tawny	Black
McNair 710	VII	Late	Oct. 27-Nov. 1	Good	Good		38-42	Large	Purple	Gray	Brown
McNair 770	VII	Late	Oct. 24-28	Good	Good	C1,3	36-40	Large	Purple	Gray	Brown
McNair 800	VII	Late	Oct. 26-30	Good	Fair		35-39	Med.	White	Gray	Buff
Mitchell	IV	V. Early	Sept. 22-26	Fair	Ex.		26-30	Med.	Purple	Tawny	Brown
Nathan	V	Early	Oct. 4-8	Good	Good	C3,4Ri	32-36	Small	White	Tawny	Black
Pickett 71	VI	Medium	Oct. 20-24	Ex.	Fair	C1,3	31-35	Small	Purple	Gray	Brown
Pioneer 5482	IV	V. Early	Oct. 4-8	Good	Ex.		31-35	Med.	White	Tawny	Black
Pioneer 6782	VI	Medium	Oct. 19-23	Good	Fair		38-42	Med.	Purple	Tawny	Black
Pioneer 9561	V	Early	Oct. 9-13	Good	Good		36-40	Med.	White	Tawny	Black

Table 34 Continued.

Variety	Maturity			Resistance			Height	Seed	Color		
	Group	Relative	Date¶	Shatter	Lodge	Nema§	Inches	Size	Flower	Pub.#	Hilum
RA 480	V	Early	Oct. 1-5	Ex.	Ex.		40-44	Med.	Purple	Tawny	Black
RA 481	V	Early	Oct. 6-10	Ex.	Good		38-42	Med.	White	Gray	Buff
RA 501A	V	Early	Oct. 4-8	Good	Good	C3	40-44	Med.	Purple	Tawny	Black
RA 502	V	Early	Oct. 3-7	Good	Good	C3	30-34	Med.	Purple	Brown	Black
RA 604	VI	Medium	Oct. 14-18	Good	Ex.	C1,3Ri	35-39	Med.	Purple	Tawny	Black
RA 605	VI	Medium	Oct. 15-19	Good	Good	C1,3,4	39-43	Med.	Purple	Tawny	Black
RA 606	VI	Medium	Oct. 14-18	Good	Fair	C3	38-42	Med.	Purple	Gray	Buff
RA 680	VI	Medium	Oct. 18-22	Ex.	Good	C3Ri	36-40	Med.	Purple	Tawny	Black
RA 701	VII	Late	Oct. 26-30	Good	Good	C3Ri	37-41	Large	Mixed	Tawny	Black
RA 800	VIII	V. Late	Nov. 4-8	Ex.	Fair	C3,Ri	44-48	Med.	Purple	Tawny	Black
Ransom	VII	Late	Oct. 26-30	Ex.	Ex.		36-40	Large	Purple	Tawny	Black
S 69-96	VI	Medium	Oct. 22-26	Good	Fair		36-40	Small	White	Gray	Buff
S 72-60	VII	Late	Oct. 26-30	Good	Fair		37-41	Med.	Purple	Tawny	Black
Sohoma	VI	Medium	Oct. 20-24	Ex.	Good		37-41	Med.	Purple	Gray	Varies
Ware	IV	V. Early	Sept. 22-26	Ex.	Ex.		23-27	Large	White	Gray	Buff
Wilstar 550	V	Early	Oct. 8-12	Ex.	Fair		34-38	Small	Purple	Tawny	Varies
Wilstar 790	VII	Late	Oct. 26-30	Good	Good		38-42	Med.	White	Tawny	Black
Wright	VII	Late	Oct. 26-30	Ex.	Fair	Ri,a	40-44	Med.	Purple	Tawny	Black
York	V	Early	Oct. 12-16	Fair	Good		31-35	Large	Purple	Gray	Buff

¶ - "Typical" dates of physiological maturity (safe from frost) when planted in mid-May at Raleigh, N. C.
§ - Soybean Cyst (C), with race number in subscript, or Root-Knot (R), M. arenaria (a) or M. incognita (i), or Lance (L).
# - Pubescence.
+ - Prepared by E. James Dunphy, Crop Science Extension Specialist (Soybeans), North Carolina State University, Raleigh, N. C., April 1982.

TABLE 35. PERFORMANCE OF EARLY PLANTED EARLY MATURING SOYBEANS COMBINED OVER LOCATIONS. THREE-YEAR AVERAGE 1980, 1981 AND 1982.

VARIETY	YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
DELTAPINE 105	38	1.4	37	.123
FORREST	36	1.4	35	.122
BAY	35	1.3	34	.125
COKER 136	35	1.4	35	.120
WILSTAR 550	34	1.3	36	.121
ASGROW A5618	33	1.3	31	.124
BEDFORD	33	1.6	39	.122
TWO-YEAR AVERAGE - 1981, 1982.				
DELTAPINE 105	41	1.8	39	.124
FORREST	40	1.7	36	.124
ASGROW A5474	40	1.6	35	.124
BAY	40	1.6	36	.129
PIONEER BRAND 9561	40	1.6	40	.126
COKER 136	38	1.7	38	.123
BEDFORD	37	2.1	42	.125
WILSTAR 550	37	1.6	39	.122
+HB-466D1-5	36	1.7	39	.125
ASGROW A5939	36	2.2	38	.124
ASGROW A5618	35	1.5	32	.128
AGRIPRO AP55	34	2.1	39	.127

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.

TABLE 36. PERFORMANCE OF EARLY PLANTED EARLY MATURING SOYBEANS 1982.

VARIETY	ROBESON YIELD BUS/A	DUPLIN YIELD BUS/A	ROWAN YIELD BUS/A	AVERAGE YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
ASGROW A5474	32*	38	20**	30**	1.4	35	.129
BAY	28	53**	8	30**	1.3	39	.136
+RAX 32	29	41	16*	29*	1.3	31	.130
PIONEER BRAND 5482	35**	40	11	29*	1.3	34	.129
+COKER 80-764	24	48*	14*	28*	1.3	33	.131
DELTAPINE 105	33*	50*	2	28*	1.3	39	.129
+DELTAPINE X544	28	43	13	28*	1.3	36	.133
BEDFORD	31*	37	15*	28*	1.3	43	.130
+DELTAPINE X529	33*	38	11	27*	1.3	34	.131
+DELTAPINE X532	27	44	10	27*	1.3	36	.130
PIONEER BRAND 9561	26	45	9	27*	1.3	41	.132
+COKER 79-5	29	34	14*	25*	1.3	29	.127
+HB-466D1-5	31*	37	8	25*	1.4	39	.128
FORREST	27	39	10	25*	1.3	39	.131
+N77-179	33*	35	8	25*	1.3	31	.127
+NK B501070	27	37	11	25*	1.4	42	.132
+N79-2317	27	32	15*	25*	1.3	30	.126
ASGROW A5939	27	32	13	24*	1.4	39	.129
COKER 136	23	42	8	24*	1.6	37	.131
+N79-2337	25	38	9	24*	1.4	36	.127
+COKER 355	25	36	11	24*	1.3	38	.128
ASGROW A5618	32*	38	1	24*	1.3	31	.134
+N80-53201	25	37	9	23*	1.6	35	.127
RA 502	25	35	6	22	1.3	43	.132
WILSTAR 550	23	37	5	22	1.3	41	.130
SHILOH	21	34	6	20	1.2	36	.127
AGRIPRO AP55	23	32	3	19	1.3	38	.131
B.L.S.D. (KRATIO=50)	6	7	7	10			
C.V. (%)	13	12	33	18			

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.
**HIGHEST YIELDER.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.

TABLE 37. PERFORMANCE OF EARLY PLANTED MEDIUM MATURING SOYBEANS COMBINED OVER LOCATIONS. THREE-YEAR AVERAGE 1980, 1981 AND 1982.

VARIETY	YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
COKER 156	40	1.5	33	.123
CENTENNIAL	38	1.4	37	.120
DELTAPINE 506	38	1.6	40	.120
DELTAPINE 246	38	1.6	31	.121
RA 680	37	1.4	37	.119
+N75-2213	37	1.7	38	.120
DAVIS	37	1.7	36	.121
BRYSOY 9	33	1.7	36	.121
	TWO-YEAR AVERAGE - 1981, 1982.			
COKER 156	43	1.9	36	.127
+HB-468D1-6	41	1.7	36	.121
+N75-2213	41	2.3	42	.122
+N73-1102	41	1.8	39	.121
CENTENNIAL	41	1.7	38	.123
NK S69-96	40	2.6	39	.125
DELTAPINE 506	40	2.1	45	.122
DELTAPINE 246	39	2.1	33	.125
RA 680	39	1.7	39	.122
DAVIS	39	2.4	40	.122
BRYSOY 9	35	2.3	38	.125

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.

TABLE 38. PERFORMANCE OF EARLY PLANTED MEDIUM MATURING SOYBEANS 1982.

VARIETY	ROBESON YIELD BUS/A	DUPLIN YIELD BUS/A	ROWAN YIELD BUS/A	AVERAGE YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
CENTENNIAL	30*	46*	20**	32**	1.3	38	.125
COKER 156	32*	45*	16*	31*	1.4	31	.129
+NK M751111	29	47*	15*	30*	1.2	31	.127
+COKER 80-931	27	47*	15*	30*	1.4	37	.130
MCNAIR 600	27	44*	14*	28*	1.4	39	.128
NK S69-96	31*	39*	14*	28*	1.7	39	.129
+NK B500471	30*	35	19*	28*	1.4	31	.127
+HB-468D1-6	30*	41*	13*	28*	1.3	34	.124
+NAPB 611	25	42*	15*	27*	1.2	34	.128
+N77-114	37**	38	5	27*	1.2	30	.125
DELTAPINE 506	25	49**	6	26*	1.3	42	.125
RA 606	23	43*	13*	26*	1.7	37	.126
DELTAPINE 246	25	38	16*	26*	1.3	29	.126
+N75-2213	29	43*	6	26*	1.7	39	.127
RA 604	27	34	15*	26*	1.6	39	.123
+RAX 75	24	38	15*	25*	1.3	38	.125
+RAX 76	24	39*	12*	25*	1.3	37	.125
+N73-1102	28	39*	8	25*	1.3	35	.125
JEFF	27	34	12*	25*	1.3	33	.126
DAVIS	24	37	8	23	1.7	34	.125
RA 680	23	39*	7	23	1.3	38	.124
BRADLEY	30*	30	8	23	1.7	33	.124
BRYSOY 9	24	31	12*	23	1.3	35	.126
SUMTER	21	32	5	19	1.6	41	.126
B.L.S.D. (KRATIO=50)	9	11	11	8			
C.V. (%)	16	15	47	16			

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.
**HIGHEST YIELDER.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.

TABLE 39. PERFORMANCE OF EARLY PLANTED LATE MATURING SOYBEANS COMBINED OVER LOCATIONS. THREE-YEAR AVERAGE 1980, 1981 AND 1982.

VARIETY	YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
AGRIPRO AP71	41	1.9	37	.123
GASOY 17	39	1.9	39	.126
COKER 237	39	1.6	37	.123
MCNAIR 700	39	1.5	35	.121
BRAXTON	39	1.6	43	.120
+N76-1507	38	1.8	33	.123
RANSOM	38	1.7	37	.123
FOSTER	38	1.9	38	.121
MCNAIR 770	37	1.6	33	.122
WILSTAR 790	37	1.6	40	.121
RA 701	37	1.7	39	.119
BRAGG	35	1.8	41	.120
HUTTON	33	1.8	38	.123
TWO-YEAR AVERAGE 1981, 1982.				
MCNAIR 700	45	1.9	38	.124
COKER 368	45	2.4	43	.127
NK S72-60	44	2.8	39	.123
COKER 237	44	2.0	40	.126
AGRIPRO AP71	44	2.6	39	.128
+N76-1507	44	2.5	35	.125
RANSOM	43	2.3	40	.125
BRAXTON	43	2.0	44	.121
RA 701	43	2.4	43	.121
GASOY 17	43	2.6	41	.128
MCNAIR 770	42	2.1	35	.125
DELTAPINE 497	42	2.2	45	.120
COKER 488	42	2.5	42	.125
FOSTER	41	2.7	38	.123
COKER 317	41	2.4	41	.129
WILSTAR 790	40	2.1	42	.124
BRAGG	40	2.5	44	.123
HUTTON	39	2.5	42	.125

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.

TABLE 40. PERFORMANCE OF EARLY PLANTED LATE MATURING SOYBEANS 1982.

VARIETY	ROBESON YIELD BUS/A	DUPLIN YIELD BUS/A	AVERAGE YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
MCNAIR 770	37*	39*	38**	1.5	32	.137
AGRIPRO AP71	33*	42*	37*	1.7	40	.138
GASOY 17	34*	41*	37*	1.8	36	.136
COKER 368	33*	42*	37*	1.5	40	.137
NK S72-60	38*	36	37*	1.8	33	.128
BRAXTON	32*	42*	37*	1.3	41	.132
+NAPB 705	35*	36	36*	1.5	37	.138
+RAX 83	32*	40*	36*	2.0	45	.135
DELTAPINE 497	31*	38*	35*	1.5	41	.129
FOSTER	33*	36	34*	1.7	36	.129
DELTAPINE 417	33*	36	34*	1.7	41	.135
COKER 488	33*	34	34*	1.7	40	.134
MCNAIR 710	23	44**	34*	1.5	36	.137
RA 800	42**	25	33*	1.7	33	.127
+HB-507D1-7	27	38*	33*	1.7	36	.129
+N76-1507	35*	31	33*	1.7	30	.135
+RAX 82	29*	36	32*	2.0	40	.131
MCNAIR 700	38*	27	32*	1.5	37	.133
+N79-1101	30*	33	31*	1.5	37	.135
COKER 237	27	36	31*	1.5	37	.133
RANSOM	29*	33	31*	1.5	38	.138
+F-77-1797	30*	33	31*	1.7	35	.129
COKER 317	26	35	31*	1.7	38	.140
ASGROW A7372	25	33	29*	1.5	39	.132
RA 701	34*	23	29*	1.5	38	.129
BRAGG	26	30	28	1.7	40	.130
WILSTAR 790	33*	20	27	1.5	38	.134
HUTTON	28*	20	24	1.7	36	.134
N80-5023	27	21	24	1.5	40	.132
B.L.S.D. (KRATIO=50)	15	8	20			
C.V. (%)	21	16	19			

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.
**HIGHEST YIELDER.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.

TABLE 41. PERFORMANCE OF LATE PLANTED EARLY MATURING SOYBEANS COMBINED OVER LOCATIONS. TWO-YEAR AVERAGE 1981 AND 1982.

VARIETY	YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
FORREST	32	1.0	30	.124
ASGROW A5474	30	1.0	29	.123
DELTAPINE 105	29	1.0	30	.126
ASGROW A5939	28	1.0	29	.124
BEDFORD	27	1.0	30	.123
BAY	26	1.0	26	.125
AGRIPRO AP55	25	1.0	32	.125
ASGROW A5618	24	1.0	26	.127

TABLE 42. PERFORMANCE OF LATE PLANTED EARLY MATURING SOYBEANS 1982.

VARIETY	PASQUOTANK YIELD BUS/A	WAYNE YIELD BUS/A	UNION YIELD BUS/A	AVERAGE YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
FORREST	43**	38**	12**	31**	1.0	29	.126
ASGROW A5474	43**	32*	6	27*	1.0	29	.124
DELTAPINE 105	39*	35*	4	26	1.0	28	.126
BEDFORD	35*	30*	7*	24	1.0	27	.126
ASGROW A5939	41*	23	8*	24	1.0	29	.126
BAY	33*	26	7*	22	1.0	25	.129
AGRIPRO AP55	33*	29	3	22	1.0	32	.126
ASGROW A5618	33*	27	2	21	1.0	27	.129
B.L.S.D. (KRATIO=50)	NS	9	6	5			
C.V. (%)	12	9	53	5			

**HIGHEST YIELDER.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.

TABLE 43. PERFORMANCE OF LATE PLANTED MEDIUM MATURING SOYBEANS COMBINED OVER LOCATIONS. TWO-YEAR AVERAGE 1981 AND 1982.

VARIETY	YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
DAVIS	33	1.0	32	.130
NK S69-96	31	1.0	34	.130
+N75-2213	30	1.0	34	.130
COKER 156	29	1.0	28	.132
DELTAPINE 506	29	1.0	32	.131
+N73-1102	29	1.0	33	.130
+HB-468D1-6	29	1.0	31	.130
CENTENNIAL	28	1.0	31	.132
DELTAPINE 246	27	1.0	30	.132
BRYSOY 9	27	1.0	32	.132

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.

TABLE 44. PERFORMANCE OF LATE PLANTED MEDIUM MATURING SOYBEANS 1982.

VARIETY	WAYNE YIELD BUS/A	UNION YIELD BUS/A	AVERAGE YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
DAVIS	42*	18*	30**	1.0	34	.120
+N75-2213	43*	16*	29*	1.0	37	.119
BRADLEY	38	20**	29*	1.0	32	.119
+N77-114	43*	11*	27*	1.0	28	.117
NK S69-96	45**	8	26*	1.0	34	.119
+NAPB 611	40	13*	26*	1.0	27	.120
DELTAPINE 506	39	14*	26*	1.0	29	.121
SUMTER	37	12*	25*	1.0	39	.119
BRYSOY 9	41*	8	25*	1.0	32	.120
COKER 80-931	39	10*	24*	1.0	27	.119
COKER 156	36	12*	24*	1.0	28	.121
CENTENNIAL	37	11*	24*	1.0	28	.119
+HB-468D1-6	37	11*	24*	1.0	34	.118
+N73-1102	37	7	22	1.0	34	.121
JEFF	33	10*	21	1.0	32	.121
DELTAPINE 246	33	10*	21	1.0	30	.119
B.L.S.D. (KRATIO=50)	5	12	7			
C.V. (%)	9	45	12			

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.
**HIGHEST YIELDER.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.

TABLE 45. PERFORMANCE OF LATE PLANTED LATE MATURING SOYBEANS COMBINED OVER LOCATIONS. TWO-YEAR AVERAGE 1981 AND 1982.

VARIETY	YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
COKER 368	33	1.0	36	.131
FOSTER	32	1.0	33	.131
+N76-1507	31	1.0	33	.130
DUOCROP	31	1.0	32	.124
AGRIPRO AP71	30	1.0	32	.129
DELTAPINE 497	30	1.0	33	.129
GASOY 17	30	1.0	32	.132
BRAGG	30	1.0	35	.129
MCNAIR 700	30	1.0	30	.128
WILSTAR 790	29	1.0	34	.129
COKER 488	29	1.0	37	.132
COKER 237	27	1.0	29	.130
RANSOM	27	1.0	34	.129
COKER 317	27	1.0	32	.133
HUTTON	24	1.0	29	.129

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.

TABLE 46. PERFORMANCE OF LATE PLANTED LATE MATURING SOYBEANS 1982.

VARIETY	WAYNE YIELD BUS/A	UNION YIELD BUS/A	AVERAGE YIELD BUS/A	LODGING	PLANT HEIGHT INCHES	MOISTURE
COKER 368	48**	18*	33**	1.0	34	.118
FOSTER	41	20*	30*	1.0	30	.119
+NAPB 705	38	22**	30*	1.0	37	.122
+F-77-1797	40	19*	30*	1.0	34	.120
+N76-1507	40	16*	28*	1.0	35	.119
DELTAPINE 417	45*	8	27*	1.0	34	.121
COKER 488	35	17*	26*	1.0	35	.121
BRAGG	35	17*	26*	1.0	32	.119
ASGROW A7372	36	14*	25*	1.0	29	.119
GASOY 17	33	16*	25*	1.0	30	.120
WILSTAR 790	34	15*	25*	1.0	33	.120
DELTAPINE 497	39	11	25*	1.0	30	.122
AGRIPRO AP71	35	13*	24*	1.0	32	.119
+HB-507D1-7	39	9	24*	1.0	34	.118
MCNAIR 700	37	10	24*	1.0	29	.119
COKER 317	35	11	23	1.0	28	.121
DUOCROP	32	12	22	1.0	30	.121
COKER 237	28	14*	21	1.0	28	.120
RANSOM	32	9	21	1.0	34	.118
HUTTON	26	12	19	1.0	26	.120
B.L.S.D. (KRATIO=50)	4	10	10			
C.V. (%)	8	36	16			

+EXPERIMENTALS. SEED OF THESE VARIETIES MAY OR MAY NOT BE AVAILABLE IN 1983 AND MAY HAVE A DIFFERENT DESIGNATION.
**HIGHEST YIELDER.
*NOT SIGNIFICANTLY DIFFERENT FROM THE HIGHEST YIELDER.

Table 47 Flowering and pod maturity dates by maturity groups - 1982.

Variety	Flowering Date Full Season[1]	Flowering Date Double-Crop[2]	Pod Maturity Date Full Season[1]	Pod Maturity Date Double Crop[2]
		GROUP V		
Agripro AP55		8-9		10-15
Asgrow A5474		8-8		10-17
Asgrow A5618		8-8		10-17
Asgrow A5939		8-9		10-17
Bay		8-7		10-18
Bedford		8-9		10-18
Deltapine		8-13		10-19
Forrest		8-7		10-19
		GROUP VI		
Brysoy 9		8-15	10-9	10-28
Centennial		8-15	10-11	10-28
+Coker 80-931		8-16	10-10	10-28
Coker 156		8-15	10-10	10-29
Davis		8-15	10-5	10-28
Deltapine 246		8-15		10-26
Deltapine 506		8-15	10-10	10-29
+HB-468D1-6		8-15	10-12	10-30
Sumter		8-15		10-28
Jeff		8-15	10-5	10-27
McNair 600			10-9	
+N73-1102		8-14	10-5	10-29
+N75-2213		8-15	10-5	10-31
+N77-114		8-8		10-26
+NAPB-611		8-16	10-11	10-29
+NK B500471			10-9	
+NK M751111			10-8	
NK S69-96		8-15	10-10	10-29
RA 604			10-5	
RA 606			10-8	
+RA 680			10-11	
Bradley		8-14		10-30
		GROUPS VII AND VIII		
Agripro AP71	7-15	8-15	10-22	10-31
Asgrow A7372	7-17	8-15	10-11	10-30
Bragg	7-13	8-15	10-20	10-31
Braxton	7-14		10-24	
Coker 237	7-13	8-15	10-24	10-29
Coker 317	7-21	8-22	10-25	11-1
Coker 368	7-23	8-21	11-3	11-1
Coker 488	7-22	8-21	10-25	11-1
Deltapine 417	7-23	8-19	10-25	11-2
Deltapine 497	7-23	8-20	10-25	10-31
Duocrop		8-16		10-31
+F-77-1797	7-21	8-21	10-26	11-1
Foster	7-18	8-21	10-26	10-31
GaSoy 17	7-22	8-16	10-25	10-31
+HB-50701-7	7-20	8-15	10-25	11-1
Hutton	7-17	8-16	10-22	10-31
McNair 700	7-15	8-15	10-5	10-31
McNair 710	7-17		10-26	
McNair 770	7-17		10-27	
+N76-1507	7-15	8-16	10-25	11-1
+N79-1101	7-11		10-29	
+N80-5023	7-11		10-22	
+NAPB 705	7-17	8-15	10-26	10-31
NK S72-60	7-12		10-25	
RA 701	7-18		10-22	
RA 800	7-15		10-24	
Ransom	7-11	8-15	10-11	10-31
+RAX 82	7-13		10-25	
+RAX 83	7-17		10-25	
Wilstar 790	7-15	8-16	10-23	11-1

[1] Data taken at Duplin County location.

[2] Data taken at Wayne County location.

+Experimentals. Seed of these may or may not be available in 1983 and may have a different designation.

Table 48 Oil percentage analyses and seed size.

Variety	Oil %	Seed[1/] Size grams/100	Variety	Oil %	Seed Size grams/100
		GROUP V			
Agripro AP55	24.0	18	Forrest	25.3	20
Asgrow A5474	22.2	18	HB 466D1-5	24.2	19
Asgrow A5618	25.9	19	N 77-179	26.1	18.5
Asgrow A5939	24.7	21	N 79-2317	27.5	10
Bay	25.0	18.5	N 79-2337	25.4	22
Bedford	24.6	24	N 80-53201	23.6	21.5
Coker 79-5	21.4	17	NK B501070	24.0	18
Coker 80-764	23.6	20	Pioneer brand 5482	25.5	18
Coker 136	24.2	18.5	Pioneer brand 9561	24.6	18
Coker 355	22.7	22	RA 502	23.3	23
Deltapine 105	24.3	17	RA X32	24.6	18.5
Deltapine X529	30.4	19.5	Shiloh	23.7	21
Deltapine X532	26.7	19	Wilstar 550	23.1	21.5
Deltapine X544	24.8	18.5			
		GROUP VI			
Brysoy 9	22.7	21.5	N 75-2213	23.6	21
Bradley	22.9	23.5	N 77-114	30.9	18
Centennial	24.8	22	NAPB 611	23.8	23
Coker 80-931	27.8	22.5	NK B500471	24.1	22
Coker 156	23.5	19	NK M751111	27.2	23
Davis	22.7	18.5	NK S69-96	23.6	21
Deltapine 246	24.0	18	RA 604	22.6	23
Deltapine 506	26.2	18	RA 606	21.9	23
HB 468D1-6	24.2	22.5	RA 680	22.6	24.5
Jeff	25.3	23	RAX 75	26.0	19
McNair 600	23.9	23	RAX 76	25.6	18.5
N 73-1102	23.0	19	Sumter	23.2	21
		GROUP VII			
Agripro AP71	23.0	24	McNair 700	23.7	27
Asgrow A7372	24.1	22	McNair 710	27.0	21
Bragg	25.7	21	McNair 770	26.4	18
Braxton	23.9	19	N 76-1507	23.8	22.5
Coker 237	22.9	23	N 79-1101	24.2	21
Coker 317	21.3	19	N 80-5023	20.4	19
Coker 368	23.0	19	NAPB 705	22.3	20.5
Coker 488	22.6	21	NK S72-60	24.2	22
Deltapine 417	23.4	19	RA 701	22.0	25
Deltapine 497	21.5	23.5	RA 800	21.7	23
F 77-1797	22.9	21	Ransom	25.5	22
Foster	23.3	23	RAX 82	22.0	20
GaSoy 17	22.3	21	RAX 83	24.4	19.5
HB 507D1-7	23.3	21	Wilstar 790	22.3	26
Hutton	24.2	21			