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NORTH CAROLINA
MEASURED CROP PERFORMANCE
SOYBEAN AND COTTON 1999

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PERFORMANCE OF SOYBEAN AND COTTON**IN NORTH CAROLINA****INTRODUCTION**

With the large number of commercially available and prospective hybrids and varieties of soybean and cotton, 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 growers need up-to-date, unbiased, reliable information. The Official Variety Testing Program, through this report, seeks to provide that type of information.¹

The first section of this report is concerned with soybean and the second section deals with cotton. Both sections are complete in that they contain information on experimental procedure, location of the tests (Figure 1), a discussion of the data for 1999,² 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 these two crops.

Growers are cautioned against making varietal selection decisions based on an individual location in any one year. True varietal performance may have been masked by the unusual weather conditions experienced at any one location or any one growing season.

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, Phil Johnson, Dwight Parrish, Ken Barnes, and Johnny Denton, assisted in conducting these tests. Jane Dove Long prepared the text for this bulletin.

² Statistical analyses were made in the Statistical Laboratory and Computing Center by Mrs. Sandra Donaghy and Mrs. Joy Smith.

Comparing Hybrids and Varieties

Performance of a hybrid or variety cannot be tested with absolute precision. Although the tests are conducted in a uniform manner, as much as possible, uncontrollable variability exists among experimental plots due to soil type, 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) are 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.

The coefficient of variability (C.V.) is listed as a general indicator of population variability; it does not, however, always indicate level of precision. The coefficient of determination (R^2) is a better measure of the level of precision because it indicates the amount of variation accounted for in the trial. The higher the R^2 value the more precise the trial. Thus, relative precision among various trials can be compared. The standard error of the mean (s.e.) is also listed as a general indicator of precision since it reveals how well the true mean was estimated. The formula for the s.e. is the square root of the error variance divided by the square root of the number of replicates. The error degree of freedom (Error d.f.) used to test varieties or hybrids is listed along with the mean of the test.

Hybrid or varietal performance may appear inconsistent among locations within an area or among years in a particular area, thus it is important

ADDENDUM

TWO-YEAR AVERAGE PERFORMANCE OF ROUNDUP READY GROUP V EARLY-PLANTED
EARLY-MATURING NON STRESSED SOYBEAN COMBINED OVER LOCATIONS 1998-1999.

BRAND VARIETY OR VARIETY	YIELD BU/A	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Asgrow AG 5602RR	40	1.7	36	10-24
Asgrow AG5401RR	40	1.9	38	10-20
FFR RT557N	39	2.7	37	10-19
Hartz H5013RR	39	3.2	35	10-24
FFR RT5485N	39	1.6	36	10-19
Hartz H5545RR	38	2.8	36	10-22
USG 7557RR	38	2.2	36	10-21
USG 7547RR	38	1.8	36	10-21
NK S53-Q7	37	1.6	34	10-19
FFR RT517N	33	2.2	35	10-18

#Pod maturity data collected at Johnston county.

Note: Number of locations equal nine.

TWO-YEAR AVERAGE PERFORMANCE OF ROUNDUP READY GROUP V EARLY-PLANTED
LATE-MATURING NON STRESSED SOYBEAN COMBINED OVER LOCATIONS 1998-1999.

BRAND VARIETY OR VARIETY	YIELD BU/A	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Asgrow AG 5901RR	44	2.0	37	10-28
Pioneer 95B71RR	41	1.9	35	10-23
Deltapine DP 5806RR	41	2.3	37	10-28
Deltapine DP 5960RR	39	2.0	38	10-28
Deltapine DP 5644RR	39	2.2	36	10-25
FFR RT587N	38	2.0	37	10-24
Asgrow AG 5602RR	38	1.9	37	10-24
Hartz H5350RR	38	2.5	35	10-23
FFR RT560	38	2.3	35	10-23
Hartz H5181RR	36	3.5	37	10-30
Asgrow AG5801RR	35	1.7	36	10-25
Sure Grow SG 597RR	34	2.1	39	10-26

#Pod maturity data collected at Johnston county.

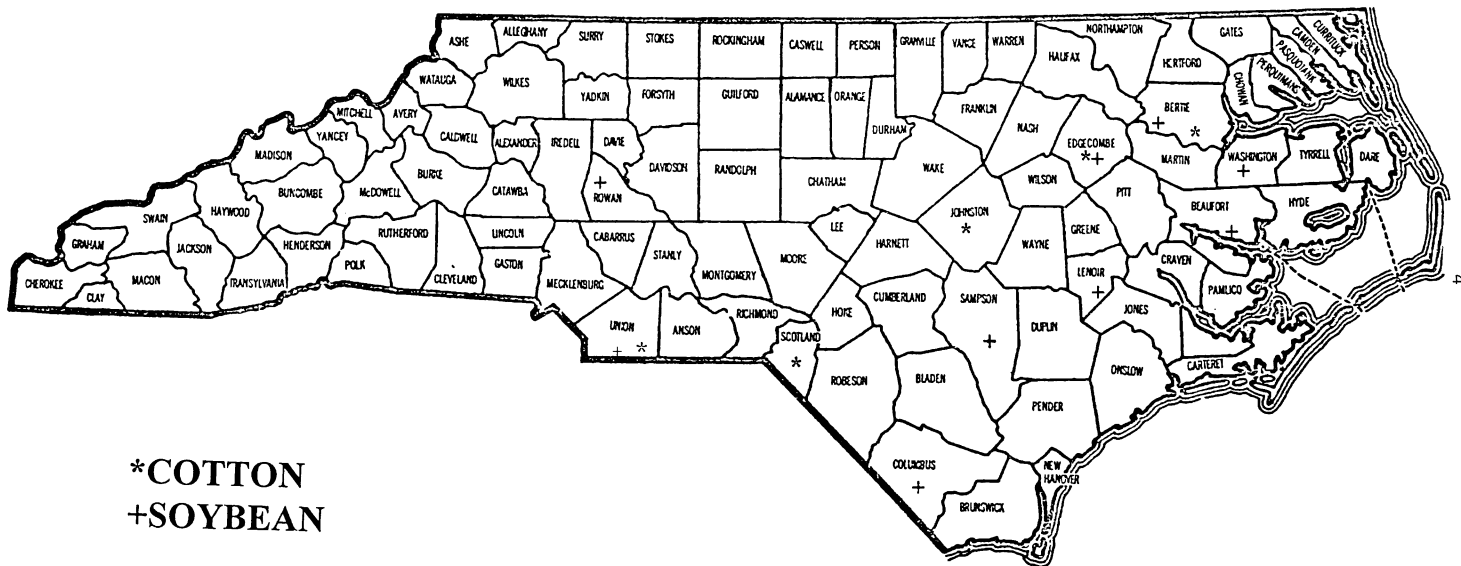
Note: Number of locations equal nine.

for the reader to examine results from more than one location or more than one year at a particular location to obtain a more accurate picture of relative hybrid or varietal performance. Individual location data are not normally reported for soybean or cotton. An effort has been made to facilitate comparisons across 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 its yield. 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 or hybrid when first determining if it is adapted to his/her farm. Research conducted at North Carolina State University and several other universities has consistently shown a significant yield advantage where professionally grown/certified seed is used rather than "farmer saved" or "brown bagged" seed. These tests were planted with professionally grown/certified seed provided by the sponsoring agencies. Farmers who use inferior seed sources can expect accompanying decreases in performance.

LOCATION OF OFFICIAL VARIETY TESTS



Soybean

Bertie County, Peanut Belt Research Station, Lewiston, NC.
Steve Barnes, Superintendent.

Columbus County, Border Belt Tobacco Research Station, Whiteville, NC
Ty Marshall, Superintendent.

Sampson County, Horticultural Crops Research Station, Clinton, NC
Jimmie Prince, Superintendent.

Union County, Everett Medlin, PO Box 3221, Monroe, NC
Agricultural Extension Agent, Tom Pegram, cooperating.

Washington County, Tidewater Research Station, Plymouth, NC
John Smith, Superintendent.

Late Soybean Test After Small Grain

Beaufort County, Circle Groves Farms, PO Box 339, Belhaven, NC 27810
Agricultural Extension Agent, Rod Gurganus, cooperating.

Lenoir County, Lower Coastal Plain Research Station, Kinston, NC
Sandy Barnes, Superintendent.

Rowan County, Piedmont Research Station, Salisbury, NC
Raymond Coltrain, Superintendent.

Washington County, Tidewater Research Station, Plymouth, NC
John Smith, Superintendent.

Cotton

Bertie County, Peanut Belt Research Station, Lewiston, NC,
Steve Barnes, Superintendent.

Edgecombe County, Upper Coastal Plain Research Station, Rocky Mount, NC
Clyde Bogle, Superintendent

Johnston County, Central Crops Research Station, Clayton, NC
George Clark, Superintendent.

Scotland County, Allan McLaurin, 231 E Cronly St., Laurinburg, NC
Agricultural Extension Agent, Dave Morrison, cooperating.

Union County, Greg Hargett, 3505 Landsford Rd., Marshville, NC
Agricultural Extension Agent, Tom Pegram, cooperating

SOYBEAN

There are many 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 in these tests and their contact person, address, and entry designation are listed below in Table 1. Public varieties are listed in Table 2.

Table 1. Name, contact person, and addresses of sponsoring agencies in the 1999 North Carolina Soybean Performance Trials along with designation used to identify the varieties in the trials.

Agency and Contact Person	Address	Designation
AgriBioTech Jim Kurzanski	120 Corporate Park Drive Henderson, NV 89014 702-566-2440	Hystest
Agri Pro Seeds, Inc. Al Hoggard	761 Walnut Knoll Lane Memphis, TN 38018 901-844-7340	Agripro Hyperperformer
Asgrow Seed Company Walter Mayhew	PO Box 359 Marion, AR 72364 870-739-4431	Asgrow
Delta King Seed Co. T. J. Lawhon	PO Box 970 McCrary, AR 72101 870-731-5484	Delta King
Delta & Pine Land Co. Dru Rush	8339 Appleton Rd. Brewton, AL 334-867-3419	Deltapine

Hornbeck Seed Company James Thomas	PO Box 347 210 Drier Road DeWitt, AR 72042 870-946-2087	HBK
Hartz Seed Co. Richard Dougherty	PO Box 6369 Kinston, NC 919-523-9096	Hartz H
Monsanto Diane Freeman	3100 Sycamore Road DeKalb, IL 60115 815-758-3461	DeKalb CX
Novartis Seeds, Inc. Bill Pritchett	5011 Hwy 96 S Oxford, NC 27565 919-690-1623	NK
Pioneer Hi-Bred Int., Inc. Dennis McCoy	435 E. Smith Ave. Winterville, NC 28590 252-355-2017	Pioneer
Southern Elite Genetics Assoc. Keller Newton	PO Box 2061 Statesboro, GA 30459 912-489-4654	SGA
Southern States Cooperative, Inc. Howard J. Tabor	PO Box 26234 Richmond, VA 23260 804-281-1203	FFR
Sure Grow Seed, Inc. Ken Lege	7265 Hwy 9 South Centre, AL 35960 800-633-2226	SG
UniSouth Genetics, Inc. David McKinney	2640-C Nolanville Rd. Nashville, TN 37211 800-505-3133	USG

Table 2. Soybean public varieties.

State Responsible For Development	Variety
Alabama	Carver
Georgia	Cook
Missouri	Anand
North Carolina	Brim, Clifford, Young, NC experimentals
South Carolina	Dillon, Musen, SC 87-119, SC 89-147, SC 91-2007, SC, 92-2482
Virginia	Hutcheson, Essex, VA experimentals

Test Locations: Five full season tests were located in the Coastal Plain with one in the Piedmont; three late-planted tests were located also in the Coastal Plain and one in the Piedmont.

Data: Data collected on yield, moisture, lodging, pod maturity, and plant height. Yields were calculated on plot weight and adjusted to 14% moisture. Lodging was scored on a scale of 1-5 with "1" being no lodging and "5" being completely lodged before harvest; this does not necessarily reflect harvest loss. Plant height was determined by measuring from the ground to the top of the plant prior to harvest. Pod maturity data is the date when 95% of the pods turn brown; soybeans should be ready to harvest 10 days after this date given optimum harvest conditions. The pod maturity data were taken at Johnston county where the soybeans were planted on June 22.

Seasonal Conditions: Planting for the full-season trials was on time but soil moisture was suboptimum. The Bertie county test was discarded due to poor stands; late-planted trials were planted on time; harvest of all trials was early or ontime (Table 3 and accompanying weather graphs). Below-normal rainfall was experienced in May and June at some locations, July and early August during flowering at nearly all locations. Temperatures (heat units) were above average for most of the season. Excessive rainfall was experienced at all locations in September due to Hurricanes Dennis, Floyd, and Irene.

Results: Soil test results are shown in Table 4. All data were separated into stress (≤ 25 bu/a) and nonstress (> 25 bu/a) environments as well as roundup ready versus conventional. Data are shown by maturity group with maturity group IV in Tables 5-7, maturity group V in Tables 8-17, maturity group VI in Tables 18-23, and maturity groups VII-VIII in Tables 24-29. Maturity group IV soybean were only planted at Union and Washington counties.

Roundup-ready variety data are shown in Tables 5, 6, 7, 14, 15, 16, 17, 21, 22, 23, 27, 28, and 29. The roundup-ready trials were planted

at all locations. A few roundup-ready varieties are also included in the conventional tests for comparison purposes.

For those who wish to compare a roundup-ready variety, for example, with a conventional variety one may only do so by examining the relative performance to a common variety. For example, Pioneer 95B41RR is in both the conventional test (Table 9) and the roundup test (Table 14); if one wishes to compare Hartz H55545RR with Hutcheson then compute the relative performance of each to Pioneer 95B41RR. Thus Hutcheson performed 20% better than Hartz H5545RR ignoring herbicide considerations.

Interpreting Data: Research has shown that the best data to use in selecting varieties are two-year multi-location data, e.g. Tables 5, 8, 11, 18, 21, 24, and 27.

Table 3. Cultural practices for soybean performance trials - 1999.

Location by County	Row Width (inches)	Fertilizer Lbs/A	Soil Type	Date of Planting	Date of Harvest+
EARLY PLANTED TESTS					
Columbus	36	350 5-10-30 MG 31b.	Norfolk fine sandy loam	19 May	27 Oct (VE, VL, VIC) 8 Nov (VIRR, VII)
Edgecombe	36	600 5-10-10	Goldsboro/Lynchburg fine sandy loam	25 May	11 Nov
Sampson	3	400 3-5-30	Wagram loamy sand	20 May	28 Oct (VE, VL) 8 Nov (VI, VII)
Union	Drilled 7 1/2		Tatum	19 May	25 Oct (VE) 3 Nov (VL, VI)
Washington (Group IV)	38 Drilled 7 1/2	200 0-0-60 MG 1.65 lb	Hyde silt loam	21 May	29 Oct (IV, VE) 9 Nov (VL, VI)
LATE PLANTED TESTS					
Beaufort	30		Ponzer	24 Jun	16 Nov
Lenoir	38	300 5-10-30	Goldsboro sandy loam	29 Jun	12 Nov
Rowan	Drilled 7 1/2		Hiwasee clay	24 Jun	15 Nov
Washington	38		Cape Fear loam	24 Jun	9 Nov

E=Early Maturing Subgroup

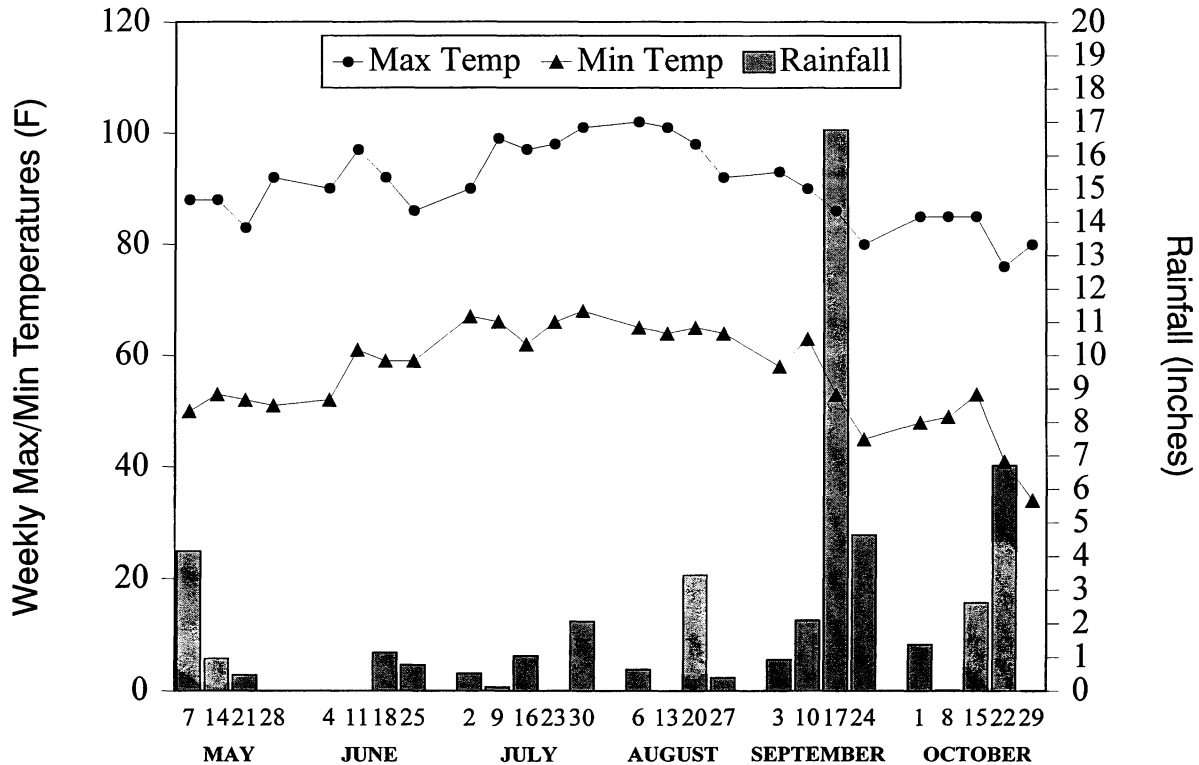
L=Late Maturing Subgroup

Table 4. Soil test results, soybeans - 1999.

Location by county	HM %	W-V	CEC	BS	Ac	pH	P-I	K-I	Ca %	Mg %	Mn-I	Zn-I	Cu-I
Early Planted													
Columbus	0.32	1.25	2.5	76	0.6	5.7	66	48	51.0	15.0	50	51	58
Edgecombe	0.81	1.39	4.7	81	0.9	5.7	41	48	59.0	18.0	56	32	44
Sampson	1.67	1.43	8.2	93	0.6	6.1	68	101	60.0	27.0	38	131	33
Union	0.46	0.97	13.6	96	0.5	6.6	472	176	72.0	19.0	112	826	1235
Washington	2.84	1.07	9.4	83	1.6	5.8	279	69	64.0	14.0	37	230	195
Late Planted													
Beaufort	5.53	0.85	10.7	61	4.2	4.3	96	58	45.0	13.0	37	476	57
Lenoir	0.51	1.37	2.9	72	0.8	5.2	316	48	53.0	11.0	42	64	48
Rowan	0.09	1.07	7.7	86	1.1	5.5	63	51	59.0	23.0	778	115	148
Washington	4.95	1.05	10.1	75	2.5	5.4	48	76	50.0	22.0	18	48	37

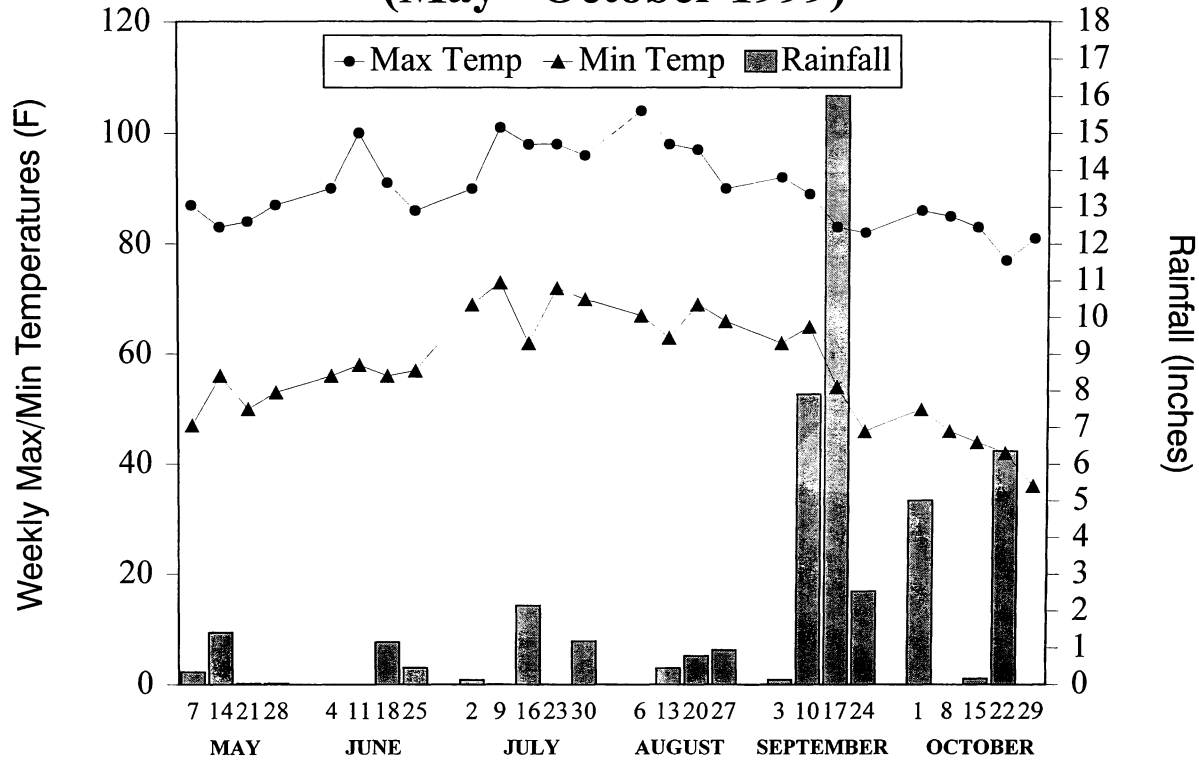
Columbus Co. Weekly Weather Data

(May - October 1999)



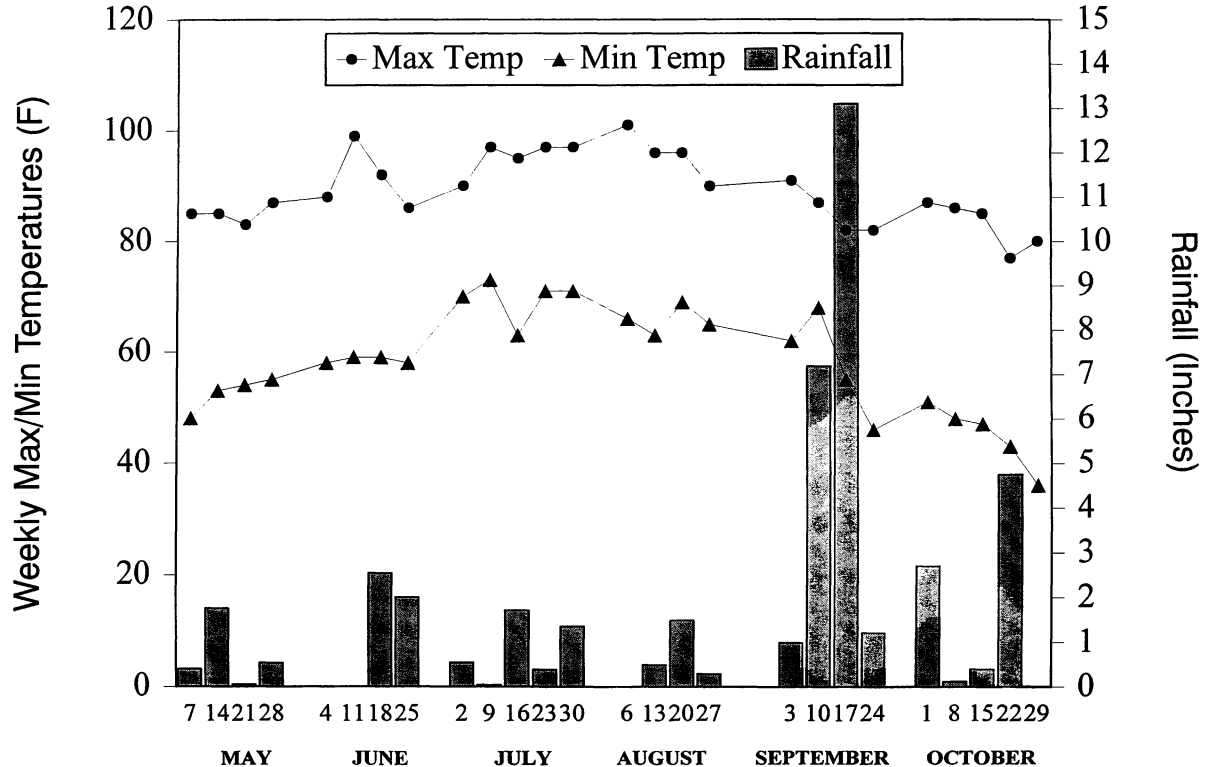
Edgecombe Co. Weekly Weather Data

(May - October 1999)



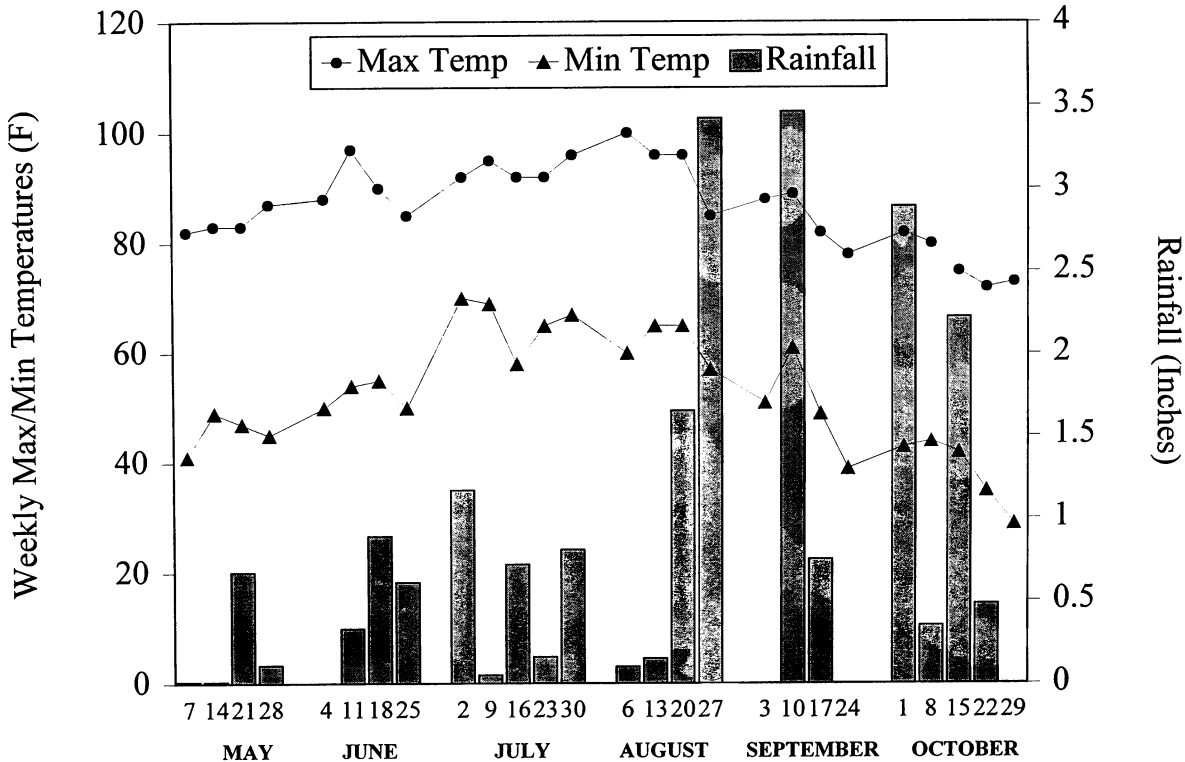
Lenoir Co. Weekly Weather Data

(May - October 1999)



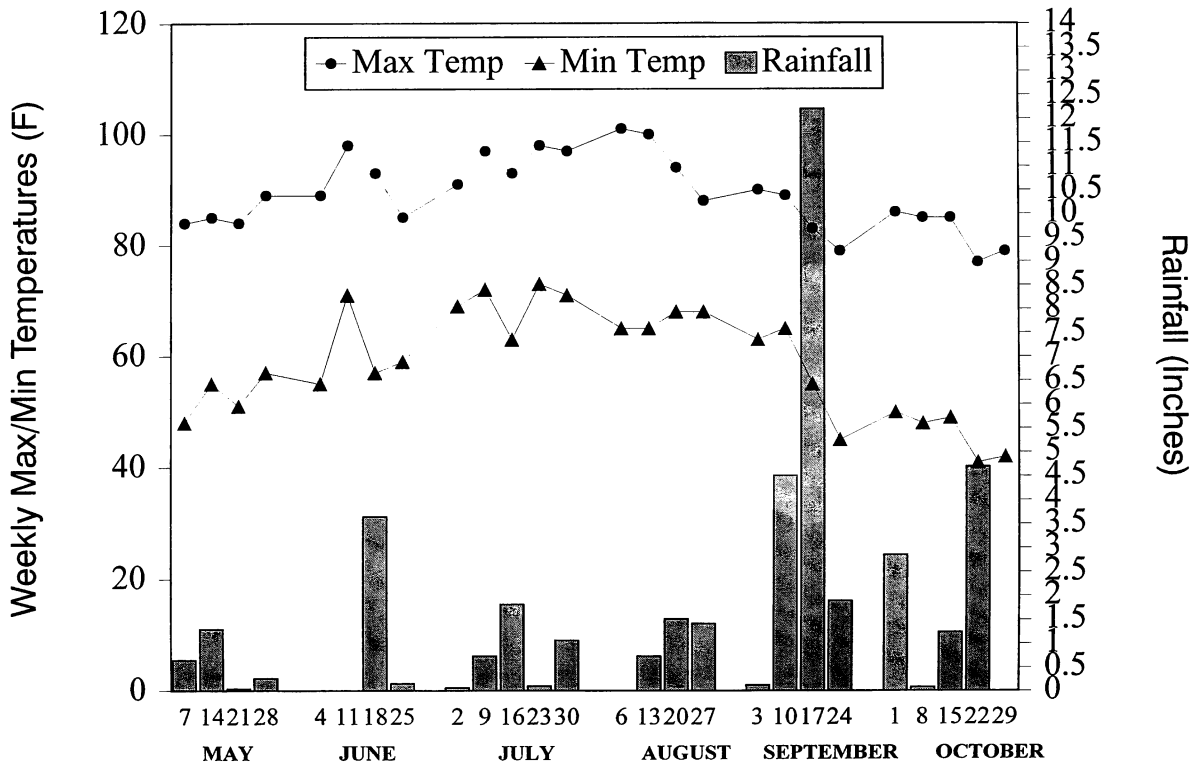
Rowan Co. Weekly Weather Data

(May - October 1999)



Sampson Co. Weekly Weather Data

(May - October 1999)



Washington Co. Weekly Weather Data

(May - October 1999)

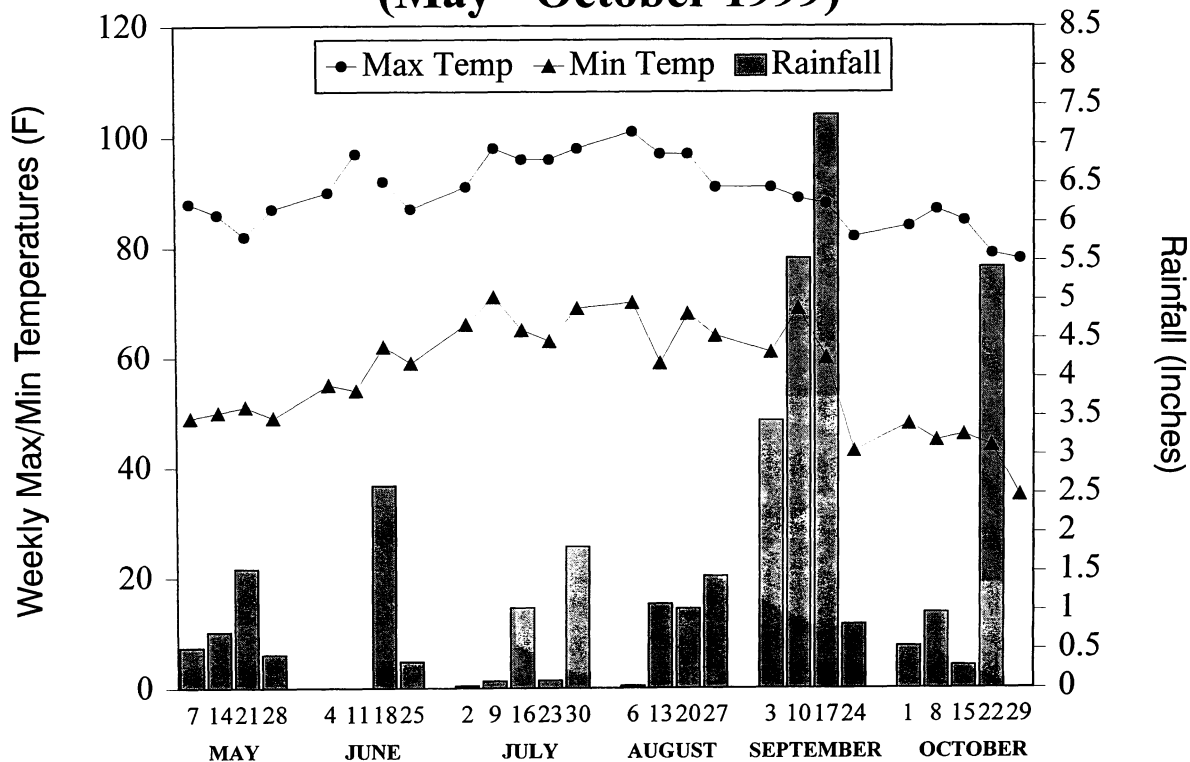


TABLE 5. TWO AND THREE YEAR AVERAGE PERFORMANCE OF ROUNDUP READY
GROUP IV NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LOGGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
Hartz H4994RR	46	1.8	37	10-15
NK S46-W8	40	1.1	36	10-08
Pioneer 9492RR	37	1.0	34	10-08
Pioneer 94B81RR	34	1.6	35	10-08
TWO-YEAR AVERAGE - 1998, 1999				
Hartz H4994RR	47	1.2	35	10-15
Sure Grow SG498RR	46	1.0	32	10-12
Deltapine DP4750RR	44	1.4	35	10-12
Hartz H4252RR	43	1.4	36	10-09
Sure Grow SG468RR	41	1.0	36	10-09
NK S46-W8	40	1.1	34	10-07
FFR RT447	38	1.3	36	10-06
Pioneer 9492RR	38	1.0	34	10-06
Pioneer 94B81RR	32	1.6	35	10-07

#Pod maturity data collected at Johnston county.

TABLE 6. DATA COMBINED OVER LOCATIONS FOR ROUNDUP READY GROUP IV
NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD#
				MATURITY DATE
Hartz H4994RR	52**	2.0	38	10-16
Hartz H4882RR	49*	1.8	40	10-13
USG 7499RR	48*	2.2	41	10-13
Hartz H4252RR	48*	2.2	40	10-13
Asgrow AG4901RR	47*	1.8	40	10-13
Hyttest HTS4725RR	47*	2.2	40	10-15
Deltapine DP4690RR	45*	1.8	40	10-15
USG 7489RR	45*	1.8	34	10-13
+Deltapine DPX8S47RR	45*	1.8	42	10-16
Sure Grow SG498RR	43	1.0	37	10-15
Pioneer 9492RR	43	1.5	40	10-11
Asgrow AG4602RR	41	2.5	43	10-15
FFR RT447	41	1.7	43	10-11
USG 7478nRR	41	1.5	41	10-11
Sure Grow SG468RR	40	1.5	37	10-13
Deltapine DP4750RR	40	2.0	38	10-15
Asgrow AG4902RR	40	1.5	39	10-11
Asgrow AG4702RR	39	1.2	39	10-13
Hyttest HTS4800RR	38	1.8	43	10-11
USG 7459RR	38	2.0	41	10-11
NK S46-W8	36	1.7	36	10-11
USG 7449nRR	33	3.3	35	10-11
Pioneer 94B81RR	23	2.3	36	10-11
Mean	42			
Adj. R2 (%)	90.7			
BLSD (K-50)	8			
C.V. (%)	19.4			
s.e.	3.3			
Error d.f.	113			

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

+Experimental. Seed of this may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 7. DATA COMBINED OVER LOCATIONS FOR ROUNDUP READY GROUP IV
STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+Deltapine DPX8S47RR	20**	1.8	40	10-16
Sure Grow SG498RR	19*	1.0	39	10-15
Deltapine DP4750RR	18*	2.4	41	10-15
Sure Grow SG468RR	17*	2.4	49	10-13
USG 7459RR	17*	2.6	42	10-11
Asgrow AG4901RR	17*	2.2	41	10-13
Hyttest HTS4725RR	16*	2.4	40	10-15
Asgrow AG4902RR	16*	1.8	40	10-11
USG 7489RR	15*	2.2	44	10-13
USG 7478nRR	15*	1.8	48	10-11
FFR RT447	15*	3.0	42	10-11
NK S46-W8	13	2.8	43	10-11
USG 7499RR	13	3.2	43	10-13
Pioneer 9492RR	13	1.8	40	10-11
Hyttest HTS4800RR	12	2.8	52	10-11
Pioneer 94B81RR	12	2.0	45	10-11
Deltapine DP4690RR	12	2.6	42	10-15
Asgrow AG4702RR	12	1.8	39	10-13
Hartz H4252RR	12	1.8	46	10-13
Hartz H4994RR	12	3.2	48	10-16
Asgrow AG4602RR	12	2.2	40	10-15
USG 7449nRR	11	3.8	44	10-11
Hartz H4882RR	10	2.2	38	10-13
Mean	14			
Adj. R2 (%)	74.7			
BLS D (K-50)	6			
C.V. (%)	30.0			
s.e.	1.9			
Error d.f.	84			

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

+Experimental. Seed of this may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 8. TWO AND THREE YEAR AVERAGE PERFORMANCE OF EARLY-MATURING
GROUP V NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
Hutcheson	42	1.2	33	10-18
Clifford	41	1.3	33	10-23
NK S57-11	40	1.2	36	10-24
TWO-YEAR AVERAGE - 1998, 1999				
Hutcheson	40	1.5	32	10-17
Deltapine DP5354	39	2.8	35	10-23
+V90-1012	39	1.4	34	10-20
Clifford	38	1.5	32	10-22
NK S57-11	38	1.4	36	10-23
Pioneer 95B33	37	1.2	34	10-17
Essex	34	1.5	31	10-18

+Experimental. Seed of this may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county.

TABLE 9. DATA COMBINED OVER LOCATIONS FOR EARLY-MATURING GROUP V
NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD		PLANT HEIGHT	POD#
	BU/ACRE	LODGING	INCHES	MATURITY DATE
Hutcheson	42**	1.5	33	10-19
Deltapine DP5354	41*	2.5	34	10-27
Clifford	40*	1.5	32	10-25
+V90-1012	39*	1.4	34	10-21
Hytest HTS5005	39*	1.6	32	10-23
Anand	38*	1.1	30	10-23
Pioneer 95B41RR	38*	1.4	34	10-18
NK S57-11	38*	1.8	35	10-25
Essex	37*	1.6	30	10-21
+Essex RSV4	35*	1.7	32	10-21
Pioneer 95B33	35*	1.3	31	10-18
Mean	38			
Adj. R2 (%)	86.5			
BLS D (K-50)	9			
C.V. (%)	10.8			
s.e.	1.1			
Error d.f.	20			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 10. DATA COMBINED OVER LOCATIONS FOR EARLY-MATURING
GROUP V STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Anand	24**	1.3	29	10-23
Clifford	22*	1.8	30	10-25
+V90-1012	21*	1.8	32	10-21
Pioneer 95B41RR	21*	1.6	31	10-18
Deltapine DP5354	21*	2.4	29	10-27
Pioneer 95B33	21*	1.8	30	10-18
Hutcheson	20*	2.0	31	10-19
+Essex RSV4	20*	1.9	31	10-21
NK S57-11	20*	1.8	29	10-25
Hyttest HTS5005	20*	1.9	31	10-23
Essex	19	1.9	31	10-21
Mean	21			
Adj. R2 (%)	47.1			
BLS D (K-50)	5			
C.V. (%)	12.5			
s.e.	0.6			
Error d.f.	30			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 11. TWO AND THREE YEAR AVERAGE PERFORMANCE OF LATE-MATURING
GROUP V NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LOGGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
Pioneer 9594	43	1.6	36	10-28
Hyperformer HY574	42	1.6	35	10-26
Hutcheson	41	1.3	31	10-18
Pioneer 95B71RR	40	1.4	33	10-24
FFR 594	38	1.8	37	10-25
TWO-YEAR AVERAGE - 1998, 1999				
Asgrow A5944	43	1.3	35	10-25
Agripro AP572STS	41	1.4	32	10-26
Pioneer 9594	41	1.9	35	10-27
Hornbeck HBK5990	41	1.4	34	10-23
Hyperformer HY574	40	1.8	35	10-25
Hutcheson	40	1.5	31	10-17
Pioneer 95B71RR	38	1.5	32	10-23
FFR 595N	37	1.9	38	10-27
Deltapine DP5989	36	2.3	39	10-26
FFR 594	35	2.1	37	10-24
Asgrow A5704	33	1.8	36	10-19

#Pod maturity data collected at Johnston county.

TABLE 12. DATA COMBINED OVER LOCATIONS FOR LATE-MATURING GROUP V
NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD		PLANT HEIGHT	POD#
	BU/ACRE	LODGING	INCHES	MATURITY DATE
Hyperformer HY574	42**	1.8	34	10-29
Asgrow A5944	41*	1.4	31	10-29
Agripro AP572STS	41*	1.4	31	10-31
Hornbeck HBK5990	41*	1.5	32	10-25
Hornbeck HBK5991	41*	1.6	30	10-21
Pioneer 9594	40*	1.6	32	10-29
Hutcheson	40*	1.5	28	10-19
Fowler	38	1.4	33	10-21
Deltapine DP5989	38	1.9	37	10-31
Pioneer 95B71RR	37	1.4	30	10-25
+N94-546	37	1.4	31	10-21
Delta King 5995	36	1.6	30	10-29
+N95-670	35	1.5	32	10-21
Hartz H5050	35	1.8	34	10-27
Agripro AP569RR\N	34	1.3	34	10-29
FFR 595N	34	1.5	35	10-29
Caviness	34	1.7	31	10-23
FFR 563N	33	1.5	32	10-18
FFR HT551STS	33	1.4	32	10-27
FFR 594	32	1.9	35	10-27
Agripro AP588RR	30	1.7	33	10-29
Asgrow A5704	28	1.7	35	10-18
Mean	36			
Adj. R2 (%)	89.4			
BLSD (K-50)	4			
C.V. (%)	9.7			
s.e.	0.9			
Error d.f.	63			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 13. DATA COMBINED OVER LOCATIONS FOR LATE-MATURING GROUP V
STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Hornbeck HBK5991	24**	1.9	29	10-21
Agripro AP572STS	24**	1.9	30	10-31
Hyperformer HY574	23*	2.0	37	10-29
Hornbeck HBK5990	22*	1.8	34	10-25
Hartz H5050	21*	1.9	35	10-27
Fowler	21*	2.1	32	10-21
Pioneer 9594	20*	1.8	34	10-29
+N94-546	20*	1.8	34	10-21
Deltapine DP5989	20*	2.3	37	10-31
Pioneer 95B71RR	20*	1.8	34	10-25
Asgrow A5944	19	1.7	32	10-29
+N95-670	19	1.8	31	10-21
FFR 595N	19	2.3	35	10-29
Hutcheson	18	2.3	31	10-19
Agripro AP569RR\N	18	1.7	33	10-29
FFR HT551STS	18	1.8	37	10-27
Delta King 5995	18	2.0	32	10-29
Caviness	18	2.2	32	10-23
FFR 563N	17	1.5	33	10-18
FFR 594	17	2.2	35	10-27
Asgrow A5704	17	1.7	34	10-18
Agripro AP588RR	14	1.9	33	10-29
Mean	19			
Adj. R2 (%)	71.4			
BLSD (K-50)	5			
C.V. (%)	15.0			
s.e.	0.8			
Error d.f.	42			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 14. DATA COMBINED OVER LOCATIONS FOR EARLY-MATURING ROUNDUP
READY GROUP V NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Pioneer 95B32RR	41**	1.6	33	10-23
Asgrow AG5602RR	40*	1.7	36	10-27
FFR RT557N	39*	2.4	34	10-22
Pioneer 95B41RR	39*	1.9	35	10-18
Pioneer 95B53RR	39*	2.0	34	10-22
Asgrow AG5401RR	38*	1.9	37	10-23
USG 7548nRR	37*	1.8	33	10-24
USG 7547RR	37*	1.9	34	10-25
Hyttest HTS5410RR	36	2.0	36	10-25
FFR RT5485N	36	1.4	34	10-22
Hartz H5545RR	36	2.5	36	10-27
NK S53-Q7	36	1.4	32	10-22
Hartz H5013RR	36	2.9	33	10-29
Hartz H5000RR	36	2.2	35	10-25
USG 7557RR	35	1.9	34	10-25
FFR RT517N	33	2.1	33	10-20
Mean	37			
Adj. R2 (%)	86.5			
BLSD (K-50)	5			
C.V. (%)	9.0			
s.e.	0.7			
Error d.f.	60			

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

#Pod maturity data collected at Johnston county from soybean
planted June 22, 1999.

TABLE 15. DATA COMBINED OVER LOCATIONS FOR EARLY-MATURING ROUNDUP
READY GROUP V STRESSED SOYBEAN - 1999.

BRAND-VARIETY OR VARIETY	YIELD BU/A	LOGGING	PLANT HEIGHT INCHES	POD MATURITY DATE
Pioneer 95B41RR	22**	1.6	38	10-18
Hartz H5013RR	22**	2.5	34	10-29
Hartz H5545RR	21*	2.4	37	10-27
Pioneer 95B53RR	21*	2.5	36	10-22
FFR RT5485N	21*	1.7	37	10-22
Pioneer 95B32RR	21*	1.8	36	10-23
FFR RT557N	21*	2.3	40	10-22
Hyttest HTS5410RR	19*	2.3	40	10-25
USG 7547RR	19*	2.3	35	10-25
Asgrow AG5401RR	19*	2.0	39	10-23
NK S53-Q7	19*	1.8	34	10-22
USG 7557RR	18*	2.0	40	10-25
USG 7548nRR	18*	2.3	36	10-24
Asgrow AG5602RR	18*	1.9	39	10-27
Hartz H5000RR	18*	2.3	39	10-25
FFR RT517N	17*	2.3	38	10-20
Mean	20			
Adj. R2 (%)	68.5			
B LSD (K-50)	6			
C.V. (%)	15.7			
s.e.	0.7			
Error d.f.	45			

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

#Pod maturity data collected at Johnston county from soybean
planted June 22, 1999.

TABLE 16. DATA COMBINED OVER LOCATIONS FOR LATE-MATURING ROUNDUP READY
GROUP V NON STRESSED SOYBEAN - 1999.

BRAND-VARIETY OR VARIETY	YIELD BU/A	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Pioneer 95B95RR	44**	1.8	38	10-29
Asgrow AG5901RR	41*	1.9	36	10-31
+Deltapine DPX5915RR	40*	1.4	35	10-25
Deltapine DP 5806RR	39	1.9	36	10-31
+Hartz HX5950RR	39	2.5	39	10-25
Pioneer 95B71RR	39	1.8	34	10-25
Asgrow AG5802RR	37	1.2	38	10-31
+NK X9857RR	37	1.9	33	10-23
FFR RT560	37	2.3	35	10-27
FFR RT587N	36	1.8	37	10-27
Hartz H5999RR	36	1.9	37	10-31
Deltapine DP 5644RR	35	2.0	35	10-29
Hartz H5350RR	35	2.5	33	10-25
Delta King 5661RR	35	2.0	36	10-27
Asgrow AG5602RR	35	1.8	37	10-27
Deltapine DP 5960RR	34	1.6	37	10-31
+Deltapine DPX5718RR	34	2.6	38	10-27
Dekalb CX580CRR	34	2.0	34	10-29
Asgrow AG5801RR	34	1.6	37	10-29
Sure Grow SG 597RR	33	2.0	41	10-27
Hartz H5181RR	33	2.9	35	11-02
Mean	37			
Adj. R2 (%)	76.1			
BLSD (K-50)	5			
C.V. (%)	10.4			
s.e.	0.8			
Error d.f.	80			

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

+Experimental. Seed of these may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county from soybean
planted June 22, 1999.

TABLE 17. DATA COMBINED OVER LOCATIONS FOR LATE-MATURING ROUNDUP READY
GROUP V STRESSED SOYBEAN - 1999.

BRAND-VARIETY OR VARIETY	YIELD BU/A	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+Deltapine DPX5915RR	27**	2.1	34	10-25
+Hartz HX5950RR	24*	2.3	34	10-25
+NK X9857RR	23*	2.3	33	10-23
Pioneer 95B71RR	22*	2.2	33	10-25
Asgrow AG5901RR	22*	2.5	35	10-31
Pioneer 95B95RR	22*	2.2	35	10-29
Deltapine DP 5806RR	22*	2.6	30	10-31
+Deltapine DPX5718RR	22*	2.6	38	10-27
FFR RT560	21	2.4	33	10-27
Dekalb CX580CRR	21	2.5	34	10-29
Hartz H5350RR	21	3.0	31	10-25
Sure Grow SG 597RR	21	2.3	35	10-27
Delta King 5661RR	21	2.5	34	10-27
Asgrow AG5802RR	20	1.7	37	10-31
Deltapine DP 5644RR	20	2.1	29	10-29
Hartz H5999RR	20	2.6	33	10-31
FFR RT587N	20	2.2	34	10-27
Hartz H5181RR	19	3.0	33	11-02
Deltapine DP 5960RR	19	2.3	36	10-31
Asgrow AG5602RR	18	2.4	34	10-27
Asgrow AG5801RR	17	2.3	34	10-29
Mean	21			
Adj. R2 (%)	58.9			
BLSD (K-50)	6			
C.V. (%)	14.0			
s.e.	0.8			
Error d.f.	40			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 18. TWO AND THREE YEAR AVERAGE PERFORMANCE OF GROUP VI
NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
Hartz H6686	45	1.6	37	10-31
FFR 688	45	1.6	36	10-31
Asgrow A6297	45	1.3	36	10-31
Hartz H6255	44	1.6	36	11-04
+SC 89-147	44	2.0	37	11-01
NKS 65-50	44	1.6	36	10-28
FFR 665N	43	1.6	35	10-30
+N93-132	43	1.9	36	10-30
Pioneer 9692	43	1.7	36	10-31
Musen	43	1.8	37	10-31
Pioneer 9631	42	1.9	38	11-01
Pioneer 9671STS	42	1.9	37	10-30
Hornbeck HBK6600	41	1.6	34	10-31
Brim	40	1.7	36	10-30
Dillon	40	1.5	37	10-30
Young	39	2.0	39	11-01
Asgrow A6711	37	1.3	38	10-30
+N94-7589	35	2.4	35	10-30
TWO-YEAR AVERAGE - 1998, 1999				
+N94-552	49	2.1	36	11-02
FFR 688	46	1.9	35	10-30
Hartz H6686	45	1.8	37	10-30
Hartz H6255	44	1.8	36	11-04
Asgrow A6297	44	1.5	36	10-30
+N93-132	44	2.1	37	10-29
Pioneer 9692	44	1.9	35	10-30
+SC 89-147	43	2.3	35	11-01
Musen	43	2.0	36	10-30
Hartz H6255RR	42	1.8	37	11-04
Pioneer 9631	42	2.3	38	11-01
+SC91-2007	42	1.9	37	11-03
FFR 665N	42	1.8	35	10-29
NKS 65-50	42	1.9	35	10-28

TABLE 18. (CONTINUED) TWO AND THREE YEAR AVERAGE PERFORMANCE OF GROUP VI
NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

Brim	41	1.9	36	10-29
Pioneer 9671STS	41	2.2	36	10-29
Dillon	39	1.7	37	10-29
Hornbeck HBK6600	39	1.8	34	10-30
Young	37	2.2	37	11-01
Asgrow A6711	37	1.4	37	10-29
+N94-7589	33	2.8	35	10-29

+Experimental. Seed of these may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county.

TABLE 19. DATA COMBINED OVER LOCATIONS FOR GROUP VI
NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LOGGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+N94-552	51**	1.8	33	11-02
+N93-132	50*	1.8	39	10-31
FFR 688	47*	1.7	33	11-02
Hartz H6686	46*	1.8	34	11-02
FFR 665N	45	1.7	35	10-31
NKS 65-50	45	1.9	32	10-29
Pioneer 9692	44	1.6	33	11-02
Asgrow A6297	44	1.7	36	11-02
+SC 89-147	43	2.1	35	11-02
Brim	43	1.8	37	10-31
Pioneer 9671STS	43	1.8	35	10-31
Musen	43	1.9	38	11-02
+SC91-2007	43	1.9	37	11-04
Hartz H6255RR	42	1.9	35	11-04
Pioneer 9631	42	1.9	36	11-02
Hartz H6191	41	1.6	32	11-05
Hartz H6255	41	1.9	35	11-05
+N96-6800	41	1.9	29	10-31
Dillon	41	1.5	36	10-31
FFR 731N	40	1.9	35	11-02
Hornbeck HBK6600	40	1.9	35	11-02
+N94-7589	36	2.5	34	10-31
Young	35	2.0	37	10-31
Asgrow A6711	34	1.6	35	10-31
Prolina	33	2.1	36	10-29
Mean	42			
Adj. R2 (%)	68.5			
BLSD (K-50)	6			
C.V. (%)	10.8			
s.e.	1.0			
Error d.f.	72			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 20. DATA COMBINED OVER LOCATIONS FOR GROUP VI STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+N94-552	28**	2.0	31	11-02
FFR 688	26*	1.9	34	11-02
+N96-6800	25*	2.1	30	10-31
Hartz H6686	25*	2.0	35	11-02
Asgrow A6297	25*	1.7	34	11-02
Dillon	24*	1.8	38	10-31
NKS 65-50	23*	2.0	34	10-29
Pioneer 9631	23*	2.5	34	11-02
Musen	22	1.8	31	11-02
Hartz H6191	22	2.0	32	11-05
Hartz H6255RR	22	2.3	33	11-04
Hartz H6255	21	2.2	32	11-05
Hornbeck HBK6600	21	2.0	32	11-02
FFR 665N	21	2.0	33	10-31
+SC 89-147	21	2.1	30	11-02
Young	21	2.2	35	10-31
+N93-132	21	1.9	33	10-31
Brim	20	1.9	31	10-31
Pioneer 9671STS	20	1.9	33	10-31
Pioneer 9692	20	1.9	31	11-02
+SC91-2007	20	1.9	36	11-04
+N94-7589	20	2.7	33	10-31
FFR 731N	19	2.4	34	11-02
Asgrow A6711	19	1.9	36	10-31
Prolina	18	1.9	35	10-29
Mean	22			
Adj. R2 (%)	46.5			
BLSD (K-50)	6			
C.V. (%)	14.7			
s.e.	0.9			
Error d.f.	48			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 21. TWO AND THREE YEAR AVERAGE PERFORMANCE OF ROUNDUP READY
GROUP VI NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
Hartz H6255RR	44	2.2	38	11-03
Hartz H6686RR	41	2.0	42	11-01
Asgrow AG 6101RR	39	1.9	41	10-31
NK S60-E4	38	1.6	35	10-26
TWO-YEAR AVERAGE - 1998, 1999				
Hartz H6255RR	45	2.2	37	11-02
Sure Grow SG678RR	44	2.0	39	10-28
Hartz H6686RR	43	1.9	41	11-01
Pioneer 96B01RR	41	2.8	37	10-26
Deltapine DP6880RR	40	3.0	39	10-30
NK S60-E4	39	1.6	34	10-25
Asgrow AG 6101RR	38	1.8	41	10-30
Deltapine DP6200RR	36	1.9	37	10-29

#Pod maturity data collected at Johnston county.

TABLE 22. DATA COMBINED OVER LOCATIONS FOR ROUNDUP READY GROUP VI
NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/A	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Hartz H6255RR	41**	2.2	36	11-04
Sure Grow SG678RR	39*	1.9	38	10-29
Asgrow AG6201RR	38*	1.8	37	11-02
+FFR EXP47355N	38*	1.5	38	11-04
Hartz H6686RR	37*	1.8	38	11-02
NK S60-E4	37*	1.6	34	10-29
Pioneer 96B01RR	37*	2.9	36	10-27
Deltapine DP6880RR	37*	2.8	36	11-02
Asgrow AG6701RR	36*	1.4	38	11-02
+Hartz HX6904RR	35*	2.6	36	10-27
Asgrow AG6101RR	34	1.8	38	11-02
Deltapine DP6200RR	34	1.9	36	10-31
+FFR EXP47058N	33	1.1	37	11-04
Mean	37			
Adj. R2 (%)	67.8			
BLSD (K-50)	7			
C.V. (%)	11.3			
s.e.	0.8			
Error d.f.	48			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 23. DATA COMBINED OVER LOCATIONS FOR ROUNDUP READY GROUP VI
STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/A	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
Hartz H6255RR	28**	2.5	35	11-04
Sure Grow SG678RR	26*	2.8	37	10-29
Asgrow AG6701RR	24*	2.0	32	11-02
Hartz H6686RR	24*	2.4	38	11-02
Deltapine DP6880RR	23*	2.8	35	11-02
Pioneer 96B01RR	23*	2.7	35	10-27
NK S60-E4	23*	2.3	34	10-29
+Hartz HX6904RR	22*	2.8	35	10-27
+FFR EXP47355N	22*	2.3	34	11-04
Asgrow AG6201RR	22*	2.5	36	11-02
+FFR EXP47058N	19	1.9	36	11-04
Asgrow AG6101RR	19	2.6	33	11-02
Deltapine DP6200RR	18	2.3	38	10-31
Mean	23			
Adj. R2 (%)	63.5			
BLS D (K-50)	7			
C.V. (%)	16.6			
s.e.	0.9			
Error d.f.	24			

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

+Experimental. Seed of these may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county from soybean
planted June 22, 1999.

TABLE 24. TWO AND THREE YEAR AVERAGE PERFORMANCE OF GROUP VII
AND VIII NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
Pioneer 9831	44	1.4	40	11-05
+N90-7199	43	2.0	38	11-05
Carver	43	1.3	38	11-01
NK S75-55	42	1.6	38	11-03
+N94-29	42	1.7	37	10-30
Cook	42	1.8	38	11-04
SGA Haskell	42	2.4	37	11-04
Pioneer 97B61	42	1.7	39	11-04
+N94-7441	41	1.3	37	11-03
SGA Benning	40	1.9	38	11-04
Agripro AP 727	31	1.7	39	
TWO-YEAR AVERAGE - 1998, 1999				
NK S73-Z5	44	1.9	43	11-03
Pioneer 9831	43	1.6	39	11-05
NK S80-J2	43	1.6	39	11-04
+N94-7441	42	1.5	40	11-04
+N90-7199	42	2.4	37	11-05
Pioneer 97B61	42	1.9	38	11-04
Carver	41	1.3	38	11-01
Cook	41	1.9	38	11-04
NK S75-55	40	1.8	37	11-03
SGA Haskell	40	2.6	36	11-04
SGA Benning	39	2.2	38	11-04
+N94-29	39	2.1	38	10-30
+NTCPR 96-1215	36	2.8	36	11-05
SGA Prichard	34	2.4	35	11-05
Agripro AP 727	27	2.2	36	

+Experimental. Seed of these may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county.

TABLE 25. DATA COMBINED OVER LOCATIONS FOR GROUP VII AND VIII
NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+N95-614	51**	1.5	43	11-05
Pioneer 97B62	51**	1.8	44	11-05
+N94-537	51**	2.0	44	11-05
NK S75-55	48*	2.0	47	11-04
+Hartz HX821280	47	1.8	45	11-05
NK S80-J2	47	2.0	51	11-05
Pioneer 97B61	46	2.0	47	11-05
+Hartz HX82167	46	1.8	48	11-05
Pioneer 9831	46	1.5	47	11-05
Cook	46	1.8	45	11-05
Carver	45	1.5	46	11-02
+N90-7199	45	2.3	45	11-05
SGA Benning	43	2.5	44	11-05
+SC 92-2482	41	2.5	49	11-05
Deltapine DP7731	41	2.0	46	11-05
NK S73-Z5	40	1.8	45	11-04
SGA Haskell	40	2.3	40	11-05
+N94-29	39	2.8	43	10-29
+N94-7441	39	1.5	44	11-05
SGA Prichard	36	2.8	46	11-05
Agripro AP727	36	2.5	51	11-05
+NTCPR 96-1215	35	3.0	41	11-05
Agripro AP750RR	34	2.0	48	11-05
Mean	43			
Adj. R2 (%)	78.7			
BLS D (K-50)	4			
C.V. (%)	8.3			
s.e.	1.8			
Error d.f.	64			

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

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 26. DATA COMBINED OVER LOCATIONS FOR GROUPS VII AND VIII
STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD#
				MATURITY DATE
NK S80-J2	32**	2.0	28	11-05
+N94-29	29*	1.8	33	10-29
SGA Haskell	28*	2.3	26	11-05
Cook	25*	2.0	27	11-05
SGA Benning	24	2.3	29	11-05
+Hartz HX82167	24	1.5	29	11-05
Carver	23	1.3	32	11-02
+N90-7199	23	3.0	30	11-05
Pioneer 97B62	23	2.3	27	11-05
SGA Prichard	22	2.8	27	11-05
NK S73-Z5	22	1.8	26	11-04
NK S75-55	21	2.3	31	11-04
+N95-614	21	2.5	28	11-05
Deltapine DP7731	20	2.8	25	11-05
Pioneer 9831	20	2.0	30	11-05
+N94-537	20	2.0	26	11-05
+Hartz HX821280	19	1.8	28	11-05
Pioneer 97B61	19	2.3	29	11-05
+NTCPR 96-1215	18	3.3	28	11-05
+N94-7441	16	2.0	29	11-05
+SC 92-2482	15	1.8	29	11-05
Agripro AP750RR	14	1.3	32	11-05
Agripro AP727	13	1.8	30	11-05
Mean	21			
Adj. R2 (%)	89.4			
B LSD (K-50)	8			
C.V. (%)	25.9			
s.e.	2.7			
Error d.f.	63			

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

+Experimental. Seed of these may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county from soybean
planted June 22, 1999.

TABLE 27. TWO AND THREE YEAR AVERAGE PERFORMANCE OF ROUNDUP READY GROUP VII AND VIII NON STRESSED SOYBEAN COMBINED OVER LOCATIONS.

BRAND VARIETY OR VARIETY	YIELD BU/ACRE	LODGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
THREE-YEAR AVERAGE 1997, 1998, AND 1999				
NK S73-Z5	41	2.3	41	11-3
Hartz H7152RR	39	2.1	41	11-3
Hartz H8001RR	37	2.1	42	11-3
Hartz H7550RR	36	2.2	44	11-3
TWO-YEAR AVERAGE - 1998, 1999				
+Deltapine DPX8S74	51	1.9	39	11-4
Deltapine DP7375RR	44	1.9	42	11-3
NK S73-Z5	44	2.3	40	11-3
Hartz H7152RR	42	2.1	41	11-2
Hartz H8001RR	39	2.1	42	11-2
Hartz H7550RR	38	2.1	43	11-2

+Experimental. Seed of this may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county.

TABLE 28. DATA COMBINED OVER LOCATIONS FOR ROUNDUP READY GROUP VII
AND VIII NON STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/A	LOGGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+Deltapine DPX8S74RR	48**	1.8	40	11-05
Hartz H7152RR	38	1.9	41	11-05
NK S73-Z5	38	2.3	42	11-04
Deltapine DP7375RR	38	1.8	41	11-04
+FFR EXP47360N	35	1.8	43	11-05
Hartz H8001RR	34	2.1	43	11-05
Hartz H7550RR	29	2.1	44	11-05
Mean	37			
Adj. R2 (%)	77.5			
BLSD (K-50)	7			
C.V. (%)	11.5			
s.e.	1.0			
Error d.f.	12			

**Highest yielder.

+Experimental. Seed of these may or may not be available in 2000 and may have a different designation.

#Pod maturity data collected at Johnston county from soybean planted June 22, 1999.

TABLE 29. DATA COMBINED OVER LOCATIONS FOR ROUNDUP READY GROUP VII
AND VIII STRESSED SOYBEAN - 1999.

BRAND VARIETY OR VARIETY	YIELD BU/A	LOGGING	PLANT HEIGHT INCHES	POD# MATURITY DATE
+Deltapine DPX8S74RR	27**	3.0	34	11-05
Hartz H8001RR	25*	3.3	33	11-05
+FFR EXP47360N	25*	3.0	34	11-05
Hartz H7152RR	25*	3.0	33	11-05
NK S73-Z5	24*	3.0	28	11-04
Deltapine DP7375RR	23	3.3	29	11-04
Hartz H7550RR	22	2.8	33	11-05
Mean	24			
Adj. R2 (%)	52.8			
BLSD (K-50)	4			
C.V. (%)	9.4			
s.e.	1.1			
Error d.f.	18			

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

+Experimental. Seed of these may or may not be available in 2000
and may have a different designation.

#Pod maturity data collected at Johnston county from soybean
planted June 22, 1999.

COTTON

Most cotton varieties sold in North Carolina were developed for cotton producing areas outside the state; therefore it is imperative that producers review performance data from within the state. The Official Variety Testing conducts variety tests on research stations as well as private growers' farms. A portion of these data is also published in the cotton extension bulletin.

Entries: Experimental lines and commercial varieties developed by both public and private agencies are included. Any individual or firm may make application for having entries included. A fee is charged on an entry basis. Agencies sponsoring entries in the tests and their contact person, address and entry designation listed below.

Table 30. Name, contact person, and address of sponsoring agencies in the 1999 North Carolina Cotton Performance Trials along with designation used to identify the varieties or hybrids in the trials.

Agency and Contact Person	Address	Designation
<u>AgrEvo Cotton Seed Intl</u> Jane Dever	311 Poplar View Lane West Collierville TN 38017	Fiber Max ACSI
<u>AgriPro Seeds, Inc.</u> Paul Kennedy	266 E. Nolley Dr. Collierville, TN 37017	Agripro AP HS
<u>Delta & Pine Land Co.</u> Dru Rush	8339 Appleton Road Brewton AL 36426	Deltapine DP
<u>Helena Cotton Research</u> Scott Menotti	6076 Poplar Ave., Ste 500 Memphis, TN 38119	HCR
<u>NC State University</u> Daryl Bowman	3709 Hillsborough St. Raleigh, NC 27607	NC
<u>Paymaster Technology Corp.</u> David Albers	1301 E. 50 th Lubbock, TX 79404	Paymaster PM
<u>PhytoGen Seed Co.</u> Randall McPherson	PO Box 27 Leland, MS 38756	GA HS
<u>Seed Source, Inc.</u> John M. Green	PO Box 28 Stoneville, MS 28776	SS

<u>Stoneville Pedigreed Seed Company</u> Greg Baldwin	2409 Commerce St. Albany, GA 31707	ST, Stoneville BXN
<u>Sure-Grow Research</u> Ken Lege	7265 Hwy 95 Centre, AL 35960	Sure-Grow
<u>Terra International, Inc</u> Robert Wright	117 Kennedy Flat Rd. Leland, MS 38756	Terra

Test Locations: The four test locations included the Central Crops Research Station near Clayton (Johnston county), the Upper Coastal Plain Research Station near Rocky Mount (Edgecombe county), the Peanut Belt Research Station near Lewiston (Bertie county), and with Greg Hargett near Marshville (Union county). A fifth test site, Allen McLaurin farm near Gibson, N. C., was in a field infested with Columbia lance and root-knot nematodes with a rye cover crop. The Union county test was planted no-till in 7 1/2" rows using only roundup ready varieties.

Data: Data were collected on lint yield, lint percent, plant height, percent bolls opened, and the fiber properties UHM span length, uniformity index, T1 strength, elongation, and micronaire. Percent bolls opened was determined two to three weeks prior to harvest and indicates relative maturity; this measure should only be compared within a particular test and not across tests at the same location. Fiber properties were determined by HVI. The trials were divided by maturity with varieties earlier than Deltapine 51 included in the early group and those later than Deltapine 51 included in the medium group. The sponsoring agency decided which group their variety belonged and some may appear to be misplaced based on boll opening data.

Seasonal Conditions: Planting was on time for most locations but delayed at Union county (Table 31 and accompanying weather graphs). The season started off dry with soil moisture inadequate at some locations.

The early test at Johnston county was lost due to poor stands. The test in Scotland county was lost due to seedling disease. Temperatures were above normal for most of the season. Rainfall was below normal at all locations in May, June, July, and most of August. In September, Hurricanes Dennis, Floyd, and Irene brought excessive rainfall in the eastern part of the state. Much of the cotton was lodged or blown over. Boll rot and tight lock was prevalent in the areas hit by the hurricanes. Defoliation was difficult at best since ground equipment could not travel through the fields without running over the cotton. Harvests were delayed as a result.

Results: Cultural practices are listed in Table 31. Soil test results are shown in Table 32. The early-maturing variety data are included in Tables 33-35. The statewide averages only include data from Bertie, Edgecombe, and Johnston counties.

Data for medium-maturing varieties are included in Tables 36-38. It is suggested that growers choose medium-maturing cotton varieties based on data from a minimum of two years across locations.

Data from Union county (Piedmont) (Table 39) were not included in the statewide averages. Only a limited number of varieties were included in these trials due to the method these trials were conducted, i.e. no-till 7 1/2" rows, and roundup application.

Please keep in mind that all cotton is classified by HVI (high-volume instrumentation). Premiums and discounts will be assessed depending on several lint quality traits. Two traits of major significance are lint strength and micronaire. For fiber strength, the base will be 24-25 g/tex with a premium for strength above 26 g/tex and a discount for strength below 23 g/tex. The premium range for micronaire will be 3.7-4.2; discounts will be assessed for micronaire above 4.9; the base

values will be 3.5-3.6 and 4.2-4.9. With this in mind, there are varieties with strength in the premium range as well as the base range.

Interpreting Data: Previous research has shown that two-year multi-location data provide the best predictor of future performance. Single year data may be misleading, e.g. varieties without heat tolerance performed poorly in 1995 which had high night-time temperatures while in more normal years these varieties may have performed superbly.

TABLE 31. Cultural Practices for Cotton Performance Trials - 1999.

Location	Fertilizer Lbs/A	Soil Type	Date of Planting	Date/Rate of Pix	Date Defoliated	Date of Harvest
Bertie	50 0-0-60 100 18-46-0 19 gal 30%N	Goldsboro sandy loam	10-May	E, M-23 July 10 oz.	E, M-12 Oct	E, M-1 Nov
Edgecombe	600 5-10-10 16 gal. 30% N	Goldsboro/ Lynchburg fine sandy loam	11-May	E, M-19 July 4 oz.	E, M-15 Oct	E, M-10 Nov
Johnston	400 6-6-36 400 12-6-24 2 lb Solubor	Norfolk loamy sand	7-May	E, M-6 July 8 oz. E, M-19 July 12 oz.	E, M-12 Oct	M-29 Oct
Union	3 tons Turkey litter .25 lb Boron	Tatum	19-May	E, M-28 June 10 oz. E, M-16 July 10 oz.	E, M-15 Oct	E, M-4 Nov

E=Early variety test.

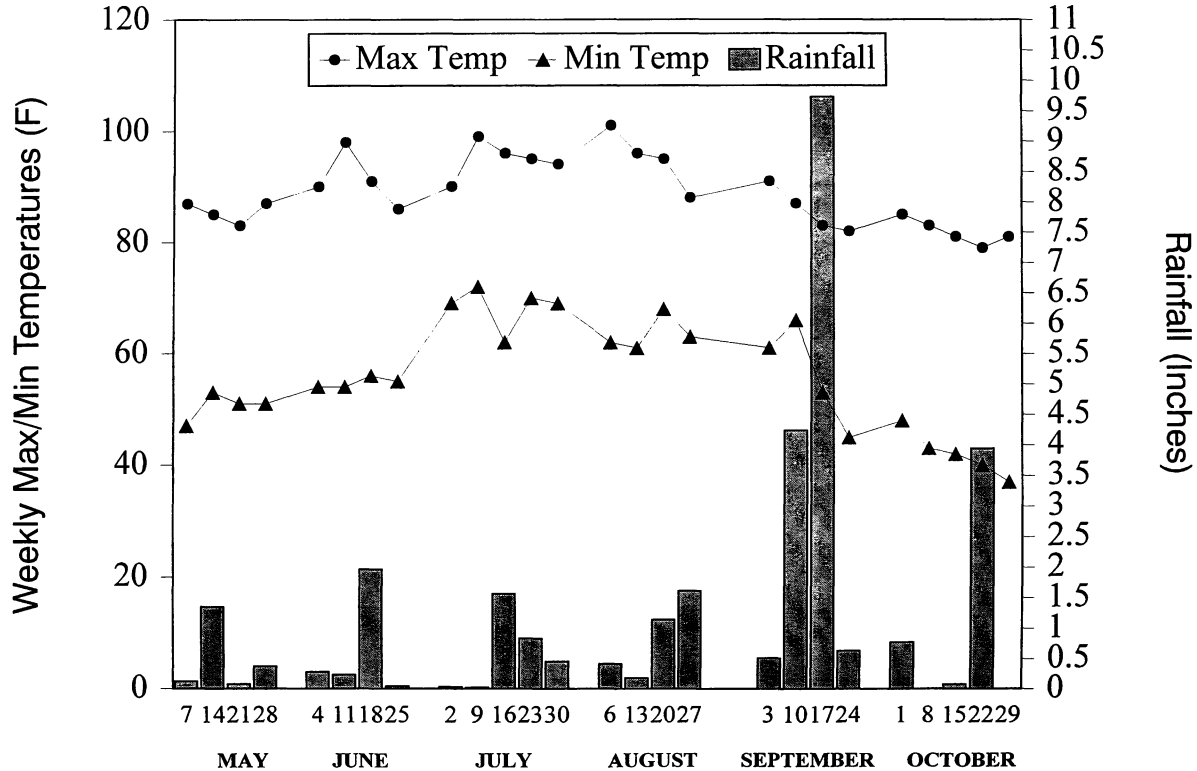
M=Medium variety test.

Table 32. Soil test results for cotton - 1999.

Location by county	HM %	W-V	CEC	BS	Ac	pH	P-I	K-I	Ca %	Mg %	Mn-I	Zn-I	Cu-I
Bertie	0.81	1.36	4.9	76	1.2	5.8	70	60	60.0	10.0	42	53	121
Edgecombe	0.81	1.39	4.7	81	0.9	5.7	41	48	59.0	18.0	56	32	44
Johnston	0.32	1.53	2.7	70	0.8	6.2	124	41	47.0	17.0	65	87	55
Union	0.56	0.98	11.2	95	0.6	6.5	188	129	69.0	19.0	516	604	368

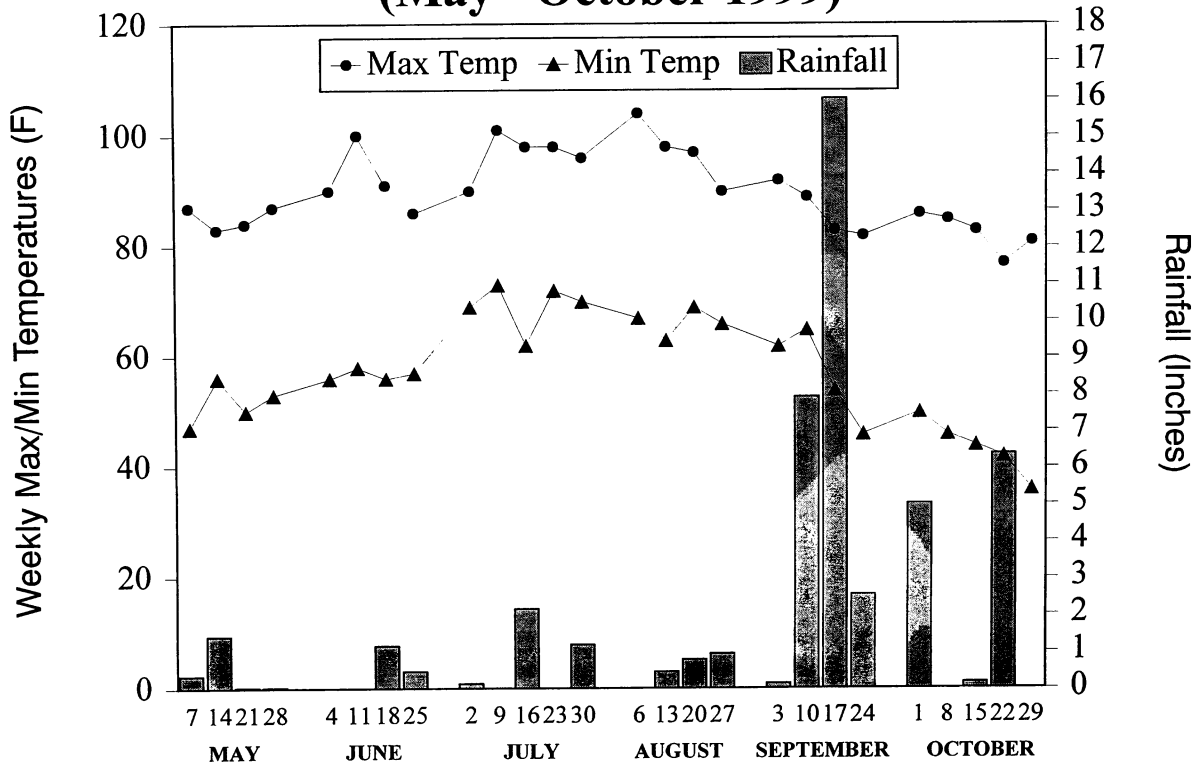
Bertie Co. Weekly Weather Data

(May - October 1999)



Edgecombe Co. Weekly Weather Data

(May - October 1999)



Johnston Co. Weekly Weather Data

(May - October 1999)

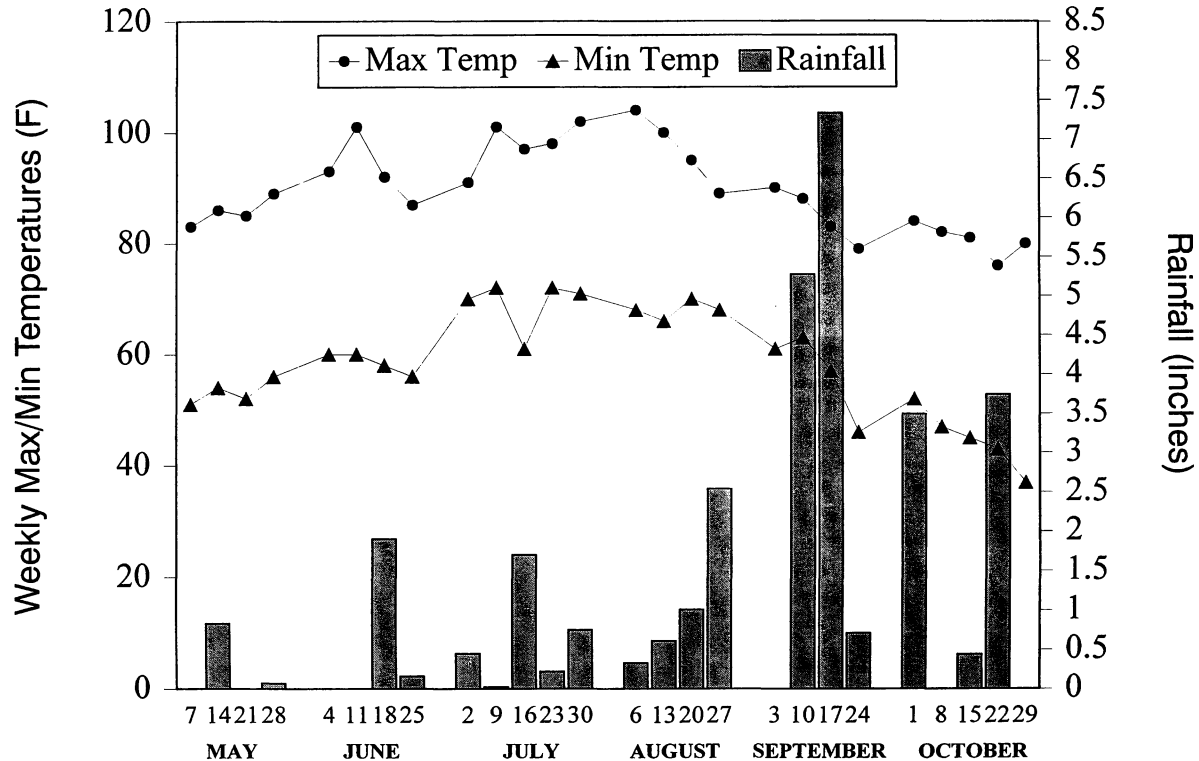


TABLE 33. THREE-YEAR STATEWIDE AVERAGE PERFORMANCE OF EARLY-MATURING COTTON VARIETIES - 1997 - 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT % %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION
Stoneville ST474	1207**	44.1	33	54	1.11	83.9	29.7	4.6	7.5
Stoneville ST 373	1179*	43.0	30	46	1.13	82.8	28.5	4.3	7.4
Sure Grow 501	1170*	44.1	31	56	1.14	84.6	32.6	4.6	7.6
Stoneville BXN47	1154	43.5	33	56	1.12	84.1	29.9	4.5	7.6
Sure Grow 125	1141	41.9	30	59	1.15	84.1	29.4	4.5	8.2
Paymaster PM1220BG\RR	1122	41.8	32	65	1.1	82.8	30.1	4.6	7.8
Deltapine DP 5111	1104	40.4	30	71	1.11	83.4	31.9	4.7	7.0
Paymaster PM1560BG	1100	42.3	31	69	1.12	83.7	30.0	4.7	7.9
+NC 72	1091	41.9	33	55	1.17	83.6	33.4	4.0	6.5
Paymaster PM1330BG	1082	40.7	29	67	1.14	83.4	30.2	4.2	7.2
Deltapine DP51	1060	40.9	30	51	1.15	83.4	29.1	4.4	7.6
FiberMax 819	1041	43.4	29	60	1.17	84.3	32.1	4.3	6.6
Terra 292	1002	38.1	30	58	1.13	82.8	28.7	4.4	7.8
Mean	1112	42.0	31	59	1.13	83.6	30.4	4.5	7.4
Adj R2 %	96								
C.V. (%)	5.8								
BLSD (K-50)	52								
s.e.	12								
Error d.f.	84								

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

+Experimental. Seed of this may or may not be available in 2000 and may have a different designation.

TABLE 34. TWO-YEAR STATEWIDE AVERAGE PERFORMANCE OF EARLY-MATURING COTTON VARIETIES - 1998 & 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION
Sure Grow 105	1113**	42.0	29	59	1.15	84.6	31.0	4.3	8.6
Sure Grow 747	1102*	42.7	30	61	1.13	83.2	28.1	4.6	9.1
Agripro AP7115	1089*	42.5	30	51	1.09	82.0	29.9	4.1	8.4
Stoneville ST474	1082*	43.5	32	57	1.10	83.2	29.9	4.4	7.9
Sure Grow 125	1082*	41.5	31	61	1.15	83.8	28.9	4.2	9.0
PhytoGen PSC355	1076*	41.2	32	62	1.13	83.9	31.5	4.5	9.3
Paymaster PM1218BG\RR	1073*	42.3	32	70	1.08	82.6	27.5	4.5	8.4
Sure Grow 501	1071*	44.0	31	54	1.13	83.5	32.6	4.3	8.4
Stoneville ST 373	1070*	42.3	30	42	1.13	82.7	28.5	4.0	8.1
Paymaster PM1440	1067*	41.6	30	55	1.12	83.6	30.6	4.4	8.0
Stoneville BXC47	1064*	43.3	33	54	1.11	83.9	30.3	4.2	8.1
Paymaster PM1220BG\RR	1055*	41.7	33	65	1.09	82.4	30.0	4.4	8.4
Deltapine DP428B	1040	40.0	31	58	1.14	82.4	28.7	4.2	8.2
Deltapine DP388	1020	41.6	29	67	1.10	82.4	30.4	4.2	9.2
Paymaster PM1560BG	1013	41.5	30	58	1.11	83.8	30.4	4.5	8.6
Deltapine DP 5111	1006	39.9	30	66	1.11	83.1	32.6	4.5	7.6
+NC 72	979	41.2	33	59	1.17	83.2	33.1	3.7	7.2
Deltapine DP51	967	40.6	30	48	1.14	82.7	29.3	4.1	8.3
Paymaster PM1330BG	967	40.0	30	64	1.14	82.9	30.0	3.9	7.9
Deltapine DP425RR	963	40.0	30	50	1.11	82.4	29.1	4.3	8.6
FiberMax 819	954	42.8	29	51	1.17	83.8	33.0	4.1	7.2
Deltapine DP436RR	945	38.3	28	52	1.16	83.7	29.5	4.0	8.8
+Seed Source SS9801	925	40.9	30	57	1.17	83.7	32.7	4.2	7.9
Terra 292	893	37.3	29	53	1.14	82.8	28.9	4.2	8.4

Mean	1026	41.4	31	57	1.13	83.2	30.3	4.2	8.3
Adj R2 %	96								
C.V. (%)	5.6								
B LSD (K-50)	60								
s.e.	13								
Error d.f.	92								

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

+Experimentals. Seed of these may or may not be available in 2000 and may have a different designation.

TABLE 35. AVERAGE PERFORMANCE OF EARLY-MATURING COTTON VARIETIES ACROSS LOCATIONS - 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT LINT %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION
+ACSI EXP0052	1036**	41.8	31	72	1.18	84.8	35.4	4.2	8.9
Sure Grow 125BR	893	39.1	34	71	1.11	84.3	29.7	3.7	11.8
Sure Grow 501BR	886	39.9	35	73	1.11	85.0	32.3	4.0	11.4
PhytoGen PSC355	880	39.5	35	72	1.14	85.1	31.7	4.2	12.2
Sure Grow 747	872	42.1	35	77	1.12	83.7	28.6	4.2	11.4
+Stoneville STX9903RR	865	42.1	36	69	1.12	84.6	30.3	3.7	10.6
Agripro AP7115	861	41.0	33	66	1.08	83.0	31.0	3.4	10.9
PhytoGen PSC569	846	39.4	37	58	1.12	83.2	34.3	3.2	10.6
+Helena HCR7114-46	843	40.8	32	70	1.11	83.2	30.9	4.0	10.9
Paymaster PM1218BG/RR	841	41.9	36	81	1.08	83.4	29.2	4.3	10.5
Paymaster PM1440	840	40.0	31	67	1.11	84.1	31.9	4.1	10.4
Sure Grow 125RR	839	40.0	34	70	1.11	85.0	28.9	3.9	11.9
+Stoneville STX9901BT	833	41.2	36	65	1.12	82.8	30.1	3.3	10.4
Paymaster PM1220BG\RR	831	40.8	36	72	1.09	83.3	30.9	4.1	10.5
Sure Grow 125	817	39.1	32	77	1.13	84.4	29.8	3.7	11.8
+Stoneville STX9902BT/RR	814	42.4	32	69	1.09	83.7	31.3	3.7	10.6
PhytoGen PSC952	809	39.5	32	71	1.10	83.8	30.4	4.2	11.1
Deltapine DP451B/RR	799	38.1	35	72	1.14	83.8	31.4	3.6	10.3
Sure Grow 105	790	40.1	34	74	1.14	84.8	32.3	3.7	10.8
Deltapine DP409B/RR	789	39.4	31	73	1.11	82.4	31.4	3.6	10.8
Stoneville ST 373	779	40.5	33	63	1.16	84.0	30.4	3.4	10.5
Paymaster PM1560BG	778	39.8	32	69	1.11	84.1	31.9	4.2	11.0
Deltapine DP 5111	774	38.1	34	75	1.10	83.5	33.0	4.1	9.8
Stoneville BXN47	773	41.3	38	76	1.12	85.0	31.0	3.6	10.7
Stoneville ST474	767	41.1	36	68	1.11	84.6	30.9	3.9	10.5

Deltapine DP429RR	765	38.5	33	65	1.13	82.7	32.0	3.4	10.8
Deltapine DP428B	756	38.4	34	67	1.14	83.4	31.2	3.6	10.5
Deltapine DP388	744	39.2	33	76	1.12	83.6	31.5	3.6	11.7
+NC 72	742	39.5	36	73	1.17	83.7	33.4	3.2	9.3
+Seed Source SS9901	740	39.9	32	60	1.12	83.7	32.7	3.6	11.0
Deltapine DP422B/RR	730	39.2	31	60	1.11	83.5	29.7	3.4	11.3
Sure Grow 501	718	41.9	34	70	1.14	84.3	33.4	3.7	10.9
PhytoGen PSC636	713	38.5	32	66	1.16	83.5	32.3	3.5	9.9
+Seed Source SS9801	703	39.9	33	73	1.16	83.9	34.7	3.8	10.0
+Paymaster PMX0425	701	39.3	31	68	1.16	84.0	32.6	3.5	10.3
Deltapine DP436RR	697	36.4	32	62	1.16	84.5	31.1	3.5	11.1
FiberMax 819	677	41.0	32	69	1.17	84.7	35.2	3.7	9.3
Paymaster PM1330BG	671	38.3	32	73	1.16	83.9	32.1	3.5	10.2
Terra 292	669	37.0	31	65	1.14	84.2	30.6	3.7	10.8
Deltapine DP51	669	38.8	33	61	1.15	83.6	31.4	3.4	10.6
Deltapine DP425RR	651	38.3	32	62	1.11	83.8	31.8	3.7	11.1
Deltapine DP20	636	39.1	31	65	1.14	83.5	30.0	3.4	11.5
+Helena HCR9228	625	38.6	30	67	1.08	82.9	33.1	3.2	10.2
Paymaster PM1220	603	39.1	37	67	1.13	84.6	31.4	3.5	11.3
+Helena HCR9220	567	39.0	30	64	1.11	83.5	32.5	3.1	10.3
+Helena HCR9310	557	39.4	30	70	1.17	83.1	32.0	3.5	11.1
Mean	765	39.7	33	69	1.13	83.9	31.6	3.7	10.7
Adj R2 %	91								
C.V. (%)	8.6								
BLSD (K-50)	117								
s.e.	21								
Error d.f.	45								

**Highest yielder.

+Experimentals. Seed of these may or may not be available in 2000 and may have a different designation.

TABLE 36. THREE-YEAR STATEWIDE AVERAGE PERFORMANCE OF MEDIUM-MATURING COTTON VARIETIES - 1997 - 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION
FiberMax 989	1133**	42.0	31	52	1.16	83.9	32.9	4.3	6.9
Sure Grow 821	1100*	41.3	31	62	1.14	84.3	29.7	4.8	9.0
Deltapine DP5415RR	1100*	41.6	30	48	1.13	83.6	31.7	4.6	8.7
Agripro AP4103	1084*	40.2	31	58	1.15	83.9	32.7	4.6	7.5
Agripro AP6101	1055	40.1	31	46	1.18	84.7	33.3	4.5	7.9
Deltapine DP5690RR	1048	40.3	33	59	1.12	83.2	32.7	4.4	7.6
Agripro HS 44	1039	39.8	32	54	1.14	83.6	32.5	4.6	7.3
Deltapine DP51	995	40.2	30	55	1.15	83.1	28.8	4.5	8.0
Mean	1069	40.7	31	54	1.15	83.8	31.8	4.5	7.9
Adj R2 %	96								
C.V. (%)	5.7								
BLSD (K-50)	50								
s.e.	10								
Error d.f.	56								

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

TABLE 37. TWO-YEAR STATEWIDE AVERAGE PERFORMANCE OF MEDIUM-MATURING COTTON VARIETIES - 1998 & 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION
FiberMax 989	1081**	41.8	30	49	1.15	83.4	33.4	4.1	7.6
+ACSI IF1000	1079*	41.8	30	53	1.16	83.2	33.9	4.3	8.1
Sure Grow 821	1070*	41.0	30	59	1.13	84.0	29.6	4.6	9.9
Deltapine DP458B/RR	1069*	40.8	29	49	1.14	82.8	32.0	4.3	9.2
Deltapine DP5415RR	1067*	41.2	30	47	1.14	83.5	31.8	4.4	9.4
Agripro AP4103	1035*	39.9	31	55	1.14	83.1	32.6	4.5	8.2
Deltapine DP655B/RR	1017*	39.7	32	54	1.13	82.4	33.6	3.8	8.1
Agripro HS 44	994	39.3	31	55	1.14	82.8	33.1	4.4	8.0
Deltapine DP5690RR	992	40.0	33	53	1.12	82.9	33.4	4.2	8.4
Agripro AP6101	982	40.0	31	47	1.17	84.5	32.9	4.4	8.6
Deltapine DP51	944	39.9	31	49	1.14	82.7	28.8	4.4	8.8
Mean	1030	40.5	31	52	1.14	83.2	32.3	4.3	8.6
Adj R2 %	96								
C.V. (%)	6.0								
BLS D (K-50)	66								
s.e.	12								
Error d.f.	50								

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

+Experimental. Seed of this may or may not be available in 2000 and may have a different designation.

TABLE 38. AVERAGE PERFORMANCE OF MEDIUM-MATURING COTTON VARIETIES ACROSS LOCATIONS - 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT % %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION
ACSI E0781	896**	42.0	31	67	1.12	82.8	33.9	4.2	10.3
Deltapine DP448B	884*	38.7	33	67	1.14	83.5	32.6	4.2	10.1
+ACSI IF1000	856*	40.4	32	67	1.17	84.3	35.6	4.1	10.1
Sure Grow 821	829*	40.7	31	67	1.12	84.1	30.6	4.7	12.1
Deltapine DP458B/RR	821*	39.4	31	64	1.13	83.1	32.9	3.9	11.0
Deltapine DP655B/RR	819*	38.6	33	67	1.14	83.3	35.4	3.7	10.1
PhytoGen HS12	816*	38.2	33	67	1.16	83.6	36.1	4.0	9.6
PhytoGen GA161	810*	39.8	36	65	1.18	84.2	35.6	4.0	10.3
Agripro AP4103	805*	38.5	32	72	1.15	83.3	34.8	4.2	10.0
Deltapine DP5415RR	804*	38.9	33	62	1.15	84.1	33.4	4.1	11.3
Deltapine DP675	802*	37.2	33	66	1.12	83.6	33.4	4.0	11.3
Deltapine DP5415	799*	39.3	32	62	1.16	83.8	33.3	4.0	11.1
Deltapine DP5690RR	791*	38.6	35	69	1.12	83.6	35.2	3.9	10.2
ACSI E0222	789	41.1	30	75	1.16	85.6	36.6	4.8	8.5
FiberMax 989	785	40.2	30	67	1.16	84.1	35.2	4.0	9.4
+Helena HCR7126	780	40.7	34	69	1.15	82.8	33.2	4.0	10.2
Paymaster PM1560BG/RR	778	40.8	36	66	1.12	83.3	31.2	3.7	10.3
Deltapine NuCotn 33B	767	37.1	32	57	1.14	83.5	31.8	3.9	11.0
+Helena HCR9240	766	39.8	32	68	1.17	84.2	32.9	4.2	10.8
Agripro HS 44	766	37.7	33	68	1.14	83.3	34.6	4.1	9.9
Deltapine DP5690	750	39.3	33	67	1.13	83.8	34.9	3.8	10.0
Agripro AP6101	729	38.4	34	67	1.16	84.2	33.6	4.2	10.6
+Helena HCR9257	721	40.5	33	68	1.11	83.1	32.4	4.0	10.1
+Deltapine DPX9765	707	40.1	36	70	1.14	83.4	31.6	4.5	10.3
Paymaster PM1560BG	688	41.9	33	79	1.09	83.9	30.4	4.8	10.8
Deltapine DP51	662	38.3	32	66	1.14	83.7	30.1	4.3	10.6

Mean	785	39.5	33	67	1.14	83.7	33.5	4.1	10.4
Adj R2 %	74								
C.V. (%)	8.0								
BLSD (K-50)	107								
s.e.	16								
Error d.f.	50								

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

+Experimentals. Seed of these may or may not be available in 2000 and may have a different designation.

TABLE 39. AVERAGE PERFORMANCE OF COTTON VARIETIES GROWN IN ULTRANARROW ROWS NO-TILL AT UNION COUNTY - 1999.

VARIETY OR BRAND VARIETY	LINT YIELD LB/ACRE	LINT % %	PLANT HEIGHT INCHES	PERCENT BOLLS OPENED	UHM S.L. (IN.)	UNIFORMITY INDEX	T1 (G/TEX)	MIKE	ELONGATION	PLANT POPULATION
Paymaster PM1220BG\RR	1900**	34.6	26	66	1.09	84.2	30.1	3.8	11.0	131,260
Paymaster 1560BG/RR	1873*	34.5	26	17	1.10	82.6	29.1	3.5	10.6	131,260
Sure Grow 125BR	1845*	32.5	20	36	1.12	84.1	29.1	3.6	11.8	166,110
Deltapine DP436RR	1818*	32.9	21	18	1.17	84.9	29.2	3.7	11.2	139,392
Paymaster 1218BG/RR	1774*	32.7	23	52	1.07	83.9	27.5	4.3	11.3	170,755
Sure Grow 501BR	1736*	33.6	24	14	1.08	82.4	29.9	3.9	11.9	162,625
Deltapine DP425RR	1711*	31.3	24	31	1.14	84.9	29.0	3.6	11.2	131,260
Deltapine DP451B/RR	1664	29.7	23	17	1.12	82.6	28.9	3.8	10.7	185,855
Deltapine DP409B/RR	1534	33.5	23	50	1.09	81.5	28.0	3.4	11.5	174,240
+Paymaster PMX31746RR	1502	31.9	24	57	1.11	84.8	29.8	4.5	10.8	124,290
Deltapine DP429RR	1417	34.6	19	39	1.11	82.6	30.2	3.3	10.5	205,603
Deltapine DP422B/RR	1400	30.6	25	51	1.11	84.1	28.7	3.5	11.9	166,110
Mean	1681	32.7	23	37	1.11	83.5	29.1	3.7	11.2	
Adj R2 %	94									
C.V. (%)	9.5									
BLS D (K-50)	193									
s.e.	80									
Error d.f.	40									

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

+Experimental. Seed of this may or may not be available in 2000 and may have a different designation.