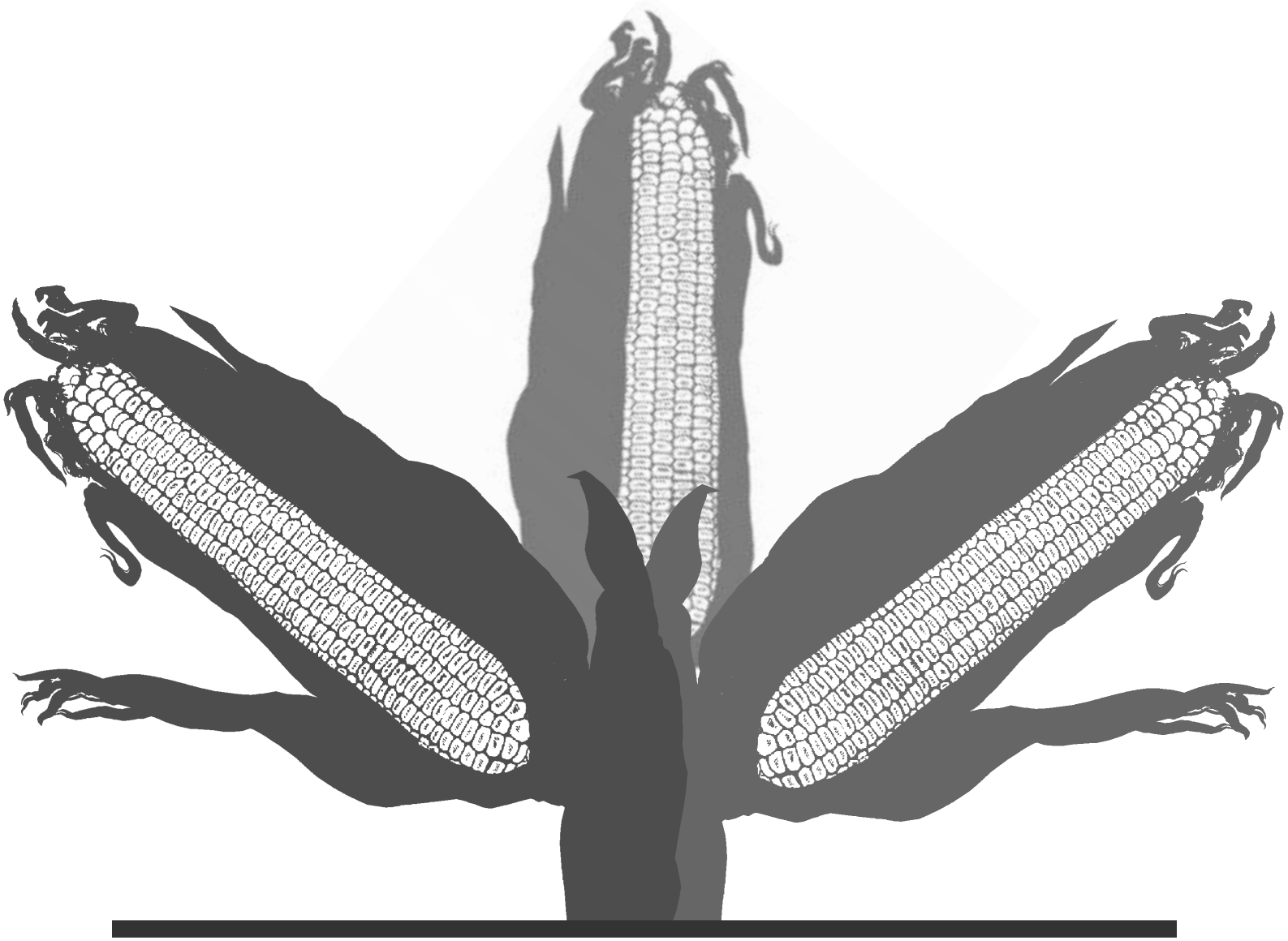
Information Bulletin 381 November 2001

MISSISSIPPI
Corn for Grain



VARIETY TRIALS, 2001

Experiment Station
Vance H. Watson, Director

Mississippi Agricultural & Forestry Experiment Station
Malcolm A. Portera, President • Mississippi State University • J. Charles Lee, Vice President

NOTICE TO USER

This Mississippi Agricultural and Forestry Experiment Station information bulletin is a summary of research conducted under project number MIS 1414 at locations shown on the map on the second page. It is intended for colleagues, cooperators, and sponsors. The interpretation of data presented in this report may change after additional experimentation. Information included is not to be construed as a recommendation for use or as an endorsement of a specific product by Mississippi State University or the Mississippi Agricultural and Forestry Experiment Station.

This report contains data generated as part of the Mississippi Agricultural and Forestry Experiment Station research program. Joint sponsorship by the organizations listed on page 3 is gratefully acknowledged.

Trade names of commercial products used in this report are included only for clarity and understanding. All available names (i.e., trade names, chemical names, etc.) of products used in this research project are listed on page 3.

Mississippi Corn for Grain Variety Trials, 2001

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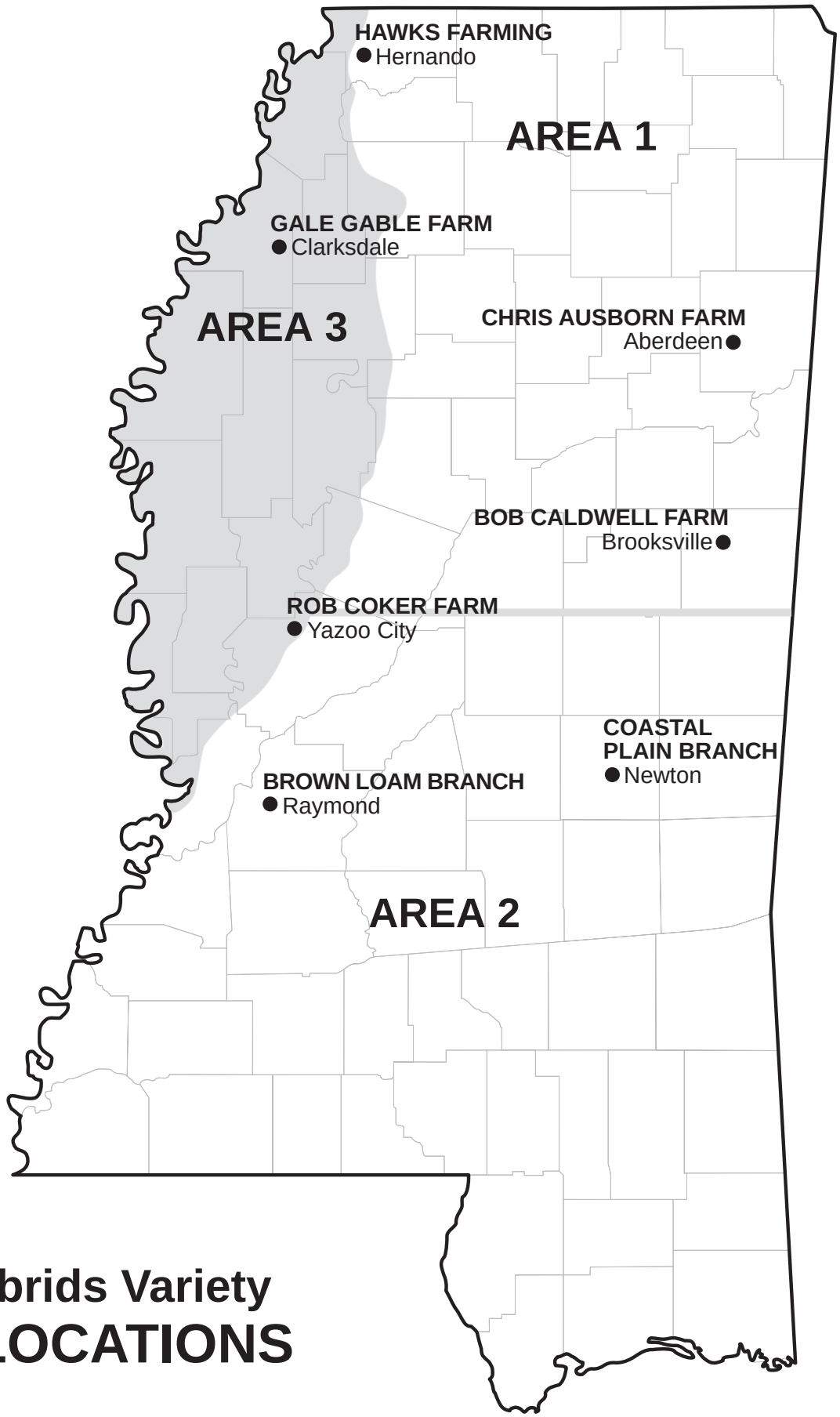

Corn Hybrids Variety
TEST LOCATIONS

Mississippi Corn for Grain Variety Trials, 2001

Procedure

Trials were conducted on Experiment Station land or on grower-cooperator fields in three geographical areas in Mississippi: Area I, located north of Interstate 20, three dryland locations; Area II, located south of Interstate 20, two dryland location; and Area III, located in the Delta region of Mississippi, two irrigated locations (see map). Commercial seed companies were given the opportunity to enter hybrids in Area I, Area II, or Area III.

Plots consisted of two 30-inch rows, each 13.33 feet long. Weeds were controlled by cultivation and/or herbicides. Only herbicides currently registered for use on corn were used in these studies, with strict adherence to all label instructions. Lorsban 15G was donated by Dow Agrosciences and applied in-furrow at planting for insect control. Experimental design was a randomized complete block with five replications at each location.

Hybrids were separated into two maturity groups based upon relative maturity as specified by the sponsoring companies. Those hybrids with a relative maturity of 115 days or less were considered to be early-maturing, while those listed as requiring 116 days or more to mature were considered late-maturing.

Seeds of all entries were supplied by participating companies. All seeds were packaged for planting at seeding rates suggested by the participating company and planted with a cone planter. Phosphorus, potassium, and lime were applied according to soil test recommendations. Nitrogen was applied in Areas I and II at 140 to 200 pounds per acre, and plots in Area III received 200 to 300 pounds of N per acre. Plots in Areas I and II were grown in dryland conditions, and plots in Area III were irrigated, if necessary.

Variables Measured in the Corn Hybrid Tests

Yield: An Almaco SPC 20 plot combine was used to harvest the total area of each plot. Harvested grain was weighed, moisture was determined, and yields were converted to bushels per acre at 15.5% moisture.

Root Lodging: Root lodging is the percentage of plants, based on actual counts of all plants in each plot, that were leaning more than 30 degrees from vertical at harvest.

Stalk Lodging: Stalk lodging is the percentage of plants, based on actual counts of all plants in each plot, that were broken below the upper ear-bearing node at harvest.

Ear Height: Ear height is the distance from the soil to the highest ear-bearing node.

Harvest Population: Harvest population is a measure of the number of plants per acre, based on actual stand counts at time of harvest.

USE OF DATA TABLES AND SUMMARY STATISTICS

The yield potential of a given variety cannot be measured with complete accuracy. Consequently, replicate plots of all varieties are evaluated for yield, and the yield of a given variety is estimated as the mean of all replicate plots of that variety. Yields vary somewhat from one replicate plot to another, which introduces a certain degree of error to the estimation of yield potential. As a result, although the mean yields of some varieties are numerically different, the two varieties may not be significantly different from each other within the range of natural variation. That is, the ability to measure yield is not precise enough to determine what the small differences are, other than what might be observed purely by chance.

The least significant difference (LSD) is an estimate of the smallest difference between two varieties that can be declared to be the result of something other than random variation in a particular trial. Consider the following example for a given trial:

Variety	Yield
A	90 bu/A
B	85 bu/A
C	81 bu/A
LSD	7 bu/A

The difference between variety A and variety B is 5 bu/A (i.e., 90 - 85 = 5). This difference is smaller than the LSD (7 bu/A). Consequently, we would conclude that variety A and variety B have the same yield potential, since we are unable to say that the observed difference did not occur purely due to chance. However, the difference between variety A and variety C is 9 bu/A (i.e., 90 - 81 = 9), which is larger than the LSD (7 bu/A). We would therefore conclude that the yield potential of variety A is superior to that of variety C.

The coefficient of variation (CV) is a measure of the relative precision of a given trial and is used to compare the relative precision of different trials. The CV is generally considered an estimate of the amount of unexplained variation in a given trial. This unexplained variation can be the result of variation between plots with respect to soil type, fertility, insects, diseases, moisture stress, etc. Overall, as the CV increases, the precision of a given trial decreases.

The coefficient of determination (R^2) is another measure of the level of precision in a trial and is also used to compare the relative precision of different trials. The R^2 is a measure of the amount of variation that is explained, or accounted for, in a given trial. For example, an R^2 value of 90 percent indicates that 90 percent of the observed variation in the trial has been accounted for in the trial, with the remaining 10 percent being unaccounted for. The higher the R^2 value, the more precise the trial. The R^2 is generally considered a better measure of precision than the CV for comparison of different trials.

Table 1. Location, number of entries, planting dates, and harvest dates for 2001 corn hybrid trials.

Location	Maturity[1]	No. of entries	Planting date	Harvest date
Area I				
Hawks Farming, Inc. (Hernando)	Early	26	March 27	September 6
Bob Caldwell Farm (Brooksville)	Early	26	April 16	October 1
	Late	33		
Chris Ausborn Farm (Aberdeen)	Early	26	April 23	September 20
	Late	33		
Area II				
Coastal Plain Branch (Newton)	Early	9	April 3	September 10
	Late	16		
Brown Loam Branch (Raymond)	Early	9	April 5	September 12
	Late	16		
Area III				
Rob Coker Farm (Yazoo City)	Early	27	April 6	September 11
	Late	34		
Gale Gable Farm (Clarksdale)	Early	27	March 26	August 28
	Late	34		

[1]Early maturity = 115 days or less; late maturity =116 days or more.

Table 2. Characteristics provided by sponsoring companies for corn hybrids entered in the 2001 Mississippi variety trials.

Company	Hybrid	Planting rate (x1000)	Days to maturity	Grain texture[1]	MDMV resistance[2]	MCDV resistance[2]
AgriGold Hybrids	A6445	28	109	M	S	S
Rt. 1 Box 203	A6469Bt	28	111	M	S	S
St. Francisville, IL 62460	A6607	28	114	M	S	S
618-943-5776	A6617	28	115	H	S	S
	A6620	28	115	M	S	S
	A6729Bt	28	118	H	S	S
	XA4902Bt	28	113	M	S	S
Garst Seed Co.	8288	28	118	—	—	—
761 Walnut Knoll Lane	8222IT	28	119	H	—	—
Memphis, TN 38018	9707	28	117	MH	S	S
901-844-7340	8366IT	28	113	—	—	—
	8251IT	28	117	M	—	—
	8215	28	119	—	—	—
Genesis Brand Seed	Genesis 3214YG	32	114	—	—	—
P.O. Box 21085	Genesis 2A116RR	32	116	—	—	—
Lansing, MI 48909	Genesis 2B116TR	32	116	—	—	—
517-887-1684						
Kaystar Seed	X1181	32	118	M	—	—
P.O. Box 947						
40329 US Hwy. 14 East						
Huron, SD 57350						
605-352-5750						
Land O' Lakes/	641RR	28/32	110	—	—	—
Croplan Genetics	733Bt	28/32	111	—	—	—
P.O. Box 146	734LL	28/32	111	—	—	—
Blytheville, AR 72316	743Bt	28/32	114	—	—	—
870-762-1557	818	28/32	116	—	—	—
	1167CL	28/32	116	M	R	R
	767RR	28/32	116	—	—	—
	727	28/32	110	M	—	—
	678	28/32	115	M	S	S
	827	28/32	118	—	—	—
Monsanto	DKC64-10	28/32	114	—	—	—
3100 Sycamore Rd.	DKC66-50	28/32	116	—	—	—
DeKalb, IL 60115	RX828YG	28/32	116	—	—	—
815-758-9323	DK687	28/32	118	—	—	—
	DKC68-70	28/32	118	—	—	—
	RX897	28/32	118	—	—	—
	DK697	28/32	119	—	—	—
	DKC69-70	28/32	119	—	—	—
NC+ Hybrids	7101	28	119	M	—	—
3820 N 56						
Box 4408						
Lincoln, NE 68504						
402-467-2517						
Pioneer Hi-Bred Intl.	34B24	28	110	M	—	—
6767 Old Madison Pike	34B23	28	108	M	MS	MS
Suite 110	33J56	28	113	M	MR	MR
Huntsville, AL 35806	32H58	28	116	M	—	—
256-971-0760	3223	28	116	—	—	—
	31B13	28	119	M	MS	MS
	31G98	28	117	M	MS	MS
	31R88	28	120	M	MS	MS
	33R77	28	114	S	—	—
Southern States Coop	SS692BT	28/32	111	M	S	S
P.O. Box 26234	SS736BT	28/32	114	M	S	S
6606 West Broad St.	SS859CL	28/32	118	M	MR	MR
Richmond, VA 23200	SS729CL	28/32	114	M	S	S
804-281-1253						
Syngenta Seed	N63-G7	28	108	M	—	—
100 Sangria Drive	N83-N5	28	119	MH	—	—
Hattiesburg, MS 39402	N83-Z8	28	119	MH	—	—
601-264-2878						
Terral Seed Inc.	TV2130	28/30	113	MH	MR	—
P.O. Box 826	TV2140	26/28	114	H	—	—
Lake Providence, LA 71254	TV2140RR	26/28	114	H	MR	—
318-559-2840	TV2128RR	30/32	112	H	MR	—
	TV2155Bt	26/28	115	H	MS	—
	TV2160Bt	26/28	116	H	MR	—
	TVX21R500	26/28	115	H	R	—
	TVX26R101YG	28/30	116	MH	—	—
UAP Mid South	5515	32	117	H	M	—
57 Germantown Court	5516	32	116	H	MR	MR
Suite 200	X15548	32	119	H	R	R
Cordova, TN 38018	5570	32	116	H	—	—
901-752-4223	5518	32	118	H	—	—
	5516RR	32	115	H	M	—
	5518RR	32	118	H	—	—

[1]M = Medium; H = Hard.

[2]MDMV = Maize Dwarf Mosaic Virus; MCDV = Maize Chlorotic Dwarf Virus (corn stunt); S = Susceptible; R = Resistant; MR = Moderately Resistant; and MS = Moderately Susceptible.

HAWKS FARMING, INC., HERNANDO

Crop Summary

Corn was planted no-till into soybean stubble. The growing season was very favorable for good yields. Because of animal damage to plots in the late test, data were not reported.

Soil type	**Collins silt loam**
Soil pH	**6.4**
Soil fertility	**P = H; K = H**
Fertilizer added	**Preplant – N @ 50 lb/A + P_2O_5 @ 30 lb/A + K_2O @ 40 lb/A + Sulfur @ 10 lb/A**
	Sidedress – N @ 150 lb/A
Herbicide application	**Postemergence – Atrazine @ 2 qt/A + Crop Oil Concentrate + Beacon @ 0.5 oz/A**
Previous crop	**Soybeans**
Planting date	**March 27**
Harvest date	**September 6**

Rainfall Summary

	Inches
April	**3.94**
May	**6.35**
June	**2.12**
July	**5.53**
August	**2.24**
September	**3.36**
Total	**23.54**

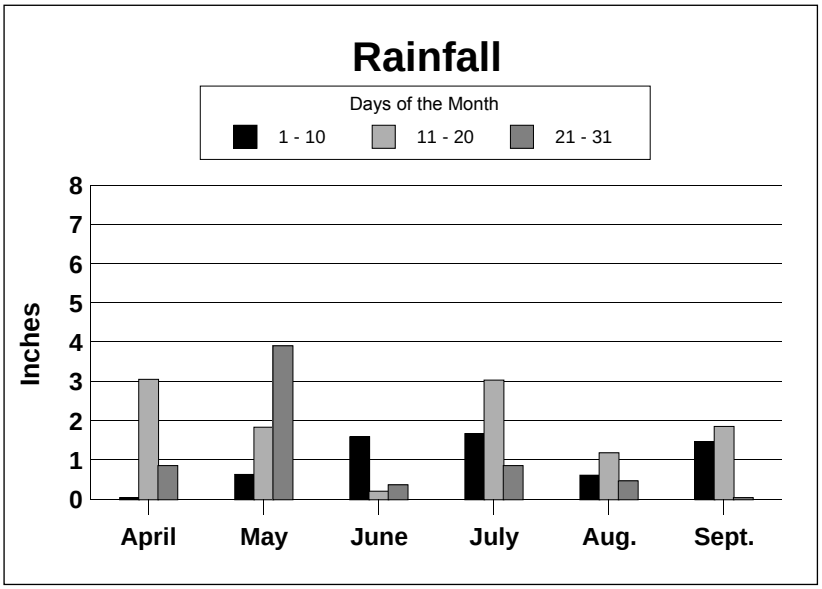

Table 3. Characteristics of 25 early-maturing corn hybrids grown without irrigation on a Collins silt loam soil in Hernando, DeSoto County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year average	3-year average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Dyna-Gro	5516RR	159.8	171.1	—	0	2	41	17.9	33
Terral	TV2130	156.3	162.7	—	1	3	42	17.9	29
Terral	TV21R500	151.2	—	—	0	2	39	17.0	28
Terral	TV2140RR	143.6	158.2	—	1	2	39	18.9	29
Croplan Genetics	641RR	139.6	137.6	—	1	2	34	17.2	29
Croplan Genetics	734LL	137.8	—	—	0	5	39	17.5	28
SS	729CL	135.1	150.7	159.1	0	3	42	17.4	27
Pioneer	33R77	134.7	—	—	0	4	39	17.8	29
Terral	TV2155Bt	132.4	—	—	0	2	40	18.0	26
Terral	TV2140	129.9	138.6	162.4	0	2	38	18.4	28
DEKALB	DKC64-10	122.9	—	—	1	3	35	16.3	27
NK	N63-G7	120.8	—	—	0	4	36	15.4	27
Pioneer	33J56	119.3	157.0	168.9	0	2	40	18.2	28
Garst/AgriPro	8366IT	111.8	—	—	1	3	35	18.5	26
AgriGold	A6617	107.8	—	—	0	11	33	18.4	26
SS	SS692Bt	103.5	—	—	1	4	32	17.0	23
Croplan Genetics	743Bt	97.2	—	—	0	6	38	16.7	25
SS	SS736Bt	96.8	—	—	1	4	33	17.7	25
Pioneer	34B24	92.7	—	—	1	4	34	18.2	24
Pioneer	34B23	90.6	136.6	—	1	3	34	17.6	24
Terral	TV2128RR	88.3	106.7	—	0	6	34	17.6	24
Croplan Genetics	762CL	80.6	—	—	1	4	33	17.5	26
AgriGold	A6469Bt	65.8	—	—	1	1	31	17.7	20
Croplan Genetics	733BT	64.9	—	—	1	5	29	16.7	21
AgriGold	A6620	64.4	—	—	0	6	30	17.6	22
Overall mean		121.2	149.6	163.5					
LSD (.10)		41.1	21.0	15.7					
Error degrees of freedom		65	58	24					
CV (%)		24.8	18.0	15.3					
R^2 (%)		56	68	79					

[1]Planted March 27; harvested September 6.

Bob Caldwell, Jr., Farms, Brooksville

Crop Summary

Corn was planted into stale seedbeds rowed up the previous fall. Corn emerged to a good stand. Very good growing conditions resulted in high yields.

Soil type . . . . . Brooksville silty clay
Soil pH 6.2
Soil fertility . . . . . P = M; K = H
Fertilizer added . . . . . Preplant – P_2O_5 @ 67 lb/A + K_2O @ 100 lb/A
Sidedress – N @ 200 lb/A
Herbicide application . . . . Preemergence – Atrazine @ 2 qt/A
+ Dual @ 1.5 pt/A + Gramoxone Extra @ 1 qt/A
Previous crop . . . . . Soybeans
Planting date . . . . . April 16
Harvest date . . . . . October 1

Table 4. Characteristics of 26 early-maturing corn hybrids grown without irrigation on a Brooksville silty clay soil in Brooksville, Noxubee County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year average	3-year average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Terral	TV2140	235.0	161.5	147.1	0	0	55	14.5	32
Terral	TV2130	231.1	164.3	—	0	0	59	14.2	32
SS	SS736Bt	224.6	—	—	0	1	44	14.5	33
Terral	TV2155Bt	221.6	—	—	0	0	51	15.1	31
Dyna-Gro	5516RR	221.0	—	—	0	0	53	14.0	34
Pioneer	33R77	219.2	—	—	0	1	51	14.6	32
Terral	TV2140RR	218.6	144.3	—	0	1	57	14.2	33
Pioneer	33J56	218.3	160.2	143.7	0	3	46	14.3	32
DEKALB	DKC64-10	212.8	—	—	0	0	46	13.9	32
SS	729CL	211.2	160.4	143.4	0	2	53	14.2	33
Garst/AgriPro	8366IT	208.1	—	—	0	1	48	14.3	31
Terral	TV21R500	207.2	—	—	0	1	52	14.4	30
AgriGold	A6469Bt	202.2	—	—	0	0	42	14.2	32
NK	N63-G7	201.6	—	—	0	1	50	13.9	32
Terral	TV2128RR	195.1	142.8	—	0	1	47	14.1	33
Croplan Genetics	734LL	194.2	—	—	0	0	52	14.4	32
SS	SS692Bt	188.6	—	—	0	1	46	14.0	29
Croplan Genetics	743Bt	179.1	—	—	0	2	46	13.4	32
Pioneer	34B23	175.5	137.5	—	0	2	41	14.2	33
Pioneer	34B24	171.1	—	—	0	1	40	13.0	31
Croplan Genetics	733BT	164.5	—	—	0	0	40	14.1	30
Croplan Genetics	762CL	155.4	—	—	0	2	37	14.5	32
Croplan Genetics	727	150.7	118.0	118.2	0	1	42	14.3	30
AgriGold	A6620	137.4	—	—	0	2	38	14.4	30
AgriGold	A6617	136.7	—	—	0	2	40	13.3	34
Croplan Genetics	641RR	135.4	106.4	—	0	2	41	12.6	32
Overall mean		192.9	143.9	138.1					
LSD (.10)		37.7	22.7	16.2					
Error degrees of freedom		100	64	36					
CV (%)		18.6	21.1	19.1					
R^2 (%)		52	84	87					

[1]Planted April 16; harvested October 1.

Rainfall Summary

	Inches
April	3.04
May	1.32
June	4.71
July	2.10
August	7.98
September	4.61
Total	23.76

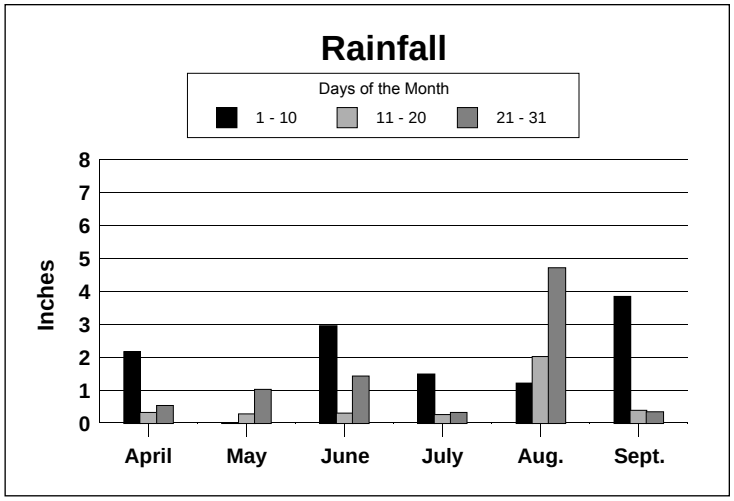

Table 5. Characteristics of 33 late-maturing corn hybrids grown without irrigation on a Brooksville silty clay soil in Brooksville, Noxubee County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year average	3-year average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Pioneer	32H58	247.8	—	—	0	0	50	15.2	33
Garst/AgriPro	8215	242.8	—	—	3	4	57	15.1	32
Garst/AgriPro	8222IT	234.9	166.6	—	0	0	50	15.7	32
Dyna-Gro	5518	232.7	—	—	0	1	56	14.6	35
DEKALB	DKC68-70	232.2	—	—	0	0	49	15.1	32
Pioneer	31R88	231.6	161.2	—	1	2	54	15.1	34
Pioneer	31G98	231.0	160.4	—	0	1	58	14.7	33
Dyna-Gro	5518RR	229.4	—	—	3	2	57	14.4	34
DEKALB	DKC69-70	227.6	—	—	0	1	54	15.5	34
Dyna-Gro	5515	222.0	—	—	1	2	49	14.9	36
Pioneer	3223	221.1	151.2	156.4	0	2	58	14.8	34
DeKalb	DK697	216.5	148.4	141.0	0	1	52	15.4	32
Garst/AgriPro	8288	215.0	—	—	1	1	51	15.7	32
NK	N83-Z8	214.0	—	—	0	0	57	15.5	30
DeKalb	DK687	211.7	152.5	142.8	0	1	54	15.3	33
Croplan Genetics	818	209.1	154.7	—	0	1	50	15.4	30
Pioneer	31B13	207.7	142.7	—	1	1	59	14.7	34
NC+	7101	205.7	—	—	1	2	46	14.8	32
AgriGold	A6729Bt	202.3	143.1	—	1	3	58	15.2	32
Terral	TVX26R101YG	200.8	—	—	0	1	52	14.8	31
Dyna-Gro	X15548	199.6	151.4	—	0	1	55	15.0	34
Garst/AgriPro	8251IT	199.1	148.7	—	0	0	59	14.5	33
Asgrow	RX 897	196.8	—	—	0	0	58	14.8	33
Croplan Genetics	827	195.8	—	—	3	4	55	15.0	34
Croplan Genetics	1167CL	193.5	142.3	134.1	0	0	55	13.1	30
Dyna-Gro	5570	189.6	—	—	0	0	54	12.8	31
SS	859CL	189.2	141.4	136.9	4	2	52	15.1	32
NK	N83-N5	187.9	—	—	0	2	57	15.3	32
Croplan Genetics	767RR	182.0	—	—	1	1	47	14.9	32
Asgrow	RX828YG	181.6	—	—	0	0	42	15.5	32
DEKALB	DKC66-50	181.6	—	—	0	2	47	15.1	31
Dyna-Gro	DG5516	180.5	—	—	0	1	55	14.7	33
Terral	TV2160Bt	180.1	—	—	3	3	58	15.3	32
Overall mean		208.9	150.1	140.8					
LSD (.10)		34.4	17.4	15.2					
Error degrees of freedom		125	94	47					
CV (%)		15.6	15.5	17.5					
R^2 (%)		33	91	87					

[1]Planted April 16; harvested October 1.

Chris Ausborn Farm, Aberdeen

Crop Summary

Wet conditions from mid-March through early April delayed planting. Rains were timely until July, when corn went through some drought stress. Insect and weed pressures were minimal.

Soil type . . . . . **Houston clay**
Soil pH **7.20**
Soil fertility . . . . . **P = M; K = H**
Fertilizer added . . . . . **Preplant – P_2O_5 @ 60 lb/A + Zinc @ 2 lb/A**
Sidedress – N @ 200 lb/A
Herbicide application . . . . **Preemergence – Atrazine @ 2 qt/A**
+ Accent @ .5 oz/A
Previous crop . . . . . **Soybeans**
Planting date . . . . . **April 23**
Harvest date . . . . . **September 20**

Table 6. Results from 26 early-maturing corn hybrids grown without irrigation on a Houston clay soil in Aberdeen, Monroe County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Dyna-Gro	5516RR	170.4	—	—	0	1	40	17.6	35
NK	N63-G7	163.9	—	—	0	0	35	16.0	32
Pioneer	33J56	159.2	—	—	0	1	37	17.0	30
Terral	TV2155Bt	156.6	—	—	0	0	38	17.0	30
SS	SS736Bt	155.3	—	—	0	0	34	16.8	30
Croplan Genetics	743Bt	154.6	—	—	0	1	33	16.4	32
Terral	TV2140	151.5	—	—	0	1	38	17.5	32
DEKALB	DKC64-10	150.9	—	—	0	1	33	15.8	33
Terral	TV2130	150.6	—	—	0	2	39	16.6	32
SS	729CL	150.6	—	—	0	2	38	15.9	32
SS	SS692Bt	150.3	—	—	0	0	34	15.8	34
AgriGold	A6469Bt	150.0	—	—	0	0	32	17.2	32
Terral	TV21R500	147.9	—	—	0	0	38	17.6	30
Garst/AgriPro	8366IT	145.9	—	—	0	2	32	16.6	32
Pioneer	33R77	145.0	—	—	0	1	35	17.4	32
AgriGold	A6617	144.3	—	—	0	0	31	17.2	34
Croplan Genetics	641RR	141.3	—	—	0	1	35	15.7	31
Croplan Genetics	734LL	139.3	—	—	0	1	37	17.4	34
Terral	TV2140RR	138.4	—	—	0	0	38	17.5	31
Croplan Genetics	733BT	135.5	—	—	0	0	30	17.2	34
Croplan Genetics	762CL	131.4	—	—	0	0	31	16.6	30
Croplan Genetics	727	130.5	—	—	0	1	33	15.8	28
Terral	TV2128RR	120.4	—	—	0	2	30	15.9	31
Pioneer	34B23	108.5	—	—	0	0	31	16.8	30
AgriGold	A6620	97.5	—	—	0	2	25	16.5	28
Pioneer	34B24	95.0	—	—	0	0	30	17.3	31
Overall mean		141.7	—	—					
LSD (.10)		17.2	—	—					
Error degrees of freedom		100	—	—					
CV (%)		11.6	—	—					
R^2 (%)		64	—	—					

[1]Planted April 23; harvested September 20.
[2]No 2- or 3-year averages.

Rainfall Summary

	Inches
April	3.23
May	8.49
June	6.34
July	1.47
August	5.90
September	3.25
Total	28.68

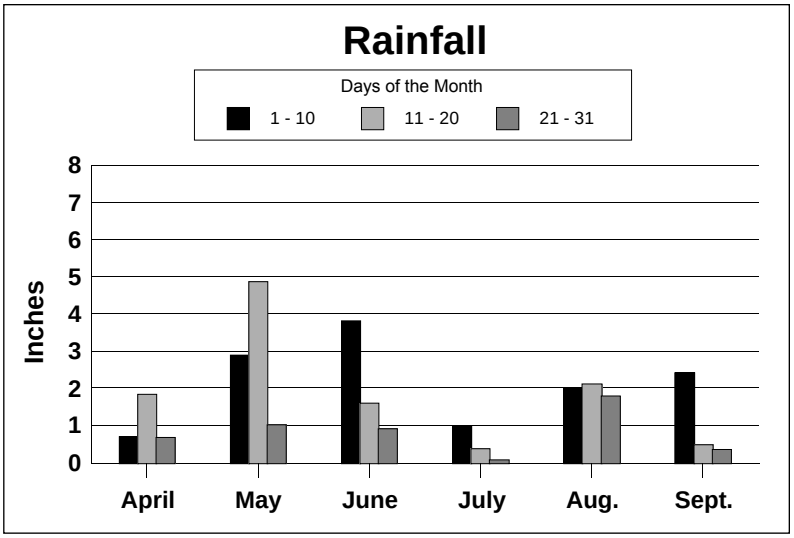

Table 7. Results from 33 late-maturing corn hybrids grown without irrigation on a Houston clay soil in Aberdeen, Monroe County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Terral	TV2160Bt	178.0	—	—	0	1	36	17.7	32
Garst/AgriPro	8288	164.9	—	—	0	1	39	18.5	34
DeKalb	DK687	162.7	—	—	0	0	34	18.1	34
Pioneer	31G98	162.6	—	—	0	0	36	18.5	32
Pioneer	31R88	159.2	—	—	0	1	34	18.3	33
AgriGold	A6729Bt	159.0	—	—	0	0	33	18.0	30
SS	859CL	158.6	—	—	0	1	34	18.0	32
Asgrow	RX828YG	157.6	—	—	0	1	34	18.6	32
Dyna-Gro	DG5516	157.6	—	—	0	2	34	17.8	32
Pioneer	31B13	156.9	—	—	0	0	34	17.8	32
Dyna-Gro	X15548	156.4	—	—	0	0	33	18.7	32
Garst/AgriPro	8222IT	156.0	—	—	0	1	32	18.0	33
NK	N83-N5	154.7	—	—	0	1	33	18.1	32
DeKalb	DK697	154.2	—	—	0	1	34	18.3	33
DEKALB	DKC66-50	153.4	—	—	0	1	32	18.8	32
Dyna-Gro	5518	150.4	—	—	0	1	32	18.8	34
Garst/AgriPro	8251IT	149.8	—	—	0	1	33	18.8	26
Pioneer	32H58	148.4	—	—	0	0	35	17.5	31
Terral	TVX26R101YG	145.9	—	—	0	1	38	18.1	34
Croplan Genetics	1167CL	145.8	—	—	0	1	34	18.2	30
Garst/AgriPro	8215	144.6	—	—	0	0	34	18.4	32
Croplan Genetics	818	144.6	—	—	0	1	35	18.2	32
Dyna-Gro	5518RR	143.6	—	—	0	1	33	18.2	33
NC+	7101	142.5	—	—	0	1	37	18.6	32
Pioneer	3223	142.0	—	—	0	0	37	16.0	31
Dyna-Gro	5515	141.7	—	—	0	1	32	18.7	32
DEKALB	DKC69-70	139.9	—	—	0	2	32	18.0	32
Croplan Genetics	827	138.6	—	—	0	1	35	18.4	30
DEKALB	DKC68-70	138.5	—	—	0	2	32	18.7	32
NK	N83-Z8	136.6	—	—	0	1	33	19.2	32
Asgrow	RX 897	136.2	—	—	0	1	32	17.8	31
Dyna-Gro	5570	136.1	—	—	0	1	32	18.7	32
Croplan Genetics	767RR	131.8	—	—	0	1	34	18.0	30
Overall mean		150.0	—	—					
LSD (.10)		25.5	—	—					
Error degrees of freedom		128	—	—					
CV (%)		16.2	—	—					
R^2 (%)		20	—	—					

[1]Planted April 23; harvested September 20.
[2]No 2- or 3-year averages.

MAFES Coastal Plain Branch, Newton

Crop Summary

Temperatures had normalized by planting time. Adequate soil moisture and soil temperature permitted a timely planting and crop emergence. The crop progressed normally until conditions turned dry from mid-April until late May, when rains began coming as needed. The crop looked good and was above average up until harvest time. At crop maturity, frequent rains and wind for a 2- to 3-week period delayed harvest, causing yield losses in some plots.

Soil type . . . . . Prentiss very fine sandy loam
Soil pH 6.7
Soil fertility . . . . . P = H; K = H
Fertilizer added . . . . . Preplant – N @ 51 lb/A + K_2O @ 60 lb/A
Sidedress – N @ 150 lb/A
Herbicide application . . . Preemergence – Atrazine @ 2 qt/A
+ Frontier @ 24 oz/A
Previous crop . . . . . Corn
Planting date . . . . . April 3
Harvest date . . . . . September 10

Table 8. Results from nine early-maturing corn hybrids grown without irrigation on a Prentiss very fine sandy loam soil at the MAFES Coastal Plain Branch, Newton, 2001.[1]

Hybrid number	Brand name	2001 yield	2-year average	3-year average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Terral	TV2140	122.3	105.5	113.2	2	0	39	19.5	29
SS	729CL	116.3	105.4	123.0	4	0	38	18.4	26
DEKALB	DKC64-10	106.6	—	—	0	8	36	17.1	28
Terral	TV2140RR	101.9	93.0	—	3	1	39	18.2	26
Terral	TV2130	101.1	91.3	—	4	0	40	17.9	26
Terral	TV21R500	99.1	—	—	3	0	41	19.0	21
Terral	TV2155Bt	93.6	—	—	7	0	41	18.5	25
NK	N63-G7	89.0	—	—	5	1	33	17.9	26
Terral	TV2128RR	82.4	82.6	—	1	11	34	18.0	28
Overall mean		102.7	96.4	118.1					
LSD (.10)		22.2	10.6	11.5					
Error degrees of freedom		25	29	12					
CV (%)		16.2	14.0	14.9					
R^2 (%)		62	70	86					

[1]Planted April 3; harvested September 10.

Rainfall Summary

	Inches
April	4.57
May	3.78
June	5.55
July	2.76
August	5.98
September	4.68
Total	27.32

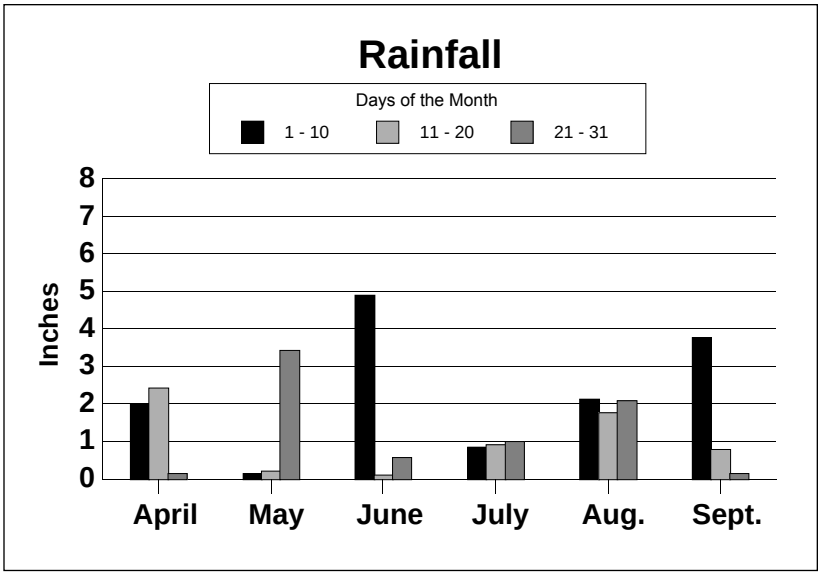

Table 9. Results from 16 late-maturing corn hybrids grown without irrigation on a Prentiss very fine sandy loam soil at the MAFES Coastal Plain Branch, Newton, 2001.[1]

Hybrid number	Brand name	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
DEKALB	DKC69-70	123.2	—	—	0	0	44	20.0	31
Pioneer	3223	118.6	—	—	1	2	43	18.4	30
Dyna-Gro	X15548	114.2	—	—	0	0	33	18.9	21
DeKalb	DK697	111.3	—	—	0	0	40	18.5	34
DEKALB	DKC68-70	110.8	—	—	4	0	41	19.6	19
Pioneer	31R88	107.9	—	—	2	1	41	18.6	30
Terral	TVX26R101YG	107.9	—	—	2	0	35	18.7	26
Asgrow	RX 897	106.6	—	—	2	0	38	18.8	31
Asgrow	RX828YG	105.1	—	—	3	1	34	19.0	30
DeKalb	DK687	100.7	—	—	4	1	40	19.1	26
NK	N83-Z8	100.6	—	—	1	0	33	19.8	22
Terral	TV2160Bt	100.5	—	—	3	1	40	19.0	26
Dyna-Gro	5518	99.7	—	—	0	2	39	18.6	34
NK	N83-N5	98.0	—	—	4	0	33	19.1	22
DEKALB	DKC66-50	97.0	—	—	0	1	39	18.6	31
SS	859CL	91.9	—	—	3	2	35	18.8	28
Overall mean		105.6	—	—					
LSD (.10)		16.8	—	—					
Error degrees of freedom		56	—	—					
CV (%)		14.6	—	—					
R^2 (%)		53	—	—					

[1]Planted April 3; harvested September 10.
[2]No 2- or 3-year averages.

MAFES Brown Loam Branch, Raymond

Crop Summary

The corn test emerged to a good stand. Above-average June and July rainfall during the growing season provided for an above-average yield. No problems resulted from weeds or disease.

Soil type . . . . . Calloway silt loam
Soil pH 6.5
Soil fertility . . . . . P = H; K = M
Fertilizer added . . . . . Preplant – P_2O_5 @ 75 lb/A + K_2O @ 78 lb/A
Sidedress – N @ 180 lb/A
Herbicide application . . . . Preemergence – Atrazine @ 2 qt/A
+ Dual @ 1 qt/A
Previous crop . . . . . Corn
Planting date . . . . . April 5
Harvest date . . . . . September 12

Table 10. Results from nine early-maturing corn hybrids grown without irrigation on a Calloway silt loam soil at the MAFES Brown Loam Branch, Raymond, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
DEKALB	DKC64-10	160.5	—	—	0	0	42	16.3	29
Terral	TV21R500	158.9	—	—	0	0	49	17.0	28
Terral	TV2140	154.5	—	—	0	0	49	17.3	28
Terral	TV2130	152.5	—	—	0	0	49	16.5	29
SS	729CL	148.2	—	—	0	0	46	17.3	31
Terral	TV2140RR	146.4	—	—	0	0	47	17.0	29
NK	N63-G7	140.7	—	—	0	0	44	17.1	27
Terral	TV2155Bt	138.9	—	—	0	0	47	17.7	27
Terral	TV2128RR	135.5	—	—	0	3	41	16.6	30
Overall mean		148.2	—	—					
LSD (.10)		24.3	—	—					
Error degrees of freedom		31	—	—					
CV (%)		15.1	—	—					
R^2 (%)		32	—	—					

[1]Planted April 5; harvested September 12.
[2]No 2- or 3-year averages.

Rainfall Summary

	Inches
April	1.32
May	2.65
June	8.00
July	8.97
August	3.88
September	10.45
Total	35.27

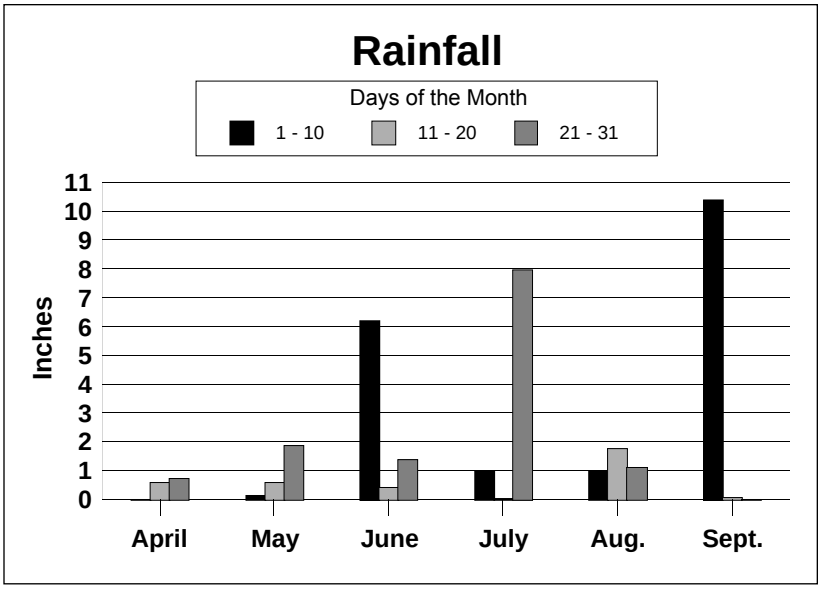

Table 11. Results from 16 late-maturing corn hybrids grown without irrigation on a Calloway silt loam soil at the MAFES Brown Loam Branch, Raymond, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
DeKalb	DK687	153.4	—	—	0	0	44	17.4	30
Terral	TVX26R101YG	149.7	—	—	0	0	44	17.0	28
Dyna-Gro	5518	144.3	—	—	0	1	47	17.3	34
Dyna-Gro	X15548	143.1	—	—	0	0	47	17.2	32
DEKALB	DKC68-70	139.5	—	—	0	0	47	16.9	32
Pioneer	3223	136.6	—	—	0	0	46	17.2	30
DeKalb	DK697	135.2	—	—	0	0	46	17.7	30
NK	N83-N5	132.5	—	—	0	0	48	17.7	32
NK	N83-Z8	127.0	—	—	0	0	50	17.6	30
Pioneer	31R88	126.5	—	—	0	0	44	17.6	28
DEKALB	DKC66-50	126.0	—	—	0	0	42	16.5	32
DEKALB	DKC69-70	124.7	—	—	0	0	44	17.6	28
Asgrow	RX 897	123.8	—	—	0	0	41	17.1	31
Asgrow	RX828YG	123.8	—	—	0	0	40	17.5	29
Terral	TV2160Bt	111.7	—	—	0	0	46	17.2	29
SS	859CL	99.0	—	—	0	0	39	17.4	27
Overall mean		130.2	—	—					
LSD (.10)		20.0	—	—					
Error degrees of freedom		54	—	—					
CV (%)		13.8	—	—					
R^2 (%)		52	—	—					

[1]Planted April 5; harvested September 12.
[2]No 2- or 3-year averages.

GALE GABLE FARM, CLARKSDALE

Crop Summary

Rainfall amounts and timing of rainfall were nearly perfect for growing corn. The crop was planted in ideal conditions and received 14.66 inches of rainfall from planting to harvest. From the end of May until July 21, rains fell 6-14 days apart at rates of 0.50 to 2.49 inches per day. Temperatures were mild.

Soil type . . . . . **Sharkey clay**
Soil pH **6.5**
Soil fertility . . . . . **P = M; K = M**
Fertilizer added . . . . . **Preplant – N @ 18 lb/A + P_2O_5 @ 111 lb/A + K_2O @ 108 lb/A**
Sidedress – N @ 300 lb/A
Herbicide application . . . . **Preemergence – Axiom @ 14 oz/A + Atrazine @ 2 qt/A**
Irrigation . . . . . **June 18, July 9, July 30, and August 6**
Previous crop . . . . . **Soybeans**
Planting date . . . . . **March 26**
Harvest date . . . . . **August 28**

Table 12. Results from 27 early-maturing corn hybrids grown with irrigation on a Sharkey clay soil in Clarksdale, Coahoma County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Genesis	3214YG	251.3	—	—	0	0	42	17.3	34
Croplan Genetics	734LL	241.3	—	—	0	2	45	15.3	34
SS	SS736Bt	234.8	—	—	0	1	40	15.8	33
Terral	TV2140RR	232.7	—	—	0	0	42	15.1	31
SS	SS692Bt	231.7	—	—	0	1	39	14.8	32
Terral	TV2130	224.1	—	—	0	2	45	15.4	30
Pioneer	33R77	222.9	—	—	0	2	45	16.3	29
Pioneer	34B23	222.1	—	—	0	1	38	15.1	31
Pioneer	34B24	220.5	—	—	0	0	40	15.1	30
Dyna-Gro	5516RR	219.6	—	—	0	1	46	15.3	35
Garst/AgriPro	8366IT	219.2	—	—	0	1	39	15.6	31
Croplan Genetics	733BT	215.9	—	—	0	0	39	17.7	32
Terral	TV2155Bt	215.1	—	—	0	0	48	16.7	30
Croplan Genetics	641RR	215.0	—	—	0	0	36	14.5	32
Terral	TV2140	211.2	—	—	0	1	47	16.4	31
Pioneer	33J56	211.0	—	—	0	4	40	15.0	30
Terral	TV2128RR	209.1	—	—	0	3	41	14.4	31
AgriGold	A6445	206.9	—	—	0	1	34	15.6	31
SS	729CL	203.6	—	—	0	4	45	14.9	30
AgriGold	A6607	197.8	—	—	0	4	42	15.7	31
NK	N63-G7	197.3	—	—	0	0	41	14.4	32
Croplan Genetics	744BT	197.0	—	—	0	2	44	14.3	33
Croplan Genetics	727	194.1	—	—	0	3	38	14.6	32
Terral	TV21R500	194.1	—	—	0	1	44	17.1	27
DEKALB	DKC64-10	190.8	—	—	0	2	40	14.4	32
AgriGold	XA4902Bt	185.1	—	—	0	0	40	18.0	30
Croplan Genetics	1157	175.6	—	—	0	1	36	15.0	31
Overall mean		212.6	—	—					
LSD (.10)		29.5	—	—					
Error degrees of freedom		104	—	—					
CV (%)		13.2	—	—					
R^2 (%)		35	—	—					

[1]Planted March 25; harvested August 28.
[2]No 2- or 3-year averages.

Rainfall Summary

	Inches
April	0
May	5.14
June	3.29
July	2.66
August	3.57
Total	14.66

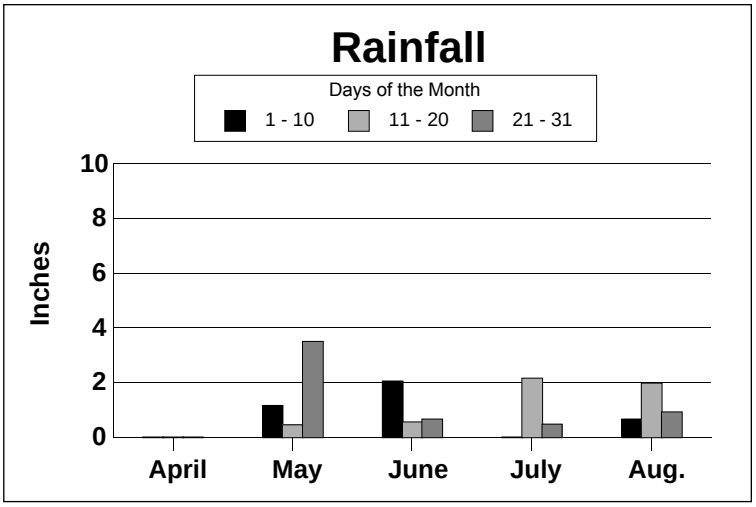

Table 13. Results from 34 late-maturing corn hybrids grown with irrigation on a Sharkey clay soil in Clarksdale, Coahoma County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Pioneer	31B13	255.0	—	—	0	0	48	16.5	32
Pioneer	32H58	249.8	—	—	0	1	43	16.6	31
NK	N83-N5	249.1	—	—	0	0	48	14.5	30
DeKalb	DK687	240.9	—	—	0	1	46	16.0	34
DEKALB	DKC68-70	236.2	—	—	0	0	48	16.6	34
NK	N83-Z8	233.9	—	—	0	0	48	16.5	29
Genesis	2A116RR	233.8	—	—	0	0	46	16.8	33
DeKalb	DK697	233.4	—	—	0	1	48	17.6	35
Dyna-Gro	5518RR	232.1	—	—	0	1	48	15.8	33
Garst/AgriPro	AP9707	231.4	—	—	0	1	44	16.2	31
Dyna-Gro	5518	230.7	—	—	0	1	46	16.1	35
Terral	TV2160Bt	230.6	—	—	0	0	47	17.2	32
Croplan Genetics	818	225.5	—	—	0	5	41	16.5	31
Garst/AgriPro	8288	225.5	—	—	0	3	44	17.2	29
Pioneer	3223	224.7	—	—	0	2	47	16.6	30
AgriGold	A6729Bt	224.7	—	—	0	0	48	16.2	31
Pioneer	31G98	223.9	—	—	0	1	48	16.4	31
Asgrow	RX 897	223.4	—	—	0	2	46	16.3	36
DEKALB	DKC66-50	220.9	—	—	0	1	42	15.9	34
Dyna-Gro	5515	220.5	—	—	0	1	46	16.5	32
Dyna-Gro	X15548	220.0	—	—	0	0	47	17.7	32
SS	859CL	219.1	—	—	0	1	40	16.7	34
Genesis	2B116TR	216.0	—	—	0	0	40	16.0	30
Garst/AgriPro	8222IT	215.6	—	—	0	4	45	17.7	29
DEKALB	DKC69-70	213.3	—	—	0	0	46	19.0	34
Asgrow	RX828YG	210.8	—	—	0	0	39	16.7	34
Croplan Genetics	827	205.6	—	—	0	1	47	17.7	34
Terral	TVX26R101YG	202.9	—	—	0	0	40	17.0	32
Croplan Genetics	1167CL	202.9	—	—	0	1	45	17.0	29
Pioneer	31R88	202.3	—	—	0	1	46	16.9	29
Dyna-Gro	5570	200.9	—	—	0	0	44	16.6	29
Dyna-Gro	DG5516	200.1	—	—	0	1	45	16.0	32
Croplan Genetics	767RR	192.2	—	—	0	1	38	16.4	33
KAYSTAR	X1181	183.7	—	—	0	1	44	16.5	31
Overall mean		221.5	—	—					
LSD (.10)		27.1	—	—					
Error degrees of freedom		132	—	—					
CV (%)		11.7	—	—					
R^2 (%)		34	—	—					

[1]Planted March 26; harvested August 28.
[2]No 2- or 3-year averages.

Rob Coker Farm, Yazoo City

Crop Summary

The field was planted in corn last year. The tillage practices used included disk, rowed-up, and rolled before planting. The field received 21 inches of rainfall from planting to harvest, with 6 inches of that amount falling in August. During the growing season, temperatures were moderate compared with recent years.

Soil type	**Forestdale silty clay loam**
Soil pH	**5.7**
Soil fertility	**P = M; K = M**
Fertilizer added	**Preplant – N @ 27 lb/A + P_2O_5 @ 186 lb/A + K_2O @ 64 lb/A**
	Sidedress – N @ 240 lb/A
Herbicide application	**Bicep II Magnum @ 2 qt/A**
Irrigation	**Furrow – May 7, May 14, May 28, June 11, June 18, June 25, and July 9**
Previous crop	**Corn**
Planting date	**April 6**
Harvest date	**September 11**

Table 14. Results from 27 early-maturing corn hybrids grown with irrigation on a Forestdale silty clay loam soil in Yazoo City, Yazoo County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
AgriGold	XA4902Bt	169.3	—	—	0	2	35	16.8	30
Croplan Genetics	733BT	168.4	—	—	0	1	33	16.6	22
Terral	TV2140RR	164.9	—	—	0	3	39	16.4	26
Terral	TV2140	164.3	—	—	0	3	40	16.6	27
SS	SS736Bt	163.2	—	—	0	1	35	16.3	30
Terral	TV2155Bt	160.2	—	—	0	2	40	16.6	29
Genesis	3214YG	159.3	—	—	0	1	38	17.2	26
Terral	TV2128RR	157.8	—	—	0	5	39	16.7	22
Croplan Genetics	734LL	157.6	—	—	0	6	37	16.6	28
Dyna-Gro	5516RR	156.3	—	—	0	4	40	16.8	32
Pioneer	34B24	156.0	—	—	0	1	33	17.4	24
Pioneer	33J56	154.0	—	—	0	3	36	16.7	22
DEKALB	DKC64-10	152.4	—	—	0	5	36	16.1	26
SS	SS692Bt	152.3	—	—	0	0	35	16.5	22
Pioneer	34B23	152.2	—	—	0	5	29	17.0	21
Terral	TV21R500	151.5	—	—	0	2	37	16.0	22
Pioneer	33R77	150.2	—	—	0	3	41	16.4	24
Croplan Genetics	744BT	148.5	—	—	0	3	38	16.7	27
AgriGold	A6607	146.1	—	—	0	7	33	17.0	24
Croplan Genetics	727	145.8	—	—	0	5	32	16.9	22
NK	N63-G7	145.3	—	—	0	4	37	16.7	28
Terral	TV2130	142.2	—	—	0	1	42	16.1	23
Croplan Genetics	1157	140.5	—	—	0	1	31	17.5	22
AgriGold	A6445	140.0	—	—	0	4	29	16.7	23
SS	729CL	139.4	—	—	0	4	41	16.3	28
Croplan Genetics	641RR	137.6	—	—	0	3	34	16.5	24
Garst/AgriPro	8366IT	125.2	—	—	0	2	35	16.1	25
Overall mean		151.9	—	—					
LSD (.10)		29.2	—	—					
Error degrees of freedom		103	—	—					
CV (%)		18.2	—	—					
R^2 (%)		28	—	—					

[1]Planted April 6; harvested September 11.
[2]No 2- or 3-year averages.

Rainfall Summary

	Inches
April	2.44
May	3.94
June	3.38
July	2.89
August	6.10
September	2.19
Total	20.94

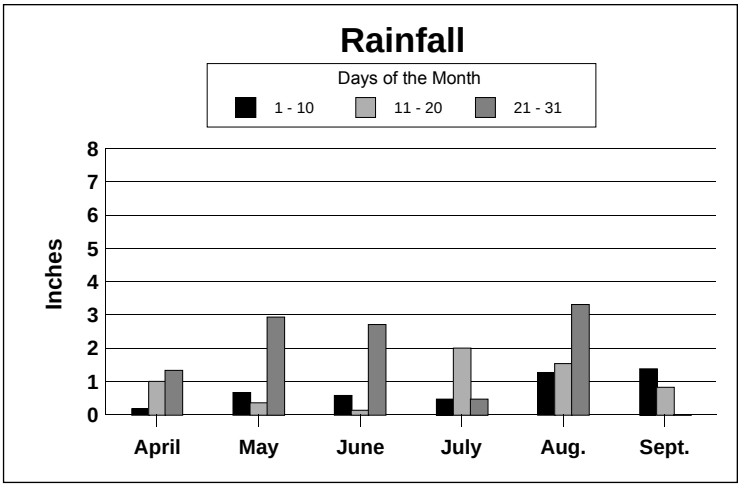

Table 15. Results from 34 late-maturing corn hybrids grown with irrigation on a Forestdale silty clay loam soil in Yazoo City, Yazoo County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year[2] average	3-year[2] average	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
DEKALB	DKC69-70	214.7	—	—	0	0	44	17.3	34
NK	N83-Z8	214.1	—	—	0	0	50	16.9	23
Dyna-Gro	5515	195.3	—	—	0	3	37	16.4	27
Asgrow	RX828YG	191.5	—	—	0	0	35	17.0	22
Terral	TVX26R101YG	190.3	—	—	0	0	37	16.3	26
DeKalb	DK697	190.3	—	—	0	3	44	16.6	29
Pioneer	32H58	188.6	—	—	0	4	38	16.7	24
Garst/AgriPro	AP9707	186.3	—	—	0	3	40	16.3	24
DEKALB	DKC68-70	186.3	—	—	0	0	40	16.2	32
Pioneer	31R88	185.5	—	—	0	4	38	17.2	26
Terral	TV2160Bt	185.1	—	—	0	1	48	16.8	29
Dyna-Gro	DG5516	184.4	—	—	0	2	39	16.4	23
Pioneer	31B13	179.9	—	—	0	0	43	16.6	29
AgriGold	A6729Bt	178.9	—	—	0	1	45	16.7	29
DeKalb	DK687	177.3	—	—	0	4	44	16.2	27
KAYSTAR	X1181	175.0	—	—	0	1	44	16.7	26
Croplan Genetics	818	174.8	—	—	0	1	39	16.6	22
Dyna-Gro	X15548	169.6	—	—	0	3	37	16.2	26
Dyna-Gro	5570	167.7	—	—	0	1	43	16.1	24
Asgrow	RX 897	165.3	—	—	0	4	42	16.2	30
Genesis	2B116TR	162.4	—	—	0	1	37	16.0	28
Pioneer	31G98	162.2	—	—	0	3	42	16.0	24
SS	859CL	161.8	—	—	0	4	37	16.7	26
Dyna-Gro	5518	156.4	—	—	0	2	45	16.2	26
Garst/AgriPro	8222IT	153.5	—	—	0	5	41	17.3	29
Garst/AgriPro	8288	152.4	—	—	0	4	34	17.9	20
Croplan Genetics	1167CL	152.3	—	—	0	2	40	16.0	22
Croplan Genetics	767RR	149.3	—	—	0	3	37	16.4	30
Dyna-Gro	5518RR	149.2	—	—	0	2	44	16.3	24
NK	N83-N5	145.3	—	—	0	6	45	17.0	29
Genesis	2A116RR	145.3	—	—	0	7	43	17.1	30
Pioneer	3223	141.8	—	—	0	6	44	16.3	28
Croplan Genetics	827	140.9	—	—	0	12	47	16.5	32
DEKALB	DKC66-50	133.6	—	—	0	5	37	16.5	26
Overall mean		170.8	—	—					
LSD (.10)		36.0	—	—					
Error degrees of freedom		132	—	—					
CV (%)		20.1	—	—					
R^2 (%)		34	—	—					

[1]Planted April 6; harvested September 11.
[2]No 2- or 3-year averages.

Table 16. Average grain production by area for early-maturing corn hybrids grown in Mississippi, 2001.

Hybrid number	Brand name	Area I [1]			Area II [2]		Area III [3]		
		2001 yield	2-yr. avg.	3-yr. avg.	2001 yield	2-yr. avg.	2001 yield	2-yr. avg.	3-yr. avg.
		bu/A	*bu/A*	*bu/A*		*bu/A*	*bu/A*	*bu/A*	
A6445	AgriGold	—	—	—	—	—	173.4	—	—
A6469BT	AgriGold	139.3	—	—	—	—	—	—	—
A6607	AgriGold	—	—	—	—	—	172.0	—	—
A6617	AgriGold	129.6	—	—	—	—	—	—	—
A6620	AgriGold	99.8	—	—	—	—	—	—	—
XA4902Bt	AgriGold	—	—	—	—	—	177.2	—	—
641RR	Croplan Genetics	138.8	120.5	—	—	—	176.3	—	—
733BT	Croplan Genetics	121.6	—	—	—	—	192.2	—	—
734LL	Croplan Genetics	157.1	—	—	—	—	199.5	—	—
743Bt	Croplan Genetics	143.6	—	—	—	—	172.8	—	—
727	Croplan Genetics	140.6	—	—	—	—	170.0	164.0	183.3
762CL	Croplan Genetics	122.4	—	—	—	—	158.1	164.0	177.7
DKC64-10	DEKALB	162.2	—	—	133.5	—	171.6	—	—
5516RR	Dyna-Gro	183.8	—	—	—	—	188.0	—	—
8366IT	Garst/AgriPro	155.3	—	—	—	—	172.2	—	—
3214YG	Genesis	—	—	—	—	—	205.3	194.5	—
34B24	Pioneer	120.0	—	—	—	—	188.3	—	—
34B23	Pioneer	124.9	137.1	—	—	—	187.2	—	—
33J56	Pioneer	165.6	158.6	156.3	—	—	182.5	184.0	189.8
33R77	Pioneer	166.3	—	—	—	—	186.6	—	—
SS692Bt	Southern States	147.5	—	—	—	—	192.0	—	—
SS736Bt	Southern States	158.9	—	—	—	—	199.0	—	—
SS729CL	Southern States	165.6	155.6	151.2	132.3	113.4	171.5	179.2	191.3
Syngenta	N63-G7	162.1	—	—	114.8	—	171.3	—	—
TV2130	Terral	179.3	163.5	—	126.8	106.8	183.1	188.0	—
TV2140	Terral	172.1	150.0	154.8	138.4	113.6	187.8	188.3	192.0
TV2140RR	Terral	166.9	151.2	—	124.2	106.6	198.8	193.8	—
TV2128RR	Terral	134.6	124.3	—	109.0	96.6	183.4	180.6	—
TV2155Bt	Terral	170.2	—	—	116.3	—	187.6	—	—
TVX21R500	Terral	168.8	—	—	129.0	—	172.8	—	—
Overall Mean		155.1	146.9	154.1	127.1	114.1	182.3	182.9	187.3
LSD (.10)		18.2	15.4	11.6	15.8	8.9	20.7	13.9	11.1
Error degrees of freedom		265	106	48	56	45	207	120	89
CV (%)		18.4	19.5	17.4	15.7	12.4	15.3	14.1	13.4
R^2 (%)		73	82	86	73	87	67	62	66

[1]1-year = average of Aberdeen, Brooksville, and Hernando; 2- and 3-year = average of Brooksville and Hernando.
[2]Average of Newton and Raymond.
[3]1-year = average of Clarksdale and Yazoo City; 2- and 3-year = average of Cruger, Shaw, Clarksdale, and Yazoo City.

Table 17. Average grain production by area for late-maturing corn hybrids grown in Mississippi, 2001.

Hybrid number	Brand name	Area I [1]			Area II [2]	Area III [3]		
		2001 yield	2-yr. avg.	3-yr. avg.	2001 yield	2001 yield	2-yr. avg.	3-yr. avg.
		bu/A	*bu/A*	*bu/A*		*bu/A*	*bu/A*	*bu/A*
A6729Bt	AgriGold	202.3	143.1	—	—	201.8	196.7	—
RX828YG	Asgrow	181.6	—	—	114.4	201.1	—	—
RX897	Asgrow	196.8	—	—	115.2	194.3	—	—
818	Croplan Genetics	209.1	154.7	—	—	200.1	207.2	—
1167CL	Croplan Genetics	193.5	142.3	134.1	—	177.6	189.3	179.4
767RR	Croplan Genetics	182.0	—	—	—	170.8	—	—
827	Croplan Genetics	195.8	—	—	—	173.2	—	—
DKC66-50	DEKALB	181.6	—	—	111.5	177.2	—	—
DK687	DEKALB	211.7	152.5	142.8	127.0	209.1	207.5	199.3
DKC68-70	DEKALB	232.2	—	—	125.2	211.3	—	—
DK697	DEKALB	216.5	148.4	141.0	123.3	211.9	199.5	200.2
DKC69-70	DEKALB	227.6	—	—	123.9	214.0	—	—
5515	Dyna-Gro	222.0	—	—	—	207.9	—	—
5516	Dyna-Gro	180.5	—	—	—	192.2	—	—
X15548	Dyna-Gro	199.6	151.4	—	128.7	194.8	198.9	—
5570	Dyna-Gro	189.6	—	—	—	184.3	—	—
5518	Dyna-Gro	232.7	—	—	122.0	193.6	—	—
5518RR	Dyna-Gro	229.4	—	—	—	190.7	—	—
8288	Garst/AgriPro	215.0	—	—	—	188.9	—	—
8222IT	Garst/AgriPro	234.9	166.6	—	—	184.6	185.3	—
9707	Garst/AgriPro	—	—	—	—	208.8	201.7	205.3
8251IT	Garst/AgriPro	199.1	148.7	—	—	—	—	—
8215	Garst/AgriPro	242.8	—	—	—	—	—	—
2A116RR	Genesis	—	—	—	—	189.5	—	—
2B116TR	Genesis	—	—	—	—	189.2	—	—
X1181	Kaystar	—	—	—	—	179.4	—	—
7101	NC+	205.7	—	—	—	—	—	—
N83-N5	NK	187.9	—	—	115.3	197.2	—	—
N83-Z8	NK	214.0	—	—	113.8	224.0	—	—
32H58	Pioneer	247.8	—	—	—	219.2	—	—
3223	Pioneer	221.1	151.2	156.4	127.6	183.2	189.0	193.8
31B13	Pioneer	207.7	142.7	—	—	217.4	203.3	—
31G98	Pioneer	231.0	160.4	—	—	193.0	203.8	—
31R88	Pioneer	231.6	161.2	—	117.2	193.9	198.7	—
SS859CL	Southern States	189.2	141.4	136.9	95.5	190.5	193.0	168.8
TV2160Bt	Terral	180.1	—	—	106.1	207.9	—	—
TVX26R101YG	Terral	200.8	—	—	128.8	196.6	—	—
Overall Mean		208.9	150.1	140.8	117.7	196.2	197.9	193.2
LSD (.10)		34.4	17.4	15.2	12.8	22.5	16.2	18.5
Error degrees of freedom		125	94	47	110	264	187	97
CV (%)		15.6	15.5	17.5	14.2	15.5	15.5	20.1
R^2 (%)		33	91	87	65	59	50	50

[1]Brooksville only.
[2]Average of Newton and Raymond.
[3]1-year = average of Clarksdale and Yazoo City; 2- and 3-year = average of Cruger, Shaw, Clarksdale, and Yazoo City.

Table 18. Results from 25 grain sorghum varieties grown on a Sharkey clay soil in Stoneville, Washington County, 2001.[1]

Brand name	Hybrid number	2001 yield	2-year [2] average	3-year [2] average	Head elongation	Plant height	Moisture content
		bu/A	*bu/A*	*bu/A*	*in*	*in*	*%*
Garst	AP2838	140.5	—	—	4	54	11.9
Terral	TVX00981	139.1	—	—	6	63	12.8
Asgrow	A459	139.0	—	—	4	60	12.2
Pioneer	83G66	136.6	—	—	5	54	12.7
Dyna-Gro	751B	136.4	—	—	7	61	12.6
Garst	5515	131.6	—	—	3	53	12.1
FFR	FFR320	131.5	—	—	6	54	11.7
Southern	SS-800	131.1	—	—	6	52	11.8
Garst	5616	130.5	—	—	3	47	12.0
Asgrow	A571	129.9	—	—	7	59	12.1
FFR	FFR322	128.9	—	—	10	56	12.6
Dyna-Gro	780B	128.7	—	—	7	61	12.8
Terral	TVX00972	128.0	—	—	5	58	12.7
Terral	TV9421	126.0	—	—	6	56	12.0
DEKALB	DKS 51-90	124.2	—	—	3	55	12.3
Terral	TVX99314	122.8	—	—	3	56	12.4
Southern	SS-650	119.7	—	—	3	54	13.1
Terral	TVX00980	119.3	—	—	3	56	11.9
Terral	TV1050	117.3	—	—	4	55	11.7
FFR	FFR319W	112.8	—	—	5	54	12.0
Terral	TVX99317	112.8	—	—	3	56	14.8
Dyna-Gro	762B	110.3	—	—	7	61	11.9
KAYSTAR	X-095	109.7	—	—	3	52	11.4
Garst	5664	109.3	—	—	3	49	11.6
DEKALB	DKS 54-00	95.0	—	—	7	61	12.4
Overall mean		124.4	—	—			
LSD (.10)		13.3	—	—			
Error degrees of freedom		72	—	—			
CV (%)		9.1	—	—			
R^2 (%)		63	—	—			

[1]Planted May 30; harvested August 23.
[2]No 2- or 3-year average.

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