Mississippi Corn for Grain and Grain Sorghum Variety Trials, 2003

Bernie White
Manager, Variety Evaluations
Mississippi State University

Frank Boykin
Operations Manager
Black Belt Branch Experiment Station

Sean Horton
Farm Manager
Delta Research and Extension Center

Billy Johnson
Senior Research Assistant
Coastal Plain Branch Experiment Station

Erick Larson
Associate Professor
MSU Plant and Soil Sciences

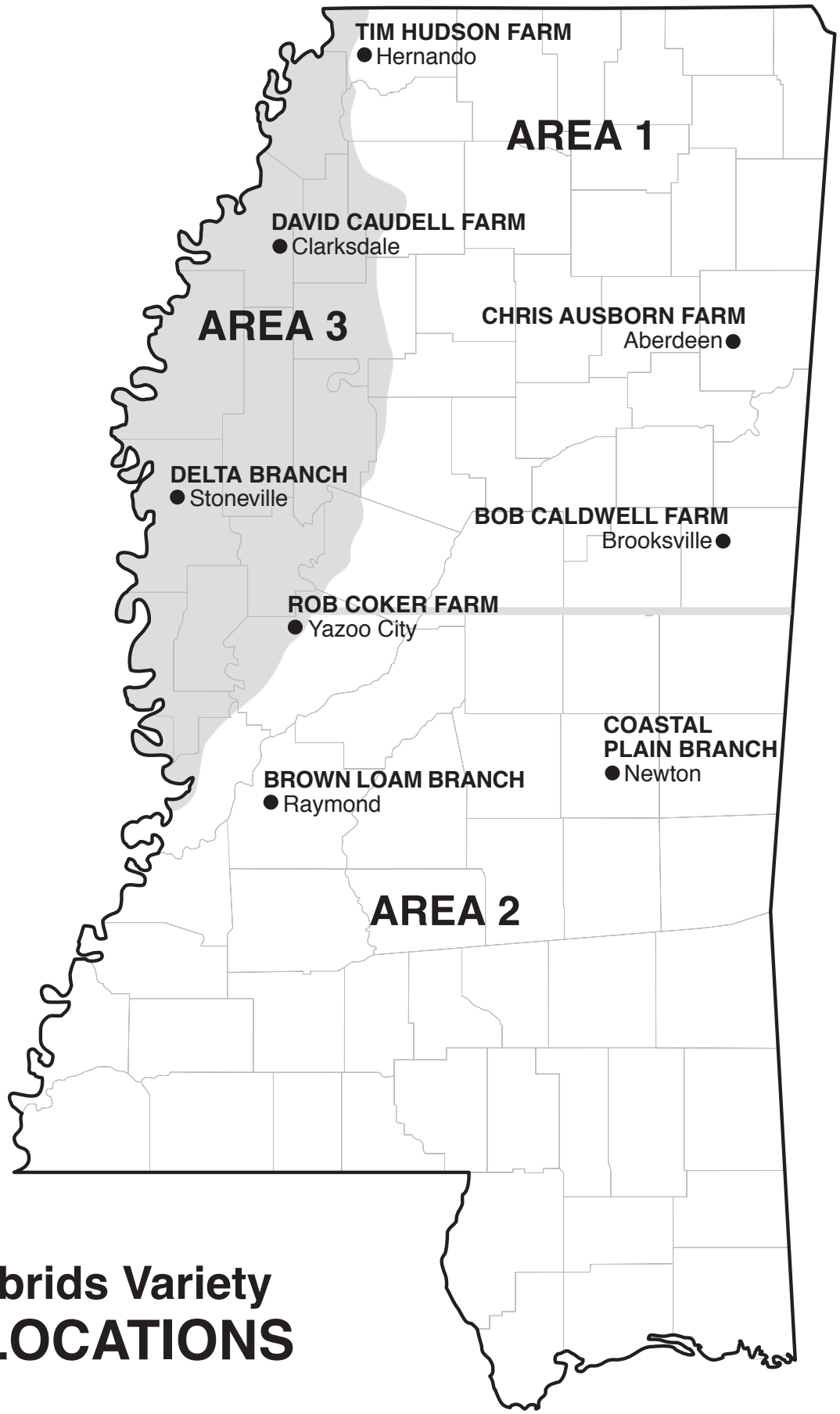
Dee Perkins
Research Associate I
Brown Loam Branch Experiment Station

Art Smith
County Extension Agent
DeSoto County

Charlie Stokes
County Extension Agent
MSU Extension Service

Clarence Watson
Associate Director, MAFES
Mississippi State University

For more information, contact Bernie White at (662) 325-2390; e-mail, bwhite@mafes.msstate.edu. Recognition is given to Jessie Selvie and Jerry Nail, research technicians for the Variety Testing Program, for their assistance in packaging, planting, harvesting, and recording plot data. Statistical analyses and computing assistance were provided by Robert Goss, a student worker in the Experimental Statistics Unit. This publication was prepared by Jimmie Cooper, administrative secretary for MAFES Research Support Units. Information Bulletin 402 was published by the Office of Agricultural Communications, a unit of the Mississippi State University Division of Agriculture, Forestry, and Veterinary Medicine.



Corn Hybrids Variety
TEST LOCATIONS

Mississippi Corn for Grain and Grain Sorghum Variety Trials, 2003

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 locations); and Area III, located in the Delta region (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, 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 four 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 requiring 116 days or more to mature were considered late maturing.

Seed of all entries were supplied by participating companies. All seed were packaged for planting at seeding rates suggested by the participating company and planted with a cone planter. Fertilizer was applied according to soil test recommendations. Plots in Areas I and II were grown in dryland conditions, and plots in Area III were irrigated as 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 percent moisture.

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 2003 corn hybrid trials.

Location	Maturity[1]	No. of entries	Planting date	Harvest date
Area I				
Tim Hudson Farm	Early	43	April 2	September 16
(Hernando)	Late	29	April 2	September 16
Bob Caldwell Farm	Early	43	March 31	September 12
(Brooksville)	Late	29	March 31	September 12
Chris Ausborn Farm	Early[2]	43	April 2	September 8
(Aberdeen)	Late	29	April 2	September 9
Area II				
Coastal Plain Branch	Early	35	March 27	August 20
(Newton)	Late	21	March 27	September 4
Brown Loam Branch	Early	35	April 1	September 17
(Raymond)	Late	21	April 1	September 17
Area III				
Rob Coker Farm	Early	56	March 18	August 26
(Yazoo City)	Late	46	March 18	August 26
David Caudell	Early	56	April 3	September 15
(Clarksdale)	Late	46	April 3	September 15
Delta Branch	Early	56	March 25	August 25
(Stoneville)	Late	46	March 25	August 25

[1]Early maturity = 115 days or less; late maturity =116 days or more.
[2]Early test lost to harvest error by cooperator.

Table 2. Characteristics provided by sponsoring companies for corn hybrids entered in the 2003 Mississippi variety trials.

Company	Hybrid	Trait [1]	Planting rate (x1000)	Days to maturity	Grain texture [2]	MDMV resistance [3]	MCDV resistance [3]
AgriGold Hybrids	A6395Bt	Bt	32	108	M	MS	MS
Rt. 1 Box 203	A6445Bt	Bt	28	110	M	MS	MS
St. Francisville, IL 62460	A6490RR	RR	32	112	H	-	-
618-943-5776	A6610		28	115	M	MR	MR
	XA2100Bt	Bt	32	118	H	-	-
	XA2300Bt	Bt	32	117	H	R	R
Bell Southern Hybrids	1140 RY	RR BT	30	111			
P.O. Box 178	1430Y	BT	30	114			
Fisher, AR 72429	1420R	R	30	114	H		
870-328-7222	1510C		30	115	H		
	1520R	RR	30	115	M		
	BXR 4444C		30	114			
	BXR 1111Y	BT	30	111			
	BXR 2222RY	RR BT	30	112			
	BXR 2211R	RR	30	111			
	BXR 1122C		30	112			
FFR Seed	736Bt	BtYG	32	113	M	MS	MS
969 Cloverleaf Drive	849CL		32	118	MS	MR	MR
Southaven, MS 38671	842RR		32	117	MS	MR	MR
731-394-4679	900BT	BtYG	32	119	MS	S	S
	748		32	115	MH	MR	MR
Garst Seed Co.	8288		28	117	H	-	-
761 Walnut Knoll Lane	8230IT	IT	28	118	M	MR	MR
Memphis, TN 38018	8350YG1	Bt	28	115	M	-	-
901-844-7340	8366Bt	Bt	28	113	M	-	-
	ND200YG1	Bt	28	119	MH	-	-
Genesis Brand Seed	Genesis 3214YG	YG	32	114	-	-	-
P.O. Box 21085	Genesis 2A16YG	YG	32	116	-	-	-
Lansing, MI 48909	Genesis 2B16TR	YG/RR	32	116	-	-	-
517-887-1684	Genesis 2A16RR	RR	32	116	-	-	-
	Genesis 2D14RR		32	114	-	-	-
	Genesis 2C15RR	RR	32	116	-	-	-
	Genesis 4C16RR/YGCB		32	116	-	-	-
	Genesis 3215RR	RR	32	115	-	-	-
	Genesis 2C15YGCB		32	115	-	-	-
	Genesis 2D16YGCB		32	116	-	-	-
	Genesis 2D16RR/YGCB		32	116	-	-	-
	Genesis 3C15C		32	115	-	-	-
Golden Acres Genetics	GA 2828RR	RR	32	115	H	MS	MS
P.O. Box 579	GA 8112		32	115	H	MR	MR
Buchanan Dam, TX 78609	GA 2888IMI	IMI	28	118	M	MS	MS
512-793-5205	GA 2850RR	RR	32	117	H	MR	MR
	GAX-6306RR/Bt	RR/Bt	32	117	M	MS	MS
	GAX-6309Bt	Bt	32	118	M	MS	MS
Monsanto	DK697		28/32	119	-	-	-
3100 Sycamore Rd.	DKC64-11	RR/YGCB	28/32	114	-	-	-
DeKalb, IL 60115	DKC68-70	YGCB	28/32	118	-	-	-
815-758-9323	DKC69-70	YGCB	28/32	119	-	-	-
	DKC69-71	RR/YGCB	28/32	119	H	S	S
	DKC69-72	RR	28/32	119	H	MS	MS
	DKC66-80	RR	28/32	116	M	MR	MR
	DKC67-60	RR	28/32	117	M	R	R
NC+ Hybrids 3820 N 56 Box 4408 Lincoln, NE 68504 402-467-2517	NC+7101		32	118	M	-	-

[1]RR = Incorporates Roundup Ready Technology; IT, CL, IMI = Incorporates CLEARFIELD Technology; and Bt, YG = Corn Borer Protection Technology.
[2]M = Medium, H = Hard, R = Resistance to weevil is good, and S = Soft.
[3]MDMV = Maize Dwarf Mosaic Virus, MCDV = Maize Chlorotic Dwarf Virus (corn stunt), S = Susceptible, R = Resistant, MR = Moderately Resistant, and MS = Moderately Susceptible.

Table 2 (cont.). Characteristics provided by sponsoring companies for corn hybrids entered in the 2003 Mississippi variety trials.

Company	Hybrid	Trait [1]	Planting rate (x1000)	Days to maturity	Grain texture [2]	MDMV resistance [3]	MCDV resistance [3]
Pioneer Hi-Bred Intl.	33V15		28	114	H	MS	MS
6767 Old Madison Pike	33M54		28	114	H	S	S
Suite 110	32R25		28	116	M	MS	MS
Huntsville, AL 35806	31G98		28	117	-	MS	MS
256-971-0760	31R88		24	120	-	MS	MS
	32D99		28	118	M	MS	MS
	31B13	YG	24	119	-	MS	MS
	34B24	YGCB	28	110	M	S	S
	32H69	YGCB	28	117	M	MS	MS
	31G66		28	118	H	MS	MS
Southern States Coop	SS736Bt		28	114	M	MS	MS
P.O. Box 26234							
Richmond, VA 23200							
804-281-1253							
Syngenta Seed	N65-M7		28	108	M	-	-
100 Sangria Drive	N83-N5		28	118	MH	-	-
Hattiesburg, MS 39402	N83-Z8	Bt	28	119	MH	-	-
601-264-2878	NX7630	Bt	28	114	MH	-	-
Terral Seed, Inc.	TV2130		28/30	113	MH	MR	-
P.O. Box 826	TV2140		26/28	114	H	-	-
Lake Providence, LA 71254	TV2155Bt	Bt	26/28	115	H	MS	-
318-559-2840	TV2160Bt	Bt	26/28	115	H	MR	-
	TV26BR10n	RR/Bt	28/30	115	MH	-	-
	TV24R10	RR	28/30	114	H	-	-
	TV23R15n	RR	28/30	115	MH	-	-
	TV2140nRR	RR	26/28	114	H	-	-
	TV25B30	Bt	26/28	115	H	-	-
	TV26B23	Bt	28/32	116	H	-	-
	TVX24R013	RR	28/32	114	H	-	-
	TVX22R013	RR	28/32	112	H	-	-
	TVX25B013	Bt	28/32	115	MH	-	-
	TVX25B023	Bt	28/32	115	MH	-	-
	TVX26B013	Bt	28/32	116	MH	-	-
	TVX25BR013	RR/Bt	28/32	115	MH	-	-
	TVX20C03		28/32	112	MH	-	-
	TVX21C03		28/32	113	MH	-	-
	TVX23C03		28/32	115	MH	-	-
	TVX26C013		28/32	116	MH	-	-
	TVX25BR023	RR/Bt	28/32	115	MH	-	-
Triumph Seed Co., Inc.	1866Bt	Bt	32	118	H(R)	MR	MR
P.O. Box 1050	1120BtRR	BtRR		112	-	-	-
Ralls, TX 79357							
800-530-4789							
UAP Delta	DG5515		32	118	H	M	-
57 Germantown Court	DG5516		32	116	H	MR	MR
Suite 200	DG5518		32	118	H	-	-
Cordova, TN 38018	DG5528Bt	Bt	32	114	H	S	S
901-752-4223	DG58K15	RR	32	118	H	MR	MR
	DG58K56	RR	32	119	H	-	-
	DG57K66	RR	32	115	H	MR	MR
	DG58K22	RR	32	118	H	-	-
	DG57P35	RR/Bt	32	114	H	S	S
	CX03417	Bt	32	117	H	-	-
	CX03816	Bt	32	116	H	-	-
	CX03515	Bt	32	115	H	-	-
UniSouth Genetics, Inc.	BG 422		32	116	H	MR	MR
2640-C Nolensville Rd.	BT 1152	Bt	32	115	H	MR	MR
Nashville, TN 37211							
615-242-3397							
Unity Ag Direct, Inc.	6287A		32	114	H	MR	MR
107 Fallon St.	6296		32	115	-	MR	MR
Kentland, IN 47751							
800-338-4558							

[1]RR = Incorporates Roundup Ready Technology; IT, CL, IMI = Incorporates CLEARFIELD Technology; and Bt, YG = Corn Borer Protection Technology.
[2]M = Medium, H = Hard, R = Resistance to weevil is good, and S = Soft.
[3]MDMV = Maize Dwarf Mosaic Virus, MCDV = Maize Chlorotic Dwarf Virus (corn stunt), S = Susceptible, R = Resistant, MR = Moderately Resistant, and MS = Moderately Susceptible.

TIM HUDSON FARM, HERNANDO

Crop Summary

Corn was grown in a no-tillage production system following a soybean crop from the previous year. Abundant rainfall was received during May. A strong storm on July 22 produced high winds and caused some stalk lodging.

Soil type	**Collins silt loam**
Soil pH	**6.5**
Soil fertility	**P=H; K=H**
Fertilizer added	**N @ 200 lb/A**
Herbicide application	**Atrazine @ 2 qt/A + Gramoxone @ 1 pt/A**
Previous crop	**Soybeans**
Planting date	**April 2**
Harvest date	**September 16**

Rainfall Summary

	Inches
April	**3.52**
May	**11.47**
June	**4.82**
July	**3.30**
August	**1.61**
September	**3.17**
Total	**27.89**

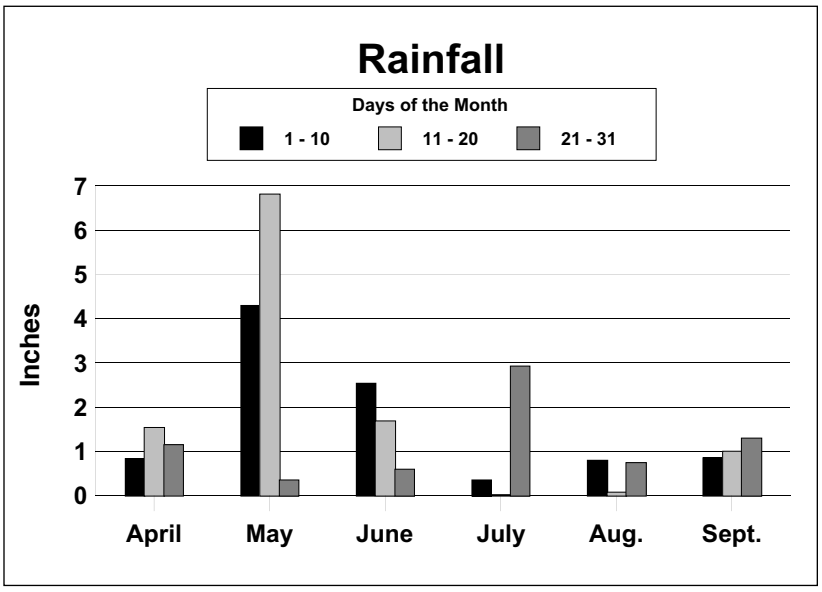


Table 3. Characteristics of 43 early-maturing corn hybrids grown without irrigation on a Collins silt loam soil in Hernando, DeSoto County, 2003.[1]

Brand name	Hybrid number	2003 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	TVX23C03	207.8	-	-	0	3	37	16.5	33
Terral	TV2130	204.6	204.6	187.4	0	5	38	16.7	34
Terral	TVX20C03	197.0	-	-	0	1	33	15.5	28
Pioneer	33M54	196.4	-	-	0	2	30	16.7	28
Terral	TVX25B013	195.9	-	-	0	1	38	15.9	30
Terral	TVX25BR013	195.4	-	-	0	3	39	15.8	33
FFR	736Bt	195.4	211.6	-	0	3	32	16.8	32
Terral	TV26BR10n	194.9	203.8	-	0	2	32	16.3	32
BXR	BXR 1111Y	192.3	-	-	0	2	31	17.2	27
Dyna-Gro	DG57P35	191.5	201.7	-	0	3	32	17.0	30
Terral	TV23R15n	191.1	198.4	-	0	2	38	16.5	30
Terral	TV24R10	189.8	195.1	-	0	4	38	17.9	33
BXR	BXR 2222RY	188.7	-	-	0	1	31	16.7	27
Dyna-Gro	DG57K66	187.4	188.4	-	0	2	36	16.5	33
Terral	TV2140	187.3	200.0	175.0	0	4	36	16.6	27
Belle	1420R	186.9	-	-	0	1	34	17.7	26
Terral	TV2160Bt	185.2	196.4	178.0	0	4	34	17.2	30
Terral	TV25B30	184.8	-	-	0	1	35	17.0	31
Terral	TVX25BR023	183.9	-	-	0	5	32	16.6	30
Belle	1430Y	183.3	-	-	0	3	38	17.2	30
Genesis	2D14RR	181.4	-	-	0	1	37	16.0	27
Terral	TVX24R013	180.8	-	-	0	2	36	16.6	25
Belle	1140RY	179.0	-	-	0	1	32	16.4	30
Pioneer	34B24	176.8	200.8	162.2	0	0	28	16.2	28
DEKALB	DKC64-11 (RR/YGCB)	174.8	190.1	-	0	1	33	15.2	29
NK Brand	NX 7630	173.8	-	-	0	1	30	16.5	27
NK Brand	N65-M7	172.7	183.7	-	0	2	30	15.5	29
Terral	TV2140nRR	172.1	192.9	-	0	3	37	16.6	26
Terral	TVX22R013	172.0	-	-	0	3	35	15.5	31
Terral	TVX25B023	171.9	-	-	0	2	31	16.7	30
FFR	FFR748	169.7	-	-	0	6	31	16.2	30
Pioneer	33V15	169.2	-	-	0	2	30	16.5	25
AgriGold	A6490RR	168.9	189.4	-	0	5	34	15.4	32
Dyna-Gro	5528BT	168.3	-	-	0	6	32	16.1	28
BXR	BXR 2211R	164.8	-	-	0	1	34	15.7	27
Terral	TV2155Bt	164.8	185.1	166.3	0	8	38	16.5	29
BXR	BXR 4444C	164.7	-	-	0	0	32	17.6	24
Garst	8350YG1	164.1	-	-	0	2	34	15.5	29
AgriGold	A6395Bt	163.1	-	-	0	1	25	15.6	31
Terral	TVX21C03	162.4	-	-	0	4	34	17.8	26
BXR	BXR 1122C	157.6	-	-	0	1	33	15.7	22
Belle	1510C	157.0	-	-	0	10	33	16.8	26
Belle	1520R	153.2	-	-	0	6	34	16.5	25
Overall mean		179.6	196.1	173.8					
LSD (.10)		25.8	15.6	16.0					
Error degrees of freedom		126	98	44					
CV (%)		12.3	10.2	14.5					
R^2 (%)		35	56	79					

[1]Planted April 2; harvested September 16.

Table 4. Characteristics of 29 late-maturing corn hybrids grown without irrigation on a Collins silt loam soil in Hernando, DeSoto County, 2003.[1]

Brand name	Hybrid number	2003 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	32H69	214.4	-	-	0	1	37	12.9	29
Pioneer	31B13	203.6	216.9	187.1	0	3	38	16.5	28
DEKALB	DKC69-71 (RR/YGCB)	201.6	-	-	0	1	39	17.8	28
FFR	900BT	199.3	-	-	0	9	38	16.7	33
Pioneer	32R25	197.6	212.6	-	0	3	38	16.1	28
NK Brand	N83-Z8 (Bt)	193.3	208.1	183.1	0	4	40	17.0	28
FFR	849CL	191.3	-	-	0	8	37	16.7	34
Terral	TVX26B013	190.8	-	-	0	4	35	16.2	33
Garst	ND200YG1	188.6	-	-	0	3	35	17.5	32
Pioneer	31G66	188.2	-	-	0	3	34	16.9	28
Genesis	2A16YG	187.8	-	-	0	4	39	16.7	31
DEKALB	DKC69-70 (YGCB)	186.4	200.0	179.5	0	6	40	17.3	28
Pioneer	32D99	184.7	210.9	-	0	1	37	16.5	33
Terral	TV26B23	183.5	-	-	0	4	43	17.1	34
Garst	8288	182.7	197.7	178.2	0	1	32	16.5	30
Pioneer	31R88	182.7	199.9	177.7	0	3	**	16.9	25
NC+	7101	181.9	-	-	0	2	34	16.8	26
DEKALB	DK697	180.7	196.6	179.9	0	6	39	17.8	29
DEKALB	DKC68-70 (YGCB)	178.2	181.3	165.7	0	1	38	16.6	26
DEKALB	DKC66-80 (RR)	177.3	-	-	0	5	35	17.2	29
DEKALB	DKC69-72 (RR)	176.1	-	-	0	6	41	16.5	30
Dyna-Gro	5518	167.7	177.0	156.3	0	16	38	17.2	32
Garst	8230IT	162.9	182.2	-	0	7	37	16.5	30
Terral	TVX26C013	159.0	-	-	0	13	38	16.6	32
AgriGold	XA2300Bt	158.8	-	-	0	5	32	16.0	30
Dyna-Gro	DG58K22	152.9	185.5	-	0	9	36	16.5	30
Genesis	2A16RR	150.5	-	-	0	7	39	17.2	26
NK	N83-N5	145.4	181.5	172.1	0	10	35	16.7	28
FFR	842RR	145.2	-	-	0	7	37	16.7	33
Overall mean		179.9	199.2	177.4					
LSD (.10)		39.2	23.3	20.7					
Error degrees of freedom		77	80	79					
CV (%)		17.8	14.6	17.8					
R^2 (%)		36	55	67					

[1]Planted April 2; harvested September 16.

BOB CALDWELL, JR., FARMS, BROOKSVILLE

Crop Summary

Corn was grown in a no-tillage production system following a soybean crop in the previous year. Below-average temperatures coupled with abundant rainfall promoted high yields.

Soil type	Brooksville clay
Soil pH	5.6
Soil fertility	P=M; K=M
Fertilizer added	Preplant — N @ 50 lb/A (32%); P_2O_5 @ 60 lb/A; K_2O @ 90 lb/A; S @ 8 lb/A
	Sidedress — N @ 150 lb/A (32%)
Herbicide application	Preemergence — Atrazine @ 2.5 qt/A
	Postemergence — Option @ 1.5 oz/A + Ammonium Sulphate @ 1.5 lb/A + Methylated Seed Oil @ 1.5 qt/A
Previous crop	Soybeans
Planting date	March 31
Harvest date	September 12

Rainfall Summary

	Inches
April	5.54
May	5.46
June	8.36
July	5.47
August	5.04
September	3.29
Total	33.16

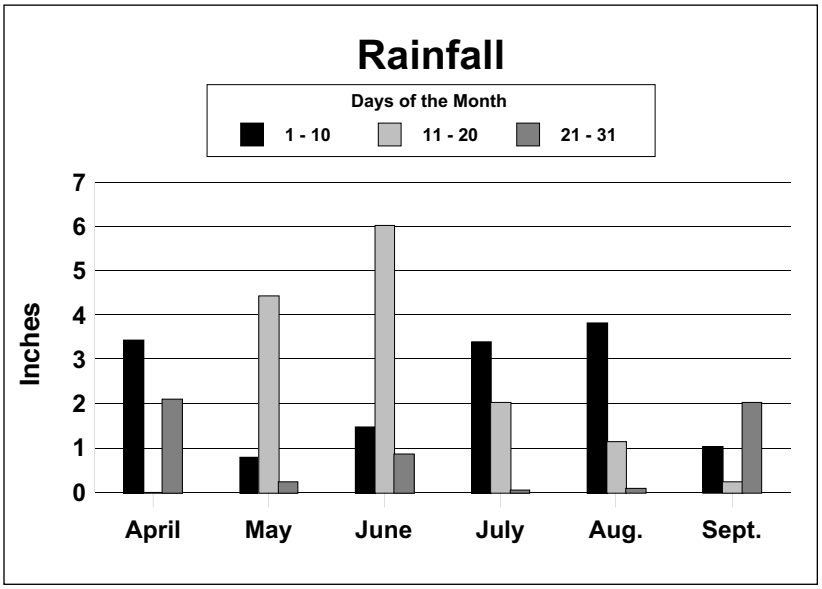


Table 5. Characteristics of 43 early-maturing corn hybrids grown without irrigation on a Brooksville clay soil in Brooksville, Noxubee County, 2003.[1]

Brand name	Hybrid number	2003 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	TVX25BR023	189.3	-	-	0	3	40	14.5	35
Terral	TV2140	185.5	180.3	199.8	0	1	46	15.1	30
Pioneer	33M54	184.7	-	-	0	1	43	15.5	28
Dyna-Gro	5528BT	182.1	-	-	0	1	41	14.4	30
AgriGold	A6395Bt	181.3	-	-	0	0	37	16.4	33
Terral	TVX20C03	180.9	-	-	0	1	43	14.8	31
Terral	TVX23C03	180.8	-	-	0	0	46	15.2	34
Terral	TV23R15n	180.6	169.6	-	0	1	46	14.7	33
Terral	TV2155Bt	177.9	184.3	197.6	0	1	47	15.4	30
Garst	8350YG1	177.8	-	-	0	3	45	14.8	30
Genesis	2D14RR	177.6	-	-	0	0	45	14.7	28
Terral	TV2130	177.2	176.4	196.0	0	5	48	14.4	32
BXR	BXR 1111Y	174.3	-	-	0	1	41	14.3	30
Belle	1520R	174.3	-	-	0	0	46	15.0	30
NK Brand	N65-M7	173.8	183.6	-	0	0	39	14.9	30
BXR	BXR 2222RY	173.1	-	-	0	0	42	14.5	30
Terral	TV26BR10n	172.7	182.8	-	0	0	41	14.8	34
Pioneer	33V15	172.5	-	-	0	0	44	15.3	27
Dyna-Gro	DG57K66	171.3	188.0	-	0	0	45	14.6	34
FFR	736Bt	171.2	159.3	-	0	2	39	14.5	34
Terral	TVX25B013	170.9	-	-	0	3	44	15.0	31
Terral	TVX25BR013	169.7	-	-	0	1	45	16.0	32
Terral	TV25B30	168.6	-	-	0	5	47	15.4	34
Terral	TVX22R013	168.3	-	-	0	0	42	14.5	31
Dyna-Gro	DG57P35	167.4	170.8	-	0	0	43	14.6	30
Belle	1510C	165.1	-	-	0	1	43	15.0	25
BXR	BXR 1122C	165.0	-	-	0	1	40	14.5	25
NK Brand	NX 7630	164.2	-	-	0	0	40	14.9	26
Terral	TVX24R013	163.7	-	-	0	1	43	14.9	31
Terral	TVX25B023	163.7	-	-	0	1	44	15.0	27
FFR	FFR748	159.3	-	-	0	3	44	15.0	25
Terral	TVX21C03	157.0	-	-	0	5	48	15.3	32
Terral	TV2140nRR	155.3	170.7	-	0	1	46	14.7	30
Terral	TV2160Bt	150.6	174.6	176.6	0	1	47	15.3	28
DEKALB	DKC64-11 (RR/YGCB)	147.7	145.7	-	0	0	41	14.3	30
Belle	1140RY	146.6	-	-	0	0	43	14.9	28
Belle	1430Y	146.3	-	-	0	1	36	15.3	22
BXR	BXR 4444C	145.2	-	-	0	4	45	15.5	26
Terral	TV24R10	144.9	158.2	-	0	5	44	15.4	32
Pioneer	34B24	144.4	159.9	163.9	0	0	38	15.2	30
AgriGold	A6490RR	143.8	158.3	-	0	6	39	14.7	32
Belle	1420R	136.5	-	-	0	4	45	15.6	31
BXR	BXR 2211R	117.3	-	-	0	1	41	14.4	22
Overall mean		165.6	170.8	186.8					
LSD (.10)		28.1	21.0	17.1					
Error degrees of freedom		126	98	44					
CV (%)		14.5	15.7	14.4					
R^2 (%)		37	38	63					

[1]Planted March 31; harvested September 12.

Table 6. Characteristics of 29 late-maturing corn hybrids grown without irrigation on a Brooksville clay soil in Brooksville, Noxubee County, 2003.[1]

Brand name	Hybrid number	2003 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	32R25	186.4	186.6	-	0	1	48	14.7	30
DEKALB	DKC69-70 (YGCB)	184.2	190.6	203.0	0	0	47	15.1	28
Pioneer	31G66	179.8	-	-	0	1	41	14.9	28
Genesis	2A16YG	179.1	-	-	0	1	44	14.8	28
DEKALB	DKC69-72 (RR)	175.0	-	-	0	0	45	14.9	28
DEKALB	DKC66-80 (RR)	172.9	-	-	0	0	48	14.6	28
FFR	849CL	172.3	-	-	0	1	44	14.8	32
NK Brand	N83-Z8 (Bt)	172.1	176.0	188.7	0	2	48	15.1	28
Terral	TV26B23	168.5	-	-	0	2	48	15.5	30
Pioneer	31B13	167.9	167.3	181.0	0	5	47	14.9	24
Garst	8230IT	167.7	162.2	-	0	1	41	14.7	29
FFR	900BT	167.3	-	-	0	5	44	14.3	32
DEKALB	DK697	165.8	171.7	186.6	0	1	44	14.8	27
DEKALB	DKC69-71 (RR/YGCB)	163.1	-	-	0	0	44	15.2	28
Garst	8288	163.0	161.7	179.5	0	0	42	15.3	28
Pioneer	32D99	161.0	172.2	-	0	1	46	15.3	30
Garst	ND200YG1	160.4	-	-	0	1	45	15.4	27
Terral	TVX26B013	159.9	-	-	0	2	47	15.0	29
NK	N83-N5	158.5	163.2	172.0	0	2	49	15.3	31
Pioneer	32H69	156.7	-	-	0	0	46	15.3	29
Dyna-Gro	DG58K22	152.6	161.2	-	0	1	47	15.0	32
Genesis	2A16RR	150.8	-	-	0	1	47	15.0	28
AgriGold	XA2300Bt	145.9	-	-	0	1	40	14.6	28
DEKALB	DKC68-70 (YGCB)	145.6	160.9	184.7	0	4	43	14.4	30
FFR	842RR	142.9	-	-	0	5	42	14.5	32
Terral	TVX26C013	141.0	-	-	0	4	41	14.8	31
NC+	7101	138.7	-	-	0	0	42	14.3	26
Pioneer	31R88	137.3	159.2	183.3	0	1	44	15.0	26
Dyna-Gro	5518	136.7	166.4	188.5	0	0	47	14.6	30
Overall mean		161.2	170.6	187.2					
LSD (.10)		39.6	20.2	16.1					
Error degrees of freedom		82	82	85					
CV (%)		20.6	14.9	13.5					
R^2 (%)		23	44	67					

[1]Planted March 31; harvested September 12.

Chris Ausborn Farm, Aberdeen

Crop Summary

Abundant rainfall saturated soils for several weeks during May and June. This stunted corn development and promoted substantial nitrogen loss through denitrification. Corn yields were reduced due to these environmental conditions. Southwestern corn borer populations were lower than last year.

Soil type	**Houston clay**
Soil pH	**7.6**
Soil fertility	**P=M; K=H**
Fertilizer added	**Preplant — 0-33-17 @ 210 lb/A + Zinc @ 2 lb/A**
	Sidedress — N @ 200 lb/A
Herbicide application	**Atrazine @ 2 qt/A + Accent @ 0.4 oz/A**
Previous crop	**Soybeans**
Planting date	**April 2**
Harvest date	**September 9**

Rainfall Summary

	Inches
April	**5.35**
May	**11.05**
June	**5.00**
July	**6.95**
August	**7.95**
September	**4.50**
Total	**40.80**

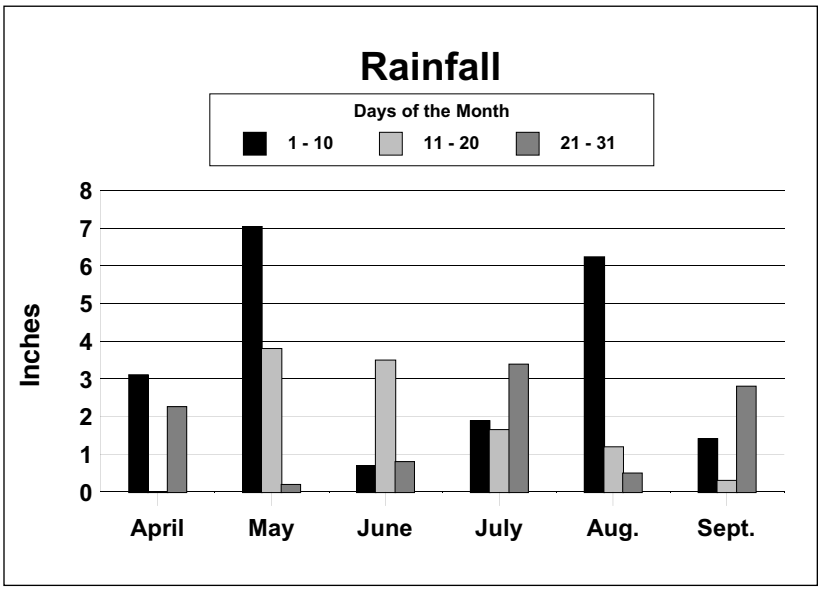


Table 7. Results from 33 early-maturing corn hybrids grown without irrigation on a Houston clay soil in Aberdeen, Monroe County, 2003.[1]

Brand name	Hybrid number	2003 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	5518	138.0	154.1	152.8	0	0	31	14.5	33
Garst	8230IT	135.1	157.3	-	0	0	25	14.6	31
NC+	7101	131.4	-	-	0	0	27	14.3	30
DEKALB	DKC68-70 (YGCB)	130.3	148.4	144.9	0	0	29	14.3	28
FFR	842RR	127.7	-	-	0	1	30	14.8	34
FFR	900BT	122.8	-	-	0	0	28	14.3	33
Pioneer	31R88	119.2	137.9	145.5	0	0	27	15.1	26
Dyna-Gro	DG58K22	116.0	140.1	-	0	0	34	14.8	32
Garst	ND200YG1	114.9	-	-	0	0	27	15.1	30
DEKALB	DK697	113.5	141.7	146.2	0	1	30	14.6	28
Pioneer	32R25	113.5	135.2	-	0	1	36	13.8	30
Pioneer	32H69	112.9	-	-	0	0	29	14.7	30
Pioneer	32D99	112.1	144.6	-	0	1	28	14.8	30
FFR	849CL	110.3	-	-	0	0	29	14.4	31
DEKALB	DKC69-71 (RR/YGCB)	108.8	-	-	0	0	28	15.1	28
Pioneer	31G66	105.9	-	-	0	0	24	14.6	28
Terral	TVX26C013	105.5	-	-	0	2	30	14.9	32
DEKALB	DKC66-80 (RR)	104.0	-	-	0	0	30	14.5	29
Genesis	2A16RR	103.8	-	-	0	1	30	14.6	30
Pioneer	31B13	102.8	150.5	152.8	0	1	31	14.5	26
NK	N83-N5	101.6	122.5	134.0	0	0	31	14.8	29
Terral	TV26B23	101.5	-	-	0	0	31	15.4	34
Terral	TVX26B013	98.5	-	-	0	0	30	14.3	32
Genesis	2A16YG	97.7	-	-	0	0	27	14.8	28
Garst	8288	97.3	129.5	142.1	0	0	28	14.7	30
DEKALB	DKC69-72 (RR)	95.4	-	-	0	0	26	14.8	30
DEKALB	DKC69-70 (YGCB)	85.5	134.1	136.1	0	0	28	15.2	29
NK Brand	N83-Z8 (Bt)	83.8	134.8	135.5	0	0	29	15.4	30
AgriGold	XA2300Bt	79.8	-	-	0	1	26	14.2	32
Overall mean		109.3	140.8	143.3					
LSD (.10)		24.1	15.5	11.6					
Error degrees of freedom		84	84	88					
CV (%)		18.7	14.1	12.9					
R^2 (%)		42	77	76					

[1]Planted April 2; Harvested September 9.

MAFES Coastal Plain Branch, Newton

Crop Summary

Below-average temperatures coupled with abundant, timely rainfall promoted high yields.

Soil type	Prentiss fine sandy loam
Soil pH	6.3
Soil fertility	P=M; K=M+
Fertilizer added	Preplant — 13-13-13 @ 500 lb/A + 0-0-60 @ 200 lb/A Sidedress — N (32%) @ 150 lb/A
Herbicide application	Preemergence — Atrazine @ 2 qt/A + Lasso @ 2 qt/A
Previous crop	Canola
Planting date	March 27
Harvest date	August 20 (Early) and September 4 (Late)

Rainfall Summary

	Inches
April	11.05
May	3.27
June	10.18
July	11.11
August	5.70
September	2.88
Total	44.19

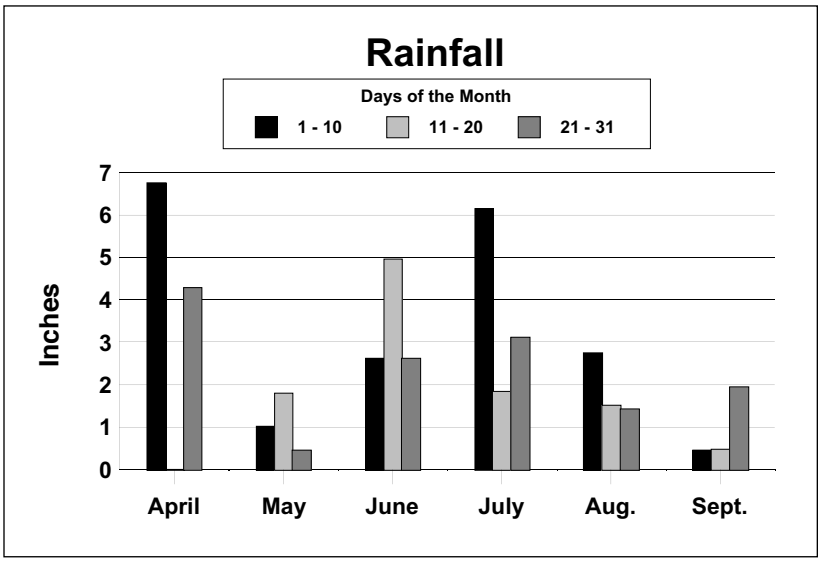


Table 8. Results from 35 early-maturing corn hybrids grown without irrigation on a Prentiss fine sandy loam soil at the MAFES Coastal Plain Branch, Newton, 2003.[1]

Brand name	Hybrid number	2003 yield	2-year average[2]	3-year average[2]	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Terral	TVX24R013	227.4	-	-	0	0	52	19	30
Terral	TV25B30	222.7	-	-	0	0	50	19	36
Belle	1430Y	219.5	-	-	0	1	51	19	32
Dyna-Gro	DG57P35	218.6	-	-	0	0	46	19	32
Terral	TV2130	218.0	-	-	0	0	54	19	33
Terral	TV2140nRR	217.8	-	-	0	0	51	19	30
Terral	TVX23C03	217.1	-	-	0	3	53	19	33
Dyna-Gro	5528BT	215.4	-	-	0	0	47	19	33
Terral	TV26BR10n	213.7	-	-	0	0	44	19	35
Terral	TV24R10	213.0	-	-	0	0	50	19	34
Terral	TV2140	212.8	-	-	0	0	51	19	30
BXR	BXR 2222RY	209.3	-	-	0	0	44	19	30
Terral	TVX25BR023	208.9	-	-	0	0	43	19	34
Pioneer	33V15	206.0	-	-	0	0	48	19	26
DEKALB	DKC64-11 (RR/YGCB)	204.1	-	-	0	0	47	19	30
BXR	BXR 1111Y	203.8	-	-	0	0	44	19	30
Terral	TVX20C03	203.5	-	-	0	0	45	19	30
Terral	TV2160Bt	202.7	-	-	0	0	48	19	30
Terral	TV2155Bt	201.1	-	-	0	0	53	19	34
Terral	TV23R15n	199.8	-	-	0	0	50	19	36
Pioneer	34B24	199.8	-	-	0	0	45	19	30
Belle	1140RY	199.7	-	-	0	0	47	19	28
Terral	TVX25BR013	197.3	-	-	0	0	49	19	33
Belle	1510C	196.7	-	-	0	0	50	19	28
Terral	TVX21C03	194.9	-	-	0	0	53	19	31
Terral	TVX25B023	194.7	-	-	0	0	44	19	28
BXR	BXR 2211R	192.1	-	-	0	0	48	19	31
NK Brand	NX 7630	191.8	-	-	0	0	44	19	28
BXR	BXR 4444C	191.1	-	-	0	0	51	19	27
Belle	1520R	190.8	-	-	0	0	51	19	29
NK Brand	N65-M7	190.6	-	-	0	0	44	19	30
Belle	1420R	188.1	-	-	0	0	50	19	31
Terral	TVX25B013	187.3	-	-	0	0	51	19	31
Terral	TVX22R013	182.0	-	-	0	0	52	19	31
BXR	BXR 1122C	167.1	-	-	0	0	49	19	25
Overall mean		202.8	-	-					
LSD (.10)		22.9	-	-					
Error degrees of freedom		100	-	-					
CV (%)		9.5	-	-					
R^2 (%)		41	-	-					

[1]Planted March 27; harvested August 20.
[2]No 2- or 3-year averages.

Table 9. Results from 21 late-maturing corn hybrids grown without irrigation on a Prentiss fine sandy loam soil at the MAFES Coastal Plain Branch, Newton, 2003.[1]

Brand name	Hybrid number	2003 yield	2-year average[2]	3-year average[2]	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Dyna-Gro	DG58K22	243.2	-	-	0	0	52	17.5	34
Pioneer	31G66	242.1	-	-	0	0	51	17.7	31
Dyna-Gro	5515	229.9	-	-	0	0	49	17.8	34
DEKALB	DKC69-72 (RR)	227.3	-	-	0	0	49	18.5	30
Terral	TVX26C013	226.3	-	-	0	0	51	17.9	28
Pioneer	31R88	225.1	-	-	0	0	52	18.5	30
Dyna-Gro	58K15	222.3	-	-	0	0	47	17.3	33
NK Brand	N83-Z8 (Bt)	222.1	-	-	0	0	52	18.3	30
NK	N83-N5	219.6	-	-	0	0	50	17.7	30
DEKALB	DKC69-70 (YGCB)	217.0	-	-	0	0	51	18.8	34
DEKALB	DKC68-70 (YGCB)	212.9	-	-	0	0	50	18.2	28
Terral	TVX26B013	212.0	-	-	0	0	49	17.6	34
Dyna-Gro	CX03417	208.7	-	-	0	0	50	17.4	34
DEKALB	DKC69-71 (RR/YGCB)	204.3	-	-	0	0	51	19.0	30
Terral	TV26B23	203.8	-	-	0	0	50	18.0	34
DEKALB	DKC66-80 (RR)	200.7	-	-	0	0	52	16.9	31
Pioneer	32R25	199.9	-	-	0	0	54	17.5	30
DEKALB	DK697	197.6	-	-	0	0	50	18.5	30
Dyna-Gro	5518	196.2	-	-	0	0	48	17.3	34
Dyna-Gro	DG58K56	194.4	-	-	0	0	51	17.9	30
Pioneer	31B13	179.3	-	-	0	0	48	17.8	25
Overall mean		213.5	-	-					
LSD (.10)		35.8	-	-					
Error degrees of freedom		57	-	-					
CV (%)		13.9	-	-					
R^2 (%)		31	-	-					

[1]Planted March 27; harvested September 4.
[2]No 2- or 3-year averages.

MAFES Brown Loam Branch, Raymond

Crop Summary

Below-average temperatures coupled with abundant, timely rainfall promoted high yields. A heavy rainfall event following planting hampered emergence somewhat, but plots developed fair stands.

Soil type	Reidtown silt loam
Soil pH	6.1
Soil fertility	P=M; K=M
Fertilizer added	Preplant — 17-17-17 @ 200 lb/A
	Sidedress — 34-0-0 @ 500 lb/A
Herbicide application	Bicep @ 1.5 qt/A
Previous crop	Corn
Planting date	April 1
Harvest date	September 17

Rainfall Summary

	Inches
April	6.69
May	6.36
June	7.25
July	1.59
August	3.05
September	4.87
Total	29.81

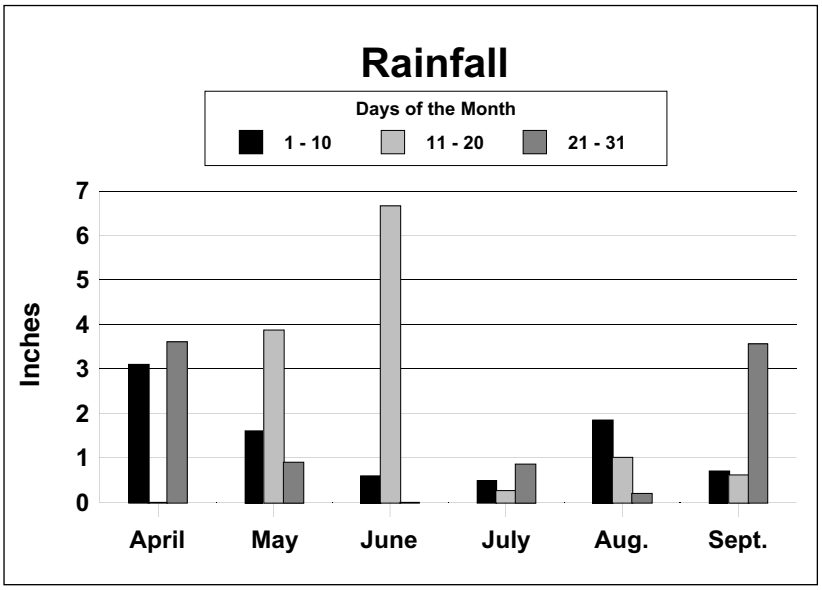


Table 10. Results from 35 early-maturing corn hybrids grown without irrigation on a Reidtown silt loam soil at the MAFES Brown Loam Branch, Raymond, 2003.[1]

Brand name	Hybrid number	2003 yield	2-year average	3-year average[2]	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Terral	TV2140	193.8	171.4	165.8	0	1	47	14.1	30
Terral	TV2130	176.2	167.0	162.1	0	1	43	13.8	30
Terral	TV2140nRR	174.9	161.3	-	0	1	46	14.2	28
Belle	1520R	173.9	-	-	0	1	43	13.8	28
Terral	TVX25BR013	165.2	-	-	0	0	41	14.7	29
Terral	TVX25B013	164.4	-	-	0	1	40	14.5	30
Terral	TV2155Bt	161.6	150.2	146.4	0	1	39	14.8	31
Terral	TVX25BR023	155.4	-	-	0	1	36	14.0	32
Terral	TVX23C03	154.9	-	-	0	2	44	14.3	28
Pioneer	34B24	148.6	-	-	0	1	37	14.4	26
Pioneer	33V15	147.2	-	-	0	2	39	14.5	26
Belle	1140RY	146.4	-	-	0	0	39	14.1	28
Terral	TV25B30	142.7	-	-	0	1	43	14.9	28
Belle	1420R	142.2	-	-	0	0	41	14.8	29
Dyna-Gro	5528BT	141.7	-	-	0	0	40	13.8	31
Belle	1430Y	140.3	-	-	0	1	43	14.9	24
BXR	BXR 2211R	139.5	-	-	0	0	37	13.8	26
Terral	TV2160Bt	139.0	138.8	128.8	0	4	41	14.3	26
Terral	TV26BR10n	137.5	139.0	-	0	1	37	14.1	28
Terral	TV24R10	137.0	138.7	-	0	2	42	14.8	26
Terral	TVX24R013	136.4	-	-	0	1	38	14.0	28
BXR	BXR 4444C	136.1	-	-	0	1	42	15.0	25
Dyna-Gro	DG57P35	135.5	-	-	0	1	38	14.0	27
Belle	1510C	135.0	-	-	0	2	42	14.1	24
Terral	TVX21C03	134.3	-	-	0	1	40	15.0	28
DEKALB	DKC64-11 (RR/YGCB)	133.4	144.9	-	0	1	40	13.7	30
Terral	TVX22R013	132.3	-	-	0	1	39	13.8	29
BXR	BXR 1111Y	131.4	-	-	0	3	40	14.2	28
Terral	TV23R15n	126.8	129.4	-	0	2	38	14.1	30
Terral	TVX25B023	126.2	-	-	0	2	39	13.7	24
NK Brand	NX 7630	123.9	-	-	0	2	37	14.1	24
Terral	TVX20C03	123.6	-	-	0	4	38	14.2	30
BXR	BXR 2222RY	121.1	-	-	0	1	35	13.9	28
BXR	BXR 1122C	115.4	-	-	0	1	40	14.0	24
NK Brand	N65-M7	80.7	102.6	-	0	5	34	13.6	28
Overall mean		143.0	145.7	149.5					
LSD (.10)		33.2	17.5	12.2					
Error degrees of freedom		99	60	32					
CV (%)		13.4	14.9	12.7					
R^2 (%)		48	60	72					

[1]Planted April 1; harvested September 17.

Table 11. Results from 21 late-maturing corn hybrids grown without irrigation on a Reidtown silt loam soil at the MAFES Brown Loam Branch, Raymond, 2003.[1]

Brand name	Hybrid number	2003 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*	*%*	
DEKALB	DK697	194.4	163.7	154.2	0	1	44	15.2	26
Pioneer	31G66	177.5	-	-	0	2	43	16.3	31
Dyna-Gro	DG58K22	168.7	144.3	-	0	1	34	14.5	23
DEKALB	DKC69-71 (RR/YGCB)	166.6	-	-	0	1	40	15.0	24
NK Brand	N83-Z8 (Bt)	166.0	152.0	143.6	0	0	43	15.3	26
DEKALB	DKC69-72 (RR)	165.8	-	-	0	0	45	14.7	24
DEKALB	DKC69-70 (YGCB)	164.2	156.5	145.6	0	0	44	15.2	24
Pioneer	31R88	162.8	143.3	137.7	0	1	43	14.7	25
Pioneer	32R25	162.4	163.4	-	0	3	44	15.2	27
DEKALB	DKC68-70 (YGCB)	162.2	145.6	143.0	0	0	42	14.9	26
Pioneer	31B13	158.3	-	-	0	1	45	14.7	23
Dyna-Gro	5518	153.3	151.5	149.1	0	0	41	14.8	28
Terral	TV26B23	150.9	-	-	0	0	44	15.3	28
Terral	TVX26B013	150.2	-	-	0	0	43	14.6	26
Dyna-Gro	5515	148.7	148.5	-	0	1	39	14.6	28
Dyna-Gro	58K15	140.8	-	-	0	0	38	15.0	25
DEKALB	DKC66-80 (RR)	138.0	-	-	0	0	41	16.3	25
NK	N83-N5	136.5	130.7	130.7	0	2	44	15.0	24
Dyna-Gro	CX03417	135.4	-	-	0	0	45	15.2	26
Dyna-Gro	DG58K56	125.1	134.6	-	0	1	44	15.1	25
Terral	TVX26C013	123.1	-	-	0	1	44	15.1	30
Overall mean		153.3	147.0	141.8					
LSD (.10)		27.3	19.6	13.2					
Error degrees of freedom		50	63	57					
CV (%)		14.0	16.2	14.1					
R^2 (%)		56	46	56					

[1]Planted April 1; harvested September 17.

DAVID CAUDELL FARM, CLARKSDALE

Crop Summary

Abundant rainfall saturated soils for several weeks during May and June. This stunted corn development and promoted substantial nitrogen loss through denitrification. The wet soils also delayed the sidedress nitrogen fertilizer application. Thus, a supplemental aerial urea application was made to augment nitrogen loss after sidedress. Corn yields were reduced because of these environmental conditions.

Soil type	**Dundee silt loam**
Soil pH	**5.6**
Soil fertility	**P=M; K=M**
Fertilizer added	**Sidedress — N @ 177 lb/A**
	Topdress — N @ 91 lb/A (Aerial application)
Herbicide application	**Preemergence — Guardsman Max @ 3.5 pt/A**
Irrigation (furrow)	**June 13 and July 25**
Previous crop	**Soybeans**
Planting date	**April 3**
Harvest date	**September 15**

Rainfall Summary

	Inches
April	**1.44**
May	**9.58**
June	**5.58**
July	**4.18**
August	**2.94**
September	**3.89**
Total	**27.61**

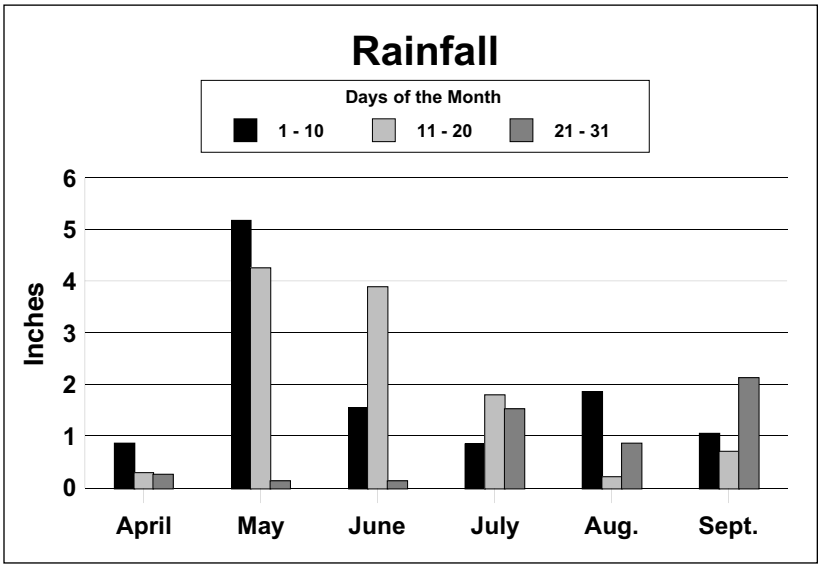


Table 12. Results from 56 early-maturing corn hybrids grown with irrigation on a Dundee silt loam soil near Clarksdale, Coahoma County, 2003.[1]

Brand name	Hybrid number	2003 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	33M54	163.2	-	-	0	7	20	15.3	27
FFR	FFR748	158.1	-	-	0	2	25	15.6	30
BXR	BXR 4444C	157.7	-	-	0	3	20	15.6	20
NK Brand	NX 7630	153.1	-	-	0	1	26	15.7	30
Terral	TV2160Bt	152.2	167.5	190.0	0	1	30	15.9	32
Dyna-Gro	DG57P35	152.1	166.8	-	0	0	22	15.5	25
Terral	TV2140nRR	150.1	153.1	-	0	6	28	15.7	28
BXR	BXR 1111Y	149.8	-	-	0	0	24	15.1	25
Terral	TVX25BR023	147.7	-	-	0	1	23	15.4	31
Terral	TV2155Bt	145.3	167.0	184.1	0	0	30	15.4	33
Terral	TVX23C03	142.9	-	-	0	4	29	15.2	28
Terral	TV23R15n	136.8	156.1	-	0	3	27	15.7	30
Belle	1510C	134.1	-	-	0	4	29	16.0	25
AgriGold	A6490RR	133.0	-	-	0	5	23	15.3	28
BXR	BXR 2222RY	127.8	-	-	0	4	27	16.1	29
Terral	TVX24R013	123.4	-	-	0	4	29	15.9	30
Pioneer	34B24	119.9	149.7	175.0	0	0	19	15.8	26
SS	SS736Bt	118.4	-	-	0	0	25	16.0	29
Terral	TV24R10	112.7	141.5	-	0	2	30	15.6	26
Genesis	2C15YGCB	112.6	-	-	0	0	27	15.4	32
BXR	BXR 1122C	110.8	-	-	0	3	23	15.7	25
Terral	TV25B30	109.7	-	-	0	0	27	15.8	29
AgriGold	A6445Bt	107.4	-	-	0	0	20	15.5	28
Terral	TV2140	106.3	136.4	163.1	0	6	28	15.8	33
Golden Acres	GA 2828RR	106.1	-	-	0	3	21	15.4	30
Golden Acres	GA 8112	105.6	138.8	-	0	4	28	16.0	30
BXR	BXR 2211R	104.4	-	-	0	3	25	16.2	25
FFR	736Bt	103.2	149.3	-	0	0	25	15.7	30
Belle	1520R	103.2	-	-	0	3	27	16.0	29
Belle	1140RY	101.3	-	-	0	1	24	15.2	28
Terral	TV26BR10n	100.0	138.5	-	0	0	21	15.4	28
Triumph	1120BTRR	99.4	-	-	0	1	22	15.7	28
Belle	1420R	95.3	-	-	0	7	24	15.6	32
Genesis	3215C	94.9	-	-	0	6	31	15.4	28
Dyna-Gro	DG57K66	94.6	133.8	-	0	3	26	15.5	30
Unity Seeds	6296	94.0	-	-	0	6	21	15.7	26
Dyna-Gro	5528BT	93.0	-	-	0	0	24	15.6	27
Terral	TVX22R013	92.7	-	-	0	2	28	15.6	29
Terral	TV2130	92.7	133.4	165.8	0	6	29	15.7	32
Genesis	3215RR	92.1	115.9	-	0	6	20	15.8	30
AgriGold	A6610	90.8	-	-	0	3	20	15.5	26
Garst	8366Bt	90.0	137.7	-	0	1	25	15.5	31
Terral	TVX25B013	89.8	-	-	0	0	26	15.5	28
DEKALB	DKC64-11 (RR/YGCB)	88.5	141.7	-	0	0	25	15.3	28
Unity Seeds	6287A	86.6	-	-	0	3	19	15.3	32
Genesis	2D14RR	86.0	-	-	0	1	25	15.6	24
Genesis	3214YG	85.5	140.7	180.2	0	0	26	15.4	30
Belle	1430Y	84.9	-	-	0	2	29	15.4	28
Terral	TVX20C03	84.2	-	-	0	3	25	15.6	28
Garst	8350YG1	84.2	-	-	0	0	23	15.2	24
Terral	TVX21C03	80.3	-	-	0	2	30	15.4	28
Terral	TVX25B023	76.1	-	-	0	0	26	15.6	30
Terral	TVX25BR013	74.8	-	-	0	2	25	15.2	28
NK Brand	N65-M7	74.5	106.9	-	0	3	17	15.6	28
Dyna-Gro	CX03515	70.9	-	-	0	0	22	15.5	30
USG/BG	BT 1152	70.4	-	-	0	1	24	15.1	27
Overall mean		109.2	143.0	176.4					
LSD (.10)		31.3	17.8	16.3					
Error degrees of freedom		165	119	55					
CV (%)		24.5	16.0	14.6					
R^2 (%)		57	77	84					

[1]Planted April 3; harvested September 15.

Table 13. Results from 46 late-maturing corn hybrids grown with irrigation on a Dundee silt loam soil near Clarksdale, Coahoma County, 2003.[1]

Brand name	Hybrid number	2003 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	DG5516	147.3	164.7	177.3	0	1	29	15.3	28
Genesis	4C16RR/YGCB	146.8	-	-	0	2	28	15.6	33
DEKALB	DKC69-70 (YGCB)	143.9	174.6	188.4	0	0	27	16.0	30
Garst	ND200YG1	143.8	-	-	0	0	26	15.9	30
Genesis	2D16RR/YGCB	137.1	-	-	0	1	24	15.9	29
Dyna-Gro	CX03417	132.3	-	-	0	0	**	16.1	26
Golden Acres	GAX-6306RR/Bt	129.0	-	-	0	1	22	15.2	28
NK Brand	N83-Z8 (Bt)	128.5	171.8	194.0	0	2	32	16.5	30
Triumph	1866Bt	127.7	-	-	0	1	29	15.9	29
Golden Acres	GAX-6309Bt	126.4	-	-	0	1	33	15.0	29
Terral	TV26B23	125.6	-	-	0	1	29	16.3	30
DEKALB	DKC69-71 (RR/YGCB)	122.8	-	-	0	0	27	15.8	32
Genesis	2B16TR	122.7	152.8	175.4	0	1	26	15.4	29
DEKALB	DKC68-70 (YGCB)	122.1	166.2	191.2	0	0	32	15.7	26
Genesis	2A16YG	119.7	166.2	-	0	5	27	15.8	34
Pioneer	32H69	116.4	-	-	0	0	28	15.8	27
Dyna-Gro	CX03816	116.0	-	-	0	0	21	15.4	28
NK	N83-N5	112.4	143.3	181.1	0	5	31	16.0	30
Dyna-Gro	58K15	112.3	-	-	0	5	26	15.1	32
DEKALB	DK697	108.2	144.3	176.1	0	4	28	15.7	32
Garst	8288	106.9	133.6	166.4	0	3	25	15.8	25
Pioneer	31B13	106.2	154.2	190.2	0	1	28	15.5	26
DEKALB	DKC69-72 (RR)	104.9	-	-	0	2	27	15.9	29
Terral	TVX26B013	102.3	-	-	0	0	24	15.1	30
AgriGold	XA2100Bt	99.5	132.1	-	0	1	21	15.7	30
Dyna-Gro	5515	96.8	138.2	167.6	0	6	28	15.4	30
Pioneer	31G98	96.5	128.6	162.6	0	5	28	15.1	27
FFR	900BT	96.4	-	-	0	2	23	15.0	32
USG/BG	BG 422	96.0	-	-	0	11	31	16.0	32
Genesis	2A16RR	95.7	131.2	167.9	0	5	30	15.9	30
Golden Acres	GA 2888IMI	95.7	133.9	-	0	8	27	15.9	31
Golden Acres	GA 2850RR	93.6	-	-	0	1	26	15.2	26
Pioneer	31G66	93.3	-	-	0	1	26	15.6	26
Dyna-Gro	DG58K56	93.0	138.1	-	0	5	25	15.9	26
DEKALB	DKC67-60 (RR)	92.2	-	-	0	3	29	15.8	31
Pioneer	32R25	91.9	138.1	-	0	4	27	15.6	30
FFR	849CL	89.0	-	-	0	5	25	15.5	33
Garst	8230IT	88.1	-	-	0	4	28	15.5	27
Dyna-Gro	5518	88.1	129.0	165.3	0	4	27	15.2	32
Pioneer	32D99	87.4	131.1	-	0	5	27	15.8	26
FFR	842RR	87.2	-	-	0	2	23	15.7	31
Genesis	2C15RR	86.7	-	-	0	4	26	16.1	28
Genesis	2D16YGCB	84.6	-	-	0	1	25	15.3	27
Pioneer	31R88	82.9	131.0	156.5	0	5	25	15.7	22
Dyna-Gro	DG58K22	78.7	122.2	-	0	7	26	15.5	31
Terral	TVX26C013	66.5	-	-	0	9	27	15.6	32
Overall mean		107.4	144.1	175.7					
LSD (.10)		27.7	16.5	15.2					
Error degrees of freedom		135	140	143					
CV (%)		22.0	14.7	13.8					
R^2 (%)		68	84	85					

[1]Planted April 3; harvested September 15.

Rob Coker Farm, Yazoo City

Crop Summary

Corn was planted in a stale seedbed tillage system. Rainfall was around average during the season, and stored soil moisture carried the crop through dry periods with little moisture stress. Insect pressure was light. Thus, yields were excellent, especially for dryland growing conditions.

Soil type	**Morganfield silty loam**
Soil pH	**7.6**
Soil fertility	**P=H; K=H**
Fertilizer added	**Preemergence — N @ 100 lb/A (32%); P @ 97 lb/a; K @ 90 lb/A**
	Sidedress — N @ 130 lb/A (32%)
Herbicide application	**Preemergence — Guardsman Max @ 2 qt/A**
Previous crop	**Cotton**
Planting date	**March 18**
Harvest date	**August 26**

Rainfall Summary

	Inches
April	**6.10**
May	**2.65**
June	**7.16**
July	**1.45**
August	**4.25**
September	**4.00**
Total	**25.61**

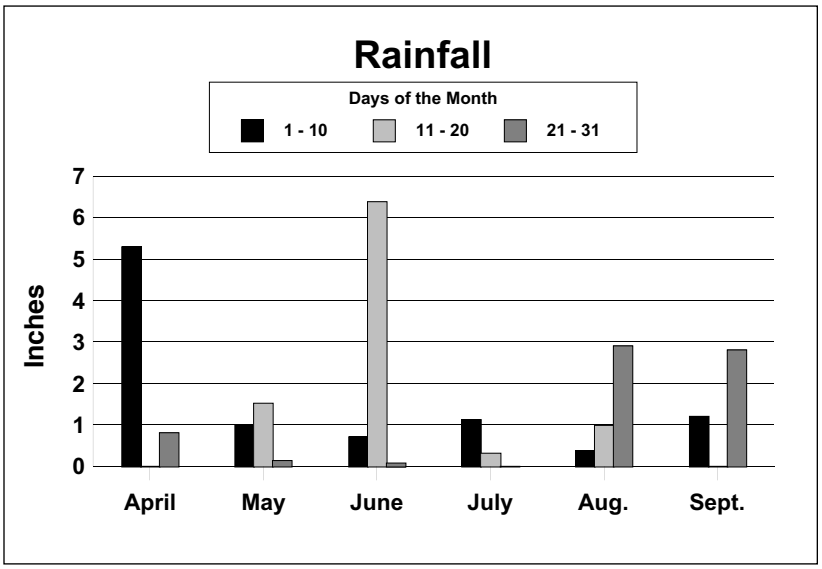


Table 14. Results from 56 early-maturing corn hybrids grown without irrigation on a Morganfield silty loam soil near Yazoo City, Yazoo County, 2003.[1]

Brand name	Hybrid number	2003 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	TVX25B023	252.7	-	-	0	0	49	15.2	34
Terral	TVX25BR023	248.4	-	-	0	1	52	15.2	36
Genesis	3214YG	246.4	236.7	208.4	0	0	53	15.1	34
Terral	TV2140nRR	241.7	238.2	-	0	0	56	14.8	34
Terral	TVX25BR013	241.2	-	-	0	0	55	14.8	35
Pioneer	33M54	241.0	-	-	0	0	53	15.2	30
Terral	TVX24R013	240.8	-	-	0	0	56	15.0	34
BXR	BXR 1111Y	240.8	-	-	0	0	50	15.4	35
Dyna-Gro	DG57K66	240.0	217.8	-	0	0	54	14.8	34
Terral	TVX23C03	239.2	-	-	0	1	59	15.2	35
SS	SS736Bt	236.9	-	-	0	0	51	15.1	32
Terral	TV25B30	234.2	-	-	0	0	55	15.7	34
Dyna-Gro	CX03515	233.0	-	-	0	0	52	15.4	34
BXR	BXR 2222RY	228.5	-	-	0	0	47	15.1	35
Belle	1140RY	228.0	-	-	0	0	55	14.8	34
NK Brand	N65-M7	227.6	208.0	-	0	1	50	14.5	34
Terral	TV2160Bt	226.3	222.3	208.8	0	0	54	15.2	34
Golden Acres	GA 8112	226.1	226.3	-	0	0	55	15.1	31
Golden Acres	GA 2828RR	225.5	-	-	0	2	51	14.8	36
Garst	8366Bt	224.3	218.4	-	0	1	53	14.5	32
Terral	TV26BR10n	224.2	214.0	-	0	0	52	15.1	37
Dyna-Gro	DG57P35	220.8	213.1	-	0	0	52	15.3	35
FFR	FFR748	220.8	-	-	0	1	53	15.2	33
Terral	TV2140	220.2	222.2	201.7	0	3	57	14.8	35
Terral	TVX25B013	219.5	-	-	0	0	54	15.1	34
Terral	TV24R10	219.4	207.8	-	0	0	57	15.4	34
Genesis	3215RR	219.0	204.7	-	0	0	47	14.7	35
Terral	TVX22R013	218.0	-	-	0	1	53	14.2	32
Dyna-Gro	5528BT	217.2	-	-	0	0	54	15.0	32
Belle	1430Y	215.2	-	-	0	0	54	15.7	32
DEKALB	DKC64-11 (RR/YGCB)	215.0	216.1	-	0	0	52	14.2	32
Garst	8350YG1	215.0	-	-	0	0	51	15.0	30
Unity Seeds	6287A	214.3	-	-	0	1	50	15.0	32
Terral	TV2155Bt	213.6	211.3	192.9	0	0	54	15.4	34
Unity Seeds	6296	213.3	-	-	0	0	51	14.7	34
Terral	TV2130	213.2	209.9	185.5	0	2	56	14.3	34
Belle	1510C	212.4	-	-	0	1	54	15.0	33
Belle	1420R	212.4	-	-	0	0	57	15.7	34
AgriGold	A6490RR	211.9	-	-	0	1	48	14.5	34
Triumph	1120BTRR	210.5	-	-	0	1	52	14.5	32
Genesis	2C15YGCB	209.5	-	-	0	0	54	15.3	34
Genesis	3215C	207.0	-	-	0	0	57	15.2	34
FFR	736Bt	205.0	213.8	-	0	2	51	14.8	35
Pioneer	34B24	204.2	213.8	193.8	0	1	53	15.2	30
Terral	TVX21C03	201.9	-	-	0	0	53	16.3	32
AgriGold	A6610	198.7	-	-	0	0	45	15.2	32
Terral	TVX20C03	198.5	-	-	0	0	56	14.0	31
AgriGold	A6445Bt	197.7	-	-	0	0	50	14.4	30
NK Brand	NX 7630	197.1	-	-	0	1	48	14.9	33
Terral	TV23R15n	196.3	190.0	-	0	0	54	15.0	34
Belle	1520R	192.1	-	-	0	0	53	15.1	34
Genesis	2D14RR	191.6	-	-	0	0	53	14.9	32
BXR	BXR 4444C	190.1	-	-	0	0	54	16.2	30
BXR	BXR 2211R	189.2	-	-	0	1	52	14.4	32
USG/BG	BT 1152	186.1	-	-	0	0	48	15.4	28
BXR	BXR 1122C	159.1	-	-	0	0	51	14.5	28
Overall mean		217.1	215.1	198.5					
LSD (.10)		28.2	18.6	15.7					
Error degrees of freedom		159	117	55					
CV (%)		10.9	11.0	12.5					
R^2 (%)		46	41	72					

[1]Planted March 18; harvested August 26.

Table 15. Results from 46 late-maturing corn hybrids grown without irrigation on a Morganfield silty loam soil near Yazoo City, Yazoo County, 2003.[1]

Brand name	Hybrid number	2003 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	32D99	254.5	242.1	-	0	0	58	15.6	32
DEKALB	DKC69-72 (RR)	247.4	-	-	0	0	53	15.7	34
DEKALB	DK697	243.0	226.7	213.7	0	1	54	15.3	34
FFR	900BT	242.0	-	-	0	0	54	15.0	34
DEKALB	DKC69-70 (YGCB)	238.7	234.3	227.3	0	0	51	16.2	34
FFR	842RR	236.0	-	-	0	0	54	15.5	34
Pioneer	31G98	232.1	229.9	205.7	0	1	55	14.7	34
DEKALB	DKC69-71 (RR/YGCB)	229.7	-	-	0	1	53	16.2	34
Dyna-Gro	CX03816	228.8	-	-	0	0	51	14.3	32
Golden Acres	GAX-6306RR/Bt	228.7	-	-	0	0	52	14.5	34
USG/BG	BG 422	227.8	-	-	0	1	57	15.0	34
Pioneer	31G66	226.8	-	-	0	0	56	15.4	31
Golden Acres	GAX-6309Bt	226.3	-	-	0	1	54	14.1	34
Dyna-Gro	5515	223.5	222.9	213.0	0	1	53	14.6	32
Garst	8288	223.0	229.6	202.0	0	0	52	15.8	31
DEKALB	DKC68-70 (YGCB)	221.9	220.3	208.2	0	0	52	15.1	31
NK Brand	N83-Z8 (Bt)	219.0	220.2	218.0	0	0	55	15.0	33
Triumph	1866Bt	218.5	-	-	0	0	58	15.3	34
NK	N83-N5	218.1	212.3	188.4	0	0	54	15.1	36
Genesis	2D16RR/YGCB	217.8	-	-	0	0	53	14.6	34
Genesis	2D16YGCB	217.6	-	-	0	1	52	15.3	34
Terral	TV26B23	216.8	-	-	0	0	56	14.9	35
Golden Acres	GA 2888IMI	215.3	205.1	-	0	0	55	15.1	33
Dyna-Gro	DG58K22	214.7	204.1	-	0	0	54	14.4	33
Genesis	2A16RR	213.7	199.9	180.4	0	1	54	14.7	34
Genesis	2B16TR	210.7	201.6	187.7	0	0	51	14.4	34
Garst	8230IT	208.4	-	-	0	1	56	15.8	30
Genesis	4C16RR/YGCB	208.1	-	-	0	1	53	14.7	34
Pioneer	32H69	207.0	-	-	0	0	57	15.7	30
AgriGold	XA2100Bt	206.8	205.9	-	0	0	54	15.3	31
Pioneer	31R88	206.4	206.9	199.3	0	0	55	15.4	31
Dyna-Gro	DG58K56	206.3	213.2	-	0	0	54	15.6	34
Dyna-Gro	CX03417	206.1	-	-	0	1	57	15.4	34
FFR	849CL	205.6	-	-	0	0	53	15.6	34
DEKALB	DKC67-60 (RR)	205.3	-	-	0	0	54	15.3	34
Dyna-Gro	5518	202.8	190.1	178.1	0	0	52	14.7	36
Garst	ND200YG1	200.3	-	-	0	1	56	16.6	34
Dyna-Gro	DG5516	199.7	192.4	189.6	0	1	52	15.1	33
Golden Acres	GA 2850RR	197.7	-	-	0	0	55	14.2	34
Genesis	2A16YG	195.8	216.1	-	0	1	56	15.3	34
Pioneer	31B13	193.9	197.7	191.3	0	0	54	15.0	29
Terral	TVX26B013	193.9	-	-	0	0	52	15.2	32
Dyna-Gro	58K15	185.9	-	-	0	0	54	15.2	33
Terral	TVX26C013	183.0	-	-	0	0	56	15.7	32
Pioneer	32R25	181.7	199.1	-	0	0	58	15.0	32
Genesis	2C15RR	176.5	-	-	0	0	55	15.4	34
Overall mean		214.4	212.9	200.2					
LSD (.10)		25.7	20.2	18.7					
Error degrees of freedom		135	140	143					
CV (%)		10.2	12.3	14.9					
R^2 (%)		50	39	54					

[1]Planted March 18; harvested August 26.

MAFES Delta Branch, Stoneville

Crop Summary

Corn was planted into raised seedbeds, which were smoothed by a do-all prior to planting. Below-average temperatures coupled with abundant, timely rainfall promoted high yields. The corn only required three irrigation treatments to supplement crop water needs.

Soil type	**Bosket very fine sandy loam**
Soil pH	**7.2**
Soil fertility	**P=; K=**
Fertilizer added	**N @ 259 lb/A**
Herbicide application	**Bicep II @ 2 qt/A**
Irrigation (furrow)	**June 1, June 27, and July 22**
Previous crop	**Soybeans**
Planting date	**March 25**
Harvest date	**August 25**

Rainfall Summary

	Inches
April	**3.78**
May	**2.55**
June	**7.30**
July	**2.46**
August	**1.53**
September	**4.94**
Total	**22.56**

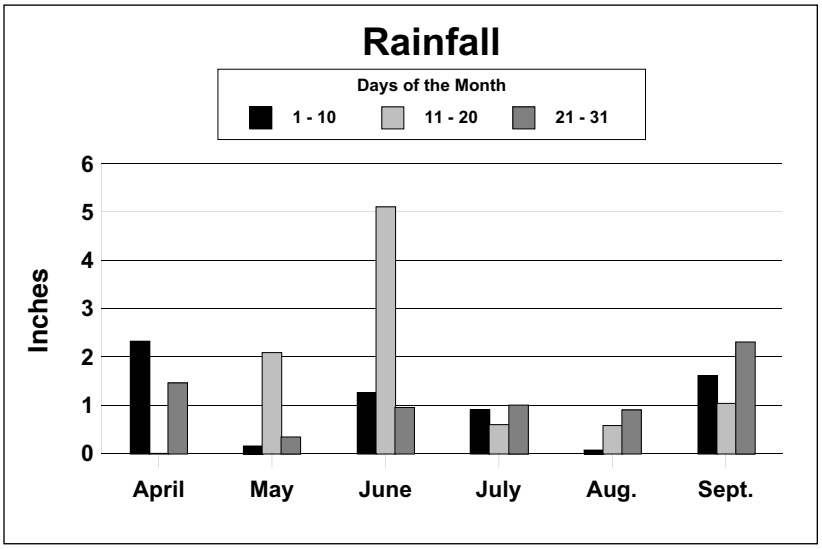


Table 16. Results from 56 early-maturing corn hybrids grown with irrigation on a Bosket very fine sandy loam soil at the MAFES Delta Branch Station, Stoneville, 2003.[1]

Brand name	Hybrid number	2003 yield	2-year average	3-year average[2]	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
BXR	BXR 1111Y	264.1	-	-	0	0	44	17.0	36
Dyna-Gro	5528BT	263.5	-	-	0	0	49	16.8	32
Terral	TV2160Bt	255.7	244.2	-	0	0	50	17.4	34
Dyna-Gro	CX03515	254.5	-	-	0	0	44	17.3	34
NK Brand	N65-M7	253.5	228.7	-	0	1	42	15.6	34
Golden Acres	GA 8112	252.1	230.6	-	0	0	50	16.3	34
Unity Seeds	6296	250.4	-	-	0	1	45	16.2	36
Belle	1430Y	249.1	-	-	0	0	51	17.1	34
Belle	1140RY	249.1	-	-	0	0	45	17.4	35
FFR	736Bt	248.9	256.6	-	0	0	43	16.0	34
FFR	FFR748	248.0	-	-	0	1	44	17.0	33
Terral	TVX23C03	247.0	-	-	0	0	52	16.6	34
Pioneer	34B24	245.5	244.8	-	0	0	44	16.9	32
SS	SS736Bt	245.0	-	-	0	0	46	16.0	31
AgriGold	A6445Bt	244.8	-	-	0	0	42	15.9	32
Terral	TV26BR10n	244.2	237.8	-	0	0	47	16.4	36
Genesis	3214YG	243.5	255.0	-	0	1	46	17.3	34
Terral	TVX25B023	243.4	-	-	0	0	44	17.7	34
Terral	TV2140	242.6	232.1	-	0	1	51	16.9	34
Golden Acres	GA 2828RR	240.1	-	-	0	1	46	16.5	35
Terral	TVX24R013	240.0	-	-	0	0	52	15.9	34
Terral	TV2140nRR	239.9	226.6	-	0	1	49	16.7	34
Terral	TV2130	238.9	231.9	-	0	0	50	16.5	36
Belle	1420R	237.5	-	-	0	0	50	17.4	36
Terral	TVX25B013	237.4	-	-	0	0	47	16.2	33
Terral	TV24R10	237.4	225.3	-	0	0	50	17.9	34
BXR	BXR 2222RY	237.1	-	-	0	0	45	17.2	34
Belle	1510C	235.8	-	-	0	0	50	16.4	32
Genesis	2C15YGCB	234.6	-	-	0	0	47	17.5	34
Terral	TVX25BR023	234.1	-	-	0	0	44	17.1	36
Terral	TVX25BR013	231.2	-	-	0	0	47	16.7	34
Pioneer	33M54	231.1	-	-	0	1	45	16.5	32
Dyna-Gro	DG57P35	231.1	229.2	-	0	0	45	16.9	32
Genesis	3215RR	231.1	212.6	-	0	0	44	17.8	34
Belle	1520R	230.9	-	-	0	0	49	16.4	33
Garst	8366Bt	230.8	233.3	-	0	0	48	16.6	30
Dyna-Gro	DG57K66	229.0	219.2	-	0	0	48	16.2	34
Genesis	3215C	228.8	-	-	0	1	51	16.7	34
Garst	8350YG1	228.3	-	-	0	0	**	16.5	30
AgriGold	A6490RR	226.8	-	-	0	0	43	15.9	34
Terral	TV25B30	225.9	-	-	0	0	49	16.8	35
Triumph	1120BTRR	225.8	-	-	0	0	46	15.9	32
DEKALB	DKC64-11 (RR/YGCB)	225.0	227.5	-	0	0	48	17.1	35
Genesis	2D14RR	224.2	-	-	0	0	49	16.1	34
USG/BG	BT 1152	221.3	-	-	0	0	45	17.6	31
NK Brand	NX 7630	220.4	-	-	0	0	42	16.6	34
Terral	TV23R15n	216.7	206.8	-	0	0	48	15.8	34
Terral	TVX22R013	215.5	-	-	0	0	46	15.9	33
Terral	TV2155Bt	215.4	223.2	-	0	0	51	17.8	34
Terral	TVX20C03	212.0	-	-	0	0	46	15.1	31
AgriGold	A6610	210.4	-	-	0	0	42	17.1	30
Unity Seeds	6287A	209.9	-	-	0	0	43	16.3	29
BXR	BXR 2211R	209.2	-	-	0	0	47	15.2	32
Terral	TVX21C03	202.1	-	-	0	1	51	18.5	30
BXR	BXR 4444C	190.9	-	-	0	1	50	17.3	30
BXR	BXR 1122C	183.5	-	-	0	0	47	15.1	28
Overall mean		233.5	230.6	-					
LSD (.10)		18.6	13.9	-					
Error degrees of freedom		160	118	-					
CV (%)		6.7	7.7	-					
R^2 (%)		60	59	-					

[1]Planted March 25; harvested August 25.
[2]No 3-year average.

Table 17. Results from 46 late-maturing corn hybrids grown with irrigation on a Bosket very fine sandy loam soil at the MAFES Delta Branch, Stoneville, 2003.[1]

Brand name	Hybrid number	2003 yield	2-year average	3-year average[2]	Root lodging	Stalk lodging	Ear height	Moisture content	Harvested stand (x1000)
		bu/A	*bu/A*	*bu/A*	*%*	*%*	*in*	*%*	
Pioneer	32D99	279.9	248.4	-	0	0	51	17.4	32
Pioneer	31G98	269.3	247.8	-	0	0	50	15.9	30
DEKALB	DKC69-71 (RR/YGCB)	269.2	-	-	0	0	49	18.7	35
Golden Acres	GAX-6306RR/Bt	264.3	-	-	0	0	47	16.5	33
DEKALB	DKC69-72 (RR)	259.5	-	-	0	0	47	17.1	34
Pioneer	32H69	258.7	-	-	0	0	46	16.9	31
Pioneer	31G66	257.0	-	-	0	0	45	16.5	31
Garst	8288	253.5	227.9	-	0	1	47	17.6	30
Garst	ND200YG1	252.7	-	-	0	0	50	18.4	30
FFR	842RR	251.8	-	-	0	1	47	16.8	34
Golden Acres	GAX-6309Bt	251.2	-	-	0	0	49	15.6	34
Genesis	2D16YGCB	250.2	-	-	0	0	47	17.1	32
NK Brand	N83-Z8 (Bt)	248.4	240.8	-	0	0	48	16.6	34
Triumph	1866Bt	247.9	-	-	0	0	52	16.8	34
DEKALB	DK697	245.1	232.4	-	0	1	49	17.3	34
Pioneer	32R25	243.0	231.6	-	0	1	50	15.5	32
USG/BG	BG 422	243.0	-	-	0	0	49	16.1	34
FFR	900BT	242.5	-	-	0	0	45	16.3	34
Golden Acres	GA 2888IMI	242.0	220.8	-	0	0	46	16.7	35
Pioneer	31R88	240.9	233.6	-	0	0	47	16.4	26
AgriGold	XA2100Bt	239.0	230.4	-	0	1	43	17.2	34
FFR	849CL	237.8	-	-	0	0	46	17.1	34
Dyna-Gro	CX03816	237.1	-	-	0	0	47	16.6	32
Terral	TVX26B013	236.9	-	-	0	0	46	16.6	34
Genesis	2A16YG	235.8	239.5	-	0	0	48	16.5	34
Genesis	4C16RR/YGCB	235.7	-	-	0	0	46	16.0	34
Terral	TV26B23	235.4	-	-	0	0	51	16.2	34
DEKALB	DKC69-70 (YGCB)	233.2	237.6	-	0	0	49	18.3	33
Dyna-Gro	CX03417	231.6	-	-	0	0	51	15.9	32
Dyna-Gro	5518	231.4	224.4	-	0	2	50	15.9	34
Genesis	2B16TR	231.2	229.5	-	0	0	45	16.3	34
Genesis	2D16RR/YGCB	228.5	-	-	0	0	43	17.0	34
Dyna-Gro	DG58K22	228.1	229.1	-	0	0	52	15.5	34
Genesis	2A16RR	227.8	219.7	-	0	1	50	16.3	34
NK	N83-N5	226.6	208.0	-	0	0	52	16.3	34
Dyna-Gro	58K15	224.7	-	-	0	0	46	15.2	34
Dyna-Gro	5515	224.5	222.4	-	0	1	44	14.8	33
Pioneer	31B13	222.0	229.4	-	0	0	50	15.5	28
Garst	8230IT	219.8	-	-	0	1	47	16.5	29
Dyna-Gro	DG5516	218.4	213.2	-	0	1	49	15.5	34
DEKALB	DKC68-70 (YGCB)	218.3	221.4	-	0	0	47	16.3	30
Dyna-Gro	DG58K56	216.7	204.7	-	0	0	46	17.4	34
DEKALB	DKC67-60 (RR)	211.8	-	-	0	1	48	16.0	34
Golden Acres	GA 2850RR	209.8	-	-	0	0	50	15.2	33
Genesis	2C15RR	209.5	-	-	0	0	52	16.7	34
Terral	TVX26C013	202.9	-	-	0	2	49	16.4	34
Overall mean		238.1	227.5	-					
LSD (.10)		27.2	18.4	-					
Error degrees of freedom		128	135	-					
CV (%)		9.5	10.2	-					
R^2 (%)		45	47	-					

[1]Planted March 25; harvested August 25.
[2]No 3-year average.

Table 18. Average grain production, by areas, for early-maturing corn hybrids grown in Mississippi, 2003

Hybrid number	Brand name	Area I[1] 2003 yield	Area I[1] 2-yr. avg.	Area I[1] 3-yr. avg.	Area II[2] 2003 yield	Area III 2003[3] yield	Area III 2-yr.[3] avg.	Area III 3-yr.[4] avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriGold	A6395Bt	172.2	-	-	-	-	-	-
AgriGold	A6445Bt	-	-	-	-	183.3	-	-
AgriGold	A6490RR	156.4	173.9	-	-	190.6	-	-
AgriGold	A6610	-	-	-	-	166.6	-	-
Belle	1140 RY	162.8	-	-	173.1	192.8	-	-
Belle	1430Y	164.8	-	-	179.9	183.1	-	-
Belle	1420R	161.7	-	-	165.2	181.8	-	-
Belle	1510C	161.1	-	-	165.8	194.1	-	-
Belle	1520R	163.8	-	-	182.3	175.4	-	-
BXR	BXR 4444C	155.0	-	-	163.6	179.6	-	-
BXR	BXR 1111Y	183.3	-	-	167.6	218.3	-	-
BXR	BXR 2222RY	180.9	-	-	165.2	197.8	-	-
BXR	BXR 2211R	141.0	-	-	165.8	167.6	-	-
BXR	BXR 1122C	161.3	-	-	141.3	151.2	-	-
DEKALB	DKC64-11 (RR/YGCB)	161.3	167.9	-	168.8	176.2	193.3	-
Dyna-Gro	DG5528Bt	175.2	-	-	178.5	191.2	-	-
Dyna-Gro	DG57K66	179.4	188.2	-	-	187.9	188.9	-
Dyna-Gro	DG57P35	179.4	186.2	-	177.0	201.3	202.6	-
Dyna-Gro	CX03515	-	-	-	-	186.1	-	-
FFR	736Bt	183.3	185.5	-	-	185.7	205.0	-
FFR	748	164.5	-	-	-	208.9	-	-
Garst	8350YG1	170.9	-	-	-	175.8	-	-
Garst	8366Bt	-	-	-	-	181.7	194.9	-
Genesis	3214YG	-	-	-	-	191.8	208.9	194.3
Genesis	2D14RR	179.5	-	-	-	167.3	-	-
Genesis	3215RR	-	-	-	-	180.7	176.5	-
Genesis	2C15YGCB	-	-	-	-	185.5	-	-
Genesis	3215C	-	-	-	-	176.9	-	-
Golden Acres	GA 2828RR	-	-	-	-	190.5	-	-
Golden Acres	GA 8112	-	-	-	-	194.6	197.8	-
NK	N65-M7	173.3	183.6	-	135.7	185.2	180.1	-
NK	NX7630	169.0	-	-	157.9	190.2	-	-
Pioneer	33V15	170.9	-	-	176.6	-	-	-
Pioneer	33M54	190.6	-	-	-	211.8	-	-
Pioneer	34B24	160.6	180.3	163.0	174.2	189.9	201.8	184.4
Southern States	SS736Bt	-	-	-	-	200.1	-	-
Terral	TV2130	190.8	190.5	191.7	197.1	181.6	190.4	175.7
Terral	TV2140	186.4	190.1	187.4	203.3	189.7	195.9	182.4
Terral	TV2155Bt	171.3	184.7	181.9	181.4	191.4	199.8	188.5
Terral	TV2160Bt	167.8	185.5	177.3	170.9	211.4	210.8	199.4
Terral	TV26BR10n	183.8	192.3	-	175.6	189.5	195.7	-
Terral	TV24R10	167.3	176.7	-	175.0	189.8	190.6	-
Terral	TV23R15n	185.9	184.0	-	163.3	183.3	183.7	-
Terral	TV2140nRR	163.7	181.8	-	196.4	210.6	205.9	-
Terral	TV25B30	176.7	-	-	182.7	189.9	-	-
Terral	TVX24R013	172.3	-	-	181.9	201.4	-	-
Terral	TVX22R013	170.2	-	-	157.1	175.4	-	-
Terral	TVX25B013	183.4	-	-	175.8	182.2	-	-
Terral	TVX25B023	167.8	-	-	160.4	190.7	-	-
Terral	TVX25BR013	182.6	-	-	181.2	182.4	-	-
Terral	TVX20C03	188.9	-	-	163.6	164.9	-	-
Terral	TVX21C03	159.7	-	-	164.6	161.4	-	-
Terral	TVX23C03	194.3	-	-	186.0	209.7	-	-
Terral	TVX25BR023	186.6	-	-	182.1	210.1	-	-
Triumph	1120BtRR	-	-	-	-	178.6	-	-
USG	BT 1152	-	-	-	-	159.3	-	-
Unity	6287A	-	-	-	-	170.3	-	-
Unity	6296	-	-	-	-	185.9	-	-
Overall Mean		172.6	183.5	180.3	173.0	185.9	196.1	187.4
LSD (.10)		19.0	13.0	11.6	20.0	15.3	9.7	11.2
Error degrees of freedom		252	196	88	199	484	354	110
CV (%)		13.3	12.9	14.5	13.8	12.2	11.0	13.5
R^2 (%)		41	55	74	75	90	86	81

[1]Averages of Brooksville and Hernando.
[2]Averages of Newton and Raymond.
[3]Averages of Clarksdale, Stoneville, and Yazoo City.
[4]Averages of Clarksdale and Yazoo City.

Table 19. Average grain production, by areas, for late-maturing corn hybrids grown in Mississippi, 2003

Hybrid number	Brand name	Area I			Area II[3]	Area III		
		2003[1] yield	2-yr.[1] avg.	3-yr.[2] avg.	2003 yield	2003[4] yield	2-yr.[4] avg.	3-yr.[5] avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriGold	XA2100Bt	-	-	-	-	181.8	188.4	-
AgriGold	XA2300Bt	128.1	-	-	-	-	-	-
DEKALB	DK697	153.3	169.1	165.3	196.0	198.8	200.5	194.9
DEKALB	DKC68-70 (YGCB)	151.4	162.9	164.3	187.6	187.4	201.2	200.0
DEKALB	DKC69-70 (YGCB)	152.0	173.3	167.9	190.6	205.3	212.9	207.9
DEKALB	DKC69-71 (RR/YGCB)	157.9	-	-	185.5	207.2	-	-
DEKALB	DKC69-72 (RR)	148.9	-	-	196.6	204.0	-	-
DEKALB	DKC66-80 (RR)	151.4	-	-	169.3	-	-	-
DEKALB	DKC67-60 (RR)	-	-	-	-	169.8	-	-
Dyna-Gro	DG5515	-	-	-	189.3	181.6	193.1	190.3
Dyna-Gro	DG5516	-	-	-	-	188.5	189.8	183.4
Dyna-Gro	DG5518	147.5	165.8	170.1	174.8	174.1	180.2	171.7
Dyna-Gro	DG58K15	-	-	-	181.6	174.3	-	-
Dyna-Gro	DG58K56	-	-	-	159.7	172.0	182.2	-
Dyna-Gro	DG58K22	140.5	162.4	-	206.0	173.8	184.1	-
Dyna-Gro	CX03417	-	-	-	172.0	190.0	-	-
Dyna-Gro	CX03816	-	-	-	-	194.0	-	-
FFR	849CL	158.0	-	-	-	177.5	-	-
FFR	842RR	138.6	-	-	-	191.7	-	-
FFR	900BT	163.1	-	-	-	193.6	-	-
Garst	8288	147.7	162.0	159.3	-	194.5	195.9	184.2
Garst	8230IT	155.2	166.5	-	-	172.1	-	-
Garst	ND200YG1	154.6	-	-	-	199.0	-	-
Genesis	2A16YG	154.9	-	-	-	183.8	205.0	-
Genesis	2B16TR	-	-	-	-	188.2	192.6	181.5
Genesis	2A16RR	135.0	-	-	-	179.1	182.9	174.1
Genesis	2C15RR	-	-	-	-	157.6	-	-
Genesis	4C16RR/YGCB	-	-	-	-	196.9	-	-
Genesis	2D16YGCB	-	-	-	-	184.1	-	-
Genesis	2D16RR/YGCB	-	-	-	-	194.5	-	-
Golden Acres	GA 2888IMI	-	-	-	-	184.3	183.7	-
Golden Acres	GA 2850RR	-	-	-	-	167.0	-	-
Golden Acres	GAX-6306RR/Bt	-	-	-	-	207.3	-	-
Golden Acres	GAX-6309Bt	-	-	-	-	201.3	-	-
NC+	NC+7101	150.6	-	-	-	-	-	-
NK	N83-N5	135.2	155.1	151.6	178.1	185.7	185.8	184.7
NK	N83-Z8	149.7	171.4	160.3	194.1	198.6	209.4	206.0
Pioneer	32R25	165.9	177.4	-	181.2	172.2	187.5	-
Pioneer	31G98	-	-	-	-	199.3	201.0	184.2
Pioneer	31R88	146.4	165.0	163.5	194.0	176.8	188.9	177.9
Pioneer	32D99	152.6	174.8	-	-	207.3	206.2	-
Pioneer	31B13	158.1	177.4	165.9	168.8	174.1	192.0	190.7
Pioneer	32H69	161.4	-	-	-	194.0	-	-
Pioneer	31G66	158.0	-	-	209.8	192.4	-	-
Terral	TV26B23	151.2	-	-	177.3	192.6	-	-
Terral	TVX26B013	149.7	-	-	181.1	177.7	-	-
Terral	TVX26C013	135.2	-	-	174.7	150.8	-	-
Triumph	1866Bt	-	-	-	-	198.0	-	-
USG	BR 422	-	-	-	-	188.9	-	-
Overall Mean		149.4	169.9	165.0	184.8	186.0	194.5	187.9
LSD (.10)		19.9	11.3	9.8	22.7	15.4	10.6	12.0
Error degrees of freedom		243	246	173	107	398	415	286
CV (%)		19.4	14.7	13.4	14.1	12.2	12.1	14.5
R^2 (%)		66	74	80	72	91	84	77

[1]Averages of Aberdeen, Brooksville, and Hernando.
[2]Averages of Aberdeen and Brooksville.
[3]Averages of Newton and Raymond.
[4]Averages of Clarksdale, Stoneville, and Yazoo City.
[5]Averages of Clarksdale and Yazoo City.

Grain Sorghum Crop Summary

Grain sorghum was replanted after the test was damaged by herbicide drift. Bicep II was applied preemerge on June 6 at the rate of 2.6 quarts per acre. Liquid nitrogen was knifed in on June 5 at 100 pounds per acre. Sorghum midge was sprayed by air on July 9 with Orhtene 90S at 1 pound per acre and on July 23 with Mustang Max at 3.8 ounces per acre. Bird tape and scare balloons were utilized to minimize feeding damage from birds.

Table 20. Results from 35 grain sorghum varieties grown on a Sharkey clay soil at the MAFES Delta Branch, Stoneville, 2003.[1]

Brand name	Hybrid number	2003 yield	2-year average	3-year average	Head exertion [2]	Plant height [3]	Moisture content
		bu/A	*bu/A*	*bu/A*	*in*	*in*	*%*
84G62	Pioneer	131.9	87.8	-	5	46	16.0
GA444E	Golden Acres	120.5	87.3	-	4	46	15.6
GA X2027	Golden Acres	118.2	-	-	7	51	16.5
TVX94S34	Terral	117.7	-	-	5	54	15.4
83G66	Pioneer	116.0	77.0	96.9	2	55	17.4
X204	Monsanto	115.9	-	-	7	51	16.5
83G15	Pioneer	115.6	-	-	2	52	16.5
TV1050	Terral	114.3	77.2	90.5	2	52	15.1
TVX93S16	Terral	113.9	-	-	7	51	17.8
5440	Garst	113.1	80.4	-	4	46	15.1
TVX95S25	Terral	112.9	-	-	3	56	16.0
GA3694	Golden Acres	111.2	81.4	-	2	50	15.6
TV9421	Terral	110.7	82.3	96.9	4	46	15.5
X1753B	Dyna-Gro	109.6	86.7	-	3	47	16.3
FFR318	FFR	106.4	71.4	-	6	54	15.6
DKS53-11	DEKALB	104.7	-	-	2	54	17.9
A571	Asgrow	103.8	-	-	4	50	14.9
SS800	Southern States	103.0	73.6	92.8	3	51	15.2
TV93S72	Terral	102.6	75.3	92.8	4	46	15.4
A603	Asgrow	102.1	-	-	3	54	15.8
N3318	Garst	99.6	-	-	2	48	15.3
TR461	Triumph	98.1	-	-	2	50	15.1
FFR322	FFR	96.8	76.3	93.8	3	49	15.5
SS650	Southern States	96.2	69.7	85.7	n/a	n/a	15.5
TV96H81	Terral	92.9	79.1	99.1	2	47	15.9
5515	Garst	88.2	69.2	90.0	3	48	15.6
780B	Dyna-Gro	84.3	70.7	90.0	4	51	16.4
TR82-G	Triumph	80.6	62.9	-	2	54	15.5
R2365	Garst	77.3	-	-	2	49	15.8
TVX96H23	Terral	76.6	-	-	4	52	15.8
TVX95S201	Terral	76.3	56.2	-	5	48	15.9
X17F90B	Dyna-Gro	75.5	-	-	6	56	16.9
R3546	Garst	75.5	-	-	2	46	15.7
R3392	Garst	70.7	-	-	9	52	19.5
TVX96H202	Terral	57.8	49.9	-	3	48	17.1
Overall mean		99.7	74.3	92.9			
LSD (.10)		15.3	11.4	8.7			
Error degrees of freedom		101	107	80			
CV (%)		13.0	18.4	13.7			
R^2 (%)		71	87	92			

[1]Planted May 30; harvested August 23.
[2]Head Exertion = Distance in inches from the flag leaf to base of panicle.
[3]Plant Height = Height in inches from the soil surface to the top of the grain head.

GRAIN SORGHUM SOURCES

FFR Seed **969 Cloverleaf Drive** **Southhaven, MS 38671**	**FFR 318** **FFR 322**
Garst Seed Company **761 Walnut Knoll Lane** **Suite 200** **Cordova, TN 38018**	**5440** **5515** **N3318** **R3546** **R3392** **R2365**
Golden Acres Genetics **P.O. Box 579** **Buchanan Dam, TX 78609**	**GA3694** **GA444E** **GAX-2027**
Monsanto **RR 3 Box 119** **Plainview,TX 79072**	**A571** **A603** **DKS53-11** **X204**
Pioneer **6767 Old Madison Pike, Ste 110** **Huntsville, AL 35806**	**83G66** **83G15** **84G62**
Southern States Coop **P.O. Box 26234** **Richmond, VA 23260**	**SS650** **SS800**
Terral Seed, Inc. **P.O. Box 826** **Lake Providence, LA 71254**	**TV9421** **TV1050** **TV93S72** **TV96H81** **TVX96H202** **TVX95S201** **TVX95S25** **TVX96H23** **TVX93S16** **TVX94S34**
Triumph Seed Co., Inc. **P.O. Box 1050** **Ralls, TX 79357**	**TR 82-G** **TR461**
UAP Delta **57 Germantown Ct., Ste 200** **Cordova, TN 38018**	**751B** **780B** **X1753B** **X17F90B**

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