UNIVERSITY OF GEORGIA
EXTENSION

1999 Corn Performance Tests

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Preface

In this research report, the results of the 1999 corn performance trials are presented. Corn performance trials were conducted at six locations throughout Georgia in 1999 (see map below). Short-season, mid-season, and full-season hybrids were planted at Tifton, Plains, and Midville in the coastal plain region, at Griffin in the Piedmont region, at Calhoun in the limestone valley region, and at Blairsville in the mountain region. High oil corn hybrids were tested at Tifton and Plains. Hybrids used for silage were evaluated at Tifton, Griffin, Calhoun, and Blairsville, Georgia, and at Quincy, Florida. Preliminary experimental hybrids were tested at Tifton only.

At each site all plots within a maturity group were seeded at the rates specified and not thinned, and the populations at harvest are included in the tables. Information concerning fertilization and cultural practices used in each trial is included with the tables. Grain harvesting was done with a small plot combine, and yields were adjusted to 15.5% moisture. Since data averaged over several years indicate a hybrid's yield potential better than data from only a single year, average yields over several years are included in this report.

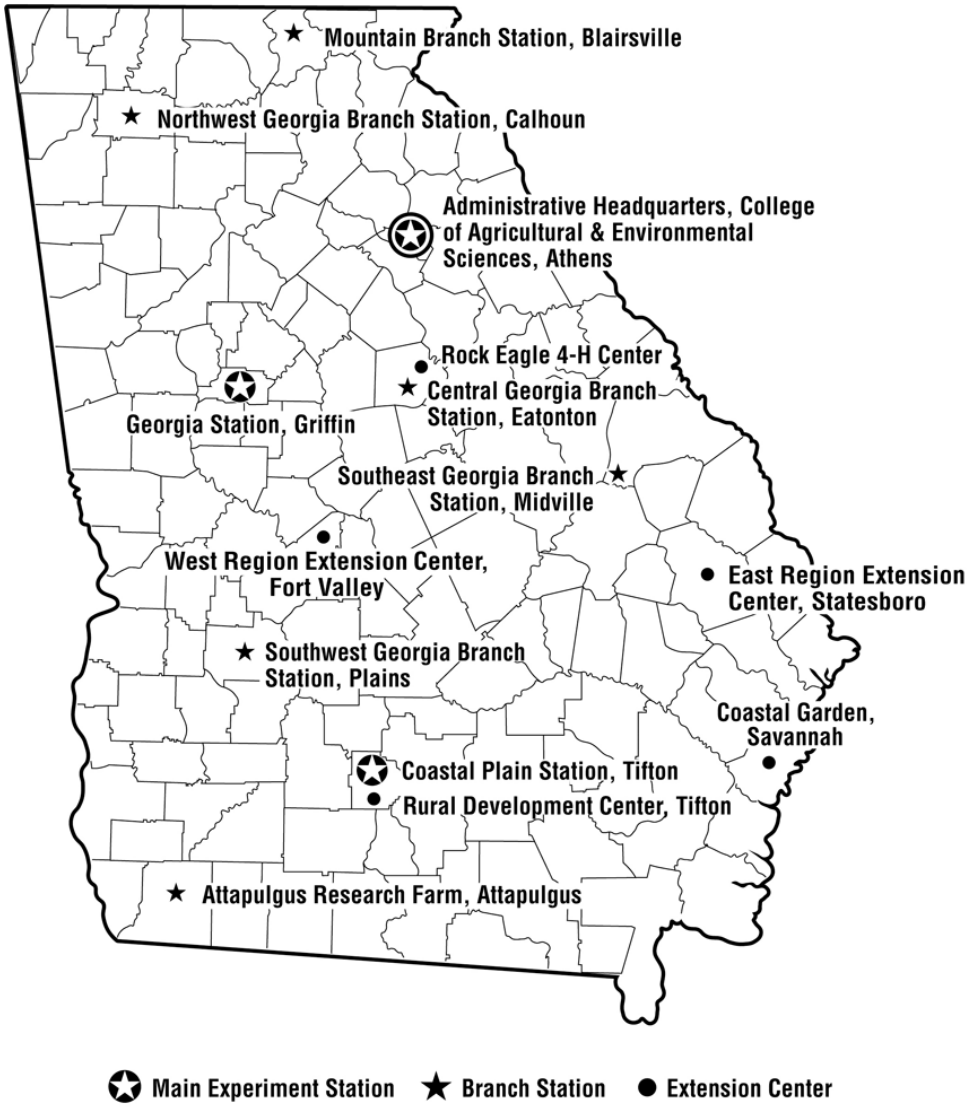
The least significant difference (L.S.D.) at the 10% level has been included in the tables to aid in comparing hybrids. If the yields of any two hybrids differ by the L.S.D. value or more, they may be considered different in yield ability. **Bolding** is used in the performance tables to indicate hybrids with yields statistically equal to the highest yielding entry in the test. The standard error (Std. Err.) of an entry mean is included at the bottom of each table to provide a general indicator of the level of precision of each experiment. The lower the value of the standard error of the

entry mean, the more precise the experiment.

Producers of hybrid seed corn are invited to enter their hybrids in the Georgia performance trials. Most hybrids entered are commercially available in Georgia, but a few experimental hybrids are also entered. Entry of a hybrid in these trials does not imply endorsement or recommendation by the University of Georgia College of Agriculture.

This report is one of four publications presenting the 1998-99 performance of agronomic crops in Georgia. For information concerning the performance of other crops, refer to one of the following research reports: 1998-99 Small Grains Performance Tests, Experiment Station Research Report #659, 1998-99 Canola Performance Tests, Experiment Station Research Report #660, and the 1998 Field Crops Performance Tests, Experiment Station Research Report #658.

This report, along with performance test information on other crops, is also available at our web site www.swvt.uga.edu. Additional information may be obtained by writing Dr. Anton E. Coy, Crop and Soil Sciences Department, Coastal Plain Experiment Station, Tifton, GA 31793-0748 or J. LaDon Day, Crop and Soil Sciences Department, University of Georgia, Georgia Station, Griffin, GA 30223-1797.



The Season

The 1999 corn season was dry and early. March and early April were dry and clear which allowed planting and emergence to progress about a week ahead of average. Dry conditions in mid-April caused some corn acreage to be shifted to other crops and approximately 25% of the corn planted to be in poor condition. Planted acreage was estimated at 300,000 acres representing a 40% decline from 1998. Early May rains improved conditions, but dry weather returned in late May. Tasseling and silking were a week ahead of average, but the dry weather pattern resulted in nearly half of the state's corn in poor condition by mid-June. Scattered rain

and slightly cooler than normal temperatures in early July improved conditions slightly. A hot and dry August lessened grain fill.

The severe drought conditions that Georgia has been experiencing since April 1998 continued throughout the corn growing season. Rainfall at the six test sites is listed below. Total seasonal rainfall amount was below normal at all test locations and only 60% of long-term average.

Growing Season Rainfall[1], 1999

Month	Blairsville	Calhoun[2]	Griffin	Midville	Plains	Tifton
	---------- inches ----------					
February	3.94	3.01	2.19	2.49	2.62	1.73
March	3.66	3.24	3.11	1.57	2.42	1.13
April	1.70	2.14	1.53	2.75	2.65	2.07
May	4.46	4.70	2.56	1.62	2.45	2.14
June	3.46	4.85	6.76	2.87	3.30	7.57
July	3.29	4.98	1.37	4.79	3.75	4.65
August	1.93	1.49	2.47	2.30	1.78	1.57
September	1.39	1.01	1.78	4.53	0.83	2.05
Total (8 mo)	*23.83*	*25.42*	*21.77*	*22.92*	*19.80*	*22.91*
Normal (8 mo)	*38.53*	*37.14*	*35.88*	*34.70*	*34.71*	*35.28*

[1] Data submitted by Dr. G. Hoogenboom, Georgia Station, Griffin, GA.
[2] Floyd County location.

Corn harvest proceeded about a week ahead of average. Only 260,000 acres were harvested for grain at an estimated yield of 95 bushels per acre compared to 80 bushels per acre from 265,000 acres in 1998 and the record 110 bushels per acre from 500,000 acres in 1997.

GRAIN TEST RESULTS

Corn Hybrid Performance in the Coastal Plain

Coastal Plain Region, Georgia

Summary of Corn Hybrid Performance, 1999
Coastal Plain Region of Georgia

Company or Brand Name	Variety	Yield						Irrigated Av
		Coastal Plain Avg.	Tifton Non-Irr.	Non-Irr. Avg.	Tifton Irr.	Plains Irr.	Midville Irr.	
		---------- bu/acre ----------						
Short-Season								
AgriPro	AP 9707	190.2	167.1	167.1	184.1	199.2	210.2	197.9
AgriPro	HY 9646	187.3	153.7	153.7	182.5	207.3	205.6	198.5
Funk's G	5516	185.2	170.6	170.6	171.6	188.2	210.6	190.1
Zimmerman	Z37	184.6	152.7	152.7	188.1	198.7	199.0	195.3
Southern States	SS747CL	184.5	163.2	163.2	196.8	185.2	192.7	191.6
Southern States	SS769BT	184.4	159.4	159.4	195.4	188.9	194.1	192.8
Funk's G	5510-A	183.6	178.9	178.9	181.6	182.9	191.0	185.1
Pioneer	3245	182.1	157.2	157.2	189.6	180.7	200.9	190.4
Pioneer	32k61	181.9	156.2	156.2	177.8	202.7	191.0	190.5
DeKalb	DK 650	181.0	165.4	165.4	184.5	188.6	185.6	186.2
Southland Genetics	SG1701	180.4	154.3	154.3	174.6	194.5	198.1	189.1
Southern States	SS787	179.9	147.9	147.9	192.1	189.5	190.1	190.5
Pioneer	3223	179.8	144.6	144.6	184.7	179.7	210.0	191.5
Southern States	SS729CL	177.6	157.8	157.8	170.1	175.1	207.5	184.2
Terra	TR1157	177.5	142.4	142.4	166.7	199.3	201.5	189.2
Funk's G	4581	176.6	161.5	161.5	177.1	168.2	199.8	181.7
Asgrow	RX 913	174.3	158.9	158.9	192.2	186.4	159.8	179.5
AgriPro	AP 9829IMI	171.2	148.3	148.3	174.7	174.4	187.6	178.9
Southland Genetics	SG1611	166.0	126.9	126.9	150.7	188.4	198.0	179.0
AgriPro	HS 9843	165.2	149.5	149.5	160.5	164.8	185.9	170.4
Southland Genetics	SG1580	163.6	131.9	131.9	174.7	176.8	171.1	174.2
Zimmerman	1851W	163.5	137.6	137.6	143.8	177.6	195.1	172.2
Asgrow	RX 889	161.4	144.0	144.0	166.1	167.1	168.3	167.2
Terra	TR 1154	161.3	137.1	137.1	141.5	177.5	189.1	169.3
Funk's G	4653	160.5	153.3	153.3	174.4	152.9	161.4	162.9
Asgrow	RX 826	160.1	119.2	119.2	152.4	181.4	187.4	173.7
Funk's G	5505RR	153.8	154.9	154.9	173.9	127.2	159.0	153.4
Pioneer	33K81	149.0	127.1	127.1	147.4	154.1	167.4	156.3
Terra	TR1147RR	145.4	131.2	131.2	144.9	165.0	140.7	150.2
NK	N79-P4	.	119.1	119.1	156.4	183.7	.	.
Pioneer	3563	.	99.0	99.0	140.2	136.4	.	.
Average		172.8	147.4	147.4	171.3	178.8	188.2	180.4

Mid and Full-Season								
DeKalb	DK 679	188.3	155.1	155.1	184.3	201.0	213.0	199.4
Pioneer	3163	186.1	154.5	154.5	181.4	196.5	212.1	196.7
DeKalb	DK 697	184.7	155.4	155.4	185.7	201.0	196.6	194.4
AgriPro	AP 9909	184.4	158.4	158.4	178.1	197.6	203.7	193.1
NK	N 83-N5	180.3	151.8	151.8	167.7	190.0	211.6	189.8
Terra	TR 702E	179.9	158.7	158.7	179.0	185.9	195.8	186.9
AgriPro	AP 9939	175.6	147.9	147.9	161.5	186.3	206.8	184.9
DeKalb	DK 687	174.4	132.3	132.3	181.9	188.0	195.6	188.5
Southern States	SS859CL	173.2	131.6	131.6	173.8	175.0	212.6	187.1
NK	N 8811	170.9	144.1	144.1	163.9	181.6	194.1	179.8
Southland	4120	169.7	137.5	137.5	180.1	165.1	196.0	180.4
Terra	TR 1167	169.2	141.6	141.6	158.8	170.7	205.6	178.4
Pioneer	3085*	166.7	137.9	137.9	143.2	188.1	197.5	176.3
Pioneer	3146	163.6	137.0	137.0	159.3	161.9	196.4	172.5
Southland	1651	162.8	129.7	129.7	167.5	159.0	194.8	173.8
Terra	TR 1185	151.7	123.8	123.8	146.4	152.4	184.3	161.0
Average		*173.8*	*143.6*	*143.6*	*169.5*	*181.3*	*201.0*	*183.9*
* Full-season hybrid.								

Tifton, Georgia

Short-Season Corn Hybrid Performance, 1999, Nonirrigated
Tifton, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
Funk's G	5510-A	**178.9**	**151.9**	100	0.52	1.5	19.7	20255	93	
Funk's G	5516	**170.6**	**161.8**	120	0.40	1.8	18.0	20691	98	
AgriPro	AP 9707	**167.1**	**156.2**	100	0.48	1.8	17.7	20038	82	
DeKalb	DK 650	**165.4**	.	107	0.43	2.0	17.0	20691	99	
Southern States	SS747CL	**163.2**	.	98	0.51	1.5	17.6	18949	96	
Funk's G	4581	**161.5**	**157.7**	91	0.51	1.8	17.0	20473	95	
Southern States	SS769BT	159.4	.	103	0.42	1.8	16.7	21127	99	
Asgrow	RX 913	158.9	.	102	0.43	1.8	18.9	21345	90	
Southern States	SS729CL	157.8	.	98	0.47	1.5	16.9	19602	96	
Pioneer	3245	157.2	**152.6**	94	0.52	1.3	18.8	19166	93	
Pioneer	32k61	156.2	**158.4**	98	0.47	1.3	16.5	19384	99	
Funk's G	5505RR	154.9	.	109	0.41	1.3	16.2	19602	100	
Southland Genetics	SG1701	154.3	.	100	0.44	1.5	19.0	20255	70	
AgriPro	HY 9646	153.7	**149.4**	98	0.44	1.0	16.3	20909	95	
Funk's G	4653	153.3	.	101	0.43	1.3	18.6	20473	95	
Zimmerman	Z37	152.7	.	106	0.44	1.5	20.7	19384	92	
AgriPro	HS 9843	149.5	**147.7**	110	0.42	1.5	18.9	18949	95	
AgriPro	AP 9829IMI	148.3	.	111	0.44	2.0	18.9	17642	90	
Southern States	SS787	147.9	**148.0**	104	0.45	1.8	17.3	18078	89	
Pioneer	3223	144.6	**149.2**	98	0.41	1.3	17.0	20909	66	
Asgrow	RX 889	144.0	.	112	0.40	1.3	18.6	18731	99	
Terra	TR1157	142.4	.	97	0.44	1.3	16.8	18731	88	
Zimmerman	1851W	137.6	.	91	0.47	1.8	19.4	19167	96	
Terra	TR 1154	137.1	**146.9**	100	0.41	1.0	15.7	18731	96	
Southland Genetics	SG1580	131.9	.	99	0.46	1.5	17.2	16771	98	
Terra	TR1147RR	131.2	.	94	0.39	1.8	15.3	20256	99	
Pioneer	33K81	127.1	.	100	0.41	1.3	16.3	18077	92	
Southland Genetics	SG1611	126.9	.	93	0.43	1.8	16.4	18295	88	
Asgrow	RX 826	119.2	.	97	0.36	1.8	17.6	19602	87	
NK	N79-P4	119.1	.	96	0.39	2.0	17.5	18731	95	
Pioneer	3563	99.0	.	97	0.33	1.0	14.5	17642	98	
Average		*147.4*[4]	*152.7*	*101*	*0.44*	*1.5*	*17.5*	*19440*	*92*	
LSD at 10% Level		*19.0*	*N.S.*[5]	*12*	*0.05*	*N.S.*	*1.3*	*2216*	*12*	

Std. Err. of Entry Mean	*8.1*	*3.8*	*5*	*0.02*	*0.2*	*0.5*	*942*	*5*

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 11.0%, and df for EMS = 90.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 18, 1999.
Harvested:	August 10, 1999.
Seeding Rate:	22,000 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 5.5.
Fertilization:	85 lb N, 70 lb P_2O_5, and 105 lb K_2O/acre as preplant; 80 lb N and 14 lb S/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Sutan, Accent, Permit and one cultivation used for weed control; Lorsban used for insect control.

Test conducted by A. E. Coy and M. D. Pippin.

Mid and Full-Season Corn Hybrid Performance, 1999, Nonirrigated
Tifton, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
Terra	TR 702E	**158.7**	**144.9**	99	0.53	1.0	19.3	17642	100	
AgriPro	AP 9909	**158.4**	**148.2**	118	0.46	2.0	20.7	17642	96	
DeKalb	DK 697	**155.4**	.	100	0.52	1.8	18.2	17642	97	
DeKalb	DK 679	**155.1**	.	105	0.49	2.0	19.0	17860	91	
Pioneer	3163	**154.5**	**151.1**	100	0.50	1.3	18.5	17860	84	
NK	N 83-N5	**151.8**	.	104	0.46	2.0	18.9	18731	91	
AgriPro	AP 9939	**147.9**	.	96	0.52	1.5	18.8	17206	98	
NK	N 8811	**144.1**	138.6	100	0.51	1.3	20.4	16771	91	
Terra	TR 1167	**141.6**	141.8	101	0.46	1.5	17.0	17642	98	
Pioneer	3085*	137.9	130.9	108	0.44	1.0	20.4	17424	63	
Southland	4120	137.5	134.6	103	0.47	1.5	19.7	16771	96	
Pioneer	3146	137.0	135.1	92	0.52	1.3	20.1	17206	85	
DeKalb	DK 687	132.3	141.8	101	0.43	1.8	18.7	17860	93	
Southern States	SS859CL	131.6	.	102	0.43	1.8	18.9	17642	73	
Southland	1651	129.7	.	99	0.43	2.5	19.8	18296	86	

Terra	TR 1185	123.8	129.5	96	0.44	1.3	18.9	16989	93
Average		*143.6*[4]	*139.6*	*101*	*0.48*	*1.6*	*19.2*	*17574*	*90*
LSD at 10% Level		*18.1*	*7.8*	*N.S.*[5]	*0.06*	*0.5*	*0.8*	*N.S.*	*15*
Std. Err. of Entry Mean		*7.6*	*3.3*	*5*	*0.02*	*0.2*	*0.4*	*782*	*6*

* Full-season hybrid.

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 10.6%, and df for EMS =45.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 18, 1999.
Harvested:	August 11, 1999.
Seeding Rate:	19,000 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 5.5.
Fertilization:	85 lb N, 70 lb P_2O_5, and 105 lb K_2O/acre as preplant; 80 lb N and 14 lb S/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Sutan, Accent, Permit and one cultivation used for weed control; Lorsban used for insect control.

Test conducted by A. E. Coy and M. D. Pippin.

Short-Season Corn Hybrid Performance, 1999, Irrigated
Tifton, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
Southern States	SS747CL	**196.8**	.	105	0.52	1.5	16.9	20691	60	
Southern States	SS769BT	**195.4**	.	115	0.44	1.0	16.1	22077	81	
Asgrow	RX 913	**192.2**	.	132	0.46	1.0	17.2	18315	58	
Southern States	SS787	**192.1**	**200.3**	105	0.50	1.8	17.2	20889	91	
Pioneer	3245	**189.6**	**202.2**	106	0.50	1.5	16.7	20592	80	
Zimmerman	Z37	**188.1**	.	119	0.44	1.3	18.2	20790	75	
Pioneer	3223	**184.7**	**199.0**	111	0.45	1.3	16.8	20988	73	
DeKalb	DK 650	**184.5**	.	115	0.44	1.3	17.4	20790	85	
AgriPro	AP 9707	**184.1**	**206.4**	105	0.49	1.3	16.6	20394	67	
AgriPro	HY 9646	**182.5**	**200.8**	110	0.44	1.3	15.6	21384	77	
Funk's G	5510-A	181.6	**198.2**	101	0.51	2.0	18.4	20394	78	
Pioneer	32k61	177.8	**198.6**	104	0.46	1.0	15.6	20988	98	
Funk's G	4581	177.1	**192.0**	107	0.45	1.3	15.6	20592	86	
Southland Genetics	SG1580	174.7	.	104	0.47	2.0	15.7	20295	68	
AgriPro	AP 9829IMI	174.7	.	116	0.43	1.0	17.5	20295	75	
Southland Genetics	SG1701	174.6	.	111	0.43	1.3	17.0	20790	43	
Funk's G	4653	174.4	.	109	0.49	1.5	17.3	19206	75	
Funk's G	5505RR	173.9	.	116	0.42	1.8	15.1	19998	100	
Funk's G	5516	171.6	**193.1**	115	0.42	1.5	15.6	19998	73	
Southern States	SS729CL	170.1	.	105	0.45	1.3	15.4	20196	86	
Terra	TR1157	166.7	.	123	0.40	1.0	15.6	19404	68	
Asgrow	RX 889	166.1	.	112	0.43	1.5	17.6	19602	92	
AgriPro	HS 9843	160.5	**185.7**	116	0.41	1.3	16.1	19107	67	
NK	N79-P4	156.4	.	102	0.44	1.3	16.8	20097	88	
Asgrow	RX 826	152.4	.	105	0.42	1.8	17.3	19998	88	
Southland Genetics	SG1611	150.7	.	112	0.40	1.5	16.0	18909	76	
Pioneer	33K81	147.4	.	107	0.40	1.8	14.7	19107	98	
Terra	TR1147RR	144.9	.	107	0.36	2.0	14.4	20889	98	
Zimmerman	1851W	143.8	.	106	0.45	1.3	18.2	17820	70	
Terra	TR 1154	141.5	**183.5**	102	0.40	1.8	14.8	19305	90	
Pioneer	3563	140.2	.	103	0.38	2.0	14.3	19701	99	
Average		*171.3*[4]	*196.3*	*110*	*0.44*	*1.4*	*16.4*	*20116*	*79*	
LSD at 10% Level		*16.8*	*N.S.*[5]	*11*	*0.04*	*0.5*	*0.7*	*1695*	*21*	

Std. Err. of Entry Mean	*7.2*	*3.3*	*5*	*0.02*	*0.2*	*0.3*	*722*	*9*

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 8.4%, and df for EMS = 90.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 18, 1999.
Harvested:	August 13, 1999.
Seeding Rate:	24,126 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 6.0.
Fertilization:	116 lb N, 130 lb P_2O_5, and 195 lb K_2O/acre as preplant; 185 lb N and 31 lb S/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Sutan, Accent, Permit, and one cultivation used for weed control; Lorsban used for insect control; irrigated 7 inches.
Test conducted by A. E. Coy and M. D. Pippin.	

Mid and Full-Season Corn Hybrid Performance, 1999, Irrigated
Tifton, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3]%	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
DeKalb	DK 697	**185.7**	.	108	0.50	1.0	18.7	20097	77	
DeKalb	DK 679	**184.3**	.	111	0.48	1.5	17.9	19899	96	
DeKalb	DK 687	**181.9**	210.0	114	0.47	1.3	18.1	19800	97	
Pioneer	3163	**181.4**	**221.2**	105	0.51	1.3	18.2	19701	94	
Southland	4120	**180.1**	190.0	109	0.50	1.0	18.6	19305	92	
Terra	TR 702E	**179.0**	200.2	102	0.50	1.0	18.3	20493	86	
AgriPro	AP 9909	**178.1**	205.5	111	0.49	1.3	18.7	19107	82	
Southern States	SS859CL	**173.8**	.	109	0.47	1.5	18.1	19800	74	
NK	N 83-N5	167.7	.	101	0.50	1.0	17.7	19206	49	
Southland	1651	167.5	.	111	0.48	1.3	17.8	18018	80	
NK	N 8811	163.9	190.7	102	0.49	1.0	20.0	19206	90	
AgriPro	AP 9939	161.5	.	102	0.49	1.0	18.3	18711	98	
Pioneer	3146	159.3	188.3	100	0.47	1.3	17.3	19305	87	
Terra	TR 1167	158.8	182.0	107	0.45	1.0	16.5	19008	98	
Terra	TR 1185	146.4	176.6	97	0.48	1.3	19.3	18711	58	

Pioneer	3085*	143.2	184.6	112	0.37	1.8	17.9	19998	53
Average		*169.5*[4]	*194.9*	*106*	*0.48*	*1.2*	*18.2*	*19398*	*82*
LSD at 10% Level		*13.4*	*7.3*	*8*	*0.04*	*N.S.*[5]	*0.7*	*N.S.*	*24*
Std. Err. of Entry Mean		*5.6*	*3.1*	*4*	*0.02*	*0.2*	*0.3*	*665*	*10*

* Full-season hybrid.

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 6.6%, and df for EMS = 45.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 18, 1999.
Harvested:	August 12, 1999.
Seeding Rate:	21,895 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 6.0.
Fertilization:	116 lb N, 130 lb P_2O_5, and 195 lb K_2O/acre as preplant; 185 lb N and 31 lb S/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Sutan, Accent, Permit, and one cultivation used for weed control;Lorsban used for insect control; irrigated 7 inches.

Test conducted by A. E. Coy and M. D. Pippin.

Preliminary Corn Hybrid Performance, 1999, Irrigated
Tifton, Georgia

Company or Brand Name	Hybrid Name	Maturity Class	Yield[1] bu/acre	Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
NK	NX 9188	F	**203.0**	108	0.53	1.3	19.0	20592	67
NK	NX 8318	M	**190.7**	120	0.44	1.5	17.0	20691	63
Grabow	91609	S	176.6	110	0.45	2.0	15.8	20295	85
Funk's G	X5583	M	169.6	100	0.50	1.8	17.7	19503	91
Grabow	91595	S	169.3	104	0.47	2.0	15.6	19503	96
Southern States	77457	S	168.6	102	0.47	2.0	14.6	19602	83
Southern States	77095	S	168.4	108	0.46	2.3	13.7	18513	68
Southern States	Exp 79027	M	167.9	110	0.45	2.0	17.4	19503	53
Pioneer	3245	S	167.0	101	0.48	2.0	15.9	19404	84
Grabow	91575Bt	S	166.6	105	0.46	2.0	15.8	19503	100
NK	NX 8308	M	164.6	101	0.46	2.0	16.6	20295	47

Funk's G	X5575	S	163.4	103	0.46	1.5	15.3	19305	91
DeKalb	CR 8605	S	160.7	105	0.42	2.0	14.4	20394	89
Southern States	16980	S	148.6	103	0.42	1.8	15.5	19404	95
NK	NX 7617	S	148.3	102	0.43	1.8	17.9	19800	99
NK	NX 7547	S	140.5	104	0.40	2.0	16.8	19305	90
NK	NX 7537	S	137.6	101	0.41	2.0	17.5	19206	96
Greenwood	835	F	136.7	115	0.40	1.5	21.6	17919	36
Greenwood	845	F	133.4	119	0.37	1.3	23.8	19008	65
Average			*162.2*[4]	*106*	*0.45*	*1.8*	*16.9*	*19566*	*79*
LSD at 10% Level			*15.7*	*8*	*0.04*	*0.5*	*1.2*	*N.S.*[5]	*31*
Std. Err. of Entry Mean			*6.6*	*3*	*0.02*	*0.2*	*0.5*	*652*	*13*

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 8.2%, and df for EMS = 54.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 18, 1999.
Harvested:	August 12, 1999.
Seeding Rate:	21,895 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 6.0.
Fertilization:	116 lb N, 130 lb P_2O_5, and 195 lb K_2O/acre as preplant; 185 lb N and 31 lb S/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Sutan, Accen, Permit, and one cultivation used for weed control;Lorsban for insect control; irrigated 7 inches.

Test conducted by A. E. Coy and M. D. Pippin.

Plains, Georgia

Short-Season Corn Hybrid Performance, 1999, Irrigated Plains, Georgia										
Company or Brand Name	**Hybrid Name**	**Yield[1]**			**Ears/ 100 Plants no.**	**Ear Grain Weight lb**	**Grain Qlty[2] rating**	**Grain Moisture[3] %**	**Plant Population no.**	**Erect Plants %**
		1999	**3-Yr Avg**							
		bu/acre								
AgriPro	HY 9646	**207.3**	**176.3**	111	0.49	1.3	15.8	21628	65	
Pioneer	32k61	**202.7**	**175.2**	108	0.45	1.0	17.0	23740	90	
Terra	TR1157	**199.3**	.	112	0.45	1.3	15.6	22325	79	
AgriPro	AP 9707	**199.2**	159.2	102	0.48	1.5	17.7	23371	71	
Zimmerman	Z37	**198.7**	.	105	0.45	1.3	17.7	24096	69	
Southland Genetics	SG1701	**194.5**	.	102	0.49	1.8	17.2	22325	67	
Southern States	SS787	189.5	166.1	105	0.45	1.5	15.7	22652	80	
Southern States	SS769BT	188.9	.	112	0.44	1.3	16.7	21780	86	
DeKalb	DK 650	188.6	.	130	0.37	1.5	17.0	22433	75	
Southland Genetics	SG1611	188.4	.	113	0.46	1.5	16.3	20691	75	
Funk's G	5516	188.2	161.2	110	0.43	1.8	17.2	22935	83	
Asgrow	RX 913	186.4	.	118	0.42	1.3	16.7	21453	63	
Southern States	SS747CL	185.2	.	103	0.47	1.5	16.7	21780	74	
NK	N79-P4	183.7	.	103	0.48	1.3	17.3	21127	90	
Funk's G	5510-A	182.9	151.2	105	0.44	1.5	17.9	23523	79	
Asgrow	RX 826	181.4	.	102	0.45	1.0	17.4	22644	85	
Pioneer	3245	180.7	162.3	107	0.44	1.3	17.4	22107	81	
Pioneer	3223	179.7	149.5	111	0.41	1.8	16.6	22325	84	
Zimmerman	1851W	177.6	.	105	0.48	1.3	18.7	20691	81	
Terra	TR 1154	177.5	151.8	105	0.42	1.5	15.2	22216	69	
Southland Genetics	SG1580	176.8	.	102	0.44	2.0	15.7	21919	84	
Southern States	SS729CL	175.1	.	102	0.44	1.5	16.5	22499	76	
AgriPro	AP 9829IMI	174.4	.	108	0.41	1.3	18.1	22645	45	
Funk's G	4581	168.2	157.6	104	0.40	1.3	16.4	22651	70	
Asgrow	RX 889	167.1	.	127	0.35	1.3	17.1	21453	76	
Terra	TR1147RR	165.0	.	106	0.40	1.5	15.6	21780	95	
AgriPro	HS 9843	164.8	156.0	104	0.39	1.3	15.4	22790	73	
Pioneer	33K81	154.1	.	105	0.41	1.5	16.0	20364	87	
Funk's G	4653	152.9	.	100	0.39	1.5	15.7	22354	58	
Pioneer	3563	136.4	.	103	0.35	2.0	14.4	21209	92	
Funk's G	5505RR	127.2	.	107	0.32	1.8	14.6	20918	80	
Average		*178.8[4]*	*160.6*	*107*	*0.43*	*1.4*	*16.5*	*22143*	*77*	
LSD at 10% Level		*14.9*	*9.9*	*6*	*0.04*	*N.S.[5]*	*1.6*	*N.S.*	*13*	

Std. Err. of Entry Mean	*6.3*	*7.3*	*2*	*0.02*	*0.2*	*0.7*	*828*	*5*

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 7.1%, and df for EMS = 90.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 22, 1999.
Harvested:	August 18, 1999.
Seeding Rate:	24,126 seeds/acre in 30" rows.
Soil Type:	Greenville sandy clay loam.
Soil Test:	P = Medium, K = High, and pH = 6.3.
Fertilization:	100 lb N, 84 lb P_2O_5, and 84 lb K_2O/acre as preplant; 150 lb N/acre as sidedress.
Previous Crop:	Peanuts.
Management:	Subsoiled and rototilled; Prowl, Atrazine and one cultivation used for weed control; Lorsban used for insect control; irrigated 12 inches.

Test conducted by A. E. Coy, M. D. Pippin, and R. R. Pines.

Mid and Full-Season Corn Hybrid Performance, 1999, Irrigated Plains, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
DeKalb	DK 679	**201.0**	.	123	0.49	1.8	18.2	19929	63	
DeKalb	DK 697	**201.0**	.	113	0.48	1.0	18.7	21562	84	
AgriPro	AP 9909	**197.6**	**176.9**	117	0.47	1.5	19.4	21018	86	
Pioneer	3163	**196.5**	**167.0**	101	0.50	1.3	18.5	22554	78	
NK	N 83-N5	**190.0**	.	120	0.46	1.0	18.6	20033	78	
Pioneer	3085*	**188.1**	**159.3**	112	0.47	1.3	18.8	21247	52	
DeKalb	DK 687	**188.0**	**164.0**	129	0.38	1.5	17.9	21998	94	
AgriPro	AP 9939	**186.3**	.	103	0.48	1.0	18.7	21998	85	
Terra	TR 702E	**185.9**	**163.8**	105	0.49	1.5	17.5	20957	86	
NK	N 8811	181.6	**165.3**	112	0.44	1.0	19.9	21671	86	
Southern States	SS859CL	175.0	.	121	0.43	2.0	17.2	19276	68	
Terra	TR 1167	170.7	**158.2**	111	0.45	1.3	16.4	19231	93	
Southland	4120	165.1	**156.5**	116	0.46	1.0	18.5	18000	89	
Pioneer	3146	161.9	**163.5**	114	0.43	1.0	18.6	19058	82	
Southland	1651	159.0	.	116	0.46	1.8	18.8	17315	71	

Terra	TR 1185	152.4	**138.9**	104	0.45	1.8	17.4	18622	70
Average		*181.3*[4]	*161.3*	*113*	*0.46*	*1.3*	*18.3*	*20279*	*79*
LSD at 10% Level		*16.8*	*N.S.*[5]	*9*	*0.04*	*0.5*	*1.2*	*1851*	*12*
Std. Err. of Entry Mean		*7.0*	*4.9*	*4*	*0.02*	*0.2*	*0.5*	*779*	*5*

* Full-season hybrid.

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 7.8%, and df for EMS = 45.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 22, 1999.
Harvested:	August 18, 1999.
Seeding Rate:	24,000 seeds/acre in 30" rows.
Soil Type:	Greenville sandy clay loam.
Soil Test:	P = Medium, K = High, and pH = 6.3.
Fertilization:	100 lb N, 84 lb P_2O_5, and 84 lb K_2O/acre as preplant; 150 lb N/acre as sidedress.
Previous Crop:	Peanuts.
Management:	Subsoiled and rototilled; Prowl, Atrazine and one cultivation used for weed control; Lorsban used forinsect control; irrigated 12 inches.

Test conducted by A. E. Coy, M. D. Pippin and R. R. Pines.

Midville, Georgia

Short-Season Corn Hybrid Performance, 1999, Irrigated
Midville, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
Funk's G	5516	**210.6**	.	103	0.40	1.0	15.8	28968	92	
AgriPro	AP 9707	**210.2**	.	99	0.41	1.0	16.2	29294	75	
Pioneer	3223	**210.0**	.	107	0.38	1.0	16.7	29403	73	
Southern States	SS729CL	**207.5**	.	101	0.39	1.0	16.1	29621	87	
AgriPro	HY 9646	**205.6**	.	102	0.40	1.0	15.5	27987	86	
Terra	TR1157	**201.5**	.	105	0.38	1.8	15.7	28096	85	
Pioneer	3245	**200.9**	.	101	0.39	1.0	16.6	28750	78	
Funk's G	4581	**199.8**	.	99	0.39	1.0	16.6	28968	89	
Zimmerman	Z37	**199.0**	.	102	0.40	1.0	19.0	28641	81	

Southland Genetics	SG1701	**198.1**	.	87	0.63	1.8	16.5	27443	64
Southland Genetics	SG1611	**198.0**	.	104	0.40	1.3	16.1	27007	76
Zimmerman	1851W	**195.1**	.	101	0.40	1.0	17.7	27988	81
Southern States	SS769BT	**194.1**	.	94	0.41	2.0	18.1	29294	96
Southern States	SS747CL	**192.7**	.	100	0.38	1.0	16.2	28641	69
Pioneer	32k61	191.0	.	94	0.41	1.8	17.3	28314	92
Funk's G	5510-A	191.0	.	100	0.40	1.5	18.0	27552	45
Southern States	SS787	190.1	.	100	0.37	2.0	16.0	28967	94
Terra	TR 1154	189.1	.	101	0.40	1.0	15.8	26027	71
AgriPro	AP 9829IMI	187.6	.	107	0.38	1.0	18.0	26898	65
Asgrow	RX 826	187.4	.	94	0.38	2.0	17.0	30492	84
AgriPro	HS 9843	185.9	.	100	0.39	1.3	16.9	27116	91
DeKalb	DK 650	185.6	.	104	0.36	2.0	17.7	28641	88
Southland Genetics	SG1580	171.1	.	99	0.36	2.0	16.1	27225	76
Asgrow	RX 889	168.3	.	102	0.34	1.0	17.6	28423	80
Pioneer	33K81	167.4	.	99	0.36	1.0	16.8	26898	78
Funk's G	4653	161.4	.	101	0.33	1.0	16.8	27770	36
Asgrow	RX 913	159.8	.	107	0.32	1.3	17.4	26790	89
Funk's G	5505RR	159.0	.	100	0.32	2.0	16.2	28532	91
Terra	TR1147RR	140.7	.	83	0.40	2.0	16.3	27552	91
Average		*188.2*[4]	.	*100*	*0.39*	*1.4*	*16.8*	*28183*	*79*
LSD at 10% Level		*18.6*		*N.S.*[5]	*N.S.*	*0.4*	*0.9*	*1988*	*14*
Std. Err. of Entry Mean		*7.9*		*5*	*0.05*	*0.2*	*0.4*	*845*	*6*

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 8.4%, and df for EMS = 84.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 23, 1999.
Harvested:	August 25, 1999.
Seeding Rate:	31,000 seeds/acre in 30" rows.
Soil Type:	Dothan sandy loam.
Soil Test:	P = High, K = Medium, and pH = 6.3.
Fertilization:	163 lb N, 98 lb P_2O_5, and 147 lb K_2O/acre as preplant; 193 lb N and 16 lb S/acre as sidedress.
Previous Crop:	Cotton.
Management:	Subsoiled, bedded and rototilled; Dual, Atrazine and two cultivations used for weed control; Lorsban used for insect control; irrigated 16 inches.

Test conducted by A. E. Coy, M. D. Pippin, and R. D. McNeill, IV.

Mid and Full-Season Corn Hybrid Performance, 1999, Irrigated
Midville, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
DeKalb	DK 679	**213.0**	.	116	0.41	1.0	16.7	25592	85	
Southern States	SS859CL	**212.6**	.	109	0.44	1.7	16.9	25156	57	
Pioneer	3163	**212.1**	.	105	0.45	1.0	16.9	25483	71	
NK	N 83-N5	**211.6**	.	108	0.44	1.3	16.4	25265	84	
AgriPro	AP 9939	**206.8**	.	104	0.45	1.0	15.6	24503	97	
Terra	TR 1167	**205.6**	.	107	0.43	1.0	16.3	25374	96	
AgriPro	AP 9909	**203.7**	.	110	0.42	1.0	16.7	25265	86	
Pioneer	3085*	197.5	.	110	0.45	1.0	16.9	22978	24	
DeKalb	DK 697	196.6	.	118	0.39	1.0	16.8	24394	88	
Pioneer	3146	196.4	.	104	0.43	1.0	16.8	25265	65	
Southland	4120	196.0	.	117	0.44	1.0	16.3	21889	92	
Terra	TR 702E	195.8	.	103	0.41	1.0	15.6	26245	94	
DeKalb	DK 687	195.6	.	126	0.37	1.3	16.7	24067	91	
Southland	1651	194.8	.	119	0.44	1.5	17.4	21453	81	
NK	N 8811	194.1	.	101	0.41	1.0	16.1	26245	84	
Terra	TR 1185	184.3	.	101	0.44	1.3	16.6	23740	80	
Average		*201.0*[4]	.	*110*	*0.43*	*1.1*	*16.5*	*24557*	*80*	
LSD at 10% Level		*12.0*		*8*	*0.04*	*0.3*	*N.S.*[5]	*1674*	*14*	
Std. Err. of Entry Mean		*5.0*		*4*	*0.02*	*0.2*	*0.6*	*704*	*6*	

* Full-season hybrid.

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 5.0%, and df for EMS = 45.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 23, 1999.
Harvested:	August 25, 1999.
Seeding Rate:	26,500 seeds/acre in 30" rows.
Soil Type:	Dothan sandy loam.
Soil Test:	P = High, K = Medium, and pH = 6.3.
Fertilization:	163 lb N, 98 lb P_2O_5, and 147 lb K_2O/acre as preplant; 193 lb N and 16 lb S/acre as sidedress.

Previous Crop:	Cotton.
Management:	Subsoiled, bedded and rototilled; Dual, Atrazine, and two cultivations used for weed control; Lorsban used for insect control; irrigated 16 inches.
Test conducted by A. E. Coy, M. D. Pippin, and R. D. McNeill, IV.	

Corn Hybrid Performance in North Georgia

Calhoun, Georgia

Short-Season Corn Hybrid Performance, 1999, Nonirrigated
Calhoun, Georgia

Company or Brand Name	Hybrid	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	2-Yr Avg							
		bu/acre								
Garst	8222IT	**112.3**	.	99	0.27	1.1	13.1	23232	85	
Pioneer	32k61	**112.2**	**78.4**	96	0.31	1.1	12.9	20445	97	
Pioneer	33G26	**111.4**	**73.3**	99	0.29	1.1	12.6	21054	94	
Pioneer	3245	**110.3**	**79.9**	98	0.29	1.1	12.5	21417	81	
Pioneer	33J56	**105.8**	.	99	0.28	1.4	12.6	20691	73	
Southern States	SS787	**100.0**	**80.3**	100	0.25	1.0	12.4	21780	88	
Pioneer	33K81	**99.7**	.	99	0.26	1.4	12.4	21175	88	
Southern States	SS729CL	94.6	.	99	0.24	1.3	12.1	21413	92	
Southern States	SS769BT	87.4	.	102	0.24	1.1	12.1	19239	74	
Southern States	SS747CL	86.8	.	98	0.25	1.3	12.1	18997	80	
Funk's G	5510-A	84.7	**74.3**	98	0.24	1.6	12.7	19481	77	
Average		*100.4*[4]	*77.2*	*99*	*0.27*	*1.2*	*12.5*	*20811*	*84*	
LSD at 10% Level		*13.7*	*N.S.*[5]	*N.S.*	*0.03*	*0.2*	*0.4*	*N.S.*	*14*	
Std. Err. of Entry Mean		*5.7*	*2.9*	*1*	*0.01*	*0.1*	*0.1*	*1136*	*6*	

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 11.3%, and df for EMS = 30.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	May 11, 1999. *This test first planted on April 14, but due to stand loss was replanted on May 11.
Harvested:	September 22, 1999.
Seeding Rate:	25,500 seeds/acre in 30" rows.
Soil Type:	Rome gravelly clay loam.
Soil Test:	P = High, K = Medium, and pH = 6.2.
Fertilization:	50 lb N, 47 lb P_2O_5, and 70 lb K_2O/acre as preplant; 100 lb N/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Aatrex and Lasso used for weed control.

Test conducted by P.A. Rose, G. Rawls, J. Stubbs, and J. L. Day.

Mid and Full-Season Corn Hybrid Performance, 1999, Nonirrigated
Calhoun, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	2-Yr Avg							
		bu/acre								
NK	N 8811	**109.6**	**80.9**	98	0.34	1.4	12.7	17908	84	
Pioneer	31G20	**105.5**	**69.6**	106	0.28	1.1	12.6	17666	85	
Southern States	SS859CL	**103.4**	.	100	0.24	1.5	12.2	18513	86	
DeKalb	DK 687	**103.0**	**81.6**	103	0.27	1.5	12.7	19360	83	
Pioneer	3163	**101.7**	**71.4**	102	0.25	1.4	12.5	19723	80	
Pioneer	3085*	96.3	**74.3**	100	0.29	1.4	12.6	16214	68	
Garst	8220	81.4	.	97	0.19	1.8	12.4	17787	81	
Average		*100.1*[4]	*75.6*	*101*	*0.27*	*1.4*	*12.5*	*18167*	*81*	
LSD at 10% Level		*9.8*	*N.S.*[5]	*5*	*0.04*	*0.3*	*0.3*	*N.S.*	*N.S.*	
Std. Err. of Entry Mean		*4.0*	*2.5*	*2*	*0.02*	*0.1*	*0.1*	*1564*	*5*	

* Full-season hybrid.

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 8.0%, and df for EMS = 18.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	May 11, 1999. *This test first planted on April 14, but due to stand loss was replanted on May 11.
Harvested:	September 22, 1999.
Seeding Rate:	23,000 seeds/acre in 30" rows.
Soil Type:	Rome gravelly clay loam.
Soil Test:	P = High, K = Medium, and pH = 6.2.
Fertilization:	50 lb N, 47 lb P_2O_5, and 70 lb K_2O/acre as preplant; 100 lb N/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Aatrex and Lasso used for weed control.

Test conducted by P.A. Rose, G. Rawls, J. Stubbs, and J. L. Day.

Blairsville, Georgia

Short-Season Corn Hybrid Performance, 1999, Nonirrigated
Blairsville, Georgia

Company or Brand Name	Hybrid Name	Yield[1]			Ears/ 100 Plants no.	Ear Grain Weight lb	Grain Qlty[2] rating	Grain Moisture[3] %	Plant Population no.	Erect Plants %
		1999	3-Yr Avg							
		bu/acre								
Pioneer	33J56	**243.2**	.	106	0.52	1.0	18.6	25894	94	
Pioneer	32k61	**237.4**	**207.8**	101	0.52	1.0	19.4	26741	98	
Pioneer	33G26	**227.7**	.	109	0.51	1.0	19.7	24321	99	
Pioneer	33K81	216.1	.	106	0.46	1.3	19.4	26136	96	
Pioneer	3245	206.6	**193.3**	101	0.48	1.0	18.1	24805	97	
Southern States	SS787	196.7	**202.7**	103	0.43	1.0	17.9	25773	80	
Southern States	SS729CL	193.1	.	102	0.44	1.1	17.4	24926	85	
Southern States	SS747CL	180.7	.	101	0.41	1.1	18.1	25531	85	
Southern States	SS769BT	177.1	.	106	0.39	1.3	18.6	25047	71	
DeKalb	DK 650	176.2	.	107	0.39	1.3	17.6	24563	91	
Average		*205.5*[4]	*201.2*	*104*	*0.45*	*1.1*	*18.5*	*25374*	*89*	
LSD at 10% Level		*15.7*	*N.S.*[5]	*5*	*0.04*	*N.S.*	*1.0*	*N.S.*	*13*	
Std. Err. of Entry Mean		*6.5*	*3.0*	*2*	*0.02*	*0.1*	*0.4*	*711*	*5*	

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 6.3%, and df for EMS = 27.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	May 11, 1999.
Harvested:	October 15, 1999.
Seeding Rate:	27,000 seeds/acre in 30" rows.
Soil Type:	Bradson clay loam.
Soil Test:	P = High, K = Medium, and pH = 6.3.
Fertilization:	30 lb N, 60 lb P_2O_5, and 90 lb K_2O/acre as preplant; 125 lb N/acre as sidedress.
Previous Crop:	Soybean.

Mid and Full-Season Corn Hybrid Performance, 1999, Nonirrigated Blairsville, Georgia										
Company or Brand Name	**Hybrid Name**	**Yield[1]**			**Ears/ 100 Plants no.**	**Ear Grain Weight lb**	**Grain Qlty[2] rating**	**Grain Moisture[3] %**	**Plant Population no.**	**Erect Plants %**
		1999	**3-Yr Avg**							
		bu/acre								
Pioneer	3163	**207.6**	**203.7**	119	0.41	1.0	18.8	25289	87	
Southern States	SS859CL	**206.3**	.	107	0.47	1.1	20.6	24684	95	
NK	N 8811	194.0	**202.2**	107	0.50	1.1	21.6	21659	95	
Pioneer	3085*	190.9	**202.6**	121	0.44	1.0	22.7	22143	89	
DeKalb	DK 687	181.1	.	128	0.37	1.0	20.7	23353	98	
Average		*196.0[4]*	*202.8*	*116*	*0.44*	*1.1*	*20.9*	*23426*	*93*	
LSD at 10% Level		*10.3*	*N.S.[5]*	*13*	*0.05*	*N.S.*	*1.3*	*1738*	*6*	
Std. Err. of Entry Mean		*4.1*	*3.1*	*5*	*0.02*	*0.1*	*0.5*	*689*	*2*	

* Full-season hybrid.

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 4.2%, and df for EMS = 12.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	May 11, 1999.
Harvested:	October 15, 1999.
Seeding Rate:	25,500 seeds/acre in 30" rows.
Soil Type:	Bradson clay loam.
Soil Test:	P = High, K = Medium, and pH = 6.3.
Fertilization:	30 lb N, 60 lb P_2O_5, and 90 lb K_2O/acre as preplant; 125 lb N/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and disked; Aatrex, Bicep, and one cultivation used for weed control.

Test conducted by P. A. Rose, J. L. Day, and H. D. Garrett.

HIGH OIL CORN TESTS RESULTS

High Oil Corn Hybrid Performance in the Coastal Plain

Tifton, Georgia

High Oil Corn Hybrid Performance, 1999, Irrigated Tifton, Georgia									
Company or Brand Name	**Hybrid Name**	**Yield[1]**		**Ears/ 100 Plants no.**	**Ear Grain Weight lb**	**Grain Qlty[2] rating**	**Grain Moisture[3] %**	**Plant Pop. no.**	**Erect Plants %**
		1999	**2-Yr Avg**						
		bu/acre							
Pioneer	3245S	**185.8**	**173.5**	101	0.35	1.8	16.6	29730	97
Grabow	91575TC2	168.2	.	100	0.33	2.0	16.1	28532	86
Grabow	71580Bt/TC3	167.4	.	101	0.32	2.3	17.0	29948	93
Grabow	71580TC3	162.7	**163.4**	100	0.33	2.3	16.8	28423	97
Grabow	71651TC3	162.4	.	104	0.32	1.8	17.1	28205	72
Grabow	71593-S	161.8	**156.8**	100	0.31	2.0	17.5	29947	90
Pioneer	32R90	160.7	**167.6**	100	0.31	2.0	16.6	29294	94
Grabow	71651TC2.5	158.9	.	107	0.29	2.0	18.1	29512	79
Grabow	71577TC2.5	154.3	.	100	0.30	2.0	15.6	29294	78
Grabow	71577Bt/TC2	154.3	.	100	0.29	1.8	14.6	29403	83
Grabow	1580TC	154.1	.	102	0.31	2.0	16.6	28097	86
Grabow	1611-S	154.0	**149.3**	102	0.28	2.3	16.5	30928	97
Pfister Super Kernoil	SK2550-19	153.9	.	102	0.28	2.0	16.3	30165	86
AgriGold	A6460TC	153.1	.	101	0.28	2.0	15.6	30057	79
SS	767TC	152.1	.	101	0.29	2.0	17.1	29621	91
Grabow	71593TC2.5	152.0	.	100	0.29	2.0	15.6	29185	87
AgriGold	A6432TC	150.9	.	100	0.29	2.5	15.9	29294	92
AgriGold	A6590TC	150.0	.	100	0.30	2.0	18.4	29294	83
Pfister Super Kernoil	SK2652-19	149.3	.	100	0.28	2.0	15.6	29948	81
Grabow	71580Bt/TC	147.9	.	103	0.28	2.0	18.0	29294	67
Grabow	71580Bt/TC2.5	147.8	.	100	0.27	2.3	16.1	30274	80
SS	727TC	147.5	.	99	0.27	2.0	15.0	30274	87
Pfister Super Kernoil	SK3977-19	146.5	.	100	0.28	2.0	17.8	30165	76
Grabow	81533TC3	145.5	.	100	0.29	2.0	16.4	28750	94
Grabow	1611TC3	145.4	.	104	0.28	2.0	17.7	29185	91
Grabow	71577Bt/TC	145.2	.	101	0.27	2.3	16.0	29621	76
Grabow	71593TC3	143.7	.	99	0.29	2.0	16.2	28641	90
Grabow	71580TC2.5	142.7	.	100	0.29	2.3	16.7	27987	89

Grabow	71577TC2	142.4	.	99	0.26	2.0	15.2	30601	69
AgriGold	A6490TC	142.2	.	101	0.28	2.3	16.7	28641	90
Pfister Super Kernoil	SK2680-19	142.0	.	100	0.26	2.0	16.4	30819	82
Grabow	81562TC2	139.6	.	100	0.27	2.0	15.1	29512	88
Grabow	81533TC2	137.2	.	101	0.27	2.3	16.5	28205	93
Pfister Super Kernoil	SK3049-19	135.2	.	100	0.27	2.3	16.6	28205	82
NK	N6423TC	130.7	**149.2**	99	0.25	2.0	15.1	28968	81
Garst	8366TC2	128.9	**148.3**	99	0.24	2.0	15.6	30928	54
Grabow	91567TC2	126.7	.	103	0.24	2.0	14.8	28532	79
Pfister Super Kernoil	SK3001-19	126.2	.	101	0.25	2.0	15.7	28641	93
Wilson	EDX 92	120.6	**126.9**	99	0.25	2.0	18.2	27879	78
Pfister Super Kernoil	SK102-19	119.4	.	98	0.25	2.0	17.2	28314	92
NK	N5220TC	118.1	**142.2**	102	0.22	2.0	14.2	29621	71
Wilson	EDX 30	109.6	**132.4**	99	0.21	2.3	17.7	30492	94
Average		*146.1*[4]	*150.9*	*101*	*0.28*	*2.1*	*16.4*	*29343*	*84*
LSD at 10% Level		*14.4*	*N.S.*[5]	*N.S.*	*0.03*	*N.S.*	*1.2*	*1612*	*12*
Std. Err. of Entry Mean		*6.2*	*4.7*	*1*	*0.01*	*0.2*	*0.5*	*688*	*5*

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 8.4%, and df for EMS = 123.
[5] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	April 14, 1999.
Harvested:	August 26, 1999.
Seeding Rate:	31,627 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 6.2.
Fertilization:	166 lb N, 130 lb P_2O_5, and 195 lb K_2O/acre as preplant; 185 lb N and 31 lb S/acre as sidedress.
Previous Crop:	Cotton.
Management:	Moldboard plowed and rototilled; Prowl, Atrazine and one cultivation used for weed control; Lorsban used for insect control; irrigated 8 inches.

Test conducted by A. E. Coy and M. D. Pippin.

Plains, Georgia

Plains, Georgia: High Oil Corn Hybrid Performance, 1999, Irrigated									
Company or Brand Name	**Hybrid Name**	**Yield[1]**			**Ears/ 100 Plants no.**	**Ear Grain Weight lb**	**Grain Qlty[2] rating**	**Grain Moisture[3] %**	**Plant Pop. no.**	**Erect Plants %**
		1999	**2-Yr Avg**							
		bu/acre								
Pioneer	3245S	**185.3**	**174.3**	.	.	1.0	15.7	.	.	
Grabow	91575TC2	**176.9**	.	.	.	1.8	13.5	.	.	
Pioneer	32R90	**174.7**	153.5	.	.	1.3	14.4	.	.	
Grabow	71593TC2.5	**164.7**	.	.	.	1.3	15.3	.	.	
NK	N6423TC	159.0	147.3	.	.	1.0	13.7	.	.	
Grabow	71580TC3	155.3	145.3	.	.	1.8	14.5	.	.	
AgriGold	A6460TC	154.8	.	.	.	1.8	15.2	.	.	
Grabow	81533TC3	154.1	133.1	.	.	1.7	12.6	.	.	
Grabow	1580TC	154.0	.	.	.	1.8	14.0	.	.	
Grabow	71593-S	153.7	148.3	.	.	1.3	14.1	.	.	
Grabow	71580Bt/TC2.5	152.2	.	.	.	1.6	14.7	.	.	
AgriGold	A6590TC	152.1	.	.	.	1.8	15.9	.	.	
AgriGold	A6432TC	151.9	.	.	.	1.3	12.2	.	.	
AgriGold	A6490TC	150.6	.	.	.	1.5	13.4	.	.	
Grabow	71651TC2.5	149.9	.	.	.	1.8	16.1	.	.	
Pfister Super Kernoil	SK2550-19	149.5	.	.	.	1.4	12.3	.	.	
Grabow	71580TC2.5	148.3	.	.	.	1.0	14.9	.	.	
Pfister Super Kernoil	SK3049-19	146.8	.	.	.	1.9	13.8	.	.	
Pfister Super Kernoil	SK3001-19	146.8	.	.	.	1.5	13.3	.	.	
Grabow	71580Bt/TC	146.3	.	.	.	1.5	15.8	.	.	
Garst	8366TC2	145.7	144.6	.	.	1.3	13.4	.	.	
Pfister Super Kernoil	SK3977-19	143.1	.	.	.	1.7	14.4	.	.	
Grabow	71577TC2	142.7	.	.	.	1.7	14.8	.	.	
Grabow	71577Bt/TC2	140.2	.	.	.	1.8	13.5	.	.	
Grabow	71651TC3	139.6	.	.	.	1.5	16.8	.	.	
Grabow	71577Bt/TC	139.3	.	.	.	1.5	13.2	.	.	
Grabow	71577TC2.5	139.1	.	.	.	1.7	13.6	.	.	
Grabow	81533TC2	138.4	.	.	.	1.5	13.2	.	.	
SS	767TC	136.9	.	.	.	1.0	14.6	.	.	
Pfister Super Kernoil	SK2680-19	136.7	.	.	.	1.8	12.3	.	.	
Grabow	1611TC3	132.7	.	.	.	1.3	16.8	.	.	

Grabow	71593TC3	132.0	.	.	.	1.5	14.1	.	.
Grabow	71580Bt/TC3	131.7	.	.	.	1.5	14.2	.	.
Pfister Super Kernoil	SK2652-19	130.4	.	.	.	1.8	14.0	.	.
Grabow	81562TC2	129.7	.	.	.	1.9	13.6	.	.
Pfister Super Kernoil	SK102-19	128.4	.	.	.	1.4	14.0	.	.
Grabow	1611-S	128.0	127.2	.	.	1.5	15.3	.	.
Wilson	EDX 30	123.6	129.6	.	.	1.3	18.7	.	.
SS	727TC	120.3	.	.	.	2.0	13.2	.	.
NK	N5220TC	108.0	120.9	.	.	1.5	12.2	.	.
Grabow	91567TC2	104.0	.	.	.	1.6	12.4	.	.
Wilson	EDX 92	103.8	108.0	.	.	1.5	16.1	.	.
Average		*142.9*[4]	*139.3*	.	.	*1.5*	*14.3*	.	.
LSD at 10% Level		*20.6*	*15.9*			*0.5*	*1.2*		
Std. Err. of Entry Mean		*8.8*	*6.7*			*0.2*	*0.5*		

[1] Yields calculated at 15.5% moisture.
[2] Grain quality rating: 1 = excellent to 5 = poor.
[3] Grain moisture at harvest.
[4] CV = 12.3%, and df for EMS = 123.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	April 13, 1999.
Harvested:	September 1, 1999.
Seeding Rate:	31,627 seeds/acre in 30" rows.
Soil Type:	Greenville sandy clay loam.
Soil Test:	P = Medium, K = High, and pH = 6.3.
Fertilization:	100 lb N, 84 lb P_2O_5, and 84 lb K_2O/acre as preplant; 100 lb N/acre as sidedress.
Previous Crop:	Peanuts.
Management:	Subsoiled and rototilled; Prowl, Atrazine, Permit and one cultivation used for weed control; irrigated 8 inches.

Test conducted by A. E. Coy, M. D. Pippin and R. R. Pines.

Seed Yield and Quality Characteristics of High Oil Corn Hybrids and Top Cross Blends Grown in Georgia, 1999

Seed Yield and Quality Characteristics of High Oil Corn Hybrids and Top Cross Blends Grown in Georgia, 1999
Part 1

Company or Brand Name	Hybrid Name	Seed Yield			Total Oil[1]— O.P.[2]		Protein— O.P.	
		Tifton	Plains	Avg	Tifton	Plains	Tifton	Plains
		---- bu/acre ----			%		%	
AgriGold	A6432TC	150.9	151.9	151.4	7.4	7.2	9.1	9.1
AgriGold	A6460TC	153.1	154.8	153.9	7.1	7.3	9.7	9.7
AgriGold	A6490TC	142.2	150.6	146.4	8.4	7.8	10.0	10.9
AgriGold	A6590TC	150.0	152.1	151.1	7.7	7.0	8.9	9.1
Garst	8366TC2	128.9	145.7	137.3	7.9	7.4	9.6	9.3
Grabow	1580TC	154.1	154.0	154.0	6.9	7.2	8.5	9.1
Grabow	1611-S	154.0	128.0	141.0	6.9	6.9	9.9	10.5
Grabow	1611TC3	145.4	132.7	139.0	7.4	6.9	9.4	9.8
Grabow	71577Bt/TC	145.2	139.3	142.2	7.8	7.0	10.0	10.1
Grabow	71577Bt/TC2	154.3	140.2	147.2	7.0	7.2	9.5	9.5
Grabow	71577TC2	142.4	142.7	142.6	6.9	7.4	9.4	9.7
Grabow	71577TC2.5	154.3	139.1	146.7	7.0	7.4	9.4	9.2
Grabow	71580Bt/TC	147.9	146.3	147.1	7.7	6.9	9.5	9.9
Grabow	71580Bt/TC2.5	147.8	152.2	150.0	7.4	7.1	8.7	9.4
Grabow	71580Bt/TC3	167.4	131.7	149.5	7.8	6.9	9.3	9.6
Grabow	71580TC2.5	142.7	148.3	145.5	7.0	7.3	10.0	9.0
Grabow	71580TC3	162.7	155.3	159.0	7.4	7.4	8.9	9.0
Grabow	71593-S	161.8	153.7	157.7	7.3	7.0	9.1	9.7
Grabow	71593TC2.5	152.0	164.7	158.3	7.1	7.4	9.0	9.5
Grabow	71593TC3	143.7	132.0	137.9	7.5	7.4	9.2	9.6
Grabow	71651TC2.5	158.9	149.9	154.4	7.1	7.0	9.8	10.3
Grabow	71651TC3	162.4	139.6	151.0	7.5	7.9	9.8	10.6
Grabow	81533TC2	137.2	138.4	137.8	7.4	7.6	9.7	10.1
Grabow	81533TC3	145.5	154.1	149.8	7.4	7.6	10.3	10.4
Grabow	81562TC2	139.6	129.7	134.6	8.2	8.8	9.0	9.5
Grabow	91567TC2	126.7	104.0	115.3	8.3	8.3	10.1	11.1
Grabow	91575TC2	168.2	176.9	172.5	7.3	7.5	9.5	9.9
NK	N5220TC	118.1	108.0	113.0	7.0	7.1	10.1	10.2
NK	N6423TC	130.7	159.0	144.8	6.9	6.9	9.7	9.3
Pfister	SK102-19	119.4	128.4	123.9	8.1	8.0	11.1	10.5
Pfister	SK2550-19	153.9	149.5	151.7	7.9	8.0	9.8	10.8
Pfister	SK2652-19	149.3	130.4	139.8	7.1	7.1	8.8	9.4
Pfister	SK2680-19	142.0	136.7	139.3	7.4	6.8	9.3	9.1

Pfister	SK3001-19	126.2	146.8	136.5	7.1	8.2	10.4	9.9
Pfister	SK3049-19	135.2	146.8	141.0	7.1	7.0	9.0	9.0
Pfister	SK3977-19	146.5	143.1	144.8	7.5	7.4	9.3	9.1
Pioneer	3245S	185.8	185.3	185.5	6.9	6.6	9.5	10.8
Pioneer	32R90	160.7	174.7	167.7	6.9	7.0	10.2	10.2
SS	727TC	147.5	120.3	133.9	6.8	6.4	8.9	10.1
SS	767TC	152.1	136.9	144.5	7.6	7.0	9.4	9.8
Wilson	EDX 30	109.6	123.6	116.6	7.0	6.7	10.6	11.9
Wilson	EDX 92	120.6	103.8	112.2	7.8	6.5	10.2	9.3
Average		*146.1*	*142.9*	*144.5*	*7.4*	*7.3*	*9.5*	*9.8*
LSD at 10% Level		*14.4*	*20.6*	*12.5*	*N.S.*[3]	*0.5*	*1.0*	*0.6*
Std. Err. of Entry Mean		*6.2*	*8.8*	*6.2*	*0.5*	*0.2*	*0.4*	*0.3*

[1] Oil percentage expressed on a zero moisture basis.
[2] Open pollinated (O.P.) derived seed sample.
[3] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore, an LSD value was not calculated.

Seed Yield and Quality Characteristics of High Oil Corn Hybrids and Top Cross Blends Grown in Georgia, 1999
Part 2

Company or Brand Name	**Hybrid Name**	**Starch— O.P.**		**Met. Energy— O.P.**		**Lysine— O.P.**	
		Tifton	**Plains**	**Tifton**	**Plains**	**Tifton**	**Plains**
		%		**Kcal/lb**		**%**	
AgriGold	A6432TC	67.4	67.2	1641	1653	0.30	0.30
AgriGold	A6460TC	67.2	67.0	1641	1653	0.31	0.31
AgriGold	A6490TC	65.6	65.0	1663	1671	0.32	0.33
AgriGold	A6590TC	66.8	67.8	1651	1639	0.30	0.30
Garst	8366TC2	66.5	66.8	1656	1640	0.31	0.30
Grabow	1580TC	68.4	67.7	1633	1644	0.29	0.30
Grabow	1611-S	67.5	66.7	1630	1641	0.30	0.31
Grabow	1611TC3	67.1	67.3	1635	1635	0.30	0.30
Grabow	71577Bt/TC	66.0	67.3	1653	1644	0.31	0.31
Grabow	71577Bt/TC2	67.8	67.1	1639	1653	0.30	0.31
Grabow	71577TC2	67.9	67.0	1638	1654	0.30	0.31
Grabow	71577TC2.5	67.5	67.1	1642	1658	0.30	0.30
Grabow	71580Bt/TC	67.1	67.1	1639	1646	0.31	0.31
Grabow	71580Bt/TC2.5	67.9	67.2	1642	1649	0.30	0.30
Grabow	71580Bt/TC3	66.7	68.0	1652	1630	0.31	0.30
Grabow	71580TC2.5	67.9	67.7	1638	1639	0.31	0.30

Grabow	71580TC3	67.9	66.9	1642	1654	0.30	0.30
Grabow	71593-S	68.2	67.2	1637	1648	0.30	0.30
Grabow	71593TC2.5	68.1	66.9	1635	1656	0.30	0.31
Grabow	71593TC3	67.3	66.7	1644	1659	0.30	0.31
Grabow	71651TC2.5	67.7	67.3	1641	1650	0.31	0.31
Grabow	71651TC3	66.9	65.6	1645	1671	0.31	0.33
Grabow	81533TC2	67.0	66.3	1649	1655	0.31	0.31
Grabow	81533TC3	66.4	66.0	1641	1667	0.31	0.32
Grabow	81562TC2	66.6	65.5	1653	1678	0.31	0.32
Grabow	91567TC2	65.5	65.4	1668	1668	0.32	0.33
Grabow	91575TC2	66.8	66.5	1638	1655	0.30	0.31
NK	N5220TC	67.6	68.1	1636	1647	0.31	0.31
NK	N6423TC	68.1	67.7	1639	1651	0.30	0.30
Pfister	SK102-19	65.6	66.0	1666	1667	0.33	0.32
Pfister	SK2550-19	66.1	65.0	1660	1675	0.31	0.33
Pfister	SK2652-19	68.3	67.4	1632	1648	0.29	0.30
Pfister	SK2680-19	67.8	68.3	1641	1637	0.30	0.30
Pfister	SK3001-19	66.9	65.8	1635	1671	0.31	0.32
Pfister	SK3049-19	68.0	67.7	1633	1648	0.30	0.30
Pfister	SK3977-19	67.4	67.3	1641	1651	0.30	0.30
Pioneer	3245S	67.5	67.4	1638	1633	0.30	0.31
Pioneer	32R90	67.6	66.6	1630	1639	0.31	0.31
SS	727TC	68.1	68.0	1633	1633	0.29	0.30
SS	767TC	67.1	67.5	1651	1638	0.31	0.30
Wilson	EDX 30	67.2	66.4	1638	1642	0.31	0.33
Wilson	EDX 92	66.2	68.4	1657	1633	0.32	0.30
Average		*67.2*	*66.9*	*1643*	*1650*	*0.31*	*0.31*
LSD at 10% Level		*N.S.*	*0.9*	*15*	*N.S.*	*0.01*	*N.S.*
Std. Err. of Entry Mean		*0.8*	*0.4*	*6*	*10*	*0.01*	*0.01*

[1] Oil percentage expressed on a zero moisture basis.
[2] Open pollinated (O.P.) derived seed sample.
[3] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore, an LSD value was not calculated.

SILAGE TESTS RESULTS

Selection of Corn Hybrids for Use as Silage

J.C. Johnson, Jr., and R.N. Gates

The information presented in the following tables is intended to help producers select corn hybrids that produce large yields of high quality silage. Consistently high yields over several

locations and years reliably show a hybrid's ability to produce top yields. Primary quality factors are the proportion of grain and the digestibility of the grain and non-grain portions of the hybrid. Hybrids differ in the proportion of grain they produce.

In the past, it was accepted that a hybrid with the highest proportion of grain made the highest quality silage. Research has shown that, many times, this is not true. In-vitro dry matter digestibility (IVDMD) is a measure of the percentage of a feedstuffs the animal can digest and utilize. IVDMD values for grain are high and do not vary greatly among hybrids. IVDMD values for the non-grain portion (fodder) of the corn plant are lower but much more variable among hybrids compared to the grain portion. Thus, one hybrid with a lower proportion of grain could have high quality (digestibility) because the IVDMD of its fodder portion was much higher than another hybrid having a higher proportion of grain but a much lower IVDMD of its fodder portion.

Blairsville, Calhoun, Griffin, and Tifton, Georgia, 1999

Summary of Evaluations of Corn Hybrids for Silage Blairsville, Calhoun, Griffin, and Tifton, Georgia, 1999											
Company or Brand Name	**Hybrid No.**	**Maturity Class**	**Quality Factors[1] IVDMD**				**Dry Matter Yield**				
			Fodder	**Grain**	**Whole Plant[2]**	**Grain Portion %**	**Statewide Avg***	**Blairsville**	**Calhoun**	**Griffin**	**Tifton**
			----- % ------				---------- tons/acre ----------				
Short and Mid-Season											
AgriPro	AP 9707	S	59.6	93.4	77.4	53	.	.	.	.	9.3
AgriPro	AP 9829IMI	S	56.9	93.1	75.6	52	.	.	.	.	10.4
AgriPro	AP 9909	M	63.9	93.4	**79.5**	53	.	.	.	.	10.1
AgriPro	AP 9939	M	59.2	95.3	**78.3**	53	.	.	.	.	10.6
AgriPro	HS 9843	S	57.2	93.4	76.3	53	.	.	.	.	8.1
AgriPro	HY 9646	S	58.7	94.7	76.8	50	.	.	.	.	10.5
Asgrow	RX 897	S	58.7	94.1	76.7	51	.	.	.	**9.2**	10.2
Asgrow	RX 913	S	58.5	92.6	77.2	55	.	.	.	8.7	10.6
DeKalb	DK 687	M	60.9	94.4	**77.7**	50	9.8	10.8	.	8.1	10.6
Garst	8220	M	60.0	92.5	**77.7**	55	.	.	.	7.7	9.9
NK	N 83-N5	M	61.4	93.5	**78.0**	52	.	.	.	.	10.7
NK	N 83-R7	M	63.9	93.0	**78.9**	51	.	.	.	.	10.7
NK	N 8811	M	59.7	93.4	77.5	53	11.2	12.8	.	**10.3**	10.6
Pioneer	3154	M	59.6	92.6	75.7	49	10.4	13.0	.	8.8	9.4
Pioneer	3167	M	61.7	94.0	77.4	49	9.4	10.4	.	7.8	9.9
Pioneer	31G20	M	58.4	92.3	75.1	49	12.3	**15.4**	.	**9.4**	**12.0**
Pioneer	32k61	S	59.1	94.3	76.0	48	10.0	11.7	.	8.1	10.2
Pioneer	33J56	S	58.5	93.5	77.3	54	10.7	12.8	.	8.3	**11.0**
Southern States	SS849CL	M	63.1	92.0	**78.3**	52	10.0	11.5	.	8.6	9.8
Southern States	SS859CL	M	55.2	94.2	75.6	52	10.3	11.5	.	8.7	10.7
Southern States	SS897	M	60.4	94.1	**78.1**	52	9.1	9.8	.	8.0	9.6
Southern States	SS943	M	60.1	93.7	77.2	51	9.9	12.2	.	7.6	10.0
Zimmerman	1851W	S	62.1	93.5	76.4	45	.	.	.	.	**11.3**
Zimmerman	Z64W	S	60.0	93.6	75.4	46	.	.	.	.	10.5
Average			*59.9*	*93.5*	*77.1*	*51*	*10.3*	*12.0*	.	*8.5*	*10.3*
LSD at 10% Level			*3.5*	*N.S.[3]*	*1.9*	*2*	-	*1.9*		*1.1*	*1.0*
Std. Err. of Entry Mean			*1.5*	*1.0*	*1.0*	*1*	-	*0.8*		*0.4*	*0.4*

Full-Season											
Greenwood	830	F	50.6	86.0	66.3	44	.	.	.	.	10.3
Greenwood	835	F	55.0	86.1	**68.0**	42	.	.	.	.	**12.2**
Greenwood	840	F	49.5	78.4	62.2	44	.	.	.	.	9.9
NK	McNair 508	F	52.3	86.8	**67.3**	44	.	.	.	.	10.5
NK	NX 9188	F	52.4	87.1	**69.8**	50	.	.	.	.	**12.0**
Pioneer	3085	F	50.7	83.7	**68.4**	54	9.7	**10.7**	.	**8.4**	9.9
Southern States	Exp 79579	F	56.1	84.1	**68.9**	45	10.6	**11.5**	.	**8.8**	**11.4**
Southland Genetics	SG1701	M	56.3	83.5	**70.5**	52	.	.	.	.	**11.3**
Southland Genetics	SG1836	F	55.2	85.4	**68.5**	44	.	.	.	.	9.5
Southland Genetics	SG1877	F	49.3	88.3	66.2	44	.	.	.	.	10.7
Southland Genetics	9006C	F	54.0	86.2	**68.0**	43	.	.	.	.	10.7
Average			*52.9*	*85.1*	*67.7*	*46*	*10.2*	*11.1*	.	*8.6*	*10.7*
LSD at 10% Level			*3.4*	*N.S.*	*3.7*	*4*	-	*N.S.*		*N.S.*	*1.2*
Std. Err. of Entry Mean			*1.4*	*2.4*	*1.5*	*2*	-	*0.8*		*0.4*	*0.5*

* Tifton, Griffin, and Blairsville.

[1] Quality factors taken from the replicated silage trial at Tifton.
[2] This variable is calculated to reflect the relative contribution of each component using the following formula: whole plant IVDMD = fodder IVDMD X percent fodder + grain IVDMD X percent grain.
[3] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries performing equally to highest performing entry within a column based on Fisher's protected LSD (P = 0.10).

Tifton, Georgia

Evaluation of Corn Hybrids for Silage, 1999, Irrigated
Tifton, Georgia

Company or Brand Name	Hybrid Name	Maturity Class	Forage Yield			Dry Matter %	Grain Portion %	Plant Pop. no.	2-Yr Avg Dry Forage Yield tons/acre
			Dry	Green					
			tons/acre						
Short and Mid-Season									
Pioneer	31G20	M	**12.0**	**23.1**	52.2	49	25701	**12.4**	
Zimmerman	1851	S	**11.3**	**23.7**	47.6	45	22869	.	
Pioneer	33J56	S	**11.0**	**23.6**	47.1	54	24612	.	
NK	N 83-N5	M	10.7	21.1	50.9	52	25483	11.4	
Southern States	SS859CL	M	10.7	21.7	49.5	52	23740	.	
NK	N 83-R7	M	10.7	**23.6**	45.3	51	23522	11.1	
Asgrow	RX 913	S	10.6	20.5	51.8	55	25483	.	
DeKalb	DK 687	M	10.6	**25.2**	42.1	50	23740	11.4	
AgriPro	AP 9939	M	10.6	22.5	47.0	53	23958	.	
NK	N 8811	M	10.6	22.3	47.6	53	24829	11.5	
AgriPro	HY 9646	S	10.5	20.1	52.2	50	23740	.	
Zimmerman	Z64W	S	10.5	**22.9**	45.7	46	24394	.	
AgriPro	AP 9829IMI	S	10.4	21.6	48.4	52	25483	.	
Asgrow	RX 897	S	10.2	20.7	49.3	51	25047	.	
Pioneer	32k61	S	10.2	20.7	49.5	48	23740	.	
AgriPro	AP 9909	M	10.1	21.7	46.6	53	24176	.	
Southern States	SS943	M	10.0	21.7	46.1	51	24176	.	
Garst	8220	M	9.9	21.9	45.2	55	23523	.	
Pioneer	3167	M	9.9	**23.7**	42.0	49	24394	.	
Southern States	SS849CL	M	9.8	21.8	45.1	52	23522	.	
Southern States	SS897	M	9.6	21.8	44.2	52	23740	.	
Pioneer	3154	M	9.4	18.9	49.9	49	23740	10.2	
AgriPro	AP 9707	S	9.3	21.8	42.9	53	24612	.	
AgriPro	HS 9843	S	8.1	16.9	48.0	53	23740	.	
Average			*10.3*[1]	*21.8*	*47.3*	*51*	*24248*	*11.3*	
LSD at 10% Level			*1.0*	*2.6*	*3.3*	*2*	*1403*	*0.8*	
Std. Err. of Entry Mean			*0.4*	*1.1*	*1.4*	*1*	*595*	*0.3*	
Full-Season									
Greenwood	835	F	**12.2**	29.7	41.1	42	25047	**12.4**	
NK	NX 9188	F	**12.0**	26.1	45.9	50	24612	.	
Southern States	Exp 79579	F	**11.4**	26.0	43.8	45	24611	.	
Southland Genetics	SG1701	M	**11.3**	23.6	48.3	52	24176	.	
Southland Genetics	SG1877	F	10.7	27.2	39.3	44	21345	**10.9**	

Southland Genetics	9006C	F	10.7	**24.3**	43.9	43	25700	**12.6**
NK	McNair 508	F	10.5	**24.4**	43.2	44	24612	**10.4**
Greenwood	830	F	10.3	**24.5**	41.9	44	23522	**11.1**
Greenwood	840	F	9.9	**26.0**	38.0	44	22216	**10.9**
Pioneer	3085	F	9.9	**25.4**	39.1	54	24612	**11.0**
Southland Genetics	SG1836	F	9.5	**24.7**	38.3	44	24611	**9.6**
Average			*10.7*[2]	*25.6*	*42.1*	*46*	*24097*	*11.1*
LSD at 10% Level			*1.2*	*N.S.*[3]	*3.3*	*4*	*2180*	*N.S.*
Std. Err. of Entry Mean			*0.5*	*1.4*	*1.4*	*2*	*908*	*0.4*

[1] CV = 8.7%, and df for EMS = 68.
[2] CV = 9.4%, and df for EMS = 30.
[3] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	March 18, 1999.
Harvested:	July 23, 1999.
Seeding Rate:	26,000 seeds/acre in 30" rows.
Soil Type:	Tifton loamy sand.
Soil Test:	P = High, K = Medium, and pH = 6.0.
Fertilization:	116 lb N, 130 lb P_2O_5, and 195 lb K_2O/acre as preplant; 185 lb N and 31lb S/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Sutan, Accent, Permit, and one cultivation used for weed control; Lorsban used for insect control; irrigated 6 inches.

Test conducted by A. E. Coy and M. D. Pippin.

Griffin, Georgia

Evaluation of Corn Hybrids for Silage, 1999, Irrigated Griffin, Georgia									
Company or Brand Name	**Hybrid Name**	**Maturity Class**	**Forage Yield**			**Dry Matter %**	**Grain Portion %**	**Plant Pop. no.**	**2-Yr Avg Dry Forage Yield tons/acre**
			Dry	**Green**					
			tons/acre						
NK	N 8811	M	**10.3**	**21.3**	48.4	47	25168	**9.2**	
Pioneer	31G20	M	**9.4**	15.9	59.1	49	28798	**8.7**	
Asgrow	RX 897	S	**9.2**	16.4	56.0	47	27830	.	
Pioneer	3154	M	8.8	14.2	61.8	52	25410	**8.6**	
Southern States	Exp 79579	F	8.8	18.1	48.6	51	27830	.	
Asgrow	RX 913	S	8.7	16.7	51.9	50	25894	.	
Southern States	SS859CL	M	8.7	15.8	55.0	51	22748	.	
Southern States	SS849CL	M	8.6	16.4	52.5	53	26620	.	
Pioneer	3085	F	8.4	18.9	44.8	52	26136	**8.3**	
Pioneer	33J56	S	8.3	14.7	56.0	49	24926	.	
Pioneer	32k61	S	8.1	14.0	58.6	47	25652	.	
DeKalb	DK 687	M	8.1	15.0	53.7	47	26378	.	
Southern States	SS897	M	8.0	16.1	49.7	50	27588	.	
Pioneer	3167	M	7.8	14.8	52.5	51	25894	.	
Garst	8220	M	7.7	14.4	53.5	53	26862	.	
Southern States	SS943	M	7.6	14.6	52.2	51	24200	.	
Average			*8.5*[1]	*16.1*	*53.4*	*50*	*26121*	*8.7*	
LSD at 10% Level			*1.1*	*1.8*	*3.8*	*3*	*N.S.*[2]	*N.S.*	
Std. Err. of Entry Mean			*0.4*	*0.8*	*0.6*	*1*	*1662*	*0.2*	

[1] CV = 10.6%, and df for EMS = 45.
[2] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	April 8, 1999.
Harvested:	September 1, 1999.
Seeding Rate:	31,000 seeds/acre in 30" rows.
Soil Type:	Appling coarse sandy loam.
Soil Test:	P = Medium, K = High, and pH = 6.7.
Fertilization:	49 lb N, 98 lb P_2O_5, and 147 lb K_2O/acre as preplant; 200 lb N/acre as sidedress.
Previous Crop:	Soybean.
Management:	Moldboard plowed and rototilled; Aatrex and Lasso used for weed control; irrigated 9 inches.

Test conducted by J. L. Day and P. A. Rose.

Calhoun, Georgia

Evaluation of Corn Hybrids for Silage, 1999, Irrigated Calhoun, Georgia
A corn hybrid for silage performance trial was conducted at this location during the 1999 growing season. However, high wind and rain caused considerable lodging and variation in performance among plots within the test. Since this data could potentially be misleading if used in making decisions concerning hybrid selection, we have chosen not to present them in this publication.

Blairsville, Georgia

Evaluation of Corn Hybrids for Silage, 1999, Nonirrigated
Blairsville, Georgia

Company or Brand Name	Hybrid Name	Maturity Class	Forage Yield			Dry Matter %	Grain Portion %	Plant Pop. no.	2-Yr Avg Dry Forage Yield tons/acre
			Dry	Green					
			tons/acre						
Pioneer	31G20	M	**15.4**	**29.5**	52.1	48	26606	**13.5**	
Pioneer	3154	M	13.0	25.0	51.8	50	25155	**12.4**	
Pioneer	33J56	S	12.8	25.7	50.0	55	27090	.	
NK	N 8811	M	12.8	**29.5**	43.3	49	26606	**12.2**	
Southern States	SS943	M	12.2	23.8	51.1	53	28058	.	
Pioneer	32k61	S	11.7	22.3	52.2	49	26123	.	
Southern States	Exp 79579	F	11.5	19.4	59.4	44	26606	.	
Southern States	SS849CL	M	11.5	22.7	50.4	52	25155	.	
Southern States	SS859CL	M	11.5	22.6	50.8	51	24188	.	
DeKalb	DK 687	M	10.8	23.4	46.0	46	24671	.	
Pioneer	3085	F	10.7	24.1	44.5	52	24671	10.4	
Pioneer	3167	M	10.4	23.6	44.1	50	28541	.	
Southern States	SS897	M	9.8	21.5	46.0	52	24671	.	
Average			*11.8*[1]	*24.1*	*49.4*	*50*	*26011*	*12.1*	
LSD at 10% Level			*1.9*	*3.2*	*4.1*	*4*	*N.S.*[2]	*1.6*	
Std. Err. of Entry Mean			*0.8*	*1.4*	*1.7*	*2*	*1759*	*0.7*	

[1] CV = 13.4%, and df for EMS = 36.
[2] The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	May 11, 1999
Harvested:	October 15, 1999
Seeding Rate:	28,600 plants/acre in 30" rows
Soil Type:	Bradson clay loam
Soil Test:	P = High, K = Medium, and pH = 6.3
Fertilization:	30 lb N, 60 lb P_2O_5, and 90 lb K_2O/acre as preplant; 125 lb N/acre as sidedress.
Previous Crop:	Soybean
Management:	Moldboard plowed and disked; Aatrex, Bicep, and one cultivation used for weed control.

Test conducted by P. A. Rose, J. L. Day, and H. D. Garrett.

Quincy, Florida

Evaluation of Corn Hybrids for Silage, 1999, Irrigated Quincy, Florida							
Company or Brand Name	**Hybrid Name**	**Maturity Class**	**Forage Yield (35% moisture) tons/acre**	**Dry Matter %**	**Grain Portion %**	**Plant Pop. no.**	**2-Yr Avg Dry Forage Yield tons/acre**
Short and Mid-Season							
Pioneer	32k61	S	**22.8**	.	.	.	.
Southern States	SS859CL	M	**22.5**	.	.	.	.
NK	N 83-N5	M	**22.0**	.	.	.	.
Pioneer	3223	S	**21.4**	.	.	.	.
NK	N 83-R7	M	**21.3**	.	.	.	.
NK	N 8811	M	**21.2**	.	.	.	.
AgriPro	AP 9707	S	**20.7**	.	.	.	.
DeKalb	DK 687	M	**20.6**	.	.	.	.
Pioneer	31G20	M	**20.6**	.	.	.	.
Pioneer	33J56	S	**20.4**	.	.	.	.
AgriPro	AP 9909	M	**20.0**	.	.	.	.
Asgrow	RX 913	S	**20.0**	.	.	.	.
Zimmerman	1851W	S	**20.0**	.	.	.	.
AgriPro	HS 9843	S	**19.9**	.	.	.	.
AgriPro	AP 9939	M	**19.8**	.	.	.	.
NK	N73-N8	S	**19.6**	.	.	.	.
AgriPro	AP 9829IMI	S	**19.6**	.	.	.	.
AgriPro	HY 9646	S	19.4	.	.	.	.
Funk's G	5088	S	19.4	.	.	.	.
Zimmerman	Z64W	S	19.4	.	.	.	.
Southern States	SS849CL	M	19.2	.	.	.	.
Funk's G	X5583	M	19.1	.	.	.	.
Pioneer	3154	M	18.9	.	.	.	.
Pioneer	3167	M	18.8	.	.	.	.
Southern States	SS943	M	18.8	.	.	.	.
Pioneer	3245	S	18.3	.	.	.	.
Garst	8220	M	18.3	.	.	.	.
Funk's G	5516	S	18.1	.	.	.	.
Asgrow	RX 897	S	18.0	.	.	.	.
Pioneer	3146	M	18.0	.	.	.	.
Pioneer	3098	M	17.9	.	.	.	.
Southern States	SS897	M	17.8	.	.	.	.
Funk's G	4581	S	16.8	.	.	.	.
Pioneer	3163	M	16.5	.	.	.	.

NK	N79-P4	S	16.2	.	.	.	.
Average			*19.5*[1]	.	.	.	.
LSD at 5% Level			*3.3*				
Std. Err. of Entry Mean			*1.2*				
Full-Season							
NK	NX 9188	F	**31.9**	.	.	.	.
Southland Genetics	SG1877	F	25.1	.	.	.	.
NK	McNair 508	F	24.9	.	.	.	.
Southern States	Exp 79579	F	24.8	.	.	.	.
Greenwood	835	F	24.5	.	.	.	.
Pioneer	3085	F	24.4	.	.	.	.
Southland Genetics	SG1701	M	24.4	.	.	.	.
Greenwood	830	F	24.1	.	.	.	.
Southland Genetics	SG1836	F	23.0	.	.	.	.
Greenwood	845	F	22.4	.	.	.	.
Average			*24.9*[2]	.	.	.	.
LSD at 5% Level			*3.6*				
Std. Err. of Entry Mean			*1.3*				

[1] CV = 12.1%, and df for EMS = 101.
[2] CV = 10.0%, and df for EMS = 27.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted:	Short and Mid-Season: March 26, 1999. Full-Season: March 30, 1999.
Harvested:	Short and Mid-Season: July 12, 1999. Full-Season: July 20, 1999.
Plant Population:	30,000 plants/acre in 36" rows.
Soil Type:	Norfolk loamy sand.
Soil Test:	P = Medium, K = Medium, and pH = 5.5.
Fertilization:	18 lb N, 54 lb P_2O_5, and 108 lb K_2O/acre as preplant; 150 lb N/acre as sidedress.
Previous Crop:	Cotton.
Management:	Strip tilled with subsoiler; Aatrex, Prowl, Permit, and Gramoxone (directed) used for weed control; irrigated 8 inches.

Test conducted by D. L. Wright and B. Kidd.

INSECT SCREENING RESULTS

Evaluation of Corn Hybrids for Resistance to Insects

N. W. Widstrom

Environmental conditions in Georgia during the 1999 growing season were unfavorable for buildup of insect populations large enough to cause serious damage to corn. Generally, this damage is greatest in late-planted corn left in the field for an extended period past maturity.

Hybrids resistant to insects are recommended for planting and are presently the only economical means, in late plantings, for the reduction of damage by corn earworm, fall armyworm, maize weevil, and pink scavenger caterpillar. Consult your local county agent and/or extension entomologist for additional control recommendations for other insects.

Percent yield losses attributable to all insects for individual hybrids varied from 0.4% to 3.9% and are reflected by VG, G, F, P, and VP ratings in the tables. Hybrids in the tests sustained average yield losses of 1.2%, and 1.9% in the full and mid-season, and short-season hybrid tests, respectively. The mean level of overall yield loss for all tests was 1.6%. Of the total loss, about 34% was attributable to ear injury by the corn earworm, 58% to the pink scavenger caterpillar, and 8% to the maize weevil. Losses to the pink scavenger caterpillar and maize weevil are based on damage by multiple generations of these insects as the corn dries in the field. Timely harvest will substantially reduce losses to these two insects.

Evaluations for resistance to corn earworm and fall armyworm, maize weevil, and pink scavenger caterpillar are given for hybrids in the tables following. Lettered ratings refer only to relative resistance to insects and are not indicative of yield. Thus, a hybrid rated poor for resistance to insects might possibly be among the highest yielders and vice versa. See the yield data in other tables for this information.

Husk tightness ratings were assigned using a scale of 1 to 5, in which 1 = very loose and 5 = very tight. No average rating was less than 2.0 or greater than 4.0; therefore, only loose, medium, and tight ratings are given in the tables.

Both the hybrid tests (mid and full-season, and short-season) were planted April 2, 1999. Plots were thinned to 20,000 plants per acre. Ratings for overall insect damage were completed during September.

Data for this section were compiled by J. M. Cook and J. C. Mullis of the United States Department of Agriculture, Agricultural Research Service, Insect Biology and Population Management Research Laboratory, and Georgia Coastal Plain Experiment Station, Tifton, Georgia.

Tifton, Georgia

Short-Season Corn Hybrids, 1999
Evaluations for Resistance to Insects and Other Traits
Tifton, Georgia

Company or Brand Name	Hybrid Name	Husk Tightness[1]	Days to Anthesis	Overall Resistance to Insect Injury[2]	
				1999	2 or more years
Terra	TR1154	M	63	VG	-
Zimmerman	1851W	M	64	VG	-
Asgrow	RX889	M	62	VG	-
Funk's G	5516	M	64	VG	G
NK	NX7547	M	62	VG	-
Funk's G	4581	M	66	G	F
Funk's G	4653	M	64	G	-
AgriPro	HS9843	M	63	G	-
Pioneer	33K81	M	63	G	-
Pioneer	3245	M	64	G	G
Garst	8222IT	M	64	G	G
NK	NX7537	M	61	G	-
NK	N79-P4	M	62	G	F
Southern States	SS787	M	66	G	-
Grabow	91575Bt	M	61	G	-
NK	NX7617	M	61	G	-
Pioneer	32K61	M	62	G	-
Funk's G	5510-A	M	65	G	G
Asgrow	RX826	M	62	G	-
Grabow	91595	M	64	G	-
Southern States	16980	M	60	G	-
AgriPro	AP9707	M	64	G	F
Funk's G	5505RR	M	63	G	-
Southern States	SS747IT	M	66	G	-
AgriPro	HY9646	T	65	F	-
AgriPro	AP9828IMI	M	64	F	-
Southland Genetics	SG1580	M	63	F	-
Funk's G	X5575	M	64	F	-
Southern States	SS769BT	M	62	F	-
Grabow	91609	M	66	F	-
Asgrow	RX913	M	65	F	-
Southern States	77457	M	64	F	-
Pioneer	3223	T	65	F	F

Pioneer	3563	M	64	F	-
Zimmerman	Z37	M	64	F	-
Southern States	SS729IT	M	63	F	-
Southland Genetics	SG1611	M	63	F	-
Pioneer	33G26	M	62	P	P
Terra	TR1157	M	61	P	-
DeKalb	DK650	M	64	P	-
Southern States	77095	M	64	P	-
DeKalb	CR8605	L	63	P	-
Pioneer	33J56	M	63	P	-
Terra	TR1147RR	L	62	P	-

[1] L = loose husks, M - medium-tight husks, T = tight husks
[2] Overall resistance to insect injury evaluations were made on the basis of total percent damage to the ear by one or more of the following insect categories: corn earworm and fall armyworm, maize weevil, and pink scavenger caterpillar. Ratings were made on a scale from *very good* to *very poor,* where VG = very good; G = good; F = fair; P = poor; and VP = very poor.

Mid- and Full-Season Corn Hybrids, 1999
Evaluations for Resistance to Insects and Other Traits
Tifton, Georgia

Company or Brand Name	Hybrid Name	Husk Tightness[1]	Days to Anthesis	Overall Resistance to Insect Injury[2]	
				1999	2 or more years
Greenwood	835*	T	70	VG	-
Greenwood	845*	T	70	VG	VG
Terra	TR1167	M	65	VG	G
Southland Genetics	9006c*	T	70	VG	-
Pioneer	3163	M	64	VG	G
NK	N8811	M	64	VG	VG
Southern States	Exp79027	M	64	VG	-
Terra	TR702E	M	64	VG	G
Pioneer	3146	M	64	VG	-
Garst	8220	L	66	VG	-
Pioneer	31G20	M	66	VG	F
DeKalb	DK687	M	64	VG	G
AgriPro	AP9939	M	64	G	G
Southland Genetics	SG1701*	M	64	G	-
DeKalb	DK697	L	64	G	-
NK	NX8318	L	64	G	-
Southern States	SS859IT	M	64	G	-
NK	NX9188*	L	70	G	-
Funk's G	X5583	M	64	G	-
NK	NX8308	M	64	G	-
Southland	4120	M	64	G	-
Terra	TR1185	L	64	F	F
AgriPro	AP9909	L	66	F	F
DeKalb	DK679	L	66	F	P
NK	N83-N5	L	67	F	G
Southland	1651	L	64	F	-
Pioneer	3085*	M	68	F	G

* Full-season hybrid.

[1] L = loose husks, M = medium-tight husks, T = tight husks.
[2] Overall resistance to insect injury evaluations were made on the basis of total percent damage to the ear by one or more of the following insect categories: corn earworm and fall armyworm, maize weevil, and pink scavenger caterpillar. Ratings were made on a scale from *very good* to *very poor,* where VG = very good; G = good; F = fair; P = poor; and VP = very poor.

Sources of Seed for the 1999 Corn Hybrid Tests

Company or Brand Name	Seed Source
AgriGold	AgriGold Hybrids, Route 1, Box 203, St. Francisville, IL 62460
AgriPro/HyPerformer	AgriPro Seeds, Inc., 6075 Popular Ave., Suite 435, Memphis, TN 38119
Asgrow	Asgrow Seed Company, P.O. Box 359, Marion, AR 72364
DeKalb	Monsanto Global Seed Group, 3100 Sycamore Road, DeKalb, IL 60115
Funk's G	United Agri Products, P.O. Box 534, Athens, AL 35611
Garst	Garst Seed Company, 7728 State Road 1241, Hickory, KY 42051
Grabow	Grabow Seed, 6830 Lisa Lane, Dunwoody, GA 30338
Greenwood	Greenwood, 8431 Davis Road, Laurel Hill, FL 32567
NK	Novartis Seeds, Inc., P.O. Box 249, Grifton, NC 28530
Pfister	Pfister Hybrid Corn Co., 187 N. Fayette Street, El Paso, TX 61738
Pioneer	Pioneer Hi-Bred International, Inc., 6767 Old Madison Pike, Suite 110, Huntsville, AL 35806
Southland, Southland Genetics	Southland Seed Company, Inc., Route 10, 404 Holly Dr., Dublin, GA 31021
Southern States, SS	Southern States Coop, P.O. Box 26234, Richmond, VA 23260
Terra	Terra Distribution, P.O. Box 171376, Memphis, TN 38187
Wilson, Zimmerman	Wilson Genetics, L.L.C., P.O. Box 391, Harlan, IA 51537

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