The Georgia Agricultural Experiment Stations
College of Agricultural and Environmental Sciences
The University of Georgia

Research Report Number 701
October 2005

Silage Test Results

Summary of Evaluations of Corn Hybrids for Silage
Blairsville, Calhoun, Griffin, and Tifton, Georgia, 2005

Company or Brand Name	Hybrid Name	Quality Factors[1] Milk Production[2] lbs/ton DM	Milk Production[2] lbs/acre	Quality Portion	Dry Matter Yield Statewide Average	Blairsville	Calhoun	Griffin	Tifton
					---------- tons/acre ----------				
Short -Season									
AgraTech	717RR	**2571**	**24685**	48	8.8	9.3	8.8	7.5	9.6
AgraTech	9814	**2530**	**28339**	43	.	.	.	.	**11.2**
DeKalb	DKC61-72(RR2)	**3013**	**28923**	54	.	.	.	**8.6**	9.6
DeKalb	DKC63-62(RR2)	**2571**	**25709**	48	.	.	.	**8.8**	10.0
Hytest	7799Bt	**2594**	**23861**	55	9.4	10.9	8.5	**9.1**	9.2
Mycogen	2D835	**2460**	**25340**	48	.	.	.	.	10.3
Mycogen	2J787	**2420**	**23234**	51	9.7	9.6	10.5	**9.0**	9.6
Mycogen	2T780	**2657**	**24445**	54	9.4	10.4	9.5	8.4	9.1
NK	1851W	**2428**	**25983**	44	9.8	10.0	**10.8**	7.7	**10.7**
Pioneer	33D63	**2740**	**28765**	48	9.5	9.2	8.5	**9.5**	**10.5**
Pioneer	33V15	**2494**	**25683**	49	10.1	**12.1**	9.0	**9.0**	10.3
SS	692BT	**2829**	**26309**	49	9.1	8.9	8.8	**9.4**	9.3
Terral	TV2140nRR	**2465**	**29337**	47	**11.0**	10.6	**12.2**	**9.4**	**11.9**
Average		2598[3]	26201[5]	49	9.6	10.1	9.6	8.8	10.1
LSD at 10% Level		N.S.[4]	N.S.	4	0.6	1.0	1.6	1.1	1.5
Std. Err. of Entry Mean		204	2167	2	0.3	0.4	0.7	0.5	0.6

Summary of Evaluations of Corn Hybrids for Silage
Blairsville, Calhoun, Griffin, and Tifton, Georgia, 2005 (Continued)

Company or Brand Name	Hybrid Name	Quality Factors[1] Milk Production[2] lbs/ton DM	Milk Production[2] lbs/acre	Quality Portion	Dry Matter Yield Statewide Average	Blairsville	Calhoun	Griffin	Tifton
					---------- tons/acre ----------				
Mid-Season									
AgraTech	1021RR	2535	29410	39	.	.	.	.	**11.6**
AgraTech	855RR	2715	28238	45	.	.	.	.	10.4
AgraTech	919RR	2514	24640	48	.	.	.	.	9.7
AgraTech	9505	2069	22340	28	.	.	.	.	10.8
AgraTech	999Bt	2852	31937	45	**10.6**	10.2	**11.0**	10.1	11.1
AgraTech	999aRR	2844	**32993**	44	.	.	.	.	**11.6**
Croplan Genetics	822RR2/BT	2689	27157	48	10.1	10.3	9.8	10.2	10.1
DeKalb	DKC66-21(YGCB)	2372	23717	54	.	.	.	8.4	10.0
DeKalb	DKC67-60(RR2)	2808	28918	43	.	.	.	9.4	10.3
DeKalb	DKC69-71(RR2/YGCB)	2437	27538	45	.	.	.	**10.7**	11.2
DeKalb	DKC69-72(RR2)	2030	21310	46	.	.	.	**10.8**	10.5
DynaGro	58K22	2689	29574	50	.	.	.	.	10.9
DynaGro	58K40	2647	29119	45	.	.	.	.	11.0
Golden Acres	2295RR	2582	24532	45	9.2	8.2	9.4	9.6	9.5
Greenwood	775	2670	28835	49	.	.	.	.	10.8
Greenwood	780	2739	27117	48	**11.1**	11.3	**11.5**	**11.6**	9.9
Hytest	7891RR2/BT	2669	30158	54	.	.	.	.	11.3
Hytest	7924RR2/BT	2525	24999	48	9.9	10.7	9.6	9.4	9.9
Monsanto	NC6702	2701	27008	47	.	.	.	**10.8**	10.0
Monsanto	NC6704NRR1	2791	28463	51	.	.	.	**10.7**	10.2
Monsanto	NC6901	2836	**35731**	46	.	.	.	**11.1**	**12.6**
NK	N91-R9	2335	23813	47	**10.9**	**13.1**	**10.7**	9.6	10.2
NK	NX8363	2554	26053	49	.	.	.	.	10.2
NK	NX8513	2414	28240	47	.	.	.	.	**11.7**
Pioneer	31R87(RR2)	2690	28247	49	**11.1**	**11.6**	**11.1**	**11.2**	10.5
Pioneer	31Y43	**3345**	**33786**	47	10.3	10.4	**10.7**	9.8	10.1
Pioneer	32D99	2734	27618	50	**10.7**	11.3	**10.8**	**10.7**	10.1
SS	804	2515	27670	47	10.1	10.6	9.8	8.8	10.9
SS	842RR2/YGCB	2693	24504	47	9.8	10.5	9.5	10.2	9.1
Vigoro	V58YR2	2617	24334	53	8.5	8.3	8.6	7.9	9.3
Average		2620 [6]	27600 [7]	47	10.2	10.5	10.2	10.1	10.5
LSD at 10% Level		276	2921	3	0.7	1.7	1.2	1.4	1.3
Std. Err. of Entry Mean		115	1219	1	0.3	0.7	0.5	0.6	0.6

1. Quality factors taken from the replicated silage trial at Tifton.
2. This variable is calculated using University of Wisconsin Corn Silage Evaluation System - Milk 2000 and reported at lbs milk/ton of dry matter (DM) and lbs milk/acre.
3. CV = 11.1%, and df for EMS = 12.
4. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.
5. CV = 11.7%, and df for EMS = 12.
6. CV = 6.2%, and df for EMS = 29.
7. CV = 6.2%, and df for EMS = 29.

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

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Tifton, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Irrigated

Company or Brand Name	Hybrid Name	Forage Yield Dry	Forage Yield Green	Dry Matter	Grain Portion	Plant Population	2-Yr Avg Dry Forage Yield
		tons/acre		%	%	no.	tons/acre
Short-Season							
Terral	TV2140nRR	**11.9**	**26.5**	45.2	47	30275	**12.7**
AgraTech	9814	**11.2**	**27.5**	40.9	43	29403	.
NK	1851W	**10.7**	**28.5**	37.5	44	31145	**12.6**
Pioneer	33D63	**10.5**	**26.1**	40.5	48	30274	.
Pioneer	33V15	10.3	**24.9**	41.5	49	30057	**11.6**
Mycogen	2D835	10.3	**24.9**	41.3	48	31145	.
DeKalb	DKC63-62(RR2)	10.0	23.6	42.6	48	29185	.
DeKalb	DKC61-72(RR2)	9.6	24.5	39.4	54	29403	.
Mycogen	2J787	9.6	21.1	45.6	51	30928	.
AgraTech	717RR	9.6	23.5	40.7	48	30928	10.9
SS	692BT	9.3	**25.5**	36.6	49	28096	.
Hytest	7799Bt	9.2	22.0	42.2	55	29621	10.6
Mycogen	2T780	9.2	21.9	42.4	54	28750	.
Average		10.1 [1]	24.6 [2]	41.3	49	29939	11.7
LSD at 10% Level		1.5	3.7	3.5	4	N.S.[3]	1.3
Std. Err. of Entry Mean		0.6	1.5	1.5	2	901	0.5
Mid-Season							
Monsanto	NC6901	**12.6**	**31.4**	40.1	46	32235	.
NK	NX8513	**11.7**	**29.6**	39.5	47	28750	.
AgraTech	999aRR	**11.6**	**30.4**	38.4	44	25918	.
AgraTech	1021RR	**11.6**	**31.3**	37.1	39	26790	.
Hytest	7891RR2/BT	11.3	28.3	39.9	54	29621	.
DeKalb	DKC69-71(RR2/YGCB)	11.3	28.0	40.1	45	30492	**12.7**
AgraTech	999Bt	11.2	**28.9**	38.6	45	28532	**11.8**
DynaGro	58K40	11.0	28.3	38.9	45	30057	.
SS	804	11.0	27.1	40.5	47	30275	.
DynaGro	58K22	10.9	26.9	40.7	50	30057	**12.1**
AgraTech	9505	10.8	**32.5**	33.4	28	21345	.
Greenwood	775	10.8	25.2	42.7	49	32017	.
DeKalb	DKC69-72(RR2)	10.5	26.1	40.4	46	29185	**12.7**
Pioneer	31R87(RR2)	10.5	26.3	40.0	49	30274	.
AgraTech	855RR	10.4	28.7	36.4	45	28096	.
DeKalb	DKC67-60(RR2)	10.3	27.1	37.9	43	30056	**11.9**
NK	N91-R9	10.2	26.0	39.5	47	28750	**12.4**
Monsanto	NC6704NRR1	10.2	27.5	37.2	51	29403	.
NK	NX8363	10.2	23.4	43.6	49	29621	**11.8**
Pioneer	32D99	10.1	26.8	38.0	50	29621	**12.2**

Tifton, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Irrigated (Continued)

Company or Brand Name	Hybrid Name	Forage Yield		Dry Matter	Grain Portion	Plant Population	2-Yr Avg Dry Forage Yield
		Dry	Green				
		tons/acre		%	%	no.	tons/acre
Mid-Season - continued							
Pioneer	31Y43	10.1	**29.0**	34.9	47	30056	.
Croplan Genetics	822RR2/BT	10.1	26.4	38.2	48	30275	.
DeKalb	DKC66-21(YGCB)	10.0	23.0	43.4	54	32017	.
Monsanto	NC6702	10.0	25.6	39.0	47	30492	.
Hytest	7924RR2/BT	9.9	25.5	38.8	48	29403	.
Greenwood	780	9.9	24.2	41.2	48	28750	**12.3**
AgraTech	919RR	9.8	23.9	40.9	48	27878	**11.3**
Golden Acres	2295RR	9.5	26.0	36.9	45	27661	.
Vigoro	V58YR2	9.3	23.0	40.8	53	26572	**11.5**
SS	842RR2/YGCB	9.1	23.6	38.7	47	30492	.
Average		10.5 [4]	27.0 [5]	39.2	47	29156	12.0
LSD at 10% Level		1.3	3.8	2.3	3	3528	N.S.
Std. Err. of Entry Mean		0.6	1.6	1.0	1	1500	0.5

1. CV = 12.2%, and df for EMS = 36.
2. CV = 12.5%, and df for EMS = 36.
3. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.
4. CV = 10.6%, and df for EMS = 87.
5. CV = 11.9%, and df for EMS = 87.

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

Planted: April 13, 2005.
Harvested: August 2, 2005.
Seeding Rate: Short-Season: 31,500 seeds/acre in 30" rows.
Mid-Season: 32,500 seeds/acre in 30" rows.
Soil Type: Tifton loamy sand.
Soil Test: P = High, K = Medium, and pH = 5.1.
Fertilization: 95 lb N, 140 lb P_2O_5, and 210 lb K_2O/acre as preplant; 150 lb N/acre as sidedress.
Previous Crop: Soybean.
Management: Subsoiled, bedded, and rototilled; Sutan +, Prowl, and Atrazine used for weed control; Lorsban used for insect control; Telone II used for nematode control; irrigated 3.0 inches.

Test conducted by A. E. Coy, R. Bennett, R. Brooke, and R. Burton.

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Griffin, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Irrigated

Company or Brand Name	Hybrid Name	Forage Yield Dry	Forage Yield Green	Dry Matter	Grain Portion	Plant Population	2-Yr Avg Dry Forage Yield
		tons/acre		%	%	no.	tons/acre
Short-Season							
Pioneer	33D63	**9.5**	**30.1**	31.6	45	27346	.
Terral	TV2140nRR	**9.4**	**32.3**	29.3	40	31944	**9.6**
SS	692BT	**9.4**	**30.5**	30.7	48	29766	.
Hytest	7799Bt	**9.1**	28.3	32.1	48	30250	**9.7**
Pioneer	33V15	**9.0**	29.0	31.2	44	27104	**9.6**
Mycogen	2J787	**9.0**	27.7	32.6	47	30008	.
DeKalb	DKC63-62(RR2)	**8.9**	28.1	31.4	45	29524	.
DeKalb	DKC61-72(RR2)	**8.7**	28.8	30.0	45	27104	.
Mycogen	2T780	**8.4**	27.1	31.0	46	28556	.
NK	1851W	7.7	**29.4**	26.3	44	29766	8.7
AgraTech	717RR	7.5	23.4	32.2	43	27104	8.0
Average		8.8 [1]	28.6 [2]	30.8	45	28952	9.1
LSD at 10% Level		1.1	3.1	2.1	4	N.S.[3]	0.8
Std. Err. of Entry Mean		0.5	1.3	0.9	2	1936	0.3
Mid-Season							
Greenwood	780	**11.6**	**34.1**	34.0	38	27104	**11.7**
Pioneer	31R87(RR2)	**11.2**	**35.4**	31.5	43	30250	.
Monsanto	NC6901	**11.1**	**32.5**	34.3	42	30734	.
Monsanto	NC6702	**10.8**	**34.3**	31.5	44	31702	.
DeKalb	DKC69-72(RR2)	**10.8**	32.1	33.5	42	30008	.
Monsanto	NC6704NRR1	**10.7**	31.5	34.1	43	30734	.
Pioneer	32D99	**10.7**	30.4	35.1	40	31460	**10.7**
DeKalb	DKC69-71(RR2/YGCB)	**10.7**	30.8	34.6	38	31460	**11.2**
SS	842RR2/YGCB	10.2	**33.3**	30.6	40	31460	.
Croplan Genetics	822RR2/BT	10.2	**35.1**	29.1	40	29766	.
AgraTech	999Bt	10.1	**34.6**	29.1	32	31702	.
Pioneer	31Y43	9.9	32.1	30.7	36	30250	.
NK	N91-R9	9.6	32.3	29.7	38	27588	**10.4**
Golden Acres	2295RR	9.6	**34.2**	27.8	38	29040	**9.3**
DeKalb	DKC67-60(RR2)	9.4	31.8	29.8	41	30976	**9.7**
Hytest	7924RR2/BT	9.4	29.4	31.8	41	31702	.
SS	804	8.9	29.7	29.9	44	28314	.
DeKalb	DKC66-21(YGCB)	8.4	25.8	32.8	46	28798	.
Vigoro	V58YR2	7.9	23.9	33.0	49	22506	**8.4**
Average		10.1 [4]	31.7 [5]	31.7	41	29766	10.2
LSD at 10% Level		1.4	3.0	2.4	4	3574	N.S.
Std. Err. of Entry Mean		0.6	1.3	1.0	2	1510	0.5

Griffin, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Irrigated (Continued)

1. CV = 10.3%, and df for EMS = 30.
2. CV = 9.1%, 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.
4. CV = 11.4%, and df for EMS = 54.
5. CV = 8.1%, and df for EMS = 54.

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

Planted:	April 21, 2005.
Harvested:	Short-Season: August 11, 2005. Mid-Season: August 12, 2005.
Seeding Rate:	32,000 seeds/acre in 30" rows.
Soil Type:	Cecil clay loam.
Soil Test:	P = Medium, K = High, and pH = 6.3.
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:	Wheat.
Management:	Moldboard plowed, disked, and rototilled; Atrazine and Lasso used for weed control; irrigated 1.0 inch.

Test conducted by P. A. Rose.

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Calhoun, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Irrigated

Company or Brand Name	Hybrid Name	Forage Yield Dry	Forage Yield Green	Dry Matter	Grain Portion	Plant Population	2-Yr Avg Dry Forage Yield
		tons/acre		%	%	no.	tons/acre
Short-Season							
Terral	TV2140nRR	**12.2**	**34.6**	35.1	45	25483	**9.2**
NK	1851W	**10.8**	**33.4**	32.3	43	25701	**8.7**
Mycogen	2J787	10.5	27.2	38.7	52	27661	.
Mycogen	2T780	9.5	28.6	33.6	46	24829	.
Pioneer	33V15	9.1	28.5	32.0	48	26790	**7.3**
AgraTech	717RR	8.8	24.6	35.9	44	24611	**7.4**
SS	692BT	8.8	28.7	30.4	51	28314	.
Hytest	7799Bt	8.6	24.6	34.7	53	23740	**8.0**
Pioneer	33D63	8.5	26.5	32.3	45	24394	.
Average		9.6 [1]	28.5 [2]	33.9	48	25725	8.1
LSD at 10% Level		1.6	3.9	4.2	5	N.S.[3]	N.S.
Std. Err. of Entry Mean		0.7	1.6	1.7	2	1605	0.6
Mid-Season							
Greenwood	780	**11.5**	30.2	38.0	49	27225	**9.9**
Pioneer	31R87(RR2)	**11.1**	31.6	35.3	41	27879	.
AgraTech	999Bt	**11.0**	**33.7**	32.7	38	29185	.
Pioneer	32D99	**10.8**	**33.5**	32.1	43	28750	**9.7**
Pioneer	31Y43	**10.7**	**33.1**	32.4	42	26136	.
NK	N91-R9	**10.7**	**35.7**	29.8	41	27879	**9.4**
SS	804	9.8	31.1	31.7	42	28750	.
Croplan Genetics	822RR2/BT	9.8	27.2	35.8	45	26572	.
Hytest	7924RR2/BT	9.6	27.6	34.8	43	28096	.
SS	842RR2/YGCB	9.6	30.4	31.5	45	27225	.
Golden Acres	2295RR	9.4	28.0	33.6	36	25265	8.2
Vigoro	V58YR2	8.6	26.6	32.2	47	24176	7.7
Average		10.2 [4]	30.7 [5]	33.3	43	27261	9.0
LSD at 10% Level		1.2	2.7	2.8	5	N.S.	1.7
Std. Err. of Entry Mean		0.5	1.1	1.2	2	1442	0.6

Calhoun, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Irrigated (Continued)

1. CV = 14.0%, and df for EMS = 24.
2. CV = 11.4%, and df for EMS = 24.
3. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.
4. CV = 10.0%, and df for EMS = 33.
5. CV = 7.4%, and df for EMS = 33.

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

Planted:	April 20, 1995.
Harvested:	Short-Season: August 15, 2005. Mid-Season: August 17, 2005.
Seeding Rate:	32,500 seeds/acre in 30" rows.
Soil Type:	Rome gravelly clay loam.
Soil Test:	P = High, K = High, and pH = 6.1.
Fertilization:	75 lb N, 90 lb P_2O_5, and 180 lb K_2O/acre as preplant; 200 lb N/acre as sidedress.
Previous Crop:	Soybean.
Management:	Chisel plowed, disked, and rototilled; Atrazine, Lasso, Accent, and one cultivation used for weed control; irrigated 0 inches.

Test conducted by P. A. Rose and J. Stubbs.

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Blairsville, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Nonirrigated

Company or Brand Name	Hybrid Name	Forage Yield Dry	Forage Yield Green	Dry Matter	Grain Portion	Plant Population	2-Yr Avg Dry Forage Yield
		tons/acre		%	%	no.	tons/acre
Short-Season							
Pioneer	33V15	**12.0**	**28.5**	42.2	52	29282	**12.1**
Hytest	7799Bt	10.9	25.6	42.8	51	28372	**10.9**
Terral	TV2140nRR	10.6	26.8	39.5	45	28694	**11.6**
Mycogen	2T780	10.4	27.6	37.8	52	29349	.
NK	1851W	10.0	**29.6**	33.9	48	28847	**11.4**
Mycogen	2J787	9.6	24.6	38.9	50	28694	.
AgraTech	717RR	9.3	23.5	39.4	51	27726	**10.5**
Pioneer	33D63	9.2	27.1	34.1	53	26136	.
SS	692BT	8.9	23.2	38.4	54	28059	.
Average		10.1 [1]	26.3 [2]	38.6	51	28351	11.3
LSD at 10% Level		1.0	1.8	3.2	N.S.[3]	1526	N.S.
Std. Err. of Entry Mean		0.4	0.7	1.3	3	630	0.5
Mid-Season							
NK	N91-R9	**13.1**	**39.3**	33.4	55	27104	**13.1**
Pioneer	31R87(RR2)	**11.6**	34.4	33.7	48	28314	.
Greenwood	780	11.4	31.5	36.0	52	25410	**12.1**
Pioneer	32D99	11.3	32.3	34.9	50	28072	**12.3**
Hytest	7924RR2/BT	10.7	31.3	34.1	50	24880	.
SS	804	10.6	27.0	39.3	48	29598	.
SS	842RR2/YGCB	10.6	30.9	34.3	54	27830	.
Pioneer	31Y43	10.4	33.6	30.8	51	28556	.
Croplan Genetics	822RR2/BT	10.3	32.2	31.8	49	29276	.
AgraTech	999Bt	10.2	29.4	34.8	43	28072	.
Vigoro	V58YR2	8.3	24.4	34.2	49	25168	10.8
Golden Acres	2295RR	8.2	26.3	31.5	55	24442	8.5
Average		10.5 [4]	31.0 [5]	34.1	50	27227	11.4
LSD at 10% Level		1.7	4.0	3.5	N.S.	2667	1.5
Std. Err. of Entry Mean		0.7	1.7	1.4	3	1114	0.6

Blairsville, Georgia:
Evaluation of Corn Hybrids for Silage, 2005, Nonirrigated (Continued)

1. CV = 8.4%, and df for EMS = 24.
2. CV = 5.6%, and df for EMS = 24.
3. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore an LSD value was not calculated.
4. CV = 13.2%, and df for EMS = 33.
5. CV = 10.8%, and df for EMS = 33.

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

Planted:	May 9, 2005.
Harvested:	September 13, 2005.
Seeding Rate:	30,000 seeds/acre in 30" rows.
Soil Type:	Bradson clay loam.
Soil Test:	P = High, K = High, and pH = 6.2.
Fertilization:	30 lb N, 60 lb P_2O_5, and 90 lb K_2O/acre as preplant; 170 lb N/acre as sidedress.
Previous Crop:	Soybeans.
Management:	Moldboard plowed and disked; Atrazine, Bicep, and one cultivation used for weed control.

Test conducted by P. A. Rose and H. D. Garrett.