Kentucky Silage Corn Hybrids Performance: Clinton County, 2003

Row	Brand and Hybrid	CRM	Stand (plants/A)	Moisture (%)	Yield Fresh Wt (tons/A)	Yield Dry Wt (tons/A)	TDN	NE lact	CP	RFV	Value $ per ton	Value $ per acre
1	Pioneer 31Y43	117	23,958	74.4	**31.0**	**7.9**	67.4	0.68	7.9	114	**33.75**	**1046.25**
2	Garst 8288	116	28,314	69.9	**32.0**	**9.6**	**72.1**	**0.77**	7.7	**184**	**43.10**	**1379.20**
3	Syngenta N91-R9 *	124	30,056	74.1	28.0	7.2	68.1	0.69	7.2	115	**33.77**	945.56
4	Syngenta NX8201	~118	24,829	72.4	27.0	7.4	67.3	0.68	7.0	113	**35.40**	955.80
5	Pioneer 32D99	118	27,443	74.6	**32.0**	**8.1**	66.9	0.67	6.2	104	31.42	1005.44
6	Garst 8230	117	27,443	81.7	**31.0**	5.7	65.3	0.64	6.4	96	22.04	683.24
7	Syngenta N91-R9 *	124	24,394	77.1	**34.0**	**7.8**	67.2	0.67	**12.0**	103	**33.61**	**1142.74**
8	Pioneer 33J57	114	24,829	74.8	**35.0**	**8.8**	**71.2**	**0.75**	**8.2**	**155**	**35.90**	**1256.50**
9	Garst 8362	113	25,265	70.9	25.0	7.3	**69.8**	**0.72**	6.6	**138**	**38.43**	960.75
10	Syngenta N91-R9 *	124	26,572	76.6	28.0	6.5	68.2	0.69	**8.1**	117	31.35	877.80
11	Syngenta NK83-R7	117	17,860	75.5	21.0	5.1	**69.1**	**0.71**	**10.4**	**126**	**35.73**	750.33
	Check Average		27,007	75.9	30.0	7.2	67.8	0.69	9.1	112	33.25	997.50
	Study Average		25,542	74.7	29.5	7.4	68.4	0.70	8.0	124	34.14	1007.13
	Study High		30,056	81.7	35.0	9.6	72.1	0.77	12.0	184	43.10	1379.20
	Study Low		17,860	69.9	21.0	5.1	65.3	0.64	6.2	96	22.04	683.24

* Check Hybrid

Note: The hybrids are arranged in order of planting in the field. Numbers in bold are higher than the study average for that column.

Objective:

To provide unbiased silage yields and quality performance information for corn hybrids commonly sold in Kentucky. Every effort has been made to conduct the test in an unbiased manner according to accepted agronomic practices.

Explanation of terms:

- TDN-"Total Digestible Nutrients", An energy value. Energy value is the most important factor of silage for milk production and cattle gains
- NE Lact – "Net Energy for Lactation", Main energy value in dairy ration balancing
- CP – "Crude Protein", protein content.
- Value $/acre & Value $/ton is based on the University of Missouri "Feed Value" program which estimates feeding value based on expected animal nutritional performance. Feed costs were averaged from local mills. The cost of the cracked corn was $131.50/ton, and of the soybean meal 48% was $298.00/ton.

Test Location & Farm Cooperator:

Clinton County, Steve Young

Test Procedures:

Seed Corn companies submitted hybrids for testing. Nine hybrids were seeded in eight-row strips across the field (Figure 1). All plots were harvested, weighed, chopped and sampled by Extension and/or University of Kentucky

personnel. Quality analysis was conducted by Burkmann Feeds in Danville, KY. Fresh weight yields, TDN, NE lact, and CP values were used to calculate the value per ton and value per acre.

Corn seed was planted on May 14, 2003 at a target population of 26,600 seeds/A. Corn was harvested for silage on August 28, 2003. Standard agronomic practices were used.

Other Comments:

A hybrid that ranked high in all categories will likely perform well next year. Syngenta NK83-R7 had a reduced stand count due to early season insect feeding. This low stand likely reduced yields of this hybrid.

These yield and forage quality ratings are based on one field in Clinton County, Kentucky and may not represent conditions in another location.

Research conducted by:

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Available online at: http://www.uky.edu/Ag/GrainCrops/varietytesting.htm