Fairfield, Licking, and Perry Counties Commercial Corn Hybrid Side-by-Side Performance Trials, Group I

Jeff McCutcheon, Agriculture and Natural Resources Extension Agent Howard Siegrist, Agriculture and Natural Resources Extension Agent Eric Barrett, Agriculture and Natural Resources Extension Agent Phil Rzewnicki, On-Farm Research Coordinator

Objective

To evaluate the relative performance of corn hybrids currently available to farmers in the three-county area.

Background

Slater Farms Cooperator: Cooperator: Dennis DeRolph Nearest Town: Hebron Nearest Town: Glenford Luray & Oakley Soil Type: Westland & Bennington Soil Type: Previous Crop: Previous Crop: Soybeans Soybeans Planting Date: April 30, 1999 Planting Date: May 3, 1999 Planting Rate: 28,000 seeds/A Planting Rate: 30.000 seeds/A Harvest Date: October 5, 1999 Harvest Date: October 19, 1999 Harvest Pop. (avg): 28,781 Harvest Pop. (avg): 24,159 Plot Yield (avg.): 155.07 bu/A Plot Yield (avg.): 201.68 bu/A Moisture (avg.): 16.9% Moisture (avg.): 19.5%

Cooperator: Mike Thomas Cooperator: Kennedy Farms Nearest Town: Thurston Nearest Town: Thornville Soil Type: Soil Type: Pendenlon Centerburg Previous Crop: Soybeans Previous Crop: Soybeans May 7, 1999 Planting Date: May 1, 1999 Planting Date: 30,000 seeds/A Planting Rate: 27,700 seeds/A Planting Rate: Harvest Date: October 7, 1999 Harvest Date: November 17, 1999

 Harvest Pop. (avg): 28,195
 Harvest Pop. (avg): 22,522

 Plot Yield (avg.): 166.54 bu/A
 Plot Yield (avg.): 151.55 bu/A

 Moisture (avg.): 15.6%
 Moisture (avg.): 15.6%

Methods

This study was designed to compare corn hybrid performance using farms in the three-county area. Companies submitted two hybrids for evaluation. Due to the number of submissions (44), this trial was split into two groups. The split was made based on maturity information given by the companies with the shorter-season submission from each representative being placed in this group. Maturity ranges in this group were 106- to 113-day hybrids.

Hybrids were randomly planted side by side at each location. No check/tester hybrid was used. Each of the four farms was used as a replication. The hybrids were planted in six-row, field-

length strips. Strip length ranged from 397 feet to 1,142 feet. All hybrids were planted with the cooperator's planter. Fertilizer, herbicides, and insecticides were applied according to the cooperator's crop management plan and were all within recommended cultural practices for obtaining optimum grain yields.

Results

Company	Hybrid	Yield (bu/ac @ 15%)¹	Final Stand	Test Weight (lbs/bu)	Moisture (%)
LG	2579	182.3 a	27,025	58	17.2
Ruff's	R202	180.7 ab	26,575	57	17.4
Pioneer	33K81	178.3 abc	26,950	58	18.3
Agrigold	6460	176.9 abc	27,125	56	17.7
Hy Test	4612	176.3 abcd	26,650	58	17.6
Norvartis	NX6567	174.9 abcde	26,825	58	17.8
Mycogen	2717	174.0 abcde	27,175	57	17.6
Crow's	496	170.2 abcde	26,725	56	17.7
Great Lakes	5849	169.5 abcde	25,850	58	17.5
Garst	8541 IT	168.7 abcde	25,775	58	17.1
Golden Harvest	H-2515	168.6 abcde	27,125	57	17.4
Seed Consultants	SC1068	167.4 abcde	26,750	58	17.8
Birds	63F	167.2 abcde	25,750	57	17.2
Green Land	226	167.0 abcde	24,025	57	17.2
Cargill	6888	167.0 abcde	26,725	57	17.5
Land o'Lakes	6890	165.7 bcde	24,025	57	17.6
Dekalb	585	164.5 cde	24,800	58	16.1
Vigro	V1116	164.1 cdef	23,225	57	17
Clevers	415	160.7 def	26,175	57	16.9
Ag Venture	AV735	160.4 ef	25,100	57	16.7
Shur Grow	688	159.1 ef	26,175	59	16.8
Colberts	EX68	148.3 f	23,575	57	15.4

 $^{^{1}}$ Yields followed by the same letter are not significantly different at P = 0.05. (F = 1.97, CV = 6.68%) LSD = 15.92

Summary

Fifteen miles was the longest distance between any two fields for this trial. Fifteen hybrids ranging in yield from 167 to 182 bu/A were statistically the highest-yielding performers in this trial.

For additional information, contact: Jeff McCutcheon

The Ohio State University Extension

mccutcheon.30@osu.edu

² Population means were not significantly different overall at P = 0.05. (F = 1.08, CV = 9.37%)