Fairfield, Licking, and Perry Counties Commercial Corn Performance Trials

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Objective

To provide a source of objective information on the relative performance of corn hybrids currently available to farmers in the three-county area.

Background

Cooperator:	Jim and Dave Miller	Cooperator:	Mike Thomas
Nearest town:	Millersport	Nearest town:	Thurston
Soil Type:	Marengo silty clay loam	Soil Type:	Bennington
	Cardington silt loam		Centerburg
Previous Crop:	Soybeans	Previous Crop:	Soybeans
Planting Date:	April 30, 2001	Planting Date:	April 28, 2001
Planting Population:	30,000 seeds/A	Planting Population:	29,000 seeds/A
Harvest Date:	October 22, 2001	Harvest Date:	October 17, 2001
Row Width:	30 inches	Row Width:	30 inches
Plot Length:	650 feet	Plot Length:	1,000 feet
Average Harvest Pop.:	27,583 plants/A	Average Harvest Pop.:	26,646 plants/A
Average Moisture:	19%	Average Moisture:	16%
Average Yield:	174 bu/A	Average Yield:	169 bu/A
0			
Cooperator:	Slater Farms		
Cooperator: Nearest town:	Slater Farms Hebron		
Cooperator: Nearest town: Soil Type:	Slater Farms Hebron Westland silty clay loam		
Cooperator: Nearest town: Soil Type:	Slater Farms Hebron Westland silty clay loam Bennington silt loam		
Cooperator: Nearest town: Soil Type: Previous Crop:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans		
Cooperator: Nearest town: Soil Type: Previous Crop: Planting Date:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans May 1, 2001		
Cooperator: Nearest town: Soil Type: Previous Crop: Planting Date: Planting Population:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans May 1, 2001 31,500 seeds/A		
Cooperator: Nearest town: Soil Type: Previous Crop: Planting Date: Planting Population: Harvest Date:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans May 1, 2001 31,500 seeds/A October 18, 2001		
Cooperator: Nearest town: Soil Type: Previous Crop: Planting Date: Planting Population: Harvest Date: Row Width:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans May 1, 2001 31,500 seeds/A October 18, 2001 30 inches		
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Cooperator: Nearest town: Soil Type: Previous Crop: Planting Date: Planting Population: Harvest Date: Row Width: Plot Length: Average Harvest Pop.:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans May 1, 2001 31,500 seeds/A October 18, 2001 30 inches 1,250 feet 27,146 plants/A		
Cooperator: Nearest town: Soil Type: Previous Crop: Planting Date: Planting Population: Harvest Date: Row Width: Plot Length: Average Harvest Pop.: Average Moisture:	Slater Farms Hebron Westland silty clay loam Bennington silt loam Soybeans May 1, 2001 31,500 seeds/A October 18, 2001 30 inches 1,250 feet 27,146 plants/A 21%		

Methods

This study was designed to compare corn hybrid performance using three farms as replications in the three-county area. Companies submitted hybrids for evaluation based on area market share. Only six hybrids are included in this evaluation.

Planting order was randomly selected for each farm. The six hybrids were planted side by side at each location. No check/tester hybrid was used. The hybrids were planted in six-row, field-length strips. All hybrids were planted with the cooperator's planter. Fertilizer, herbicides, and insecticides were applied according to the cooperator's crop-management plan and within recommended cultural practices for obtaining optimum grain yields.

Harvest was done with the cooperator's combine. Final stand count, plot area, total weight, percent moisture, and test-weight measurements were taken. Yield was adjusted to a moisture content of 15% moisture. The longest distance between two fields used in this trial was 18 miles.

Results

Hybrid	Yield² (bu/A)	Final Stand (plants/A)	Test Weight (lbs./bu)	Moisture (%)
Pioneer 34M94	188.3 a	27,500	57.3 b	18.6 b
Seed Consultants SC1140	188.1 a	26,542	57.3 b	20.2 c
Norvartis N70-D5	184.5 a	26,958	57.8 a	19.1 b
DeKalb DK6303	183.6 ab	27,542	56.1 c	19.4 b
Golden Harvest H-9229	177.7 b	26,958	58.1 a	19.0 b
Mycogen 2625	176.9 b	27,250	56.5	16.9 a
LSD (0.05)	6.7	NS	0.58	0.76
F	4.3	<1	13.9	16.7
CV (%)	4.5	10.8	1.2	5

Table 1. Hybrid Performance Across Farm Locations.¹

¹ Means followed by the same letter are not significantly different from each other at P = 0.05. ² Yields adjusted to 15.5% moisture.

Summary and Notes

The number of cooperators was reduced this year due to rainy weather in May. One plot that was planted but not reported suffered extensive wildlife damage, rendering the data unusable.

According to this trial, the top yielding varieties, which were not significantly different from each other, were Pioneer 34M94, Seed Consultants SC 1140, Norvartis N70-D5, and DeKalb DK6303.

For additional information, contact:

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