

# 2000 Fairfield, Licking, and Perry Counties–OSU Extension Commercial Corn Hybrid Side-by-Side 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:	Chris Reichley
Nearest town:	Millersport	Nearest town:	Somerset
Soil Type:	Marengo & Cardington silt loams	Soil Type:	Killbuck, Cincinnati, & Alford silt loams
Previous Crop:	Soybeans	Previous Crop:	Soybeans
Planting Date:	May 1, 2000	Planting Date:	May 15, 2000
Planted Population:	30,500 seeds/A	Planted Population:	30,300 seeds/A
Harvest Date:	October 9, 2000	Harvest Date:	November 6, 2000
Average Harvest Pop.:	27,654 plants/A	Average Harvest Pop.:	23,482 plants/A
Average Moisture:	19.7%	Average Moisture:	18.3%
Average Yield:	212.4 bu/A	Average Yield:	163.7 bu/A
Cooperator:	Leigh Miller	Cooperator:	Slater Farms
Nearest town:	Lancaster	Nearest town:	Hebron
Soil Type:	Alexandria & Sleeth silt loams	Soil Type:	Centerburg silt loam & Pewamo silty clay loam
Previous Crop:	Wheat	Previous Crop:	Soybeans
Planting Date:	May 4, 2000	Planting Date:	May 10, 2000
Planted Population:	27,700 seeds/A	Planted Population:	30,000 seeds/A
Harvest Date:	October 21, 2000	Harvest Date:	November 22, 2000
Average Harvest Pop.:	25,875 plants/A	Average Harvest Pop.:	23,625 plants/A
Average Moisture:	18.8%	Average Moisture:	20.6%
Average Yield:	201.4 bu/A	Average Yield:	178.6 bu/A
Cooperator:	Mike Thomas	Harvest Date:	September 28, 2000
Nearest town:	Thurston	Average Harvest Pop.:	25,212 plants/A
Soil Type:	Bennington, Cardington, and Montgomery silt loam	Average Moisture:	25.7%
Previous Crop:	Soybeans	Average Yield:	190.7 bu/A
Planting Date:	May 1, 2000		
Planted Population:	29,000 seeds/A		

## Methods

This study was designed to compare corn hybrid performance using seven farms in a three-county area. Companies submitted hybrids for evaluation based on area market share. Eight hybrids were included in this evaluation.

Experimental design was a randomized complete block with the seven farms serving as replications. Planting order of the hybrids was randomly selected for each farm site. The eight hybrids were planted side-by-side at each location. No check/tester variety was used. Each of the farms had three replications to provide site-specific information to each farm. The hybrids were planted in six-row field-length strips. Strip length was greater than 750 feet at each site. All hybrids were planted with the individual 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 15% moisture. The longest distance between two fields used in this trial was 39 miles.

## Results

**Table 1. Hybrid Performance Across All Farm Locations.<sup>1</sup>**

Hybrid	Yield (bu/A) <sup>2</sup>	Final Stand (plants/A)	Test Weight (lb/bu)	Grain Moisture (%)
Pioneer 34B23	193.5 a	23,678	58.3 a	19.5 cd
Norvartis N70-D5	189.1 ab	25,940	58.1 ab	20.1 abc
Seed Consultants SC 1118	187.8 abc	25,206	58.2 a	20.2 ab
Golden Harvest H-9229	184.5 bc	25,633	58.2 a	19.9 bc
Agrigold A6490	184.3 bc	25,006	58.3 a	20.1 abc
Mycogen 2799IMI <sup>3</sup>	182.6 bc	23,760	56.8 c	20.6 a
Asgrow RX738RR	180.9 c	24,653	57.7 b	19.2 d
Pioneer 33K81	173.6 d	23,520	58.1 ab	19.9 bc
LSD (0.05)	7.1	NS	0.4	0.6
F	5.1	1.9	10.5	4
CV (%)	11.6	10.8	1.1	5

<sup>1</sup> Means followed by the same letter are not significantly different at P = 0.05.

<sup>2</sup> Adjusted to 15.0% grain moisture.

<sup>3</sup> Hybrid suffered wildlife damage at one farm location resulting in approximately 12% less yield than replicate average.

## **Summary and Notes**

According to this trial, the top yielding varieties, which were not significantly different from each other, were Pioneer 34B23, Norvartis N70-D5, and Seed Consultants SC 1118. The results for Mycogen 2799IMI should be viewed carefully as it may have performed equally well with the highest yielding hybrids had it not been damaged by wildlife at one location. The Pioneer 33K81 yielded significantly less than all other hybrids in the trial.

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