



# Result Demonstration Report



**2016 Fort Bend County Corn Variety Trial  
Texas A&M AgriLife Extension Service  
Fort Bend County**

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## Summary

Corn has historically been used (along with grain sorghum) for rotation with cotton in row crop production in Fort Bend County. In spite of recent low corn prices, corn acres more than doubled to >16,000 acres in 2016. Because it continues to be an important crop, the need to evaluate available varieties and other best management practices to provide producers with up-to-date information to make important production decisions continues.

## Objective

The objective of this demonstration plot was to evaluate nine corn hybrids for production in Fort Bend County and to provide unbiased data that local producers could reference when selecting corn hybrids for future production years.

## Materials and Methods

Nine corn hybrids (Dyna-Gro DG54VC52, B-H Genetics 8465SS, Dekalb 67-72, Phoenix 6542A4, Terral REV 25BHR26, Golden Acres G6611, Syngenta NK N78S, and Mycogen 2C786, and TAMU 102 from the Texas A&M Corn Breeding Program) were planted on February 18, 2016 at a rate seeding rate of 24,000 seeds per acre. A total of 157 lb. nitrogen, 5 lb. of phosphorus (P2O5), and 1 lb. of potassium (K2O) were applied to the crop. The experiment was arranged in a randomized complete block design with six rows (36" spacing) per treatment and three replications. While this was dryland production, 2016 was an especially rainy year with more than 28 inches of rainfall between planting and harvest. Additional climate information can be found page 1. On August 5, 2016 the plot was harvested, weighed, and tested for moisture and bushel weight. An analysis of variance (ANOVA) was performed for bushel weight, moisture and yield (adjusted to 14 percent moisture) and means were separated using Fisher's protected LSD.

## Results

There were differences in bushel weight and yield per acre ( $p = 0.029$  and  $p = 0.006$ , respectively) across the nine varieties tested (Table 1).

**Table 1:** Grain Moisture, Bushel Weight, and Yield for Corn Hybrids Evaluated in the Fort Bend County Trial.

Company/Brand	Hybrid	Traits	Moisture (%)	Bushel Weight (lbs.)	Yield Bu./Acre
Monsanto/Dekalb	DKC 67-72	GEN VT2P	14.0	57.7 AB	157.5 A
Texas A&M AgriLife Res.	102	RR	14.2	58.0 A	154.3 A
Golden Acres Genetics	G6611	GEN VT3P	14.0	57.3 ABC	153.9 A
Terral Seed	25BHR26	HX1	14.0	57.3 ABC	153.7 AB
CPS Dyna-Gro	D54VC52	GEN VT2P	14.1	56.7 ABCD	152.1 AB
B-H Genetics	BH8465SS	GEN SSX	13.9	55.7 D	151.7 ABC
Mycogen Seeds	2C786	SSX	14.0	56.2 CD	147.1 BCD
Advanta/Phoenix	6542A4	V3111	14.0	56.0 CD	144.7 CD
Syngenta	N78S	V3111	14.0	56.3 BCD	143.9 D
Mean			14.03	56.8	151.0
CV (%)			1.000	1.000	2.6
LSD (P=.05)				1.41	6.8
Treatment Probability (P>f)			0.461	0.029	0.006

Means followed by same letter do not significantly differ (P=.05, LSD)

### **Conclusions**

Among the nine hybrids, there was no difference between yields of the top six (LSD = 6.8 bushels,  $p = 0.05$ ), which ranged from 157.5 to 151.7 bushels per acre. The average yield across all hybrid was 151.0 bu./acre, down from 158.4 bu./acre for 2015. This year, we observed higher than average yields than is typical for Fort Bend County. The objective of this result demonstration was met and it will provide an unbiased analysis of the nine corn hybrids and will provide producers with valuable information to select hybrids for production in Fort Bend County. Because of the continued interest and possible increase in corn acreage in Fort Bend County, this result demonstration will be continued next year.

### **Acknowledgements**

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