Result Demonstration Report

Fort Bend County Corn Variety Trial
Texas A&M AgriLife Extension Service
Fort Bend County
Cooperator: Alan and Lisa Stasney
John Gordy – County Extension Agent, Fort Bend County
Ronnie Schnell, Ph.D. – Assistant Professor and Extension Specialist

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, there are still more than 7,000 acres planted in Fort Bend County annually, with that amount likely to rebound some to return to levels closer to the historical average. 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 eight 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

Eight corn hybrids (Dyna-Gro DG57DC58, B-H Genetics 8475, Dekalb 62-08, Phoenix 6522A4, Terral REV 23BHR55, Golden Acres G7601, Syngenta NK N78S, and Mycogen 2C797) were planted on March 29, 2019 at a rate seeding rate of 24,000 seeds per acre. A total of 213 lb. nitrogen, 54 lb. of phosphorus (P2O5), and 54 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, 2015 was an especially rainy year with more than 70 inches of rainfall between January 1 and December 31, much of that in large rain events throughout the growing season. On August 10, 2015 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 moisture, bushel weight, and yield per acre ($p < 0.001$, $p = 0.005$, and $p < 0.001$, respectively) across the eight varieties tested.

Company/Brand	Hybrid	Traits	Moisture (%)	Bushel Weight (lbs.)	Yield Bu./Acre
Monsanto/Dekalb	DKC 62-08	GEN SSX	11.2 CD	60.9 A	170.0 A
Terral/REV	23BHR55	OPT INT	11.0 DE	59.2 C	165.9 A
Golden Acres Genetics	G7601	GEN VT3P	11.7 AB	60.0 B	160.3 B
Mycogen	2C797	SSX	10.8 E	59.9 B	158.3 BC
Syngenta	N78S	V3111	11.5 ABC	59.8 BC	153.9 CD
B-H Genetics	BH 8475	GEN SSX	11.3 CD	60.7 A	153.7 CD
CPS Dyna-Gro	DG57DC58	GEN VT2P	11.4 BC	59.8 BC	153.6 D
Advanta/Phoenix	6522A4	V3111	11.8 A	59.9 B	151.1 D
Mean			11.34	60.02	158.4
CV (%)			1.711	0.6599	1.672
LSD (P=.05)			0.34	0.69	4.6
Treatment Probability (P>f)			<0.001	0.005	<0.001

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

Conclusions

Among the eight varieties, DKC 62-08 and REV 23BHR55 outperformed the other six hybrids. The average yield across all hybrid was 158.4 bu./acre which was very good compared to typical Fort Bend County corn yields. The objective of this result demonstration was met and it will provide an unbiased analysis of the eight 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

Special thanks to Ronnie Schnell for coordinating and providing guidance for the demonstration, and Alan and Lisa Stasney for space, equipment, and manpower.