Agriculture and Natural Resources

Holubec Seed Test Strip Trial
Texas AgriLife Extension Service
McCulloch County
Cooperator: Holubec Farms

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Summary

In November of 2010, a wheat variety strip trial was established at Holubec Farms to evaluate varieties of wheat in a different location, under different growing conditions than that of the Brady Nursery. The Brady Lake Nursery has traditionally been utilized in making planting decisions in the McCulloch County area, and additional data from another site can strengthen producers abilities to make those decisions. The plot is utilized on the Syngenta/Agri-Pro field-day as a tour stop pre-harvest. The trial has grown from the original 7 varieties to 18 for the 2012 tests and should be included in future result demonstration work and small grains field-days for McCulloch County.

Objective

The strip trial was established to compare different varieties of wheat under similar growing conditions in the Central Texas area. Traditional varieties were grown alongside newer released varieties that have not had as much exposure to area producers. Grain Yield and Test Weight Data as well as protein levels, heading date and stem strength on 18 varieties.

Materials and Methods

Eighteen varieties were selected by the cooperator and Dr. David Drake to be included in the test plot. They were dry planted on November 10, 2011 no-till. Pre-plant fertilizer was applied at a rate of 200 lbs. of 18-18-0-3s per acre, and top dressed with 120lbs/ acre of 29-0-0-3s. Total rainfall from seeding until harvest was 11.5 inches. No rainfall was noted during heading with many 100 degree days lowering bushel weights. Seeding rate was 50 lbs/acre. Major winds on May 7th with speeds in excess of 50 mph caused lodging of some varieties and thus stem strength was included in the 2012 data collected. Special thanks go out to the Holubec's for harvesting this plot on May 30, 2012 six hours before a major hail storm that would have negated this year's trial.

Results and Discussion

The following information was observed for the varieties in the plot.

Variety	Stand	Maturity	Grain Yield	Test Weight	Protein
			Bu/ac	Lbs/bu	%
Coronado	2	4/2/12	62.1	56.3	14.4
TAM 203	4	4/3/12	61.7	56.5	15.2
Ruby Lee	7	3/31/12	59.7	58.0	13.9
Greer	2	4/7/12	59.6	53.5	15.7
Doans	6	4/1/12	56.8	58.5	14.3
TAM 113	3	4/9/12	51.7	58.0	14.8
W-B Cedar	5	3/31/12	51.0	54.0	15.1
TAM 112	8	4/2/12	50.4	56.0	14.7
Iba	3	4/4/12	50.1	56.0	14.5
Gallagher	4	4/2/12	48.3	56.3	15.1
Fuller	6	4/1/12	46.2	54.5	16.2
Winterhawk	4	4/3/12	46.0	57.0	15.6
Armor	6	3/31/12	45.6	55.0	15.7
T 158	3	4/8/12	45.6	54.5	11.2
Duster	4	4/6/12	45.0	58.0	15.8
OK 08328	2	4/8/12	44.7	55.0	14.7
Santa Fe	3	4/6/12	43.8	57.0	16.7
Garrison	3	4/8/12	41.3	57.0	16.5

Maturity was determined on a “heading date” at which 95% or more exerted heads were observed.
Stand was evaluated on a 1-10 Scale with 1-Excellent Standing Erect, 10-Lodged and Wind Blown

Conclusions

Grain yield was above average in 2012, and timely rains while seed heads were filling would have put this trial at bumper crop levels. Maturity with no late season freezes seemed to have little bearing on grain yield in the 2012 harvest results. Insect and disease pressure was extremely low throughout the growing season. The data collected will certainly prove valuable when compiled with additional information such as the Brady Nursery information and future years’ data collected at this site. Producers are encouraged to compare results with additional data from the Brady Nursery and other trials. Results for the Brady Nursery and other trials can be found at varietytesting.tamu.edu .

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