



Result Demonstration Report

Evaluation of Soft Winter Wheat Varieties

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McGregor, Texas

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Summary: Eight soft winter wheat varieties were evaluated in this trial and harvested for grain to measure yield. Soft wheat yields between the tested varieties varied throughout this test. Coker 9553 produced the highest grain yield at 3004 pounds/acre (50 bu/a) while LA 754 produced the lowest yield (1053 lb/a or 18 bu/a). The trial average yield was 2055 pounds per acre or 34 bushels per acre.

Objective: This demonstration was conducted to evaluate both the yield potential as well as the straw strength of several soft red winter wheat varieties in the Central Texas Blacklands.

Materials and Methods: Strip plots were planted on October 20, 2014 using the producer's grain drill calibrated to deliver 120 pounds of seed per acre. Fertilizer applications consisted of 100 lbs 18-46-0 and Anhydrous.

These strip plots were harvested on June 15, 2015 using the producer's combine. Grain yield, bushel weight, and seed moisture were obtained through the use of a weigh wagon. All yields were adjusted to 14% moisture. A subsample of each variety was sent to the Fort Worth Grain Exchange to determine sprout damage. Lodging scores were also obtained at harvest.

Results and Discussion: Coker 9553 produced the highest yield in the test with 3004 pounds per acre (50 bu/a). Yields ranged from 17 to 50 bushels per acre (See Table I. Evaluation of Soft Winter Wheat Varieties). The average yield for the trial was 34 bushels per acre with an average test weight of 54 pounds/bushel and an average moisture at harvest of 11.06%.

Coker 9553 and TV8861 provided the heaviest test weight of 55.5 lb/bu. LA754 provided the lowest test weight (53.0 lb/bu).

Economic Analysis: The varieties producing the highest grain yield obviously generated the highest gross income. Production practices, seed cost and other cost of production were essentially equal for all varieties. Leaf and stripe rust susceptible varieties may require a foliar

fungicide treatment that cost from \$2.50 to \$8.00 acre, therefore selecting rust resistant varieties can reduce input costs.

Utilizing the local evaluator price at harvest for soft winter wheat which was valued at \$4.35/bushel, the top grossing variety was valued at \$217.84 per acre, while the least grossing variety exhibited a value of \$76.35, which is a difference per acre of \$141.49. This difference illustrates the variance between soft winter wheat varieties and is evidence for the need of continued evaluation of soft winter wheat varieties and how they perform in local growing conditions.

Table I. Evaluation of Soft Winter Wheat Variety Trial, 2015 – Niemeier, McGregor

Plot No.	Wheat Variety	%Moisture @Harvest	Test Weight (Lbs/Bu)	Yield(a) Lbs/A	Yield Bu/A	Lodging (b)	Gross Value \$/A (c)
1	Pioneer 25R39	11.9	54	2452	41	2	177.80
2	Coker 9553	11.4	55.5	3004	50	2	217.84
3	LA841	10.7	54	1831	31	1	132.79
4	Pioneer 25R50	10.55	53.5	1446	24	3	104.90
5	LA754	11	53	1053	18	2	76.35
6	TV8861	11	55.5	2932	49	1	212.58
7	Pioneer 25R40	10.95	54.5	1784	30	2	129.40
8	USG 3201	11.05	53.5	1939	32	2	140.65
		11.06	54.18	2055.74	34.26	1.87	149.65

(a) Denotes yield adjusted to 14% moisture

(b) Lodging score (5 being desirable and 1 being non-desirable, or on the ground)

(c) Gross Value per Acre is calculated assuming average market price (\$0.00/bushel) at time of harvest at local elevator

Demonstration: Evaluation of Soft Winter Wheat Varieties for Yield Comparison

Cooperators Name and Location: Jerry and Jason Niemeier, McGregor Texas

Date Planted: October 120, 2014

Date Harvested: June 15, 2015

Fertilizer Used: 100 lbs of 18-46-0 Anhydrous

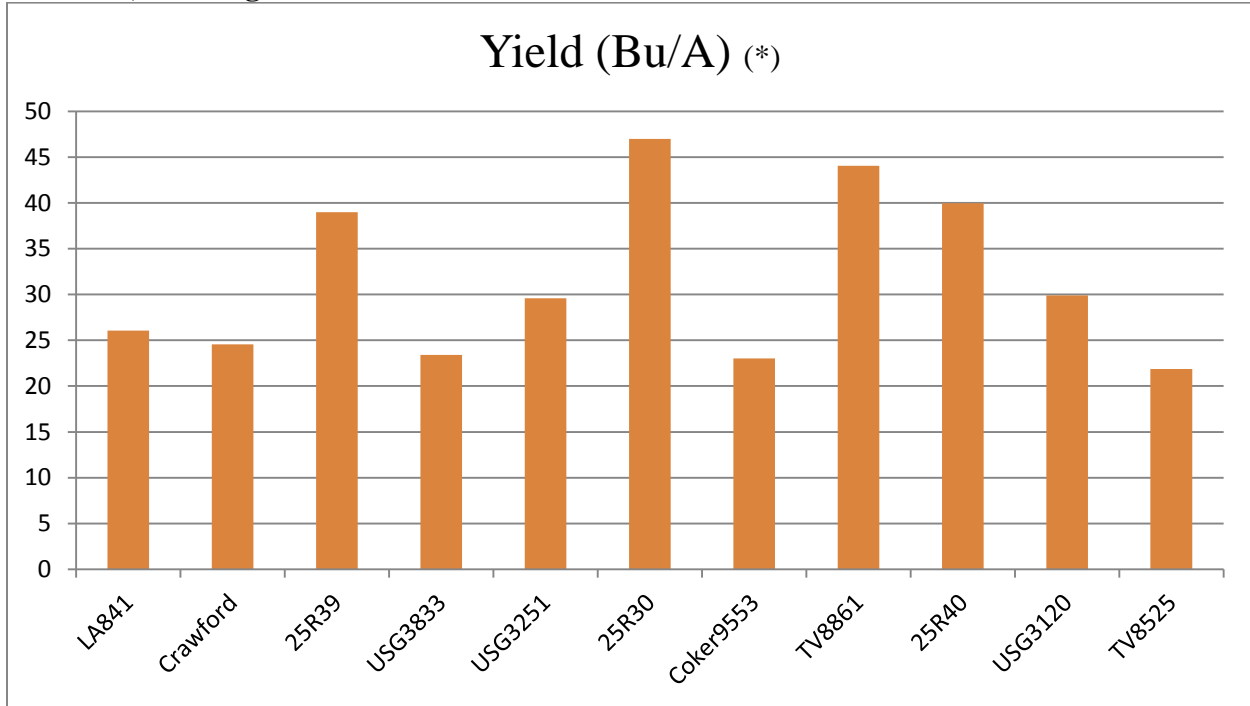
Last Crop: Corn

Seeding Rate: 120 pounds/Acre

Harvest: Producer combine harvested, utilized grain buggy/weigh wagon assisted at harvest by Ron Joiner of Pioneer

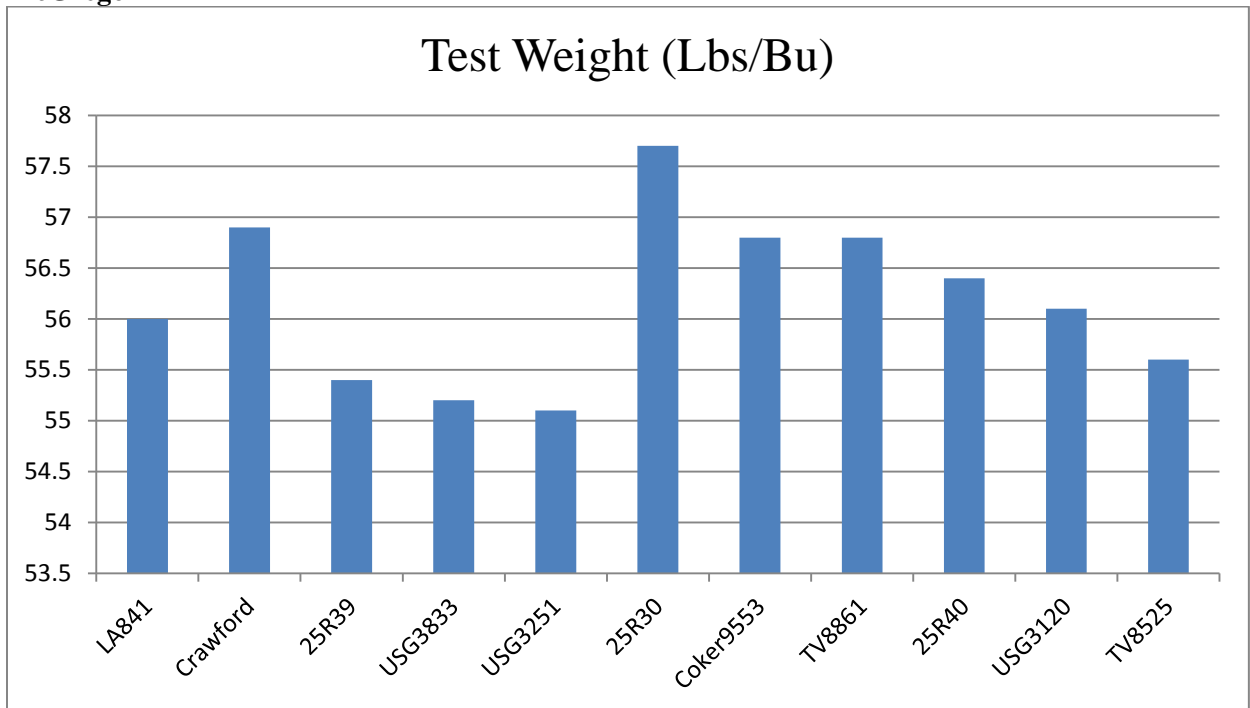
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Chart I. Evaluation of Soft Winter Wheat Varieties Yield Potential, 2015 – Jerry and Jason Niemeier, McGregor



(*) Yields adjusted to 14% moisture

Chart II. Evaluation of Soft Winter Wheat Variety Test Weight, 2015 – Jerry and Jason Niemeier, McGregor



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