

Oakes Irrigation Research Site

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Soybean Variety Trial

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One soybean variety trial was conducted at the Oakes Irrigation Research Site, a Roundup Ready ® trial. Results for the Roundup Ready trial are listed in Table 1. The trial had 47 varieties.

MATERIALS AND METHODS

Soil:	Embden loam, Embden sandy loam and Maddock sandy loam; pH = 6.8; 1.6% organic matter; soil N 19 lbs/acre; soil P was very high; soil K was high; soil S was low.
Previous crop:	2013 – field corn.
Seedbed preparation:	Spring conventional tillage.
Planting:	Planted May 21 in 30-inch rows.
Plots:	Plots were 17 ft long by 5 ft (2 rows) wide. The study had four replications.
Fertilizer:	Broadcast 25 lbs N/acre, 44 lbs P ₂ O ₅ /acre, 47 lbs K ₂ O/acre and 19 lbs S/acre as 10-18-19-8 April 21.
Irrigation:	Overhead sprinkler irrigation as needed.
Pest control:	Trust (1 pt/acre) May 21, Roundup Power Max (20 oz/acre) + AMS (1 lb/10 gal) June 24, Section 2EC (8oz/acre) + COC (1pt/acre) July 9 controlled weeds. Endura (8 oz/acre) July 17 and July 25, T-Methyl (26 oz/acre) July 31 controlled disease. Kendo (3 oz/acre) July 17 controlled insects.
Harvest:	October 9 with a plot combine.

RESULTS

Yields in the Roundup Ready trial averaged 67.1 bu/acre.

Table 1. Soybean variety trial (Roundup Ready) at the Oakes Irrigation Research Site in 2014.

Brand	Variety	Mat Group ¹	Days to PM	Plant		Seeds/ Pound	Seed		Test Wt lb/bu	Seed Yield		
				Ht inch	Lodge 0 to 9		Oil %	Protein %		2-yr. 2014	3-yr. Ave.	3-yr. Ave.
Nuseed	2074 RR2YN	0.7	122.8	33.5	0.5	2908	17.7	35.0	54.9	67.2	--	--
Nuseed	2093 RR2YN	0.9	125.3	29.5	0.8	2717	17.8	34.5	56.2	69.9	73.9	--
Nuseed	2122 RR2YN	1.2	125.0	29.3	0.8	2621	18.0	35.8	56.4	64.7	71.2	--
NuTech/G2 Genetics	7063	0.6	121.5	29.8	0.0	2706	18.7	32.6	55.3	70.0	69.4	--
NuTech/G2 Genetics	6083	0.8	121.0	30.3	0.0	2626	18.6	34.6	56.1	69.1	--	--
NuTech/G2 Genetics	6084R2	0.8	122.3	35.5	0.0	2321	18.3	35.2	55.3	67.9	--	--
NuTech/G2 Genetics	7104	1.0	125.0	28.5	3.0	2470	18.8	35.1	55.2	61.9	--	--
NuTech/G2 Genetics	6112	1.1	125.0	30.3	1.3	2543	17.2	35.2	56.3	65.5	--	--
NuTech/G2 Genetics	6143	1.4	125.5	29.8	1.8	2647	17.2	35.1	56.0	64.5	--	--
NuTech/G2 Genetics	7157	1.5	124.5	31.8	1.5	2521	18.9	34.3	55.2	66.5	--	--
Thunder	3506 R2YN	0.6	122.5	33.0	0.0	2858	17.8	35.1	54.9	70.6	--	--
Thunder	3307 R2Y	0.7	123.3	26.8	0.5	2208	17.3	35.7	56.0	71.6	--	--
Thunder	3408 R2YN	0.8	124.5	28.0	1.5	2677	18.0	34.4	55.9	71.4	--	--
Thunder	3511 R2YN	1.1	126.0	24.3	5.0	2840	18.3	34.7	56.0	60.4	--	--
Thunder	3114 R2Y	1.4	127.3	30.8	5.3	2789	17.1	35.1	55.5	65.3	69.9	73.9
Channel	1108 R2	1.1	125.5	24.5	3.0	2924	18.4	34.8	55.6	57.3	--	--
Integra	20815N	0.8	124.5	26.3	2.0	2624	17.7	34.4	56.1	70.2	73.7	--
Integra	20915N	0.9	126.3	33.0	0.8	2906	17.8	34.3	55.4	73.7	--	--
Integra	21115N	1.1	124.8	25.5	0.8	2730	17.6	35.7	56.0	66.0	--	--
REA Hybrids	66G14	0.6	121.8	33.5	0.3	2992	17.8	34.7	55.0	63.2	64.5	--
REA Hybrids	R0815	0.8	123.5	25.8	1.0	2810	18.2	34.2	55.8	69.4		
REA Hybrids	69G13	0.9	123.3	34.0	0.5	2717	18.2	34.3	55.6	69.1	70.8	73.1
REA Hybrids	69G14	0.9	124.5	28.8	1.5	2631	18.1	34.1	55.7	68.8	74.2	--
REA Hybrids	71G14	1.1	125.8	26.8	2.0	2657	18.0	34.5	56.3	65.9	73.8	--
REA Hybrids	R1215	1.2	126.8	29.5	2.3	2990	17.1	35.5	55.3	65.8	--	--
Dyna-Gro	S09RY64	0.9	125.8	28.5	1.8	2865	17.6	34.4	55.9	67.4	71.0	--
Dyna-Gro	S12RY44	1.2	125.0	28.0	0.8	2701	17.7	35.5	56.0	68.5	70.1	--
Dyna-Gro	S14RY95	1.4	124.8	32.0	0.8	3103	18.4	34.0	55.8	65.8	--	--
Dairyland	DSR-0711/R2Y	0.7	122.3	34.8	0.3	2526	18.8	33.5	56.1	63.3	--	--
Dairyland	DSR-0904/R2Y	0.9	121.8	32.0	0.3	2653	18.3	34.3	55.6	69.6	72.3	73.7
Dairyland	DSR-1120/R2Y	1.1	126.5	30.0	4.3	2222	18.6	34.7	55.3	63.2	70.3	--
Dairyland	DSR-1340/R2Y	1.3	125.8	30.0	3.5	2797	17.5	34.1	55.2	67.7	--	--
Legacy Seeds	LS0634 NRR2	0.6	122.5	34.5	0.0	2881	17.8	35.3	54.9	66.3	--	--
Legacy Seeds	LS0833 NRR2	0.8	125.3	27.3	2.5	2672	18.0	34.2	56.1	70.6	--	--
Legacy Seeds	LS1134 NRR2	1.1	126.8	24.0	4.5	2801	18.4	34.5	55.6	59.4	--	--
Legacy Seeds	LS1314 NRR2	1.3	126.8	31.0	1.8	2908	18.0	33.9	54.9	68.2	--	--
MEAN			124.5	29.8	1.5	2695	18	34.7	55.6	67.1		
C.V. (%)			1.0	6.7	25.9	2.8	0.9	0.7	1.0	5.8		
LSD 0.10			1.4	2.4	1.2	88	0.18	0.29	0.6	4.6		
LSD 0.05			1.7	2.8	1.4	106	0.21	0.35	0.8	5.5		

Table 1. Soybean variety trial (Roundup Ready) at the Oakes Irrigation Research Site in 2014.

Brand	Variety	Mat Group ¹	Days to PM	Plant		Seeds/ Pound	Seed		Test Wt lb/bu	Seed Yield		
				Ht inch	Lodge 0 to 9		Oil %	Protein %		2-yr. 2014	3-yr. Ave.	3-yr. Ave.
PFS	14R09N	0.9	126.8	27.3	2.5	2762	18	34.0	55.3	67.6	--	--
PFS	14R11N	1.1	125.0	28.8	1.5	2755	18	35.2	56.0	68.1	--	--
PFS	14R13	1.3	123.5	39	0.5	2420	18	34.5	56.0	67.6	68.2	--
Wensman Seed	W 3062NR2	0.6	121.0	24.5	0.0	2542	17	36.9	55.3	64.5	67.0	--
Wensman Seed	W 3080NR2	0.8	124.0	25.3	1.5	2932	18	34.1	55.3	68.4	--	--
Wensman Seed	W 3090NR2	0.8	123.3	36.8	0.0	2661	18	34.3	55.5	68.4	71.0	71.8
Wensman Seed	W 3102NR2	1.0	126.8	27.5	2.5	2845	18	34.0	55.2	72.9	75.2	--
Wensman Seed	W 3121NR2	1.2	125.3	29.3	1.0	2739	18	35.4	56.5	69.1	72.7	--
Proseed	P2 20-90	0.9	125.5	25.8	3.5	2376	18	35.0	55.8	62.6	68.8	69.2
Proseed	30-11	1.1	123.8	34.3	1.0	2458	18	35.0	55.5	70.5	--	--
Proseed	30-12	1.2	124.8	31.3	1.0	2615	18	35.2	55.3	67.7	--	--
MEAN			124.5	29.8	1.5	2695	18	34.7	55.6	67.1		
C.V. (%)			1.0	6.7	25.9	2.8	0.9	0.7	1.0	5.8		
LSD 0.10			1.4	2.4	1.2	88	0.18	0.29	0.6	4.6		
LSD 0.05			1.7	2.8	1.4	106	0.21	0.35	0.8	5.5		

Planting Date = May 21 Harvest Date = October 9; Previous Crop = Field corn

¹ Maturity group based on data provided by seed company.



Soybean variety trial Roundup Ready @.