

15" vs 30" Row Spacing for Soybeans

Study ID: 709047201701

County: Dawson

Soil Type: Cozad silt loam 0-1% slope; Cozad silty clay loam 0-1% slope

Planting Date: 5/16/17

Harvest Date: 10/12/17

Population: 130,000

Variety: Pioneer 27T59R

Reps: 5

Previous Crop: Corn followed by winter wheat cover crop

Herbicides: *Pre:* 22 oz/ac Roundup PowerMAX® and 3 oz/ac Enlite® on 5/24/17 *Post:* 22 oz/ac Roundup PowerMAX®, 1.5 qt/ac Warrant®, 6 oz/ac Section® 2EC, and 0.6 oz/ac Cadet® on 6/23/17

Seed Treatment: Inoculant, fungicide, Gaucho® insecticide

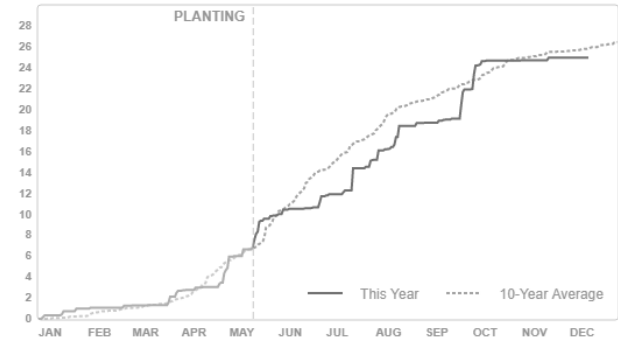
Foliar Insecticides: None

Foliar Fungicides: None

Fertilizer: 47 lb/ac average 11-52-0 (variable rate application) and 47 lb/ac average 0-0-60 (variable rate application)

Irrigation: Pivot, Total: 4"

Rainfall (in):



Soil Test (March 2017):

Sample	pH	Soluble		KCI Nitrate		Mehlich 3	CaPO ₄	Ammonium Acetate				Sum of	DPTA
		Salts	OM	NO ₃ -N	NO ₃ -N	P	SO ₄ -S	K	Ca	Mg	Na	Cations	Zn
		mS/cm	%	ppm	lb/ac	-----ppm-----						meq/100g	ppm
1	7.4	0.6	2.7	17	41	108	32	662	1788	462	87	15	3.9
2	7.4	0.5	3.0	12	29	124	29	645	2410	600	100	19	3.5
3	7.4	0.6	2.7	22	53	108	31	610	1732	460	75	14	4.0
4	7.3	0.5	2.4	14	34	93	25	552	2200	474	81	17	3.2

Introduction: Soybeans were planted following a winter wheat cover crop that was terminated on 5/24/17. The two treatments being studied were planted with a no-till planter in 30" rows and drilled with a no-till drill in 15" spacing.

Results:

	Harvest Stand Count	Lodging (%)	Moisture (%)	Yield (bu/acre)†	Marginal Net Return‡ (\$/ac)
15"	105,000	1	11.5 A*	67 A	593.71 A
30"	112,000	2	12.0 A	64 B	570.38 B
P-Value	-	-	0.243	0.033	0.033

*Values with the same letter are not significantly different at a 90% confidence level.

†Bushels per acre corrected to 13% moisture.

‡Marginal net return based on \$8.90/bu soybean.

Summary:

- Harvest stand counts and lodging were recorded at select locations in the field. Because they were not recorded for each replication, statistics were not conducted for these variables.
- There was no moisture difference between the two treatments.
- Yield was 3 bu/ac higher for the 15" drilled treatment compared with the 30" planted treatment.
- Marginal net return was significantly greater for the 15" drilled treatment.

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