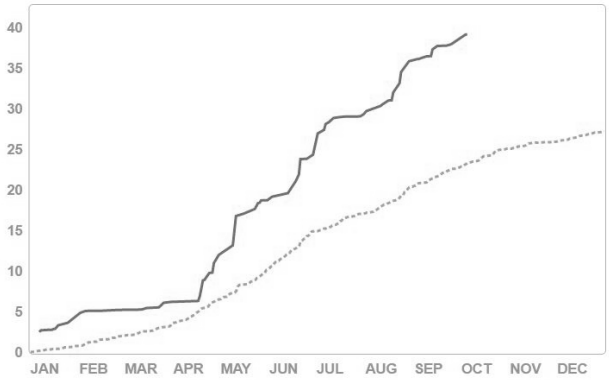
Soybean Seeding Rate in 30" Rows

Study ID: 401155201601
County: Saunders
Soil Type: Yutan, eroded-Judson complex; Pohocco silty clay; Judson silt loam
Planting Date: 5/15/16
Harvest Date: 9/27/16
Population: various
Row Spacing (in): 30
Hybrid: Fontenelle 2.4
Reps: 4
Previous Crop: Corn
Tillage: No-Till
Herbicides: ***Pre:*** 3 oz/acre Valor® XLT, 32 oz/acre Roundup®, 16 oz/acre 2,4-D
Post: 54 oz/acre Flexstar® GT
Seed Treatment: Poncho®

Foliar Insecticides: None
Foliar Fungicides: None
Fertilizer: None
Irrigation: Pivot, Total: None
Rainfall (in):



Introduction: Previous on-farm research has demonstrated that planting rates of 80,000 to 120,000 seeds/acre generally result in the highest profitability. The purpose of this study was to determine the most profitable soybean seeding rate. The populations chosen in this study are common to growers in the area. Soybeans were planted in 30" rows on May 15, 2016.

Results:

	Early Season Stand Counts (July 1, 2016)	% of Planted Seeds Emerged	Harvest Stand Count	% of Planted Seeds Present at Harvest	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
90,000 seeds/ac	79,250 D*	88 A	80,000 D	89 A	72 A	$627.43
120,000 seeds/ac	102,000 C	85 A	101,750 C	85 A	70 A	$596.07
150,000 seeds/ac	124,250 B	83 A	121,500 B	81 A	72 A	$601.71
180,000 seeds/ac	147,250 A	82 A	148,750 A	83 A	71 A	$579.61
P-Value	<0.0001	0.225	<0.0001	0.233	0.9196	N/A

*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 $9.25/bu soybean and $60/unit seed cost (140,000 seeds/unit).

Summary: No yield increase was seen for planting higher than 90,000 seeds/acre. There was no difference in the percent of planted seeds emerged or at harvest. Based on the cost of seed, planting 90,000 seeds per acre rate maximized net returns.

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In Partnership with: Nebraska Soybean Checkoff; Nebraska Corn Growers Association; Nebraska Dry Bean Commission