



# Nebraska On-Farm Research Network

## TWO PLANT POPULATIONS UNDER IRRIGATION

Study ID: 053155199001

Saunders County

1990

Objective: To determine and document the effect on profitability of a reduced plant population versus a conventional plant population.

### TREATMENT

#### LOW POPULATION

Disking

Field cultivation

Planting: Hobbit at 150,000 seeds per acre; banded application of 1 pint Dual and .25 pounds Sencor DF

Cultivation

Cultivation

Ropewick application of Roundup

Rouging

Irrigation

#### HIGH POPULATION

Disking

Field cultivation

Planting: Hobbit at 225,000 seeds per acre; banded application of 1 pint Dual and .25 pounds Sencor DF

Cultivation

Cultivation

Ropewick application of Roundup

Rouging

Irrigation

### COMPARATIVE COST BUDGET

Soybean seed:

52 pounds Hobbit \$ 9.88

Comparative cost \$ 9.88

Soybean seed:

78 pounds Hobbit \$14.82

Comparative cost \$14.82

**Nebraska Soybean & Feed Grains Profitability Project**



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

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## RESULTS:

Early population		
Low population	150000	**
High population	221000	
Final population		
Low population	131000	**
High population	191000	
Population loss		
Low population	10.9%	
High population	12.5%	
Plant height		
Low population	24.3"	
High population	23.4"	
Pod height		
Low population	7.3"	
High population	7.4"	
Moisture		
Low population	11.0%	*
High population	11.1%	
Sample weight		
Low population	56.4	
High population	56.5	
Yield(13%)		
Low population	53.1	
High population	52.4	

\* - significantly different at 95 % confidence level

\*\* - significantly different at 99% confidence level

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