



Nebraska On-Farm Research Network

Phosphorus Fertilizer vs. No Fertilizer-Soybeans

Study ID: 101025199301

County: Cass

Year: 1993

OBJECTIVE: To determine and document the profitability of using phosphorus fertilizer versus no fertilizer on soybeans.

FERTILIZER Treatment:

Disk

Disk

Fertilize: 100 pounds/acre of 18-46-0

Herbicide: 1 quart Prowl, 0.5 pints
Command and 2 ounces
Scepter.

Plant

Cultivate:

Rouge

Harvest

NO FERTILIZER Treatment:

Disk

Disk

None

1 quart Prowl, 0.5 pints
Command and 2 ounces
Scepter.

Plant

Cultivate:

Rouge

Harvest

Nebraska Soybean & Feed Grains Profitability Project



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FERTILIZER

Comparative cost (per acre)

NO FERTILIZER

Comparative cost (per acre)

Fertilizer \$9.40

None \$0.00

Total \$9.40

Total \$0.00

VARIABLE

1993
Soybeans

Final population (seeds/acre)

Fertilizer

117,100

No Fertilizer

119,900

Plant height

Fertilizer

27.0" ***

No Fertilizer

23.6"

Soil Test

Pod height

Fertilizer

4.8"

No Fertilizer

5.1"

1993

SOYBEANS

Moisture (%)

Fertilizer

9.9 **

No Fertilizer

9.8

5 ppm, Bray P_i

Test weight (pounds/bushel)

Fertilizer

57.7

No Fertilizer

57.6

Summary: The yield for the phosphorous fertilizer treatment was significantly higher in 1993.

Yield (13 %) (bushels/acre)

Fertilizer

44 **

No Fertilizer

36

** significantly different at 95% confidence level

*** significantly different at 99% confidence level

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