# Nebraska On-Farm Research Network

## POST-EMERGENCE WEED CONTROL VERSUS PREPLANT-INCORPORATED WEED CONTROL UNDER IRRIGATION

Study ID: 113155199001
Saunders County
1990

Objective: To determine and document the effect on profitability of a post-emergence weed control program versus a preplant-incorporated herbicide program.

TREATMENT

| POST-EMERGENCE WEED CONTROL | PREPLANT-INCORPORATED WEED CONTROL |
|---|---|
| Fall disking | Fall disking |
| Disking | Disking: incorporation of 1.25 pints Command and 2 pints Prowl |
| Field cultivation | Field cultivation |
| Planting: Jaques 357 | Planting: Jaques 357 |
| Irrigation | Irrigation |
| Application of .25 ounces Classic, .25 ounces Pinnacle, 9 ounces Assure, .5 gallon 28% UAN, and 2.9 ounces Induce(surfactant) | Cultivation |
| Cultivation | Irrigation: 3 times |
| Irrigation: 3 times | |

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COMPARATIVE COST BUDGET

| Chemicals: | | Chemicals: | |
|---|---|---|---|
| .25 ounces Classic | $ 4.04 | 1.25 pints Command | $ 9.61 |
| .25 ounces Pinnacle | 5.80 | 2 pints Prowl | 5.68 |
| 9 ounces Assure | 7.19 | Roundup through bean bar | 1.00 |
| .5 gallon 28% UAN | 0.47 | | |
| 2.9 ounces Induce | 0.44 | | |
| Field operations: | | Field operations: | |
| Spraying | $ 3.67 | Preplant incorporate | $ 0.30 |
| | | Bean bar application | 1.50 |
| Equipment costs: | | Equipment costs: | |
| Sprayer ($2800) | | Preplant-incorporate equipment ($1000) | |
| Comparative cost | $21.61 | Comparative cost | $18.09 |

Nebraska Soybean & Feed Grains Profitability Project

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**RESULTS:**

| | | |
|---|---|---|
| Early population | | |
| | Pre-/post-emergence | 152000 * |
| | Preplant-incorporated | 142000 |
| Final population | | |
| | Pre-/post-emergence | 134000 |
| | Preplant-incorporated | 124000 |
| Population loss | | |
| | Pre-/post-emergence | 9.5% |
| | Preplant-incorporated | 12.6% |
| Plant height | | |
| | Pre-/post-emergence | 32.2" * |
| | Preplant-incorporated | 33.9" |
| Pod height | | |
| | Pre-/post-emergence | 3.8" * |
| | Preplant-incorporated | 3.3" |
| Moisture | | |
| | Pre-/post-emergence | 9.8% |
| | Preplant-incorporated | 9.4% |
| Sample weight | | |
| | Pre-/post-emergence | 57.2 |
| | Preplant-incorporated | 57.1 |
| Yield(13%) | | |
| | Pre-/post-emergence | 47.8 |
| | Preplant-incorporated | 46.2 |

* - significantly different at 95% confidence level

** - significantly different at 99% confidence level

**Nebraska Soybean & Feed Grains Profitability Project**