

FIELD EXPERIMENT HISTORY

Title: Row Spacing Influence on Grain Yield
Experiment: 05RS **Trial ID** 2349 **Year:** 2002
Personnel: J. G. Lauer, K.D. Kohn, P.J. Flannery
Location: Arlington, WI **County:** Columbia
Supported By: Hatch

Site Information

Field: 371 **Previous Crop:** Soybean **Soil Type:** Plano
Soil Test: **Date:** 11/01/02 **pH** 5.8 **OM (%)** 2.8 **P (ppm)** 36 **K (ppm)** 128

Plot Management

Tillage Operations: Fall Chisel Plow Field Cultivator Soil Finisher
Analysis: **Rate lbs/A:** **Date:**
Fertilizer: **Preplant :** 46-0-0 325 N/A
Starter : N/A N/A N/A
Post plant : N/A N/A N/A
Manure: None None
Herbicide: Harness 2.5 pt/A **Insecticide:** None
Hornet 4.5 oz/A **Hybrid:** Pioneer 35R57
Irrigation: None
Planting Date: 5/7/02 **Planting Depth:** 1.5" **Row Width:** See Factors
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze Inter-Row Planter
Harvest Date: 10/22 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB Factorial **Replications:** 3
Plot Size Seeded: 10' x 75' **Experiment Size:** 0.258 Acre
Harvest Plot Size: 5' x 75' **Harvest Plant Density:** 29500 plants per acre

Factors/Treatments:

Row Spacing:

7.5 plantback w/15 planter
7.5 plantback w/30 planter
15 inch
15 plantback w/30 planter
30 inch

Results: Table C-32.

**Table C-32. Row Spacing Influence on Grain Yield
Arlington, WI - 2002**

Row spacing	Yield	Moisture	Test weight	Grower return	Population	Lodging
	bu/A	%	lbs/bu	\$/A	plants/A	%
7.5 inch plantback using 15 inch planter	148	21.5	55	309	28667	13.0
7.5 inch plantback using 30 inch planter	163	20.5	55	344	31333	15.3
15 inch	155	20.9	55	325	28333	9.6
15 inch plantback using 30 inch planter	162	21.1	55	340	30000	9.3
30 inch	162	21.0	56	341	29000	8.2
Mean	158	21.0	55	332	29467	11.1
<u>Probability(%)</u>						
Row Space (R)	59.4	99.1	10.6	63.2	73.4	37.6
<u>LSD(0.10)</u>						
Row Space (R)	NS	NS	NS	NS	NS	NS
<u>CV(%)</u>						
	6	3	1	6	8	48