

FIELD EXPERIMENT HISTORY

Title: Row Spacing Influence on Grain Yield
Experiment: 05RS **Trial ID** 1316 **Year:** 1998
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery and H.M. Darby
Location: Arlington, WI **County:** Columbia
Supported By: Hatch

Site Information

Field: 375 **Previous Crop:** Soybean **Soil Type:** Plano
Soil Test: **Date:** 10/1 /98 **pH** 7.1 **OM (%)** 3 **P (ppm)** 55 **K (ppm)** 225

Plot Management

Tillage Operations: Fall Chisel Plow Field Cultivator
Analysis: **Rate lbs/A:** **Date:**
Fertilizer: **Preplant :** 46-0-0 325 5 /1 /98
Starter : N/A N/A N/A
Post plant : N/A N/A N/A
Manure: None
Herbicide: Lasso @ 2qts/A; Bladex 90 DF 2.2 **Insecticide:** None
lb/A **Hybrid:** Pioneer 3751
Irrigation: None
Planting Date: 5/6/98 **Planting Depth:** 1.5" **Row Width:** Varies
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze Inter-Row Planter
Harvest Date: 10/19/98 **Harvest Method:** Kincaid Plot Combine
N/A

Experimental Design

Design: RCB **Replications:** 4
Plot Size Seeded: 10' x 75' **Experiment Size:** 5' x 75'
Harvest Plot Size: 5' x 75' **Harvest Plant Density:** 31300 plants per acre
Factors/Treatments:

Row Spacing:
15 ", 30 ", 15 " plantback w
30", 7.5" plantback w 15",
7.5" plantback w 30", and
7.5" drill

Results: Table E-29.

**Table E-29. Row Spacing Influence on Grain Yield
Arlington, WI - 1998**

Row spacing	Yield bu/A	Moisture %	Test weight lbs/bu	Population plants/A	Lodging %	Ears per plant
7.5 inch	190	19.9	55	30368	1.5	1.00
7.5 plantback w/15 planter	196	19.5	55	27381	0.9	1.00
7.5 plantback w/30 planter	187	21.3	53	36093	0.0	1.01
15 inch	196	20.1	55	29621	0.9	1.01
15 plantback w/30 planter	187	21.2	54	34599	2.2	1.01
30 inch	198	19.9	55	29870	0.0	1.01
Mean	192	20.3	54	31322	0.9	1.01
<u>Probability(%)</u>						
Row Space(R)	65.8	0.0	0.3	5.2	50.2	82.3
<u>LSD(0.10)</u>						
Row Space(R)	NS	0.5	0.7	4852	NS	NS
<u>CV(%)</u>						
	6	2	1	13	196	2