

FIELD EXPERIMENT HISTORY

Year: 2006

Expt. No. 2006-97
Expt. Title: HeadsUp: HeadsUp seed and foliar treatment trial
Personnel: T.S. Maloney and J. Dutcheshen
Location: Eiden Farm, Whitewater, WI
Supported by: Agri-Tech Consulting and HeadsUp Plant Protectants

FIELD INFORMATION

Field: Eiden zone 1
Soil type: Milford silty clay loam
Soil Test Results: 10/19/2005 pH: 6.7 P: 39 ppm K: 138 ppm O.M. 4.8 %
Fertilizer Applied: None
Tillage Operations: None
Previous Crop: Field Corn
Previous Herbicide: Harness + Atrazine f.b. Callisto
Irrigation: None

EXPERIMENTAL PROCEDURE

Exp. Design: RCB 2 factor study
Replicates: 4
Variables: Factor A: Soybean seed/foliar treatment (4 treatments) - UTC, seed, foliar, seed + foliar
Factor B: Soybean row spacing (3 treatments)
Plot Size: 10' x 50' plots = 0.011 acres
Row Spacing: 7.5", 15", and 30"
Cultivar: NK S19-R5
Planting: Date: 05/24/06
Equipment: JD 750 NT 10 foot grain drill with dual ALMACO CTS units
Rate: 225,000 (7.5"), 180,000 (15") and 150,000 (30") seeds/acre
Depth: 1"
Other data obtained: Stand and vigor at V2, days to canopy, disease incidence, grain yield measurements
Harvesting: Date: 14-Oct-06
Equipment: Allis Chalmers K2 Gleaner Plot Combine with ALMACO Seed Specter LRX Weigh System

	<u>Material</u>	<u>Rate</u>	<u>Method</u>	<u>Date</u>
Pesticides	Extreme	3.0 pt	preplant	3-May-06
	NIS	0.25 pt	preplant	3-May-06
	AMS	3.0 lb	preplant	3-May-06
	Roundup Original	32 oz	postemergence	22-Jun-06
	AMS	3.0 lb	postemergence	22-Jun-06

Results: Table 97

Table 97:

HeadsUp: HeadsUp seed and foliar treatment trial

by Agri-Tech Consulting at Whitewater, WI (Experiment 2006-97)

Replication	Treatment seed/foliar	Row spacing	Grain yield	Grain moisture	Grain test weight	V2 plant density	V2 plant vigor	Days to canopy closure	1-Jul-06 foliar infection visible	15-Jul-06 foliar infection visible	1-Aug-06 foliar infection visible	15-Aug-06 foliar infection visible	1-Sep-06 foliar infection visible	15-Sep-06 foliar infection visible	1-Oct-06 foliar infection visible	Harvest plant height	Harvest plant lodging
			bu/acre	%	lbs/bu	x1000	1-9	days	% incidence	% incidence	% incidence	% incidence	% incidence	% incidence	% incidence	inch	1-5
1			44.7	11.6	60.1	140.7	7.1	78.2	0.0	0.0	0.5	1.8	3.0	5.7	7.2	26.6	1.0
2			44.8	11.8	60.9	140.0	7.0	77.8	0.0	0.0	0.4	1.7	3.7	8.8	7.8	26.9	1.0
3			45.8	11.8	60.5	141.5	6.8	77.8	0.0	0.0	0.9	3.1	4.4	6.7	9.4	27.1	1.0
4			44.9	11.7	60.1	141.0	7.1	77.8	0.0	0.0	0.3	2.8	4.8	5.1	10.0	26.9	1.0
	Untreated control		41.7	11.7	60.6	137.8	6.5	77.8	0.0	0.0	1.9	7.5	11.4	16.3	19.0	26.9	1.0
	Seed		45.6	11.6	60.6	143.4	7.4	77.8	0.0	0.0	0.1	7.0	2.1	3.8	5.4	27.0	1.0
	Foliar		43.8	11.6	59.9	138.3	6.5	77.9	0.0	0.0	0.2	0.8	1.8	5.5	7.2	26.4	1.0
	Seed + foliar		49.0	11.8	60.6	143.6	7.6	77.9	0.0	0.0	0.0	0.0	0.5	1.8	2.8	27.2	1.0
		7.5"	48.6	12.1	60.1	142.3	7.0	67.6	0.0	0.0	1.3	3.3	5.9	8.8	10.3	29.5	1.0
		15"	45.9	12.1	60.7	134.6	6.9	76.4	0.0	0.0	0.3	2.8	4.0	6.7	8.4	27.1	1.0
		30"	40.7	10.9	60.5	145.5	7.1	89.6	0.0	0.0	0.0	0.9	2.0	5.1	7.2	24.1	1.0
	Untreated control	7.5"	46.0	12.4	60.3	137.5	6.7	67.3	0.0	0.0	4.8	10.5	19.8	25.5	27.5	29.3	1.0
	Untreated control	15"	42.1	12.0	60.8	132.3	6.3	76.8	0.0	0.0	1.0	9.3	11.0	17.5	21.0	27.0	1.0
	Untreated control	30"	36.9	10.8	60.6	143.8	6.8	89.3	0.0	0.0	0.0	2.8	3.5	5.8	8.5	24.5	1.0
	Seed	7.5"	48.9	12.0	60.1	144.8	7.5	67.8	0.0	0.0	0.3	2.3	3.3	5.3	7.0	29.8	1.0
	Seed	15"	46.8	12.0	60.6	137.3	7.5	76.0	0.0	0.0	0.0	0.8	2.3	4.0	6.0	27.3	1.0
	Seed	30"	41.3	10.9	61.2	148.3	7.3	89.8	0.0	0.0	0.0	0.0	0.8	2.3	3.3	24.0	1.0
	Foliar	7.5"	46.0	12.0	59.8	141.0	6.5	67.5	0.0	0.0	0.3	0.3	0.5	3.0	4.3	29.0	1.0
	Foliar	15"	44.8	12.0	60.0	131.3	6.8	76.8	0.0	0.0	0.3	1.3	2.0	3.8	4.3	27.0	1.0
	Foliar	30"	40.6	10.9	60.0	142.8	6.8	89.5	0.0	0.0	0.0	1.0	3.0	9.8	4.3	23.3	1.0
	Seed + foliar	7.5"	53.4	12.0	60.5	146.0	7.5	67.8	0.0	0.0	0.0	0.0	0.0	1.3	2.3	30.0	1.0
	Seed + foliar	15"	49.7	12.4	61.2	137.5	7.5	76.3	0.0	0.0	0.0	0.0	0.8	1.5	2.3	27.0	1.0
	Seed + foliar	30"	43.9	11.1	60.0	147.3	7.8	89.8	0.0	0.0	0.0	0.0	0.8	2.8	4.0	24.5	1.0
Means			45.0	11.7	60.4	140.8	7.0	77.9	0.0	0.0	0.5	2.3	4.0	6.9	8.6	26.9	1.0
Probability %																	
Row spacing (RS)			<0.1	<0.1	34.17	<0.1	>50	<0.1	>50	>50	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	>50
Seed/foliar treatment (S/F)			<0.1	>50	29.2	<0.1	<0.1	>50	>50	>50	<0.1	<0.1	<0.1	<0.1	<0.1	17.4	>50
RS x S/FT			20.9	>50	>50	>50	>50	>50	>50	>50	<0.1	<0.1	<0.1	<0.1	<0.1	>50	>50
LSD 10%																	
Row spacing (RS)			0.9	0.3	NS	1.6	NS	0.6	NS	NS	0.4	1.0	1.2	1.2	1.4	0.5	NS
Seed/foliar treatment (S/F)			1.1	NS	NS	1.8	0.4	NS	NS	NS	0.5	1.1	1.4	1.3	1.5	NS	NS
RS x S/FT			NS	NS	NS	NS	NS	NS	NS	NS	0.8	1.9	2.4	2.3	2.4	NS	NS
CV%			2.7	4.0	1.7	1.9	7.7	1.4	0.0	0.0	130.9	68.5	49.8	28.1	26.6	3.1	0.0

*HeadsUp foliar application applied on July 02, 2006