

**Soybean seed treatment fungicide efficacy in Nebraska, 2008.**

A location with a history of Rhizoctonia damping-off was selected to conduct a seed treatment fungicide efficacy trial in Nebraska. The site chosen was in a producer’s field near Swedeburg, NE. Soybeans were treated with a slurry mixture in a re-sealable plastic bag with 1 lb of soybean seed. Planting occurred on 14 May 2008. Treatments were arranged in a randomized complete block design with four replications with plots measuring 10 ft by 17 ft. Each plot consisted of 4 rows spaced 30 in apart with a planting population of approximately 160,000 seeds/A (9 seeds/row-ft). All data were collected from the center two rows of each plot. Weed control was accomplished with applications of glyphosate. Stand counts were taken at the VC and V2 growth stages and also at harvest. Stand count areas were flagged prior to counting so that the same plants were counted for each growth stage. Vigor ratings were also recorded at the VC and V4 growth stages. Harvest occurred on 8 Oct 2008 with a research plot harvester. Yields were calculated by standardizing moisture content to 13%.

Planting was delayed significantly because of abnormally high amounts of rainfall during April and the early part of May. May remained wet but the remainder of the growing season returned to normal precipitation levels. Temperatures were normal for most of the growing season. At the VC growth stage, there were no differences in stand counts between treated and non-treated soybeans. However, at the V2 growth stage three treatments had stand counts that were better than the control. This indicates that these treatments were more effective in controlling Pythium. There were no differences in yield at the end of the season.

Table 1: Stand count, vigor, and yield data for selected seed treatment fungicides in Nebraska. Different letters in data columns indicate significant differences (P = 0.05).

Treatment and Rate/CWT	VC Stand Count <sup>y</sup>	VC Vigor <sup>x</sup>	V2 Stand Count <sup>y</sup>	V4 Vigor <sup>x</sup>	Harvest Stand Count <sup>y</sup>	Yield (bu/A)
Non-treated Control.....	98.5	3.0	80.3 b	3.0	83.8	53.6
Trilex Allegiance, 1 fl oz.....	120.0	3.8	100.3 ab	3.0	92.0	55.3
Trilex Allegiance, 1 fl oz + Gaucho, 1.6 fl oz.....	104.5	3.5	92.8 ab	3.8	89.3	54.4
Trilex Allegiance, 1 fl oz + Allegiance FL, 0.55 fl oz.....	111.8	3.5	95.3 ab	3.5	86.0	56.8
BAS 580F, 1.5 fl oz + Allegiance FL, 0.55 fl oz.....	129.0	3.8	110.0 a	3.5	96.0	56.3
Warden RTA, 5 fl oz.....	131.0	4.0	105.8 a	3.5	92.9	54.8
Warden CZ, 3.2 fl oz.....	128.5	4.0	111.3 a	4.0	96.9	52.9
LSD ( $\alpha=0.05$ )	NS <sup>z</sup>	NS	16.0	NS	NS	NS

<sup>x</sup> Vigor was assessed with a 1-5 (1 = worst, 5 = best) relative scale. The control treatment in each block was given a rating of 3 and all other plots in each block were compared to the control.

<sup>y</sup> Stand counts represent the mean of the number of soybean plants in 10 ft of two rows in each plot

<sup>z</sup> NS = no significant differences between treatments.