The Effect of Using Warrior Insecticide, Quadris Fungicide, and Their Combination on Yield of Soybeans

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Objective

There is some information that suggests the use of the combination of Warrior insecticide and Quadris fungicide will increase the yield of soybeans. With the cost of this treatment plus application being approximately \$28 per acre it is important that the treatment increase yield for the treatment to be profitable. The objective of this study is to evaluate the use of Warrior, Quadris, and their combination on the yield of soybeans.

Background

Cooperator:	Tom Weiler	Planting Date:	May 14th		
County:	Morrow	Planting Rate:	197,200 seeds/ac.		
Nearest Town:	Chesterville	Row Width:	10-inch		
Drainage:	Systematic tiled	Harvest Date:	October 7		
Soil Type:	Sloan Silty Clay Loam	Variety:	Pioneer 93B36		
Tillage:	Conventional				
Previous Crop:	Corn	Soil Test:	pH = 6.9		
Fertilizer:	None		P = 62 lbs./Ac.		
Herbicides:	32 oz./Ac. of Credit Plus		K = 413 lbs./Ac.		
	on June 23				

Method

Warrior was used at the rate of 3.2 fluid ounces/acre and Quadris at 6.4 fluid ounces/acre. The treatments were applied using XR nozzles at 30 psi and a spray volume of 20 gallons per acre on July 23rd. The soybeans were at R3 growth stage (beginning pod). The study consisted of three replications in a randomized complete block experimental design. The treatments were 45-feet wide and approximately 900-feet long. A thirty-nine foot strip was harvested out of the middle of the treatments and weighed with a weigh wagon.

We also replicated this study using 10 x 40 feet small plots. We used four replications in a randomized complete block design. The middle five-feet was harvested using a plot combine. The treatments were applied at the same rates and dates using a 10-foot hand-held plot sprayer pressurized with carbon dioxide. The treatments were applied on July 27 and the soybeans were at the R3 growth stage. The treatments were applied using XR nozzles at 30 psi and a spray volume of 20 gallons per acre.

Results

Table 1. Soybean Yield Using Warrior, Quadris, and Their Combination

Treatment	Rate/Ac.	Cost/Ac. (a)	Large Plot Yield (Bu./Ac.)	Small Plot Yield (Bu/Ac.)
Warrior	3.2 oz.	\$ 12.05	56.44	64.18
Quadris	6.4 oz.	\$ 22.24	54.45	67.30
Warrior Plus	3.2 oz. Plus	\$ 28.29	55.89	68.10
Quadris	6.4 oz.			
No treatment	-	-0-	56.45	65.68
		LSD $(0.05) = NS$ CV = 2.46%		NS 7.75%
		CV	_ 2.4070	1.1370

(a) Includes an application charge of \$6.00/acre

Summary

There were very few insects found in this field during the 2004 season. Yields from all treatments were similar and no significant treatments were detected. With the cost of application and fungicide and/or insecticide, it would take away economic returns from the soybeans if any treatments were applied. These are results from one-year data. More tests should be performed when perhaps more insect/disease pressure will exist.

Acknowledgement:

The author would like to thank Pioneer, Syngenta, OSU Plant Pathology Department, and Tom Weiler for their assistance in this project.

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