

Roundup Ready Soybean Herbicide Trial

Steve Ruhl, AGNR Extension Educator- Morrow County

Objective

To evaluate various combinations of Roundup Ultra with pre-emergent herbicides and other post-emergence programs for the control of grass and broadleaf weeds in Roundup Ready soybeans.

Background

Crop Year:	1997	Soil Test:	pH 7.0; P 23ppm; K 154ppm
Cooperator:	Tom Weiler	Fertilizer Applied:	None
County/Town:	Morrow/ Chesterville	Herbicide:	See Methods
Drainage:	Systematic	Variety:	Stine 3264RR and Pioneer 9333RR
Major Soil Type:	Millgrove	Planting Rate:	204,000 seeds/A
Previous Crop:	Corn	Planting Date:	May 8, 1997
Tillage:	Fall chisel; field cultivate twice	Harvest Pop.	154,000 plants/A
		Harvest Date:	October 9, 1997

Methods and Results

Herbicide	Rate/Ac	Growth Stage ²	Control Rating (%) ¹				Costs (\$/A)		
			Annual Grass	Lambs-quarters	Giant Rag.	Velvet-leaf	Chem.	App. ³	Total
Roundup Ultra	1 qt.	LPO	99	99	91	93	13.00	4.00	17.00
Roundup Ultra	1.5 pt.	LPO	99	98	97	96	9.75	4.00	13.75
Roundup Ultra	1	EPO	98	98	96	95	6.50	4.00	21.00
Roundup Ultra	1	LPO					6.50	4.00	
Canopy	3.0 oz.	PRE	99	99	96	97	7.88	4.00	22.38
Roundup Ultra	1.0 pt.	LPO					6.50	4.00	
Roundup Ultra	0.5 pt.	EPO	99	91	96	85	3.25	4.00	16.13
Roundup Ultra	0.75 pt.	LPO					4.88	4.00	
Canopy XL	3.0 oz.	PRE	99	99	98	98	8.44	4.00	22.94
Roundup Ultra	1.0 pt.	LPO					6.50	4.00	
Dual II	1.0 qt	PRE					17.50	4.00	
Firstrate	0.33 oz.	LPO	92	86	99	97	*4*		27.07+?
COC	1.0 qt	LPO					1.18	4.00	
28% N	.25%v/v	LPO					0.39		

Dual II	1.0 qt.	PRE					17.50	4.00	
Flexstar	2.5 pt.	LPO	99	78	95	93	15.00	4.00	41.28
MSO	1.0%v/v	LPO					0.78		
Cobra	8.0 oz.	LPO					8.38		
Select	8.0 oz.	LPO	89	74	95	90	12.19	4.00	25.75
CBC	1.0%v/v	LPO					1.18		

1. Control Rating - percent of weeds controlled

2. PRE - Pre-emergent application; EPO - Early post-emergence - weeds less than 3 inches; LPO - Late post-emergence - weeds generally in the 4- to 12-inch range

3. Application cost used was \$4.00 per acre. Costs may and will vary among farms.

4 Price of Firstrate unknown

Summary and Notes

Using Roundup-Ready soybeans with Roundup Ultra is another weed control option for soybean producers. Roundup can be used post-emergent on varieties with the gene incorporated in it. Herbicide prices were in-season retail prices. The ratings are the average of four replications in the study. The plots were 40' x 10' in size. The Pioneer 9333 RR beans ran 53.8 bushels per acre and Stine 3264RR produced 58.1 bushels per acre. The weed plots had moderate weed pressure from all the weeds rated.

For additional information, contact:

Steve Ruhl
The Ohio State University
ruhl.1@osu.edu