

# Liberty Herbicide on Corn

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## Objective

To evaluate various combinations and timing of Liberty post-emergence herbicide with atrazine for the control of grass and broadleaf weeds in corn.

## Background

Crop Year:	1997	Soil Test:	pH 7.0; P 23ppm; K 154 ppm
Cooperator:	Tom Weiler	Fertilizer Applied:	180# NH <sub>3</sub> pre-plant; 46# P <sub>2</sub> O <sub>5</sub> ; 120# K <sub>2</sub> O; 11 gal. 10-34-0
County/Town:	Morrow/ Chesterville	Herbicide:	See Methods
Drainage:	Systematic	Variety:	Bird 63XPT
Major Soil Type:	Millgrove	Planting Rate:	26,700 seeds/A
Previous Crop:	Soybean	Planting Date:	May 8, 1997
Tillage:	Fall chisel; field cultivate	Harvest Pop.:	25,800 plants/A
		Harvest Date:	October 30, 1997

## Methods and Results

Treatment	Herbicide	Rate/A	Growth Stage <sup>1</sup>	Control Rating (%) <sup>2</sup>			Herbicide Cost (\$/A) <sup>3</sup>	Application Cost (\$/A)	Total Cost (\$/A)
				Annual Grass	Lambs-quarters	Giant Ragweed			
1	Liberty	28 oz.					25.20		
	Atrazine	1.5 lb.	LPO	95	94	88	5.58	4.00	35.97
	AMS	2.0%w/w					1.19		
2	Liberty	20 oz.					18.00		
	Atrazine	1.5 lb.	LPO				5.58	4.00	
	AMS	2.0%w/w		99	99	95	1.19		51.96
	Liberty	20 oz.	EPO				18.00	4.00	
	AMS	2.0%w/w				1.19			
3	Atrazine	1.0 lb.	PRE				3.72	4.00	
	Liberty	20 oz.	LPO	95	99	89	18.00	4.00	30.91
	AMS	2.0%w/w					1.19		

4	Atrazine	2.0 lb.	PRE	99	92	90	7.44	4.00	41.83
	Liberty	28.0 oz.	LPO				25.20	4.00	
	AMS	2.0%w/w					1.19		
5	Liberty	20.0 oz.		97	99	88	18.00		25.98
	Atrazine	0.75 lb.	EPO				2.79	4.00	
	AMS	2.0%w/w					1.19		
6	Liberty	20.0 oz.	EPO	99	92	88	18.00	4.00	46.38
	AMS	2.0%w/w					1.19		
	Liberty	20.0 oz.	LPO				18.00	4.00	
	AMS	2.0%w/w					1.19		

All treatments were replicated four times.

1 Control Rating - percent of weeds controlled. Control rating values are the average of all four replications.

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 Prices used were in-season retail prices. Application cost used was \$4.00 per acre. Costs may and will vary among farms.

## Summary and Notes

Liberty is a new non-selective grass and broadleaf post-emergence herbicide that can be used on corn with the Liberty-linked gene incorporated in it. The Bird 63XPT variety yielded 190.3 bushels per acre. The weed pressure was severe at the evaluation site.

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