Balance Pro

Evaluation of Balance Pro at different rates alone and in combination with other herbicides for weed control in corn at Rochester, MN in 2002. Soderholm, Courtney L., Fritz R. Breitenbach, and Lisa M. Behnken. The objective of this trial was to evaluate the performance of Balance Pro alone and with Aatrex and Harness for weed control in southeastern Minnesota. The research site was a Lawler loam containing 2.4% organic matter with a pH of 6.2 and soil test P and K levels of 35 and 132 ppm, respectively. The previous crop was soybean. The area was fertilized in the fall of 2001 with 200 lb/A Pel-Lime, 200 lb/A potash and 8 tons/A turkey manure. The site was disked twice and chisel plowed. The corn hybrid, Pioneer 37-H27, was planted on April 30, 2002, at a 2-inch depth in 30-inch rows at 31,000 seeds/A. A randomized complete block design with four replications was used. All treatments were applied preemergence (PRE) with a tractor-mounted sprayer delivering 20 gpa at a pressure of 32 psi using TurboTee 11002 nozzles. Evaluations of the plot were made on May 20, June 5, and June 20, 2002. Application dates, environment conditions, and crop and weed stages are listed below.

Date	April 30
Treatment	PRE
Temperature (F)	
air	60
soil	54
Relative humidity (%)	42
Wind (mph)	7
Soil moisture	adequate
Corn	
Stage	
height (inch)	
Giant ragweed	
Weed density/ft ²	15
height (inch)	
Common waterhemp	
Weed density/ft ²	6
height (inch)	
Common lambsquarters	
Weed density/ft ²	5.8
height (inch)	
Giant foxtail	
Weed density/ft ²	12
height (inch)	
Rainfall after application (inch)	
Week 1	0.38 inch
Week 2	0.51 inch
Week 3	0.05 inch

All of the Balance Pro treatments resulted in good control of giant ragweed. Although not statistically different, control was lower with Balance Pro alone at 2.0 oz/A and when tank mixed with Aatrex at 16 oz/A. Harness Xtra, Harness, Axiom + Aatrex, and Axiom gave poor to almost no control of giant ragweed. All Balance Pro treatments resulted in excellent control of common lambsquarters and common waterhemp. Axiom gave significantly less control of common lambsquarters and common waterhemp compared to all other treatments. Balance Pro alone and with Aatrex resulted in slightly lower giant foxtail control. (Southeast District, University of MN Extension Service, Rochester).

Table. Balance Pro weed control performance in corn on June 14 at Rochester, MN in 2002 (Soderholm, Breitenbach, and Behnken).

Treatment	Rate	Giant ragweed	Common lambsquarters	Common waterhemp	Giant foxtail control	Crop Injury
		control	control	control	22711107	, ,
	(rate/A)	(%)	(%)	(%)	(%)	(%)
Balance Pro	2 oz	71	99	98	82	0
Balance Pro + Aatrex	2 oz+16 oz	73	99	98	84	0
Balance Pro + Aatrex	2 oz+24 oz	77	99	98	89	0
Balance Pro + Aatrex	2 oz+32 oz	80	99	99	86	0
Balance Pro + Harness	2 oz+0.75 pt	80	99	99	93	0
Balance Pro + Harness	2 oz+1.5 pt	84	99	99	97	0
Balance Pro + Harness	2 oz+2.25 pt	84	99	97	96	0
Balance Pro + Harness Xtra	2 oz+1.3 qt	79	99	98	94	0
Balance Pro + Harness Xtra	2 oz+1.8 qt	87	99	99	98	0
Balance Pro + Harness Xtra	2 oz+2.1 qt	85	99	99	99	0
Harness Xtra	2.3 qt	40	91	95	90	0
Harness	2.25 pt	50	95	97	91	0
Balance Pro	3 oz	83	99	97	88	0
Axiom	20 oz	8	85	85	95	0
Axiom + Aatrex	20 oz+24 oz	28	91	97	92	0
Untreated		0	0	0	0	0
	LSD (0.10)	9	5	5	5	0