

**Annual weed control with Valor, Fierce, Gangster, Authority Assist, Authority First, Optill, Prowl H2O and Prefix in soybeans at Lamberton, MN in 2010.**

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The objective of this study was to evaluate soybean soil applied herbicides for annual grass and annual broadleaf weed control in glyphosate-resistant soybeans. This study was conducted on a Normania loam soil containing 3.8% organic matter, pH 6.1 and soil test P and K levels of 64 and 296 lb/A, respectively. A randomized complete block design with four replications and a plot size of 10 by 30 ft was used. The site was planted to corn in 2009 and was fall chiseled. On May 18, 2010, Asgrow 'AG2108' glyphosate-resistant soybeans were planted in 30-inch rows at a seeding rate of 160,000 seeds/A. The entire trial was treated with Select Max on June 29 for annual grass control. All treatments were applied with a tractor-mounted sprayer delivering 20 gpa at a pressure of 40 psi. The sprayer was equipped with 8002 flat-fan nozzles spaced 15 inches apart on the boom. Application dates, environmental conditions, weed densities and rainfall data are listed below:

Date	May 18
Treatment	PRE
Temperature (F)	
air	76
soil (4 inch)	64
Relative humidity (%)	31
Wind (mph)	calm
Sky	clear
Soil moisture	moist
Rainfall after application (inch)	
1 week	0.20
2 week	0.02
3 week	0.79
Weed densities in weedy check 56 DAT	
Yellow foxtail (no./ft <sup>2</sup> )	10
Common lambsquarters (no./ft <sup>2</sup> )	1
Redroot pigweed/waterhemp (no./ft <sup>2</sup> )	3

(Southwest Research and Outreach Center, University of Minnesota, Lamberton).

**Table. Annual weed control with Valor, Fierce, Gangster, Authority Assist, Authority First, Optill, Prowl H2O and Prefix in soybeans at Lamberton, MN in 2010 (Getting).**

Treatment <sup>a</sup>	Rate	Yellow foxtail				Common lambsquarters				Tall waterhemp				Yield (bu/A) <sup>b</sup>
		Jun 15	Jun 22	Jul 13	Sep 27	Jun 15	Jun 22	Jul 13	Sep 27	Jun 15	Jun 22	Jul 13	Sep 27	
<b>Preemergence / POST (Select Max)</b>														
		-----(% control)-----												
Valor SX	2 oz	63 de	58 bc	98 a	99 a	80 d	81 d	75 d	76 d	88 c	89 ab	84 b-d	80 c-f	57.6 b-d
Fierce	2.5 oz	65 c-e	59 bc	98 a	99 a	83 b-d	84 d	80 cc	83 b-d	94 ab	90 a	88 ab	88 a-c	59.4 a-c
Fierce	3.0 oz	65 c-e	64 a-c	98 a	99 a	86 a-c	94 a	91 a	93 a	93 ab	94 a	90 ab	93 a	58.4 a-d
Fierce	3.75 oz	68 b-d	66 ab	98 a	99 a	88 ab	91 ab	88 ab	89 ab	95 a	95 a	94 a	91 ab	58.5 a-d
Gangster FR + Gangster V	0.4 oz + 2 oz	63 de	55 c	98 a	99 a	88 ab	85 cc	81 c	81 cc	94 ab	94 a	86 bc	83 c-e	57.4 cc
Authority Assis <sup>i</sup>	5 oz	63 de	55 c	98 a	99 a	90 a	85 cc	88 ab	85 bc	79 d	80 c	74 ef	74 fg	58.4 a-d
Authority Firs <sup>i</sup>	3.2 oz	50 f	18 d	98 a	99 a	81 cc	83 d	84 bc	80 cc	63 e	73 d	71 f	70 g	53.4 e
Optill	2 oz	60 e	61 bc	98 a	99 a	86 a-c	86 b-d	88 ab	84 bc	78 d	79 cc	80 c-e	79 d-f	57.2 d
Prowl H2O	2.5 pt	73 ab	64 a-c	98 a	99 a	89 a	90 a-c	88 ab	84 bc	86 c	80 c	74 ef	73 fg	57.7 b-d
Prefix	2 pt	79 a	74 a	98 a	99 a	88 ab	83 d	81 c	81 cc	90 bc	83 bc	78 d-f	75 e-g	58.6 a-d
<b>Check</b>														
Weedy Check	-	0 g	0 e	98 a	99 a	0 e	0 e	0 e	0 e	0 f	0 e	0 g	0 h	52.7 e
	LSD (0.10)	7.5	10.5	ns	ns	5.6	5.9	5.9	6.6	4.3	6.8	7.2	8.0	2.16

<sup>a</sup> Select Max applied on June 29 for annual grass control.

<sup>b</sup> Yield adjusted to 13% moisture.