Evaluation of Roundup Ultra Max and Roundup WeatherMax in soybean at Potsdam, MN in

2002. Schaufler, Kristal L., Fritz R.Breitenbach, and Lisa M. Behnken. The objective of this trial was to evaluate weed control performance of Roundup Ultra Max and Roundup WeatherMax in soybean in southeastern Minnesota. The research site was a silt loam soil containing 3.2% organic matter with a pH of 6.7 and soil test P and K levels of 66 and 376 ppm, respectively. The previous crop was field corn. The site was chisel plowed in the fall and cultivated twice in the spring. The soybean variety, Pioneer 92B34, was planted on May 23, 2002, at a 1.5-inch depth in 30-inch rows at a population of 160,000 seeds/A. A randomized complete block design with four replications was used. All postemergence (POST) treatments were applied with a tractor-mounted sprayer, delivering 20 gallons per acre at 32 psi using TurboTee 11002 nozzles. Evaluations of the plot were taken on July 11 and 23 and August 1, 2002. Application dates, environmental conditions, crop and weed stages are listed below.

Date	July 1 July 15	
Treatment	POST I	POST II
Temperature (F)		
air	84	77
soil		
Relative humidity (%)	67	62
Wind (mph)	16	8
Soil moisture	adequate	adequate
Soybeans		
Stage	V5	R1
height (inch)	7	10
Common lambsquarter		
weed density/ft ²	37	regrowth
height (inch)	8	
Velvetleaf		
weed density/ft ²	4	regrowth
height (inch)	7	
Wild proso millet		
weed density/ft ²	17	regrowth
height (inch)	8	
Rainfall after application (inch)		
week 1	0.0	1.82
week 2	0.49	0.92
week 3	1.82	2.28

All treatments resulted in excellent control of wild proso millet (greater than 98 %). Velvetleaf control (90%) was significantly lower for Roundup Ultra Max at 13 oz/A. compared to the equivalent rate of Roundup WeatherMax at 10.8 oz/A (99%). Velvetleaf control was 97% or better for all other treatments. Common lambsquarter control was significantly lower; 79% and 81% control with Roundup Ultra Max at 13 oz/A and Roundup Weathermax at 10.8oz/A, respectively, than treatments with higher application rates that resulted in greater than 90% control. There was, however, no significant yield difference between the Roundup Ultra Max and Roundup WeatherMax treatments. (Southeast District, University of Minnesota Extension Service, Rochester).

Treatment	Rate	Common lambsquarters control	Velvetleaf control	Wild proso millet control	Soybean yield
Postemergence I	(rate/A)	(%)	(%)	(%)	(bu/A)
Roundup Ultra Max + AMS	13oz+2.5lb	79	90	98	55
Roundup WeatherMax+ AMS	10.8oz+2.5 lb	81	99	99	54
Roundup Ultra Max + AMS	26 oz+2.5lb	90	99	99	55
Roundup Weathermax + AMS	21.7oz+2.5lb	93	99	99	57
Roundup Ultra Max + AMS	32 oz+2.5 lb	93	99	99	56
Roundup WeatherMax + AMS	26.7 oz+2.5 lb	93	97	98	55
Roundup Ultra Max + AMS	52oz+2.5lb	98	99	99	55
Roundup WeatherMax + AMS	43.2 oz+2.5lb	94	98	99	55
Postemergence I/Postemergence III					
Roundup Ultra Max+AMS / Roundup Ultra Max+AMS	26oz+2.5lb / 26oz+2.5lb	97	99	99	55
Roundup Weathermax+AMS / Roundup WeatherMax+AMS	21.7oz+2.5lb / 21.7oz+2.5lb	98	99	99	56
Untreated Check		0	0	0	23
	LSD (0.10)	7	4	17	6

Table. Performance of post applied Roundup Ultra Max and Roundup WeatherMax on August 1 at Potsdam, MN in 2002 (Schaufler, Breitenbach, and Behnken).