Study Name: Rate effect of glyphosate, Tween 20, and AMS on grass control

Study Number: 9935

Objectives: Evaluate the effect of glyphosate rate and adjuvants on control of oat, foxtail millet, and proso millet.

Results: Oat control was almost 100% with 1 oz ai/A or more of Rodeo. Some oats were still standing in the 0.5 oz ai/A plots, regardless of Tween 20 or AMS rate. However, some oats were still present in the Roundup Ultra (1 oz ai) plots, but not the Roundup Ultra + AMS plots.

Control of foxtail millet and proso millet were similar. We did not rate the individual species separately. Given the results noted above, the second rating date pertains more to foxtail millet and proso millet control.

Table. Rate effect of glyphosate, Tween 20, and AMS on grass control.

		July 23	September 9
		Grasses	Grasses
Treatment	Rate	Con	trol (%)
Rodeo + Tween 20	0.5 oz ai + 0.5%	26	7
Rodeo + Tween 20	1 oz ai + 0.5%	45	25
Rodeo + Tween 20	1.5 oz ai + 0.5%	58	33
Rodeo + Tween 20	2 oz ai + 0.5%	71	53
Rodeo + Tween 20 + AMS	0.5 oz ai + 0.5% + 0.5%	35	16
Rodeo + Tween 20 + AMS	1 oz ai + 0.5% + 0.5%	51	35
Rodeo + Tween 20 + AMS	1.5 oz ai + 0.5% + 0.5%	62	45
Rodeo + Tween 20 + AMS	2 oz ai + 0.5% + 0.5%	70	60
Rodeo + Tween 20 + AMS	0.5 oz ai + 0.5% + 1%	37	27
Rodeo + Tween 20 + AMS	1 oz ai + 0.5% + 1%	53	49
Rodeo + Tween 20 + AMS	1.5 oz ai + 0.5% + 1%	62	54
Rodeo + Tween 20 + AMS	2 oz ai + 0.5% + 1%	71	63
Rodeo + Tween 20 + AMS	0.5 oz ai + 0.5% + 2%	29	21
Rodeo + Tween 20 + AMS	1 oz ai + 0.5% + 2%	48	45
Rodeo + Tween 20 + AMS	1.5 oz ai + 0.5% + 2%	60	57
Rodeo + Tween 20 + AMS	2 oz ai + 0.5% + 2%	67	60
Roundup Ultra	1 oz ai	27	34
Roundup Ultra + AMS	1 oz ai + 1%	40	45
Untreated		0	0
LSD		5	11
CV		6	17