

Adjuvant with Glyphosate at Hettinger

Treatment	Rate	----- June 17 -----							----- July 1 -----							
		wiot	dobr	kocz	ruth	wibw	dand	fibw	wiot	dobr	kocz	ruth	wibw	dand	fibw	
	% v/v	----- % Control -----														
2 oz/A Roundup Original Max +																
1	AMS	1	50	50	35	22	20	15	2	60	--	20	18	0	0	0
2	R-11	0.5	81	77	60	23	58	18	10	75	99	60	32	20	28	5
3	Preference	0.5	50	22	42	11	32	27	12	38	33	20	12	30	17	2
4	Liberate	0.5	39	45	50	18	35	35	12	71	40	40	40	42	30	5
5	APSA-80	0.5	89	77	68	29	32	20	14	64	72	58	42	21	20	0
6	Purity 100	0.5	69	42	57	38	46	30	5	36	57	35	18	1	15	1
7	Premier 90	0.5	55	50	48	31	42	35	8	38	65	28	25	15	2	0
8	Wet-Sol	0.5	80	77	62	25	46	20	30	58	80	52	40	40	35	1
9	Class Act NG	2.5	92	92	81	58	55	30	25	92	92	78	58	30	20	14
10	Surfate	1	92	88	80	40	60	30	19	91	91	79	80	18	30	6
11	Alliance + Preference	1.25 + 0.5	79	79	70	28	50	75	16	62	90	55	42	25	10	0
12	Choice + Liberate	0.5 + 0.5	61	50	69	28	45	20	16	50	65	42	38	12	5	2
13	Bronc Max + R-11	0.5 + 0.5	89	71	68	55	40	30	16	84	78	72	48	2	35	0
14	Quest + Preference	0.5 + 0.5	87	79	38	28	55	65	16	69	80	38	35	0	5	0
15	Citron + Preference	2.2 lb/100G + 0.5	61	70	51	30	40	20	8	49	12	30	28	12	15	2
16	N-Tense	0.5	91	71	82	70	52	38	6	69	67	70	52	8	40	4
17	Herbolyte	1%	64	59	35	26	32	40	12	55	85	18	9	2	0	0
18	R-11 + AMS	0.5 + 1	81	85	68	50	60	20	17	75	85	55	38	30	10	6
Trial Mean			73	66	59	33	45	31	14	63	67	47	36	17	19	3
C.V. %			27	27	26	64	42	66	68	41	36	29	51	123	120	272
LSD .05			28	26	22	NS	NS	NS	NS	NS	NS	20	26	NS	NS	NS
LSD .01			38	34	29	NS	NS	NS	NS	NS	NS	26	35	NS	NS	NS

wiot = wild oat, dobr = downy brome, kocz = kochia, ruth = Russian thistle, wibw = wild buckwheat, dand = dandelion, fibw = field bindweed

Adjuvants with Glyphosate at Hettinger

Eric Eriksmoen

Treatments were applied to 4 leaf wild oat (wiot), heading downy brome (dobr), 1 1/2" kochia (kocz), 1" Russian thistle (ruth), 3 1/2" wild buckwheat (wibw), flowering dandelion (dand) and 3 1/2" field bindweed (flbw) on June 3 with 72° F, 40% RH, clear sky and 4 mph W wind. Weed populations were not uniform throughout the trial but averaged 3, 2, 42, 2, 4, >1 and 1.5 plants per square foot, respectively. Treatments were applied with a tractor mounted CO² propelled plot sprayer delivering 10 gpa at 30 psi to 5 foot wide by 20 foot long plots. The experiment was a randomized complete block design with four replications. Plots were evaluated for percent control on June 17 and on July 1.

Summary

Significant differences between treatments for weed control were observed with the June 17 evaluation of wild oats, downy brome and kochia, and with the July 1 evaluation of kochia and Russian thistle. Specific adjuvants used with glyphosate appear to be more active on specific weeds such as N-Tense (trt 16) which tended to be more active than other adjuvants on broadleaf weeds, and Class Act NG (trt 9) which tended to have more activity on field bindweed.