

Herbicide Evaluation for Wild Oat and Foxtail Control (1998)

'Amidon' hard red spring wheat was seeded April 23. Seedbed preparation was conventional with 6-inch row spacing and wheat seeded at 1 million pls/A. Herbicide treatments were applied May 19 and/or May 25 at the 4 or 5-leaf stage of wheat. Weed populations and sizes were wild oat (Wioa), 30 plant/ft² and 4-leaf stage; and common lambsquarters (Colq), 21 plants/ft² and <1" tall. The treatments were evaluated for percent weed control on June 9 and July 24. The crop was harvested on August 10.

<u>Treatment</u>	<u>Rate</u>	<u>June 9</u>		<u>July 24</u>		<u>Yield</u> bu/A
		<u>Wioa</u>	<u>Colq</u>	<u>Wioa</u>	<u>Colq</u>	
		-----% Control-----				
Hoelon + Buctril + PO	16 fl oz A/A + 4 fl oz A/A + 0.12 gal/A	62	47	25	90	16
Hoelon + PO /	8 fl oz A/A + 0.12 gal/A /	62	75	33	80	16
Hoelon + Buctril + PO (6d)	8 fl oz A/A + 4 fl oz A/A + 0.12 gal/A					
Assert + Harmony Extra + Activator 90	5 fl oz A/A + 0.22 oz A/A + 0.25% V/V	77	68	38	93	15
Assert + Harmony Extra + Activator 90	2.5 fl oz A/A + 0.22 oz A/A + 0.25% V/V	63	70	30	100	19
Assert + Activator 90 /	2.5 fl oz A/A + 0.25% V/V /	70	43	65	89	19
Assert + Harmony Extra + Activator 90 (6d)	2.5 fl oz A/A + 0.22 oz A/A + 0.25% V/V					
Avenge + Harmony Extra (6d)	12 fl oz A/A + 0.22 oz A/A	28	65	23	100	11
Achieve + Bronate + TF8436 + AMS	2.9 fl oz A/A + 8 fl oz A/A + 0.5% V/V + 24 oz A/A	92	98	80	100	22
Discover + Bronate + Score	0.8 fl oz A/A + 8 fl oz A/A + 0.8% V/V	90	98	78	100	19
Puma + Harmony Extra	1.7 fl oz A/A + 0.22 fl oz A/A	89	98	80	100	21
MON-37500 + ND72	0.37 oz A/A + 1% V/V	80	20	68	10	20
MON-37500 + ND72 /	0.18 oz A/A + 1% V/V /	85	10	63	0	22
MON-37500 + ND72 (6d)	0.18 oz A/A + 1% V/V					
Tiller	9.3 fl oz A/A	73	95	53	100	14
Cheyenne + Harmony Extra	7.3 fl oz A/A + 0.22 oz A/A	68	97	73	100	20
Bayer 1 + ND72	0.25 oz A/A + 1% V/V	80	48	60	0	17
Stampede + MCPA ester + PO /	8 fl oz A/A + 4 fl oz A/A + 0.18 gal/A /	13	95	5	100	8
Stampede + PO (6d)	8 fl oz A/A + 0.18 gal/A					
Stampede+ MCPA ester+ PO	16 fl oz A/A + 4 fl oz A/A + 0.18 gal/A	8	95	33	100	11
Untreated		0	0	0	0	8
C.V.%		11	19	22	12	37
LSD .05		12	21	22	20	10

/ = products preceding the slash were applied May 19; those after slash applied May 25 (Post II)

Soil conditions were very dry from mid-April through mid-June. We received only one inch of rainfall from planting to the first herbicide application and one additional inch through the first month after the herbicide application. Wild oat control with Assert, Avenge, Bayer 1, Hoelon, MON-37500, and Tiller was less than 70%. Wild oat control with Achieve, Cheyenne, Discover, and Puma ranged from 73-80%. These heavy wild oat populations and dry conditions were not conducive to optimum weed control. Wild oat control with the split application of Hoelon and Assert was slightly better than a single application. Control with the split application of MON-37500 was similar to the single application. Stampede was included to evaluate foxtail control, but the wild oat population was too dominant and essentially choked out any foxtail present. Wild oat control with Achieve, Discover, and Puma was approximately 80%. We expect that these weed and soil conditions were extreme and that under more desirable conditions (lighter weed infestation, higher rainfall), these products will likely provide better control.