

# Wild Oat Control in Wheat

J. D. Harbour, S. B. Gehlhar, and J. D. Nalewaja

**W**ild oat management in small grains continues to be a challenge. The objective of this experiment was to evaluate various small grain herbicides and single vs. split applications for wild oat control and crop injury and to determine the effects of these treatments on wheat yield.

On June 5 (Day 0), treatments were applied to 2.5-leaf 'Verde' hard red spring wheat, 4.5-leaf wild oat, 2- to 6-inch wild mustard, and 6-inch common lambsquarters. Split application treatments (Day 7) were applied to 4.5-leaf wheat, 6.5-leaf wild oat, 5- to 10-inch flowering wild mustard, and 8-inch common lambsquarters on June 12.

Crop injury was minimal for all herbicide treatments (Table 1). Wild oat control from split applications of Hoelon, Assert, MON 37500, and Stampede was similar to a single application at twice the rate. With the exception of Tiller, Cheyenne, and Stampede, all treatments were effective and statistically similar in wild oat control. All treatments other than Tiller, Cheyenne, Stampede, Avenge, and the single, low rate of Assert resulted in wheat yields significantly superior to the untreated check. Yield increases with these treatments were partially attributed to season long control of wild oat, wild mustard, and common lambsquarters (data not shown). Small grain herbicides which provided greater than 90% wild oat control and yields greater than 34 bu/A include the split application of Assert+Harmony Extra+Activator 90, Achieve+Bronate+TJ8436+AMS, Clodinofof+Bronate+Score, and both full and split applications of MON 37500, and Bayer1+ND72.

Table 1. Wild oat herbicides and wheat yield response.

Treatment	Rate oz/ A	Wheat	Wild Oat	Yield Bu/ A
		Injury	Control	
		-----	% -----	
Hoelon+Bronate+PO (Day 0)	16+4+.12G	3	85	34
Hoelon+PO (Day 0) / Hoelon+Bronate+PO (Day 7)	8+0.12G / 8+4+0.12G	4	81	34
Assert+Harmony Extra+Activator 90 (Day 0)	5+0.22+0.25%	4	93	34
Assert+Harmony Extra+Activator 90 (Day 0)	2.5+0.22+0.25%	2	86	31
Assert+Activator 90 (Day 0) / Assert+Harmony Extra+Activator 90 (Day 7)	2.5+0.25% / 2.5+0.22+0.25%	2	98	35
Avenge+Harmony Extra (Day 0)	12+0.22	7	93	31
Achieve+Bronate+TF8436+AMS (Day 0)	2.9+8+0.5%+24	4	92	35
Clodinofof+Bronate+Score (Day 0)	0.8+8+0.8%	5	98	39
Puma+Harmony Extra (Day 0)	1.7+0.22	3	89	36
MON37500+ND72 (Day 0)	0.37+1%	3	92	36
MON37500+ND72 (Day 0) / MON37500+ND72 (Day 7)	0.18+1% / 0.18+1%	6	97	38
Tiller (Day 0)	9.3	0	68	32
Cheyenne+Harmony Extra (Day 0)	7.3+0.22	0	52	30
Bayer1+ND72 (Day 0)	0.25+1%	9	99	35
Stampede+MCPAe+PO (Day 0)/ Stampede+PO (Day 7)	8+4+0.18G / 8+0.18G	2	38	31
Stampede+MCPAe+PO (Day 0)	16+4+0.18g	1	27	24
Untreated	0	0	0	26
LSD 5%		4	24	8