

## 2010 Evaluation of Broadleaf Herbicides on Spring Wheat

Eric Eriksmoen, Hettinger, ND

'Howard' HRSW was seeded on April 15. Treatments were applied on May 31 to 4 leaf wheat and to 1" kochia (kocz), 2" Russian thistle (ruth), 6" field bindweed (fibw), 4 leaf wild buckwheat (wibw) and to 4 leaf volunteer Roundup Ready canola (vcan) with 63° F, 61% RH, sunny sky and south wind at 4 mph. Treatments were applied with a tractor mounted CO<sub>2</sub> propelled plot sprayer delivering 10 gpa at 30 psi through PK-01E80 nozzles to a 5 foot wide area the length of 10 by 28 foot plots. The trial was over-sprayed on June 5 with 16 oz/A Axial XL to control grassy weeds. The soil is classified as a silt-loam with a pH of 6.2 and OM of 3.2%. The trial was a randomized complete block design with four replications. Weed populations for kochia, Russian thistle, field bindweed, wild buckwheat and volunteer canola were 50+, 12, 0.75, 0.75 and 2 plants per square foot, respectively. Plots were evaluated for crop injury on June 7 and June 15, and for weed control on June 15, July 1 and July 29. The trial was harvested on August 2.

Treatment	Product rate oz/A	6/7	June 15					July 1				
		inj	inj	kocz	ruth	fibw	wibw	vcan	kocz	ruth	fibw	vcan
1 Untreated		0	0	0	0	0	0	0	0	0	0	0
2 Wolverine	27.4	0	0	85	90	58	80	91	92	94	63	99
3 WideMatch + MCPA	12 + 8	0	0	89	84	90	89	92	92	96	97	99
4 Orion	17	0	0	71	84	50	75	92	50	30	96	98
5 GoldSky + NIS	16 + 0.25%	0	0	90	90	76	78	90	92	95	91	99
C.V. %		0	0	10	5	29	16	3	4	17	23	1
LSD .05		NS	NS	11	6	24	16	3	4	16	25	1

NS = no statistical difference between treatments

Treatment	Product rate oz/A	July 29			Test weight lbs/bu	Grain yield bu/A
		kocz	ruth	fibw		
1 Untreated		0	0	0	58.5	49.3
2 Wolverine	27.4	84	99	45	57.5	53.0
3 WideMatch + MCPA	12 + 8	92	96	88	58.9	47.8
4 Orion	17	26	50	96	59.0	48.1
5 GoldSky + NIS	16 + 0.25%	90	90	68	56.2	53.6
C.V. %		21	8	36	2.4	8.4
LSD .05		19	8	33	NS	NS

NS = no statistical difference between treatments

### Summary

Crop injury was not observed. All herbicide treatments provided excellent control of volunteer canola. Wolverine (trt 2) provided excellent season long control of Russian thistle but only marginal control of wild buckwheat and kochia, and poor control of field bindweed. WideMatch + MCPA (trt3) provided excellent season long control of kochia, Russian thistle and wild buckwheat, and good control of field bindweed. Orion (trt 4) provided excellent season long control of field bindweed but only marginal control of kochia, Russian thistle and wild buckwheat. GoldSky (trt 5) provided excellent season long control of kochia and Russian thistle but only marginal control of wild buckwheat and field bindweed. There were no statistical differences for test weight or grain yield between treatments.