

**Broadleaf Weed Control in 2375 Wheat Roosevelt, MN 1997.** Holder, Bobby J., Carlyle Holen, and Gene Krause. The objective of this study was to evaluate new and existing broadleaf herbicides in wheat. Treatments were applied June 13, 1997 to wheat at the three leaf stage, canola at the three to four leaf stage, with wild buckwheat and smartweed at the cotyledon to two leaf stage. Environmental conditions at time of application were: temperature 65°F, wind from the north at five mph, sky clear. Evaluations were made June 23 and July 1, 1997. All treatments were applied with backpack spray delivering 10 gpa at 35 psi using 8001 flat fan nozzles. The experimental design was randomized complete block with three replications. Plot size was 8' x 24'.

Table I. Broadleaf Weed Control – Roosevelt 1997

Treatment	Rate	% Injury	Canola		W. Buckwheat		Smartweed	
			6/23	7/1	6/23	7/1	6/23	7/1
MCPA Ester	0.5 lb/A	0	80.0	90.0	30.0	85.0	33.3	86.7
2,4-D Ester	0.5 lb/A	0	78.3	90.0	53.3	91.7	63.3	93.3
Prosulfuron + NIS	0.014 lb/A + 0.125% v/v	0	76.7	91.7	73.3	98.3	73.3	100.0
Bromoxynil + MCPA	0.5 lb/A	0	98.3	96.7	100.0	98.3	100.0	100.0
Thifensulfuron + tribenuron + NIS	0.015 lb/A + 0.125% v/v	0	73.3	91.7	76.7	95.0	90.0	98.3
Bromoxynil+MCPA + Thifensulfuron+tribenuron + NIS	0.25 lb/A + 0.005 lb/A + 0.125% v/v	0	100.0	98.3	100.0	100.0	100.0	100.0
Carfentrazone-ethyl + 28% N	0.4 lb/A	11.7	98.3	95.0	90.0	96.7	93.3	98.3
Dicamba	0.125 lb/A	0	33.3	20.0	70.0	95.0	70.0	98.3
Clopyralid + 2,4-D	0.60 lb/A	0	70.0	88.3	76.7	96.7	80.0	98.3
LSD (0.05)		1.7	20.0	11.1	33.8	7.3	27.7	10.7

### Summary

Treatments containing bromoxynil or carfentrazone-ethyl provided excellent early broadleaf weed control while the other treatments were somewhat slower acting. By the second evaluation date (7/1) all treatments provided at least 85% control or more for the broadleaf weeds evaluated. Dicamba provided very low control of canola but very good control on wild buckwheat and smartweed. Control of broadleaf weeds was generally good to excellent on all treatments.