

2008 NDSU Broadleaf Herbicide Trial at Hettinger (WHTB0803), Eric Eriksmoen.

'Howard' HRSW was seeded on April 30. Treatments were applied on May 31 to 4 leaf wheat and to 2" kochia (kocz) and 2" Russian thistle (ruth) with 65° F, 55% RH, clear sky and west wind at 2 mph. Treatments were applied with a tractor mounted CO₂ 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 a randomized complete block design with three replications. HRSW, kochia and Russian thistle populations were 8, 17 and 3 plants per square foot, respectively. The trial was sprayed with 16 oz/A Axial XL on June 16 to control wild oats. Plots were evaluated for crop injury on June 18 and for weed control on July 2 and August 1. The trial was harvested on August 8.

Treatment	Product Rate	6/18 inj	7/2 kocz % control	7/2 kocz	-- Aug. 1-- ruth	Test Weight lbs/bu	Grain Yield bu/A
1 Starane + Sward	18 oz/A	0	98	99	99	52.1	20.5
2 Widematch	16	0	95	98	93	51.8	23.9
3 Widematch + Harmony SG + Express SG	10.7+ 0.32 + 0.08	0	27	50	99	48.8	15.9
4 Harmony SG + Express SG + Sword + NIS	0.32 + 0.08 + 6.15 + 0.25%	0	57	40	99	55.0	26.3
5 Harmony SG + Express SG + Salvo + NIS	0.2 + 0.2 + 6.4 + 0.25%	2	90	92	99	51.6	21.9
6 Rage D-Tech + NIS	8 + 0.25%	0	95	93	99	50.8	18.1
7 ET + Salvo + NIS	0.52 + 6.4 + 0.25%	0	70	83	99	51.6	17.1
8 Bronate Advance	12.8	0	98	93	99	51.5	19.1
9 Bromoxynil & 2,4-D	18	0	98	93	99	49.8	16.1
10 Huskie	9.5	0	99	99	99	49.5	16.5
11 Huskie + AMS	9.5 + 8	0	97	98	99	51.6	18.5
12 Starane NXT	13.8	0	96	96	95	53.9	21.5
13 Florasulam & MCPA	17.1	2	82	47	96	51.5	16.7
14 Untreated		0	0	0	0	48.6	13.9
C.V.%		369	11.8	11.6	3.0	2.0	13.3
LSD .05		NS	16	15	5	1.4	8.8

Summary

Crop injury was very minor when observed. All herbicide treatments provided excellent season long Kochia control with the exception of Widematch + Harmony SG + Express SG (trt 3), Harmony SG + Express SG + Sword + NIS (trt 4), ET + Salvo + NIS (trt 7) and Florasulam & MCPA (trt 13) which were all quite weak on kochia. Despite poor kochia control, treatment 4 had the highest test weight and grain yield. All herbicide treatments provided excellent season long Russian thistle control. All herbicide treatments had grain yields higher than the untreated check, however, only the Widematch alone (trt 2) and Harmony SG + Express SG + Sword + NIS (trt 4) had statistically higher yields.