

Table 1. Comparison of postemergence herbicide treatments for weed control in spring wheat at Hettinger, ND, 2023.

Herbicide treatment ^a	Rate oz/A	Kochia ^b			Common lambsquarters			Green Foxtail			Wheat yield BU/A	
		10	22	58	10	22	58	10	22	58		
		Percent control										
1 Untreated		0	0	0	0	0	0	0	0	0	0	70 -
2 Huskie FX	15.5	86 ab	91 a	88 a	98 ab	100 -	100 -	72 -	66 -			78 - 69 -
3 Huskie FX	18	90 a	93 a	88 a	100 a	100 -	100 -	72 -	59 -			80 - 69 -
4 WideARmatch MCPA ester	14 8	80 c	77 b	77 b	89 c	97 -	100 -	71 -	71 -			78 - 69 -
5 Talinor	13.7	82 bc	87 a	88 a	93 bc	100 -	100 -	74 -	64 -			86 - 73 -
6 Bison	16	81 c	79 b	78 b	99 a	100 -	100 -	72 -	66 -			77 - 72 -
LSD P=.05		3.6	6.78	6.96	5.65	3.28		4	13.04	7.36	5.58	
Standard Deviation		2.08	4.47	4.42	3.58	2.13	0	2.31	8.28	4.25	3.42	
CV		2.52	5.26	5.05	3.78	2.14	0	3.11	11.57	5.24	4.75	
Treatment F		13.05	10.52	8.19	6.35	1.58	0	2.72	0.43	1.38	1.32	
Treatment Prob(F)		0.004	0.0004	0.0034	0.0082	0.2404	1	0.1315	0.7799	0.3424	0.3446	

^a Huskie FX, fluroxypyr plus bromoxynil plus pyrasulfotole; WideARmatch, fluroxypyr plus clopyralid plus halauxifen; Talinor, bromoxynil plus bicyclopyrone; Bison, bromoxynil plus MCPA. Treatments were applied on June 6 to wheat in the early tillering phase to kochia averaging 3 inches, common lambsquarters averaging 4.3 inches, and green foxtail averaging 5.6 inches.

^b Weed control was evaluated at 10, 22, and 58 days after treatments were applied.

Table 2. Description of herbicide application and equipment for treatments applied for weed control in spring wheat at Hettinger, ND, 2023.

Application Description		Application Equipment	
Date	6/6/2023	Sprayer Type	Tractor
Start Time	9:14 AM	Pressure	37 PSI
Stop Time	9:23 AM	Nozzle Model	DG11003
Air Temp	80 F	Nozzle Spacing	20 IN
Rel Humidity	56	Boom Length	100 IN
Wind Speed	3.8 MPH	Boom Height	28 IN
Soil Temperature	66 F	Ground Speed	4.5 MPH
% Cloud Cover	0	Application Amount	10 GAL/AC
		Propellant	CO2

A trial was conducted to evaluate Huskie FX (fluroxypyr plus bromoxynil plus pyrasulfotole) compared with other commonly used postemergence herbicides for controlling weeds in spring wheat. Spring wheat ‘Lang’ was planted on May 1, 2023 using a no-till drill at a depth of 2 inches; wheat emerged on May 9. Wheat was seeded into dry soil due to limited rainfall during the month of April 2023. Few weeds were present at time of planting. In the two weeks following planting, more than 5 inches of rainfall occurred. This resulted in good emergence of both spring wheat and weeds. Postemergence herbicide treatments were applied on May 6 to spring wheat in the early tillering phase. Kochia averaged 3 inches; common lambsquarters averaged 4.3 inches, and green foxtail averaged 5.6 inches. Wheat response (injury) and weed control was evaluated at 10, 20, and 30 days after treatments application. No injury to wheat was observed. Kochia control 58 days after treatments was 88% for Huskie FX at both 15.5 and 18 oz/A. WiderARMatch resulted in 77% control; Talinor resulted in 88% control; and Bison resulted in 78% control. Common lambsquarters was controlled 100% by all herbicide treatments. Green foxtail was controlled 77 to 86% by herbicide treatments, but there were no statistical differences between treatments. Wheat yield ranged from 69 to 73 Bu/A and there were no statistical differences between herbicide treatments, even when no herbicide was applied. Weed emergence in this trial was delayed by the limited rainfall that occurred in April allowing wheat to emerge before weeds had emerged giving it a competitive advantage which it was able to maintain due to the above normal rainfall which occurred during the 2023 growing season. Even as there was no yield advantage to controlling weeds in this trial, failing to do so would increase the amount of weed seed in the harvested crop which could result in dockage and would also increase the weed seedbank for next years growing season; one which wheat or other rotational crop may not have a competitive advantage. Uncontrolled weeds would also likely result in need for an additional postharvest herbicide application.