

Table 3. Fall herbicide application for weed control in spring wheat at Hettinger, ND 2021-22.

Treatment	Rate oz/A	Kochia	Wbkwht	C mallow	J brome	Yield BU/A
		%				
Untreated Check	22	0 c	0 d	0 d	0 d	30.1 b
Roundup PowerMax	3.5	0 c	0 d	0 d	30 c	38.2 b
Anthem Flex+	22	92 a	56.3 b	87.5 b	81.3 b	52.1 a
Roundup PowerMax	4					
Anthem Flex+	22	88.3 a	64.5 a	92.5 a	91.3 a	52.6 a
Roundup PowerMax	4.5					
Anthem Flex+	22	88.3 a	50 bc	90 ab	91 a	49.1 a
Roundup PowerMax	0.2					
Olympus+	22	78.8 b	46.3 c	75 c	92.5 a	53.7 a
Roundup PowerMax fb	0.2					
Olympus (Spring POST)	7.5					
Authority Supreme	22	90.8 a	65 a	90 ab	73 b	56.5 a
Roundup PowerMax	4					
Anthem Flex+	22	93.5 a	68.3 a	92 a	90.8 a	52.8 a
Roundup PowerMax fb	0.2					
Olympus (Spring POST)	22					

LSD P=.10

CV

Treatment Prob(F)

*Treatment timing were 10/18/2021 (Fall PRE) and 5/27/2022 (Spring POST)

Abbreviations: Wbkwht , wild buckwheat; C mallow, common mallow; J brome, Japanese brome; BU/A, bushels per acre.

Application Description	Timing		Application Equipment	
	Fall PRE	Spring POST		
Application Date	10/18/2021	5/27/2022	Equipment Type	SPTRMO
Appl. Start Time	1:34 PM	8:35 AM	Operation Pressure	40 PSI
Appl. Stop Time	1:52 PM	8:42 AM	Nozzle Model	11002
Application Method	SPRAY	SPRAY	Nozzle Type	FLAFAN
Application Timing	FALPRE	POSPOS	Nozzle Spacing	20.0 IN
Application Placement	BROADCAST	BROADCAST	% Coverage	100
Applied By	CDD	CDD	Boom Length	100 IN
Appl. Entry Date	10/20/2021	6/6/2022	Boom Height	19 IN
Air Temperature Start, Stop	73.4, 73.5 F	68.3, 66.3 F	Ground Speed	3.9 MPH
% Relative Humidity Start, Stop	32.5, 29.1	42.9, 41.1	Carrier	WATER
Wind Velocity+Dir. Start	2.7 MPH, SW	1.2 MPH, NNE	Application Amount	10 GAL/AC
Wind Velocity+Dir. Stop	4.2 MPH, SW	2.9 MPH, SSE	Mix Size	2 L
Wind Velocity+Dir. Max	6.6 MPH, SW	8.9 MPH, NNW	Propellant	CO2
Wet Leaves (Y/N)	N, no	N, no	Tank Mix (Y/N)	Yes
Soil Temperature	47 F	56 F		
Soil Moisture	EXCELLENT	EXCELLENT		
% Cloud Cover	30	100		
Next Moisture Occurred On	10/24/2021	5/27/2022		
Time to Next Moisture	6.0 D	8.0 HR		
Moisture 6 Hours after Appl.	0 IN	0 IN		
Moisture 1 Week after Appl.	0.11 IN	0.51 IN		

*Abbreviations: FALPRE, fall preemergence; Spring POST, spring postemergence; SPTRMO, tractor mounted sprayer.