

Table 7. Safflower response to preemergence herbicides at Hettinger, ND 2022.

Treatment	Rate	Injury 19 DAE	Stand 24 DAE	Height 51 DAE	Yield
	oz/A	— % —	— # m ⁻² —	— cm —	— LB/A —
Spartan Charge	2.5	0 -	64.3 ab	65.8 abc	1992 -
Spartan Charge	3.75	0 -	48.8 ef	64.78 a-e	1832 -
Spartan Charge	5	2 -	56 b-f	66.6 a	2079 -
Authority Supreme	3.75	2 -	50.8 def	66.6 a	2057 -
Authority Supreme	7.5	0 -	58.8 a-f	63 de	2438 -
BroadAxe	18	2 -	63.8 ab	65.85 ab	1843 -
BroadAxe	22	0 -	68.5 a	64.48 a-e	2089 -
Anthem Flex	3.75	0 -	56.5 b-f	62.6 e	2146 -
Anthem Flex	4.5	0 -	60.3 a-d	62.83 de	2178 -
Anthem Flex	5.5	0 -	51.8 c-f	63.58 cde	2306 -
Spartan Charge+ Zidua SC	3.75 2.5	0 -	48 f	63.6 cde	2338 -
Spartan Charge+ Zidua SC	3.75 3.75	0 -	62.8 abc	65.05 a-d	2322 -
Spartan Charge+ Zidua SC	3.75 5	0 -	59.8 a-e	66.18 ab	2039 -
Spartan Charge+ Outlook	3.75 16	0 -	63.3 ab	65.25 abc	2363 -
Spartan Charge+ Outlook	3.75 21	0 -	63.5 ab	64.83 a-e	2092 -
Spartan Charge+ Prowl H2O	3.75 32	0 -	50.8 def	64 b-e	2048 -
Spartan Charge+ Prowl H2O	3.75 48	3.3 - 0 -	49.8 def 64.3 ab	65.73 abc 65.8 abc	2001 - 1992 -
LSD P=.10		NS	11.31	2.24	NS
CV		347.66	16.59	2.92	12.33
Treatment Prob(F)		0.2848	0.0522	0.0433	0.1111

*Abbreviations: DAE, days after emergence; LB/A, pounds per acre

Application Description	Application Equipment
Application Date	5/17/2022
Equipment Type	SPTRMO
Appl. Start Time	11:01 AM
Operation Pressure	35 PSI
Appl. Stop Time	12:35 PM
Nozzle Model	11002
Application Method	SPRAY
Nozzle Type	DRIRED
Application Timing	PREPRE
Nozzle Tip Size	11002
Application Placement	BROADCAST
Nozzle Spacing	20 IN
Air Temp Start, Stop	66, 71.3 F
% Coverage	100
% RH Start, Stop	53.3, 49.4
Boom Length	100 IN
Wind Velocity+Dir. Start	6.4 MPH, SW
Boom Height	20 IN
Wind Velocity+Dir. Stop	5.5 MPH, WSW
Ground Speed	3.3 MPH
Wind Velocity+Dir. Max	11.1 MPH, SW
Carrier	WATER
Wet Leaves (Y/N)	No
Application Amount	10 GAL/AC
Soil Temperature	55 F
Mix Size	2 L
Soil Moisture	SLIGHTLY WET
Propellant	CO2
% Cloud Cover	80
Tank Mix (Y/N)	Yes
Next Moisture Occurred On	5/19/2022
Moisture 1 Week after Appl.	0.49

*Abbreviations: SPTRMO, tractor mounted sprayer; DRIRED, drift reduction.