

Table 1. Buckwheat Response to Preemergence Herbicides applied at 1x and 2x rates.

Treatment	Rate oz/A	Injury			Stand		Height	Yield LB/A
		2 DAE	9 DAE	25 DAE	21 DAE	36 DAE		
		%			# m ²	cm		
Untreated		0	0 e	0 g	148 ab	56 a-e	681 -	
Metribuzin	5.3	9 fg	75 b	70 b	82 d	45 g	672 -	
Metribuzin	10.7	18.5 de	89.5 a	85.3 a	56 e	32 h	501 -	
Metolachlor	26	9.5 fg	9.5 e	0 g	154 a	58 a-d	498 -	
Metolachlor	52	38.8 c	32.5 d	9.5 ef	139 ab	53 def	517 -	
Dimethenamid	16	33.8 c	32 d	10 e	140 ab	52 ef	555 -	
Dimethenamid	32	68.8 a	63.8 b	61.3 c	104 c	43 g	482 -	
Pyroxasulfone	2.5	22.5 d	23.8 d	1.3 fg	149 a	59 abc	618 -	
Pyroxasulfone	5	52.0 b	50 c	10 e	129 b	53 def	591 -	
Mesotrione	2.5	5 gh	6.8 e	3 efg	155 a	54 cde	610 -	
Mesotrione	5	16.3 def	25 d	26.3 d	143 ab	48 fg	546 -	
Isoxaflutole	3	10.5 fg	0.8 e	0 g	148 ab	56 a-e	725 -	
Isoxaflutole	6	14.5 ef	4.5 e	0 g	151 a	55 b-e	712 -	
Topramezone	1	1.3 h	0 e	0 g	150 a	59 ab	543 -	
Topramezone	2	3.8 gh	0 e	0 g	152 a	60 a	533 -	
LSD P=.10		7.4	11.5	8.6	20	5	NS	
CV		30.7	35.0	39.3	12.7	8.7	24.2	
Treatment Prob(F)		0.0001	0.0001	0.0001	0.0001	0.0001	0.2428	

Application Description		Application Equipment	
Application Date	Jun-3-2022	Equipment Type	SPTRMO
Appl. Start Time	8:00 AM	Operation Pressure	35 PSI
Appl. Stop Time	9:45 AM	Nozzle Model	11002
Application Method	SPRAY	Nozzle Type	DRINED
Application Timing	PRE	Nozzle Tip Size, Color	11002, Yellow
Application Placement	BROADC	Nozzle Spacing	20 IN
Applied By	CDD	% Coverage	100
Appl. Entry Date	Jun-8-2022	Boom Length	100 IN
Air Temperature Start, Stop	64.7, 67.4 F	Boom Height	20 IN
% Relative Humidity Start, Stop	30.4, 24.6	Ground Speed	3.3 MPH
Wind Velocity+Dir. Start	6.6 MPH, SW	Carrier	WATER
Wind Velocity+Dir. Stop	6.8 MPH, SW	Application Amount	10 GAL/AC
Wind Velocity+Dir. Max	13.4 MPH, SSW	Mix Size	2 L
Wet Leaves (Y/N)	N, no	Propellant	CO2
Soil Temperature	52 F	Tank Mix (Y/N)	N, No
Soil Moisture	GOOD		
% Cloud Cover	10		
Next Moisture Occurred On	Jun-5-2022		
Time to Next Moisture	2.0 DAY		
Moisture 6 Hours after Appl.	0 IN		
Moisture 1 Week after Appl.	1.79 IN		

*Abbreviations: PREPRE, preemergence; BROADC, broadcast; SPTRMO, tractor mounted sprayer; DRINED, drift reduction