Table 1. Response of chickpea to preemergence herbicides at Hettinger, ND 2023.

	Herbicide treatment[a]	Rate	Chickpea stand[b]	Chickpea Height	Chickpea yield
		oz/A	plant/m2	cm	lbs/acre
1	Untreated		35 -	27 d	1752 b
2	Authority Supreme	5	42 -	30 abc	2868 a
	Aim	1			
3	Authority Supreme	10	35 -	31 abc	2989 a
	Aim	1			
4	Authority Elite	20	39 -	30 abc	2725 a
	Aim	1			
5	Authority Elite	32	39 -	31 a	2643 a
	Aim	1			
6	Spartan Charge	3.75	44 -	30 abc	2592 a
7	Spartan Charge	5	42 -	29 abc	2513 a
8	Spartan Charge	7.75	44 -	30 abc	2925 a
9	Anthem Flex	3	49 -	31 abc	2808 a
10	Anthem Flex	4	44 -	29 c	2635 a
11	Anthem Flex	5	41 -	29 bc	2624 a
12	Sharpen	2	40 -	29 abc	2548 a
	Dual II Magnum	32			
13	Sharpen	2	41 -	30 abc	2607 a
	Dual II Magnum	32			
	Zidua	3.25			
14	Authority Elite	20	45 -	31 ab	2886 a
LSD P=.05			8.76	2.187	436.06
Standard Deviation			6.13	1.532	303.11
CV			14.79	5.12	11.02
Treatment F			1.316	2.466	5.361
Treatment Prob(F)			0.2444	0.014	0.0001

[a] Authority Supreme, sulfentrazone plus pyroxasulfone; Authority Elite, sulfentrazone plus metolachlor; Spartan Charge, sulfentrazone plus carfentrazone; Anthem Flex, carfentrazone plus pyroxasulfone; Sharpen, saflufencil; Dual II Magnum, metolachlor; Zidua, pyroxasulfone

[b] Chickpea stand count and height was measured on June 14, 26 days after emergence.

Table 2. Description of herbicide application and equipment for treatments applied preemergence in chickpea to evaluate tolerance to preemergence herbicides at Hettinger, ND, 2022-23.

Application Description		**Application Equipment**	
Date	5/3/2023	Equipment Type	Tractor
Start Time	3:45 PM	Operation Pressure	38 PSI
Stop Time	4:10 PM	Nozzle Model	11002
Air Temperature	80 F	Nozzle Spacing	20 IN
Relative Humidity	19	Boom Length	100 IN
Wind Speed	1.6 MPH	Boom Height	20 IN
Soil Temperature	62 F	Ground Speed	3.7 MPH
% Cloud Cover	10	Application Amount	10 GAL/AC
		Propellant	CO2

A trial was conducted to evaluate chickpea response to various preemergence herbicides at Hettinger, ND in 2023. Chickpea was seeded on May 3, 2023 using a no-till drill at a depth of 3 inches at a seeding rate of 174,000 seed per acre. Preemergence herbicide treatments were applied immediately after seeding. Chickpea emerged on May 19. No visual injury to chickpea was observed. No differences in chickpea stand count was found for the different herbicide treatments (Table 1). Most treatments resulted in chickpea height that was equal to or greater than in the untreated control. All treatments resulted in yield that was higher than yield of the untreated control. Yield in the untreated control was reduced by weed competition.