

Table 3. Influence of gypsum on select soybean variables.

Treatment	Emergence and related measurements				Tissue nutrient and yield measurements					
	Stand				Tissue nutrient content ⁽²⁾			Grain	Test	
	3 DAE ⁽¹⁾ (plants/a)	6 DAE (plants/a)	30 DAE (plants/a)	Harvest (plants/a)	N (%)	Ca (%)	S (%)	Moisture (%)	Weight (lb/bu)	Yield (Bu/a)
No gypsum	117,500		134,516		4.05	0.95	0.21	12.0	54.2	46.0
Gypsum, half-rate	120,125		139,449		4.00	0.95	0.21	12.0	54.2	47.2
Gypsum, full-rate	121,188		129,664		3.96	0.93	0.20	12.0	54.4	45.9
Sulfur, unlimited					4.11	0.94	0.22	12.0	54.6	42.8
ANOVA										
Source	df	----- p > f -----		df	----- p > f -----					
Year	1	<0.001	<0.001	1	<0.001	<0.001	<0.001	<0.001	0.074	<0.001
Tmt	2	0.631	0.342	3	0.706	0.785	0.103	0.728	0.504	0.348
Tmt x Year	2	0.520	0.598	3	0.738	0.270	0.295	0.596	0.148	0.188
cv(%)		6.5	8.0		5.7	4.8	6.8	0.9	1.1	11.2
2021										
Mean		180,625	199,364		3.43	1.02	0.19	9.8	54.6	33.1
No gypsum		179,375	195,699		3.47	1.05	0.18	9.73	54.1	35.5
Gypsum, half-rate		182,875	205,231		3.31	1.04	0.19	9.75	54.3	33.2
Gypsum, full-rate		179,625	197,161		3.37	0.98	0.18	9.75	54.8	31.0
Sulfur, unlimited					3.55	1.01	0.19	9.73	55.2	32.6
p>f	2	0.575	0.341	3	0.646	0.346	0.795	0.976	0.213	0.221
cv(%)		2.8	3.7		7.2	5.0	5.1	1.1	1.3	8.4
2022										
Mean		58,583	69,722		4.63	0.86	0.23	14.2	54.2	57.9
No gypsum		55,625	64,625	53,500	4.62	0.85	0.23	14.2	54.3	56.4
Gypsum, half-rate		57,375	72,625	54,375	4.69	0.85	0.24	14.2	54.2	61.2
Gypsum, full-rate		62,750	70,750	56,875	4.54	0.87	0.21	14.3	54.1	60.8
Sulfur, unlimited					4.66	0.87	0.24	14.3	54.1	53.0
p>f	2	0.589	0.634	0.579	0.839	0.845	0.160	0.418	0.839	0.315
cv(%)		16.6	17.2	19.8	15.0	4.6	4.5	7.6	0.8	0.8

(1) DAE: days after emergence

(2) Tissue nutrient concentration (dry matter basis) measured at R3.

Grain yield reported at 13% moisture.