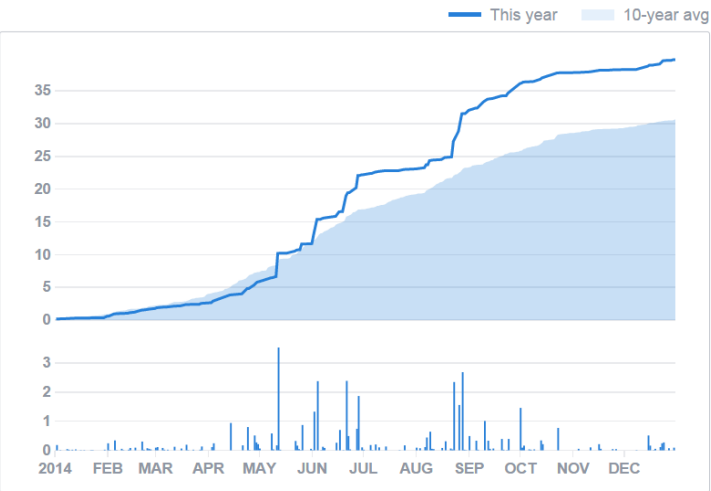
Nebraska On-Farm Research Network

Calcium Sulfate on Rainfed Corn

Study ID: 016155201401
County: Saunders
Soil Type: Yutan silty clay loam, eroded
Planting Date: 5/3/2014
Harvest Date: 10/30/2014
Population: 25,671 seeds/acre
Row Spacing: 30”
Hybrid: LG 2636
Reps: 4
Previous Crop: Soybeans
Tillage: No-Till
Herbicides: Pre: 2.5 pt/ac TripleFLEX on 5/6/14 **Post:** 24 oz/ac Glyphosate
Insecticides/Fungicides: Poncho/VOTiVO seed treatment
Fertilizer: 145 lbs actual N/acre as Anhydrous ammonia, fall 2013

Irrigation: Not Irrigated
Rainfall:



Introduction: As a by-product of certain ethanol production facilities, growers may have access to calcium sulfate which is sold as a soil amendment. The purpose of this study was to determine if the application of calcium sulfate improved rainfed corn yields. The product Pro-Cal 40 was applied at a rate of 1 ton/ac on 12/15/13.

Results:

	Yield† (bu/acre)	Moisture (%)	Net Return ‡
Check	182*	15.2	$637.00
Calcium Sulfate	182	15.3	$607.00
P-Value	*0.9684*	*0.1723*	--

†Bushels per acre corrected to 15.5% moisture.
*Values with the same letter are not significantly different at a 90% confidence level.
‡Net return based on $3.50/bu corn and $30/ton Pro-Cal 40.

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Soil samples were taken from each area after the study was harvested. Only one rep was soil sampled.

	pH	Buffer pH	OM	Nitrate-N	Mehlich-P-III	K	S	Zn	Fe	Mn	Cu	Ca	Mg	Na
			-%-	ppm										
Check	5.8	6.6	3.4	11	36	256	11	1.76	53.3	15.1	1.14	2761	589	15
Calcium Sulfate	6.2	6.8	3.4	5.8	21	262	16	1.42	46.7	12.9	1.09	2756	574	13

Summary: The addition of calcium sulfate did not have any impact on corn yields. Net returns were lower for the calcium sulfate treatment due to the additional cost of calcium sulfate and no increase in yield.

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