

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

CALCIUM TRIAL

Catalogue No: 183
This crop: 2nd Ratoon
Site: Sprowston Kearsney
 Store Field
Altitude: 1300'
Soil series: T.M.S. Trevanian
Design: Random Block
Variety: N:Co.376
Fertilizer: See Treatments
Water regime: Dry Land

Soil Analysis:
pH 4.5 OM% - Clay% -
 p.p.m.
P 10 K 65 Ca 675 Mg 170
Age: 14 months (10/67 - 12/68)
Rainfall: 53.18"

Object: To study the response of a 2nd ratoon crop to calcium treatments.

Treatments:

1.	Ca	0 lbs/A					
2.	Ca	111 " "		<u>All Plots</u>			
3.	Ca	222 " "		4:1:6 (31%)	1200 lbs/A		

Results:

Treatment	T.C.A.	%		A		B lbs		Rank	
		Sucrose	T.S.A.	T.C.A.M.	S.A.M.	A	B	A	B
1	34.35	13.80	4.740	2.454	677	1	1		
2	33.29	13.80	4.594	2.378	656	2	2		
3	31.39	13.90	4.363	2.242	623	3	3		

S.E. = + 5.76

C.V. = 17.5%

Difference between treatments not statistically significant.

The calcium treatments were superimposed on a trial previously laid down as a Nitrogen trial, but no response to calcium was recorded. In fact a slight decline in yield can be observed from lime applications which is not surprising in view of the adequate soil calcium level.