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SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

UREA X AMMONIUM SULPHATE X L.A.N. TRIAL

Catalogue No.: 94

This crop: Plant

Site: Sewraj, Tongaat

Altitude: 300'

Soil Series: Clansthal

Design: Random Block

Variety: N50/211

Fertilizer:

	N	P	K
P	see	Nil	200
	treatment		

Water regime: Dryland

Soil Analysis:

	pH	OM%	Clay%
P	5.42	0.65	-
1 R	5.93	3.69	6.0

	p.p.m.			
	P	K	Ca	Mg
P	37	102	707	50
1 R	74	61	204	43

Age: 17 months Mar. 1963 - Aug 1964

Rainfall: 41.51"

Object: To compare three forms of N, each on two levels of N, with a control without nitrogen.

Treatments:

Control	-	No nitrogen
Urea	-	100 lb.N per acre
Urea	-	200 lb.N per acre
L.A.N.	-	100 lb.N per acre
L.A.N.	-	200 lb.N per acre
S/A	-	100 lb.N per acre
S/A	-	200 lb.N per acre

Results:

	Tons cane per acre			
	Plant			
	0 lb.N	100 lb.N	200 lb.N	Mean
Urea	-	42.1	44.3	43.2
L.A.N.	-	42.5	33.9	38.2
S/A	-	41.5	37.4	39.5
Mean	35.9	42.0	38.5	-

	Sucrose % cane			
	Plant			
	0 lb.N	100 lb.N	200 lb.N	Mean
Urea	-	12.3	12.4	12.4
L.A.N.	-	13.2	12.7	13.0
S/A	-	12.4	12.6	12.5
Mean	11.8	12.6	12.6	-

	Tons sucrose per acre			
	Plant			
	0 lb.N	100 lb.N	200 lb.N	Mean
Urea	-	5.18	5.49	5.34
L.A.N.	-	5.59	4.32	4.96
S/A	-	5.16	4.70	4.93
Mean	4.22	5.31	4.80	-