

SOUTH AFRICAN SUGAR INDUSTRY

29

AGRONOMISTS' ASSOCIATION

FORMS AND LEVELS OF N

Catalogue No: 85
This crop: Plant
Site: 64 Sewraj Tongaat
Altitude: 300'
Soil series: Sand
Design: Random block, 4 reps.
Variety: N.50/211
Fertilizer: See below
Water regime: Dryland

Soil Analysis:

	<u>pH</u>	<u>OM%</u>	<u>Clay%</u>
P	5.3	0.60	-
p.p.m.			
	P	K	Ca
	37	102	7106
	Mg		
	48		

Age: 17 months (March '63 - Aug. '64)

Rainfall: P 43.44"

Object: To compare three nitrogen carriers, each at two levels, with a control.

Fertilizer:

(Urea) U₁ 103 lb N/ac.
 U₂ 206 "

(Amm. Nit.) AN₁ 108 lb N/ac.
 AN₂ 217 "

(Amm. Sul.) AS₁ 100 lb N/ac.
 AS₂ 200 "

(MP) 100 lb K/ac.

Treatment:

O = Control

U₁ : 103 lb N/ac. 100 lb K/ac.
 U₂ : 206 "
 AN₁ : 108 "
 AN₂ : 217 "
 AS₁ : 100 "
 AS₂ : 200 "

Results:

Treatment	T.C.A.	Suc. %	T.S.A.
O	35.9	11.75	4.22
U ₁	42.1	12.31	5.18
U ₂	44.3	12.39	5.49
AN ₁	42.5	13.16	5.59
AN ₂	33.9	12.73	4.32
AS ₁	41.5	12.44	5.16
AS ₂	37.4	12.56	4.70