

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

POTASH TRIAL

Catalogue No.: 88
 This crop: P, 1R.
 Site: 118 Valley's, Spata.
 Altitude: 400'
 Soil series: Dwyka
 Design: Random block, 4 reps.
 Variety: N.50/211.
 Fertilizer: See below.
 Water regime: Dryland.

Soil Analysis: 1R.

pH	OM%	Clay%	p.p.m.			
			P	K	Ca	Mg
5.35	4.36	24	22	475	7202	226

 Age: P = 17 mths. April 63 - Sept. 64.
 1R = 14 mths. Sept. 64 - Nov. 65.
 Rainfall: P = 34.26 1R = 38.90.

Object: To compare five levels of K with a control in a plant crop and 1st ratoon.

<u>Fertilizer:</u>	<u>Plant</u>	<u>1st Ratoon</u>
(LAN) 220 lbs. N/ac.		(LAN) N ₁ 100 lbs. N/ac.
		N ₂ 200 " "
(SP) 243 lbs. P/ac.		(SP) 41.5 lbs. P/ac.
(MP) K ₀ -		(MP) K ₀ -
K ₁ 50 lbs. K/ac.		K ₁ 50 lbs. K/ac.
K ₂ 100 " "		K ₂ 100 " "
K ₃ 150 " "		K ₃ 150 " "
K ₄ 200 " "		K ₄ 200 " "
K ₅ 250 " "		K ₅ 250 " "

<u>Treatment:</u>	<u>Plant</u>	<u>1st Ratoon</u>
K ₁ : 50		50 lbs. K/ac.
K ₂ : 100, 150		100 lbs. K/ac.
K ₃ : 150		150 " "
K ₄ : 200		200 " "
K ₅ : 250		250 " "

Results:

	Treatment	T.C.A.	% Suc.	T.S.A.
Plant	K ₀	25.4	13.47	3.48
	K ₁	23.1	13.48	3.11
	K ₂	25.4	13.58	3.45
	K ₃	25.5	13.03	3.32
	K ₄	26.6	13.11	3.49
	K ₅	27.3	12.84	3.51
1 R.	K ₀	23.0	12.45	2.86
	K ₁	19.7	13.16	2.59
	K ₂	19.8	12.66	2.51
	K ₃	21.9	13.19	2.89
	K ₄	18.4	13.05	2.40
	K ₅	20.0	12.60	2.52

8.14

1.21