

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

NITROGEN x MOLASSES TRIAL

Catalogue No: 6
This crop: P 1R 2R
Site: Compound, Cranbrook
Altitude: 600'
Soil series: T.M.S. Cartref
Design: Split plot, 3 reps.
Variety: N:Co.339
Fertilizer: See below
Water regime: Dryland

Soil Analysis:

	pH	OM%	Clay%
P	5.4	0.85	-
1R	5.6	1.11	-
2R	5.3	1.04	-

	p.p.m.			
	P	K	Ca	Mg
P	23	39	-	-
1R	32	54	-	-
2R	26	49	-	-

Age: P 21 months 11/56 - 8/58
 1R 21 " 8/58 - 5/60
 2R 26 " 5/60 - 7/62

Rainfall: P51.3" 1R50.1" 2R69.8"

Object: To compare three levels of N in the presence and absence of molasses

Fertilizer:

	Plant	1R	2R
Ammon. N N ₁	300	300	225
N ₂	450	600	450
N ₃	600	900	675
Supers	800	500	500
Muriate	180	300	300

Treatments:

	lb N/acre		
	Plant	1R	2R
N ₁	78	78	103
N ₂	117	156	206
N ₃	156	234	309

Results:

	Treatment	T.C.A.	Suc. %	T.S.A.
Plant	N ₁	53.9	14.91	8.04
	N ₂	56.0	14.93	8.37
	N ₃	56.5	15.00	8.47
1R	N ₁	47.3	13.14	6.21
	N ₂	49.8	12.48	6.20
	N ₃	49.8	12.35	6.04
2R	N ₁	38.1	14.58	5.55
	N ₂	35.2	14.36	5.04
	N ₃	34.6	14.40	4.99