SOUTH AFRICAN SUGAR INDUSTRY
AGRONOMISTS' ASSOCIATION.

MOLASSES TRIAL.

Catalogue No.: 5
This Crop: P, 1R
Site: Patel, Inyaninga
Altitude: 300'
Soil Series: Windermere
Design: Latin Square
Variety: N:Co.339
Fertilizer: Ibs/ae

	Amm, Nit.	Super Phos,	Mur. of Pot.
P	400	800	180
1R	600	300	250

Water Regime: Dry Land.

Soil Analysis:

	pH	OM%	Clay%
P	5.80	6.41	-
1R	5.75	6.46	-

p.p.m.

	P	K	Ca	Mg
P	25	86	-	-
1R	22	220	750	-

Age: P 21 mths. Oct. '56 - July '58
1R 23 mths, July '58 - June '60

Rainfall: P 69.10"
1R 69.80"

Object: To study the effects of different amounts of molasses on cane yield.

Treatments:
X = Control
M_1 = Molasses 1000 G.P.A.
M_2 = " 2000 "
M_3 = " 3000 "
M_4 = " 4000 "
K = Mur. of Potash 700 Ibs/ae.

Results:

	PLANT CANE			1ST RATOON		
Treatments	T.C.A.	Sucrose %	T.S.A.	T.C.A.	Sucrose %	T.S.A.
X	66.8	14.05	9.38	47.0	13.23	6.21
M_1	73.1	14.17	10.20	49.7	13.24	6.57
M_2	74.8	14.04	10.35	52.1	13.45	7.03
M_3	75.6	14.06	10.65	50.5	13.47	6.80
M_4	76.6	13.96	10.68	51.8	13.68	7.08
K	70.9	13.81	9.79	51.1	13.23	5.07

SOUTH AFRICAN SUGAR INDUSTRY
AGRONOMISTS' ASSOCIATION.

MOLASSES TRIAL.

Catalogue No.: 5
This Crop: 2R, 3R
Site: Patel, Inyaninga.
Altitude: 300'
Soil Series: Windermere
Design: Latin Square with split.plots.
Variety: N:Co.339
Fertilizer: See Treatment
Water Regime: Dry Land.

Soil Analysis:

	pH	OM%	Clay%
2R	5.58	4.55	
3R	5.47	3.73	

	p.p.m			
	P	K	Ca	Mg
2R	28	270		1015
3R	23	285	728	li33

Age: 2R 25 mths. June '60 - July '62
3R 11 mths. July '62 - June '63

Rainfall: 2R 75.09"
3R 45.34"

Object: To compare the residual effects of different amounts of molasses and further applications of 1000 g.p.a.

Treatments: Split Plots: Molasses re-applied at 1000 g.p.a. = RA
No additional Molasses (residual) = RS

Fertiliser lbs/ac

	Urea	Isuper Phose	Mur. of Potash
2R	450	300	250
3R	400	400	250

Results:

Treatments		2ND RATOON T.C.A.	2ND RATOON Sucrose %	2ND RATOON T.S.A.	3RD RATOON T.C.A.	3RD RATOON Sucrose %	3RD RATOON T.S.A.
X		44.8	14.6g	6.59	19.8	11.60	2.30
M_1	RS	47.3	14.78	6.99	25.4	11.58	2.9
	RA	51.3	14.68	7.53	24.7	li.46	2.8
M_2	RS	48.0	14.60	7.01	23.2	11.14	2.6
	RA	49.8	14.61	7.30	23.7	li.16	2.6
M_3	RS	48.9	14.66	7.17	22.2	11.83	2.63
	RA	48.5	14.65	7.08	21.0	11.95	2.51
M_4	RS	46.6	14.73	6.86	24.8	11.32	2.81
	RA	49.6	14.61	7.26	30.4	10.96	3.33
K		48.8	14.46	7.03	23.0	11.25	2.59