

SOUTH AFRICAN SUGAR INDUSTRY
AGRONOMISTS' ASSOCIATION

MOLASSES TRIAL

Catalogue No	158	Soil Analysis: None recorded Age: Plant 21 Mhs 11.56 - 7058 1R 23 Mhs 7,58 to 6,60 2R - 24 Mhs - 6,60 to 6,62 Rainfall: None recorded
I.S.E. Code	Expt. Plot 10	
This crop	Plant	
Site	NkwaIL F05	
Altitude	100 ft.	
Soil Type	Dolerite	
Design	RoBoDo 5 reps.	
Variety	NCo 310	
Fertilizer	See treatments	
Water regime	Dryland	

Object: To test the efficacy of using molasses as a fertilizer.

Treatments: All Plots - 600 Ibs/ ac Supers in furrow
100 Ibs/ ac Nitrogen in furrow
66 Ibs/ac Nitrogen Top Dressing

Molasses applied one day after planting

Analysis Brix = **88,4** %N 0,715
suo % 30,4 %P 0,097
Purity = 34,3 %K 2,860

- 1000 gallons molasses contains: N - 88 Ibs
P - 12 Ibs
K - 350 Ibs.

<u>Amounts Applied</u>	<u>Galls/ac</u>
Control	Nil
M 500	500
M 1000	1000
M 1500	1500
M 2000	2000

Results:

Treatments	ToC.A.			SUC %			Purity			Fibre		
	P	1R	2R	P	1R	2R	P	1R	2R	P	1R	2R
Control	74,9	156,7	65,8	16,3	16,5	16,5	92,3	11,9	12,7	12,2		
M 500	73,5	158,2	66,2	16,4	16,6	14,6	91,8	11,8	12,3	12,1		
M 1000	83,0	61,8	73,2	15,9	16,4	15,8	91,0	12,0	12,1	12,1		
M 1500	183,9	164,1	72,9	15,5	16,7	15,6	92,0	10,9	12,3	11,5		
M 2000	84,6	63,7	76,9	16,1	16,5	16,4	91,6	11,2	12,2	11,8		

Statistical Analysis:

Plant Cane : Significant linear response to molasses : average linear response per 500 gall = 2,43 ToC.Ao + 4,94 at 5% level and 6,73 at 1% level.

Second Ratoon : Average significant response per 500 gallons (5%) = 2,89 t.c.a.