

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

Filter cake trial

<p><u>Catalogue No.:</u> 8 <u>This crop:</u> p., IR. <u>Site:</u> Maharaj, Si nenbe. <u>Altitude:</u> 600' <u>Soil series:</u> Cartref <u>Design:</u> Random block. <u>Variety:</u> N:Co.293 <u>Fertilizer:</u> N P K <i>PAIN</i> 450 150 IR Urea 350 300 200 <u>Water regime:</u> Dryland.</p>	<p><u>Soil Analysis:</u></p> <table border="0"> <tr> <td></td> <td align="center"><u>pH</u></td> <td align="center">OM %</td> <td align="center">Clay %</td> </tr> <tr> <td>P.</td> <td align="center">4.91</td> <td align="center">0.90</td> <td></td> </tr> <tr> <td>IR.</td> <td align="center">4.86</td> <td align="center">0.66</td> <td></td> </tr> <tr> <td></td> <td align="center" colspan="3"><u>p.p.m.</u></td> </tr> <tr> <td></td> <td align="center">P</td> <td align="center">K</td> <td align="center">Ca Mg</td> </tr> <tr> <td>P.</td> <td align="center">6</td> <td align="center">45</td> <td align="center">1420 167</td> </tr> <tr> <td>IR.</td> <td align="center">8</td> <td align="center">35</td> <td align="center">410 166</td> </tr> </table> <p><u>Age:</u></p> <table border="0"> <tr> <td>P.</td> <td align="center">21 mths.</td> <td align="center">March, 1959 - Dec. 1960.</td> </tr> <tr> <td>IR.</td> <td align="center">20 mths.</td> <td align="center">Dec. 1960 - Aug. 1962.</td> </tr> </table> <p><u>Rainfall:</u></p> <table border="0"> <tr> <td>P.</td> <td align="center">63.85</td> </tr> <tr> <td>IR.</td> <td align="center">63.74</td> </tr> </table>		<u>pH</u>	OM %	Clay %	P.	4.91	0.90		IR.	4.86	0.66			<u>p.p.m.</u>				P	K	Ca Mg	P.	6	45	1420 167	IR.	8	35	410 166	P.	21 mths.	March, 1959 - Dec. 1960.	IR.	20 mths.	Dec. 1960 - Aug. 1962.	P.	63.85	IR.	63.74
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Object: To compare three levels of filter cake with a control.

Treatments:

F0	=	No filter press
F1	=	Filterpress 8 T.P.A.
F2	=	" 16 "
F3	=	" 24 "

Results:

	<u>T.C.A.</u>		<u>Sue. %</u>		<u>T.S.A. - i</u>	
	<u>P</u>	<u>IR</u>	<u>P - IR</u>	<u>IR</u>	<u>P</u>	<u>IR</u>
F0 : No filter press	58.1	37.8	14.0	15.4	8.10	5.83
F1 : F. press 8 T.P.A.	59.9	42.6	114.1	15.2	8.42	6.52
F2 : F. press 16 "	61.8	40.6	13.9	15.2	8.58	6.16
F3 : F. press 24 "	61.4	43.8	14.0	15.3	8.57	6.69

6th June, 1966.

SOUTH AFRICAN SUGAR INDUSTRY
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MOLASSES + FILTER PRESS TRIAL

Catalogue No: 8
 This crop P. IR.
 Site Maharaj, Sinembe
 Altitude 600'
 Soil series Cartref
 Design Random Block
 Variety N.Co. 293
 Fertilizer N P K
 P Amn. Nitrate 450 150
 IR Urea 350 300 200
 Water regime: Dryland

Soil Analysis:

	<u>pH</u>	<u>OM%</u>	<u>Clay%</u>
P	4.95	0.90	
IR	4.86	0.66	

<u>p.p.m.</u>				
	<u>P</u>	<u>K</u>	<u>Ca</u>	<u>Mg</u>
P	6	45	71	168
IR	8	11	20	83

Age: P 21 mnths Mar. '59-Dec. '60
 IR 20 mnths Dec. '60-Aug. '62

Rainfall: P 58.53"
 IR 51.63"

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

Treatments:

M0	No molasses	F0	No Filter Press
M1	Molasses 400 G.P.A.	F1	Filter Press 8 ToP.Ao
M2	" 800 G.P.A.	F2	" " 16 "
M3	" 1200 G.P.A.	F3	" " 24 "

Results:

Treatments	Plant Cane			1st Rntoon		
	T.C.oA.	% Sucrose	T.S.A.	T.C.A.	% Sucrose	T.S.A.
M0	58.07	13.93	8.17	40.4	15.13	6.11
M1	59.6	14.01	8.34	41.5	15.26	6.31
M2	61.0	13.92	8.49	40.8	15.35	6.26
M3	61.9	14.00	8.66	42.1	15.43	6.51
F0	58.1	13.96	8.10	37.8	15.39	5.83
F1	59.9	14.05	8.42	42.6	15.22	6.52
F2	61.8	13.88	8.58	40.6	15.18	6.16
F3	61.4	13.96	8.57	43.8	15.25	6.69