

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

PRE-RELEASE TRIAL (36/14, 38/22)

Catalogue No: 132
This crop: Plant
Site: Sprowston Section Darnall
Woollam's Road field
Altitude: 1300'
Soil series: Dolerite Sprintz
Design: Random Block
Variety: See treatments
Fertilizer:
Supers 8.3 % P 800 lb./acre
15 : 0 : 15 600 lb./acre
15 : 0 : 15 600 lb./acre

Water regime: Dryland

Soil Analysis:

pH	p.p.m.			
	P	K	Ca	Mg
3.8	22	42	40	340

Age: 22 months (11/62 - 7/64)

Rainfall: 78.90"

Object: To test pre-release varieties

Treatments: 1. C.B. 36/14
2. C.B. 38/22
3. N:Co.376
4. N:Co.293

Results:

Variety	T.C.A.	Suc. %	T.S.A.	1	2	Rank	
				T.C.A.M.	lb. S.A.M.	1	2
36/14	68.7	17.24	11.84	3.122	1076	2	2
38/22	57.6	17.48	10.07	2.618	915	4	3
376	74.2	17.47	12.96	3.372	1178	1	1
293	64.6	-	-	2.936	-	3	4

Mixed variety, no sucrose sample taken

Conclusions: C.B. 36/14 took second place to N:Co.376 while C.B. 38/22 gave disappointing results.

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PRE-RELEASE TRIAL (36/14, 38/22).

<u>Catalogue No.:</u> 132. <u>This Crop:</u> 1st Ratoon. <u>Site:</u> Sprowston Section, Darnall, Woollam's Road Field. <u>Altitude:</u> 1300' <u>Soil Series:</u> Dolerite Sprintz. <u>Design:</u> Random Block. <u>Variety:</u> See treatments. <u>Fertilizer:</u> 800 15 : 0 : 15.1st R. <u>Water Regime:</u> Dryland.	<u>Soil Analysis:</u> <table border="0"><tr><td></td><td colspan="4"><u>p.p.m.</u></td></tr><tr><td><u>pH</u></td><td><u>P</u></td><td><u>K</u></td><td><u>Ca</u></td><td><u>Mg</u></td></tr><tr><td>318</td><td>22</td><td>42</td><td>40</td><td>340</td></tr></table> <u>Age:</u> 15 Months (7/64 - 11/65). <u>Rainfall, this crop:</u> 53.02"		<u>p.p.m.</u>				<u>pH</u>	<u>P</u>	<u>K</u>	<u>Ca</u>	<u>Mg</u>	318	22	42	40	340
	<u>p.p.m.</u>															
<u>pH</u>	<u>P</u>	<u>K</u>	<u>Ca</u>	<u>Mg</u>												
318	22	42	40	340												

Object: To test pre-release varieties.

Treatments: 1. N:Co.293.
2. C.B. 38/22.
3. N:Co.376.
4. C.B. 36/14.

Results:

Variety	T.C.A.	% Sucrose	T.S.A.	T.C.A.M.	Lbs. S.A.M.	Rank	
						1	2
N:Co.293	28.64	13.47	3.858	1.909	514	3	3
C.B.38/22	37.64	11.69	4.400	2.509	586	2	2
N:Co.376	42.69	12.74	5.439	2.846	726	1	1
C.B.36/14	26.06	13.89	3.620	1.737	482	4	4

S.E. = 3.190

C.V. = 9.449%

Treatment differences - Highly significant.

L.S.D. between treatments = 5.12 T.P.A. @ 5%

7.34 T.P.A. @ 1%

Conclusions:

A good trial with N:Co.376 proving to be superior to the C.B. varieties. Unexpectedly C.B.38/22 significantly outyielded C.B.36/14 in this instance.

12th May, 1966.

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

Pre-Release Trial (36/14, 38/22)

<p><u>Catalogue No.:</u> 132. <u>This crop:</u> 3rd Ratoon <u>Site:</u> Sprowston Est. Kearsney Woollams Rd. <u>Altitude:</u> 1300' <u>Soil Series:</u> Dolerite (Sprintz) <u>Design:</u> Random Block <u>Variety:</u> See Treatments <u>Fertilizer:</u> 4:1:6 1200 lbs/acre <u>Water Regime:</u> Dry land</p>	<p><u>Soil Analysis:</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>pH</u></td> <td style="text-align: center;"><u>OM%</u></td> <td style="text-align: center;"><u>Clay%</u></td> </tr> <tr> <td style="text-align: center;">3.8</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td colspan="3" style="text-align: center;">p.p.m.</td> </tr> <tr> <td style="text-align: center;">P</td> <td style="text-align: center;">K</td> <td style="text-align: center;">Ca</td> <td style="text-align: center;">Mg</td> </tr> <tr> <td style="text-align: center;">22</td> <td style="text-align: center;">42</td> <td style="text-align: center;">40</td> <td style="text-align: center;">340</td> </tr> </table> <p><u>Age:</u> 13 months (5/67 - 7/68) <u>Rainfall:</u> 37.54" <u>Irrigation:</u> Nil.</p>	<u>pH</u>	<u>OM%</u>	<u>Clay%</u>	3.8	-	-	p.p.m.			P	K	Ca	Mg	22	42	40	340
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Object: To test pre-release varieties.

- Treatments:
1. N:Co. 376.
 2. C.B. 36/14.
 3. N:Co. 293.
 4. C.B. 38/22.

Results:

Variety	T.C.A.	Suc. %	T.S.A.	1. T.C.A.M.	2. LBS. S.A.M.	RANK	
						1	2
N:Co. 376	43.38	12.91	5.600	3.337	862	1	1
C.B. 36/14	33.49	14.27	4.779	2.576	736	2	2
N:CO. 293	26.93	14.18	3.819	2.072	588	3	3
C.B. 38/22	24.64	14.23	3.506	1.895	540	4	4

S.E. + 4.203
 C.V. = 13.093%

Treatment difference highly significant
 @ 1% and 5%
 L.S.D. between treatments = 6.72 T.P.A. @ 5%
 = 9.66 T.P.A. @ 1%

This trial has demonstrated the clear superiority of N:Co. 376 over the C.B. varieties and of C.B. 36/14 over C.B. 38/22.