

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

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

Catalogue No.: 131
This crop: Plant
Site: Holwood Section Darnall
Avenue West field
Altitude: 900'
Soil Series: T.M.S. Trevanian
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
418	23	60	325	210

Age: 22 months (10/62 - 7/64)

Rainfall: 67.65"

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	59.64	16.29	9.71	2.710	882	2	2
38/22	49.38	17.34	8.56	2.244	778	4	4
376	61.45	15.96	9.81	2.793	891	1	1
293	54.20	15.98	8.66	2.463	787	3	3

S.E. = \pm 6.06
C.V. = 10.8 %

Conclusions: C.B. 36/14 holds a good second to N:Co.376 while C.B. 38/22 was outyielded by the other 3 varieties.

SOUTH AFRICAN SUGAR INDUSTRY

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

Catalogue No.: 131
This crop: 1st Ratoon
Site: Holwood Section Darnall
 Avenue West field
Altitude: 900'
Soil series: T.M.S. Trevanian
Design: Random Block
Variety: See treatments
Fertilizer:
 800 lb./ac. 15 : 0 : 15
 1st Ratoon
Water regime: Dryland

Soil Analysis:

pH	p.p.m.			
	P	K	Ca	Mg
4.8	23	60	325	210

Age: 15 months (7/64 - 11/65)

Rainfall: 45.72"

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.	Suc. %	T.S.A.	1		2		Rank	
				T.C.A.M.	lb. S.A.M.	1	2	1	2
293	26.00	11.76	3.058	1.733	408	4	4	4	4
38/22	34.43	12.82	4.414	2.295	588	3	3	3	3
376	39.04	13.25	5.173	2.603	690	1	1	1	1
36/14	36.42	12.26	4.456	2.428	596	2	2	2	2

S.E. = 2.811

C.V. = 8.275 %

Treatment differences highly significant.

L.S.D. between treatments = 4.50 T.P.A. @ 5 %

6.46 T.P.A. @ 1 %

Conclusions: A good trial with 376 proving to be superior, and 36/14 outyielding 38/22 by an insignificant margin. N:Co.293 performed very poorly.

SOUTH AFRICAN SUGAR INDUSTRY

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

Catalogue No: 131
This crop: 2nd Ratoon
Site: Holwood Sect.
Darnall Ave. West
Altitude: 900'
Soil Series: T.M.S. Trevanian
Design: Random Block
Variety: See treatments
Fertilizer: 1200 lbs 4:1:6
Water regime: Dryland

Soil Analysis:

pH 4.8
OM%
Clay%
P 23
K 60
Ca 325
Mg 210
p.p.m.

Age: 14 months (11/65 - 1/67)

Rainfall: 44.06"

Irrigation: Nil

Object: To test pre-release varieties.

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

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	47.60	13.63	6.488	3.400	900	1	1
C.B.36/14	42.81	12.93	5.535	3.058	790	2	2
C.B.38/22	39.88	13.88	5.535	2.849	790	3	2
N:Co.293	37.81	12.78	4.832	2.701	690	4	3

S.E. † 4.364
C.V. = 10.38%

Difference between treatments not statistically significant.

The same yield trend has persisted in the 2nd ratoon with N:Co.376 retaining 1st place, and C.B.36/14 outyielding C.B.38/22 by an insignificant margin in tons cane per acre. C.B.38/22 has shown a consistently higher sucrose per cent in all crops when compared with C.B. 36/14 and in this crop the two sucrose yields are equal.

13th February, 1967.

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

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

Catalogue No.: 13/
This crop: 3rd Ratoon
Site: Holwood Sect. Darnall
 Ave. West
Altitude: 900'
Soil Series: T.M.S. Trevanian
Design: Random Block.
Variety: See Treatments
Fertilizer: 4:1:6 1200 lbs/acre
Water Regime: Dry land

Soil Analysis:

<u>pH</u>	<u>OM%</u>	<u>Clay%</u>
4.8	-	-

p.p.m.

<u>P</u>	<u>K</u>	<u>Ca</u>	<u>Mg</u>
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23	60	325	210
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Age: 17 months (1/67 - 7/68)

Rainfall: 60.58"

Irrigation: Nil.

Object: To test ~~pre~~-release varieties.

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

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	46.20	15.06	6.958	2.718	818	1	1
C.B. 36/14	38.30	15.56	5.959	2.253	702	4	4
C.B. 38/22	41.20	15.89	6.547	2.424	770	3	2
N:Co. 293	41.37	14.92	6.172	2.434	726	2	3

S.E. = + 5.135
 C.V. = 12.314%

Difference between treatments not statistically significant.

Although yield differences are not statistically significant N:Co. 376 still maintains its superiority and the position of the C.B. varieties has reversed by a small margin as compared with the previous season.