

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

PRE-RELEASE TRIAL (53/216, 52/219)

Catalogue No: 139
This crop: Plant
Site: Sprowston Section Darnall
 Woolam's Road field
Altitude: 1,300'
Soil series: Dolerite Sprintz
Design: Latin Square
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: 23 months (1/62 - 12/63)

Rainfall: 80.56"

Object: To test Pre-release varieties.

- Treatments:
1. N:Co.376
 2. N:Co.293
 3. N53/216 (Samson)
 4. N52/219 (Salute)

Results:

Variety	T.C.A.	Suc. %	T.S.A.	1	2	Rank	
				T.C.A.M.	lb./S.A.M.	1	2
376	64.46	Spoilt		2.777		1	
293	51.47			1.754		4	
53/216	55.34	Sample		1.889		2	
52/219	53.67			2.080		3	

Due to mixed samples for Suc. % cane only tons cane per acre results will be presented.

Conclusions: Note the relative improvement in performance of N53/216 compared with other estate trials.

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PRE-RELEASE TRIAL (53/216, 52/219)

Catalogue No: 139
This crop: 2nd Ratoon
Site: Sprowston Kearsney
 (Woollams Rd. Field)
Altitude: 1300'
Soil Series: Sprintz
Design: 4 x 4 Latin Square
Variety: See Treatments
Fertilizer: 15:0:15 (800 lbs/A)

Soil Analysis:

p.p.m.

pH	OM%	Clay%	P	K	Ca	Mg
4.0	-	-	26	85	200	180

Age: 18 months (12/64 - 7/66)

Rainfall: 58.72"

Irrigation: Nil

Object: To test pre-release varieties against released varieties.

- Treatments:
1. N:Co.376
 2. N:Co.293
 3. N.53/216 (Samson)
 4. N.52/219 (Salute)

Results:

Variety	T.C.A.	% Sucrose	T.S.A.	A T.C.A.M.	B Lbs S.A.M.	Rank	
						A	B
N:Co.376	78.81	15.71	12.381	4.378	1376	1	1
N:Co.293	57.94	15.35	8.894	3.219	988	3	3
N.53/216	60.61	16.35	9.909	3.367	1102	2	2
N.52/219	56.65	15.68	8.883	3.147	988	4	3

S.E. = 4.92

C.V. = 7.7%

Treatment differences significant at 1% and 5%

L.S.D. between treatments = 9.84 T.P.A. at 5%

14.58 T.P.A. at 1%

Comments:

N:Co.376 is significantly superior to all other varieties while N.53/216 shows no significant superiority over N:Co.293 and N.52/219.

25th November, 1966.

SOUTH AFRICAN SUGAR INDUSTRY

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PRE-RELEASE TRIAL (53/216, 52/219)

Catalogue No: 139
This crop: 4th Ratoon
Site: Sprowston, Kearsney,
 Woollams Road.
Altitude: 1300'
Soil series: Dolerite, Sprintz
Design: Latin Square
Variety: See Treatments.
Fertilizer: 4:1:6 @ 1200 lbs/A
Water Regime: Dry Land

Soil Analysis:
pH OM% Clay%
 4.0 - -

p.p.m.

P	K	Ca	Mg
26	85	200	180

Age: 14 months (10/67 - 12/68)
Rainfall: 53.18"

Object: To test pre-release varieties

Treatments: 1. N:Co.376
 2. N53/216
 3. N52/219
 4. N:Co.293

Results:

Variety	T.C.A.	%		T.S.A.	A		B lbs		Rank	
		Sucrose			T.C.A.M.	S.A.M.	A	B		
N:Co.376	37.12	14.20		5.271	2.651	753	1	1		
N53/216	32.33	14.50		4.688	2.309	670	2	2		
N52/219	32.11	13.80		4.431	2.294	633	3	3		
N:Co.293	28.09	14.60		4.101	2.006	586	4	4		

S.E. = ± 2.69
 C.V. = 8.4%

Treatment difference significant @ 5% only
 L.S.D. between treatments = 5.38 T.P.A. @ 5%

N:Co.376 remained significantly superior to all other varieties,
 but N53/216 was not significantly better than N:Co.293.