

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

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

Catalogue No: 140
This crop: Plant
Site: Tugela Section Darnall
 Blackhill field
Altitude: 300'
Soil series: Red sands Clansthal
Design: Latin Square
Variety: See treatments
Fertilizer: Supers 8.3% P 800 lb./ac.
 15 : 0 : 15 600 lb./ac.
 15 : 0 : 15 600 lb./ac.

Soil Analysis:

pH	p.p.m.			
	P	K	Ca	Mg
5.6	VH	50	500	160

Age: 23 months (1/62 - 12/63)

Water regime: Dryland

Rainfall: 79.70"

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	69.50	Spoilt		2.994		1	
293	66.15			2.850		2	
53/216	47.73	Sample		2.056		4	
52/219	61.99			2.671		3	

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

Conclusions: Note the relative poor performance of N53/216.

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

Catalogue No: 140
This crop: 2nd Ratoon
Site: Tugela Darnall Black Hill Field
Altitude: 100'
Soil Series: Poor Clansthal sand
Design: 4 x 4 Latin Sq.
Variety: See Treatments
Fertilizer: 10:5:15 at 1200 lbs/a
Water regime: Dryland.

Soil analysis:

pH	OM%	Clay%	p.p.m.			
			P	K	Ca	Mg
5.0	-	-	VH	92	360	485

Age: 18 months (1/65 - 7/66)

Rainfall:

Irrigation: Nil

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

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

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	59.23	14.07	8.334	3.291	926	1	1
N:Co.293	14.78	13.25	1.958	0.821	218	4	4
N.53/216	21.31	14.73	3.139	1.184	348	2	3
N.52/219	26.39	14.22	3.753	1.466	418	3	2

S.E. = \pm 6.69

C.V.% = 21.9

Treatment differences significant at 1% and 5%
 L.S.D. between treatments = 11.57 T.P.A. at 5%
 = 17.53 T.P.A. at 1%

Comments:

The soil variation within the experiment was noticeable which has contributed to the very high coefficient of variance. The very poor performance of N.53/216 should be noted in comparison with N:Co.376.

25th November, 1966.