

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

PRE-RELEASE TRIAL (168, 539).

Catalogue No.: 122.

This crop: Plant.

Site: Tugela Section, Darnall,
Blackhill Field.

Altitude: 100'.

Soil Series: Red Sands Clansthal.

Design: Random Block.

Variety: See treatments.

Fertilizer:

Supers 8.3% P 800
L.A.N. 20% N 300
M. Potash 50% K 200
15 : 0 : 15 800

Water Regime: Dryland.

Soil Analysis:

pH p.p.m.
P K Ca Mg
5.3 14 71 430 320

Age: 23 months (3/61 - 2/63)

Rainfall, this crop: 88.72"

Object: To test pre-release varieties.

Treatments:

1. N.51/539
2. N.51/168
3. N:Co.376
4. N:Co.293.

Results:

Variety	T.C.A.	% Sucrose	T.S.A.	T.C.A.M.	Lbs. S.A.M.	Rank	
						1	2
N.51/539	57.3	13.58	7.78	2.941	676	4	4
N.51/168	58.2	14.32	8.33	2.530	724	3	3
N:Co.376	66.3	12.85	8.52	2.882	740	1	1
N:Co.293	63.4	13.20	8.37	2.756	727	2	2

Statistical Results - At Experiment Station.

Conclusions:

N.51/539 and N.51/168 show no improvement over commercial varieties against which they were tested.

13th May, 1966.

SOUTH AFRICAN SUGAR INDUSTRY

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PRE-RELEASE TRIAL (168/539)

Catalogue No: 122
This Crop: 2nd Ratoon
Site: Tugela, Darnall (Black Hill Field)
Altitude: 100'
Soil Series: Poor Clansthal sand
Design: Random Block
Variety: See Treatments
Fertilizer: 10:5:15 @ 1200 lbs/ac
Water Regime: Dry land

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 N.51/168 and N.51/539 against released varieties.

Treatments:

1. N.51/539
2. N.51/168
3. N:Co.376
4. N:Co.293

Results:

Variety	T.C.A.	% Sucrose	T.S.A.	A T.C.A.M.	B lbs. S.A.M.	Rank	
						A	B
N.51/539	44.38	15.04	6.675	2.466	742	2	2
N.51/168	37.02	13.72	5.079	2.057	564	3	3
N:Co.376	54.18	14.62	7.921	3.010	880	1	1
N:Co.293	32.32	13.92	4.499	1.796	500	4	4

S.E. = 4.98 Treatment differences significant at 1% and 5%
C.V. = 11.8% L.S.D. between treatments = 7.97 T.P.A. @ 5%
11.46 T.P.A. @ 1%

Comment: This is a good experiment for poor Clansthal sands where N:Co.376 is clearly superior to all other varieties and N.51/539 outyielded N.51/168 by 7.36 tons/acre, which just missed being significant at the 5% level.

28th November, 1966.