

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

PRE-RELEASE VARIETY TRIAL

Catalogue No: 119
This Crop: 3rd Ratoon
Site: Cornubia Sect. N.E.L.
 (Massal Field)
Altitude: 400'
Soil Series: Clansthal sand
Design: Random block
Variety: See treatments
Fertilizer: 4:1:6 1200 lbs/ac
Water regime: Dryland

Soil Analysis:

pH	OM%	Clay%	ppm			
			P	K	Ca	Mg

Age: 22 months (8/64 - 6/66)
Rainfall: 60.72"
Irrigation: Nil

Object:

To test pre-release varieties.

Treatments:

1. N.51/539
2. N:Co.376
3. N.50/211
4. N.51/168

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	52.39	14.77	7.738	2.381	704	4	3
N:Co.376	58.83	13.98	8.224	2.674	748	1	1
N.50/211	55.52	13.35	7.472	2.523	674	2	4
N.51/168	54.23	14.60	7.918	2.465	720	3	2

Comments:

In the 1st, 2nd and 3rd Ratoons N.51/168 has outyielded N.51/539 by a small margin, but N:Co.376 and N.50/211 were consistently better than these two new varieties.

29th November, 1966.

SOUTH AFRICAN SUGAR INDUSTRY

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Pre-Release Trial (168, 539)

Catalogue No: 119
This Crop: 2nd Ratoon
Site: Cornubia Section N.E.L.
Massal Field
Altitude: 400'
Soil Series: Recent sands Lytton
Design: Random Block
Variety: See treatments.
Fertilizer: 10:5:15 1200 lbs.
Water Regime: Dryland.

Soil Analysis:

pH	O.M.%	P.p.m.	
		P.	K.
8.5	0.90	72	108

Age: 10 months (10/63 - 8/64)
Rainfall, this crop: 31.34"

Object: To test pre-release varieties.

Treatments: 1. N.51/539 (sabre)
2. N.51/168 (saraband)
3. N:Co.376
4. N.50/211

Results:

Variety	T.P.A.	Suc. %	T.S.A.	1		2		Rank	
				T.P.A.M.	S.A.M.	Lbs.	S.A.M.	1	2
539	35.76	13.63	4.87	3.576	974			4	3
168	36.83	12.10	4.45	3.683	890			3	4
376	40.97	14.66	6.00	4.097	1200			1	1
211	37.10	14.22	5.27	3.710	1054			2	2

10th May, 1966.

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

Pfe-Release Trial (168, 539)

Catalogue No: 119
This Crop: 1st Ratoon
Site: Cornubia Section, N.E.L.
 Massal field
Altitude: 400'
Soil Series: Recent Sands, Lytton
Design: Random block
Variety: See treatments
Fertilizer: 10:6:10 1,200 lbs.
Water Regime: Dryland

Soil Analysis:

<u>pH</u>	<u>OM %</u>	<u>ppm</u>	
		<u>P</u>	<u>K</u>
8.3	0.91	35	68

Age: 13 months (9/62 - 10/63)

Rainfall, this crop: 45.85"

Object: To test pre-release varieties.

- Treatments:
1. N.51/539 (Sabre)
 2. N.51/168 (Saraband)
 3. N:Co.376
 4. N.50/211

Results:

Variety	T.P.A.	% Suc.	T.S.A.	1 T.P.A.M.	2 Lbs. S.A.M.	Rank	
						1	2
539	51.42	13.6	6.9	3.955	1062	4	4
168	57.19	13.3	7.6	4.399	1169	3	3
376	65.02	14.5	9.4	5.001	1446	1	1
211	59.44	15.4	9.1	4.572	1400	2	2

N.51/539, N.51/168 Variety Trials

Both N.51/539 and N.51/168 gave comparable yields in both plant and ratoon results of trials at Mt. Edgecombe and Darnall. The average yields of all experiments and stages of growth were:

	T.C.A.M.	LBS. S.A.M.
N.51/539	3.533	1034
N.51/168	3.583	973

Neither variety shows any improvement over N:Co.376 or N.50/211.

In growth N.51/539 has a better stooling but thinner and shorter sticks, whereas N.51/168 has fewer but adequate number of thicker and better sticks.

11th May, 1966.