

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION.

VARIETY TRIAL.

Catalogue No.: 118
Crops: P, 1R, 2R, 3R.
Site: Syringa, Hippo Valley.
Altitude: 1200'
Soil: Triangle P 2 sandy loam.
Design: Nil (5 replications).
Varieties: As below.
Fertilizer: N P₂O₅ K₂O
P (S/A) 110 152 -
1R (S/A) 160 - -
2R (S/A) 160 - -
3R (S/A) 140 76 60

Soil Analysis:
pH P₂O₅ K₂O
(CaCl₂) p.p.m. m.e.%
5.6 8 0.3

Age:
P 13.5 months Apr. '64 - May '65.
1R 12.2 months May '65 - Jun. '66.
2R 12.2 months Jun. '66 - Jun. '67.
3R 13 months Jun. '67 - Jul. '68.

Trash: Burnt

Results:

Item	Crop	C.B.36/14	Co.462	P.R.1000	B.4362	N:Co.310	N:Co.376
T.C.A.	P	83.3	76.4	85.1	83.7	78.8	86.1
	1R	80.5	76.6	70.2	74.0	74.8	83.1
	2R	67.0	62.2	57.4	60.1	57.4	63.8
	3R	58.1	56.2	54.4	52.0	49.6	51.9
	Mean	72.2	67.8	66.8	67.4	65.2	71.2
% Cane	P	13.6	13.2	12.1	14.6	15.0	15.1
	1R	13.1	14.0	13.5	14.3	13.8	15.1
	2R	15.2	15.0	15.5	15.7	16.0	15.6
	3R	15.5	16.0	15.8	16.2	17.8	17.0
	Mean	14.4	14.6	14.2	15.2	15.6	15.7
T.S.A.	P	11.33	10.04	10.29	12.21	11.82	13.00
	1R	10.56	10.75	9.49	10.55	10.32	12.55
	2R	10.15	9.32	8.89	9.45	9.20	9.97
	3R	9.03	8.97	8.60	8.42	8.85	8.84
	Mean	10.27	9.77	9.32	10.16	10.05	11.09
T.C.A.M.	P	6.17	5.66	6.30	6.00	5.84	6.38
	1R	6.60	6.28	5.75	6.07	6.13	6.81
	2R	5.58	5.18	4.78	5.01	4.78	5.32
	3R	4.47	4.32	4.18	4.00	3.82	3.99
	Mean	5.70	5.36	5.25	5.27	5.14	5.62

Notes:

- 1) N:Co.376 was outstanding for sucrose yields over all 4 years.
- 2) C.B.36/14 improved over the 4 years relative to other varieties, and was highest in sucrose and cane yields in the 2nd and 3rd ratoons.

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HIPPO VALLEY VARIETY TRIAL NO. 1.

<u>Catalogue No.:</u> 118	<u>Soil Analysis:</u>
<u>Crop:</u> 4R.	pH P ₂ O ₅ K ₂ O
<u>Site:</u> Syringa, Hippo Valley.	(CaCl ₂) p.p.m. m.e.%
<u>Altitude:</u> 1200'	5.6 8 0.3
<u>Soil:</u> Triangle P 2 sandy loam.	<u>Age:</u> 4R 13 months. Jul '68-Aug '69
<u>Design:</u> Nil (5 replications).	
<u>Varieties:</u> As below.	
<u>Fertilizer:</u> N P ₂ O ₅ K ₂ O	
4R (S/A) 140 76 60	
<u>Trash:</u> Burnt	

Results:

Item	Crop	C.B.36/14	Co.462	P.R.1000	B.4362	N:Co.310	N:Co.376
T.C.A.	4R	46.4	54.6	46.4	46.0	45.5	45.4
Sucrose % Cane	4R	15.2	16.0	16.4	15.6	17.2	16.7
T.S.A.	4R	7.00	8.60	7.60	7.20	7.80	7.60

Notes:

N:Co.376 has been the outstanding variety with little to choose between N:Co.310, C.B.36/14, Co.462 and B.4362. Co.462 has improved relative to the other varieties with increasing number of ratoons, and was the best variety in 4th ratoon.