

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

Variety Trial

Catalogue No.: 32
 This crop: P, 1R, 2R, 3R
 Site: Armstrong, Umhloti Valley Est.
 Altitude: 400'
 Soil: Avoca
 Design: Random Blocks
 Varieties: N:Co.292, N:Co.310,
 N:Co.376, N:Co.339,
 N:Co.382, N:Co.334,
 N:Co.293, Co.331

Fertiliser:	N	P	K
Plant = A/N	375	1000	370
1R = A/N	750	500	300
2R = Urea	450	500	400
3R =	400	400	250

Soil Analysis				p.p.m.			
	pH	O.M.%	Clay %	P	K	Ca	Mg
P	5.58	3.62	-	26	101	-	-
1R	5.35	3.27	-	66	112	1900	-
2R	5.54	2.56	-	20	134	-	967
3R	5.39	-	-	26	41	1830	611

Age:
 P = 22 mths. Nov. 1956 - Aug. 1958
 1R = 22 mths. Aug. 1958 - June 1960
 2R = 28 mths. June 1960 - Oct. 1962
 3R = 15 mths. Oct. 1962 - Jan. 1964

Rainfall: P 79.15"
 1R 66.47"
 2R 88.46"
 3R 50.90"

Object: To compare the yields of eight released varieties.

Results:

Item	Crop	N:Co.292	N:Co.310	N:Co.376	N:Co.339	N:Co.382	N:Co.334	N:Co.293	Co.331
T.C.A.	P	55.0	53.1	75.2	63.8	63.7	69.3	52.9	58.9
	1R	46.0	49.2	70.0	53.3	54.3	59.7	54.3	51.3
	2R	26.1	23.5	42.2	32.3	30.2	46.2	25.5	30.5
	3R	23.4	31.4	55.3	33.8	31.5	37.9	33.8	23.9
Suc. %	P	13.8	14.2	13.9	14.0	13.8	13.8	13.8	13.8
	1R	13.5	14.0	13.8	13.6	13.6	13.4	13.6	12.5
	2R	13.7	14.6	14.1	13.7	14.0	14.5	13.8	13.5
	3R	14.6	15.4	15.0	14.9	14.9	14.8	14.9	13.5
T.S.A.	P	7.59	7.56	10.50	8.94	8.79	9.49	7.32	8.06
	1R	6.19	6.89	9.68	7.22	7.37	7.98	7.37	6.40
	2R	3.58	3.43	5.95	4.43	4.24	6.68	3.51	4.12
	3R	3.42	4.85	8.29	5.02	4.69	5.61	5.03	3.22

30th May, 1966.