

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

Variety Trial

Catalogue No.: 29  
 This crop: P, 1R, 2R.  
 Site: Hospital, Tongaat.  
 Altitude: 200'  
 Soil: Clansthal  
 Design: Random block.  
 Varieties: N:Co.293, 276, 339, 292,  
 334, Co.301.  
 Fertiliser: N P K  
 P: 400 600 See treatment  
 1R: 600 - 450  
 2R: Urea 450 - -  
 Water regime: Dryland.

Soil Analysis: p.p.m.

	pH	OM %	Clay %	P	K	Ca	Mg
P	-	-	-	-	-	-	-
1R	6.36	0.82	-	76	51	470	-
2R	5.91	0.75	-	95	78	-	214

Age:  
 P = 20 mths. Oct. 1956 - June 1958.  
 1R = 24 mths. June 1958 - June 1960.  
 2R = 31 mths. June 1960 - January 1963.

Rainfall:  
 P = 58.53"  
 1R = 67.12"  
 2R = 101.98"

Object: To compare the yields of six released varieties.

Treatments:

Plant cane: Mur. of Potash = 1500 gallons molasses prior to planting.  
 Super Phosphate = 600 lbs./a.  
 Amm. Nitrate = 400 lbs./a.

Results:

Item	Crop	N:Co.293	N:Co.376	N:Co.339	N:Co.292	N:Co.334	Co.301
T.C.A.	P	53.3	60.3	51.0	32.2	58.8	44.5
	1R	32.9	35.6	26.8	13.7	27.7	17.0
	2R	29.7	25.1	23.5	13.6	33.5	17.3
Suc. %	P	12.8	12.8	13.3	12.4	13.2	13.1
	1R	13.1	13.5	13.2	12.9	13.0	12.8
	2R	12.7	13.1	12.8	12.7	13.2	12.8
T.S.A.	P	6.78	7.62	6.79	3.98	7.81	5.82
	1R	4.32	4.83	3.56	1.75	3.61	2.19
	2R	3.77	3.29	3.05	1.72	4.42	2.22

30th May, 1966.