

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

PRE-RELEASE CB VARIETY TRIAL

Catalogue No.: 175.

This Crop: Plant.

Site: Doornkop Section, Doornkop.

Altitude: 1,300 ft.

Soil Series: Cartref.

Design: Random Block, 4 reps.

Variety: Various.

Fertiliser, lb.p.a.: 100N; 150K.

Water Regime: Dryland.

Soil Analysis:

p.p.m.  
pH OM% P K Ca Mg  
5.1 2.8 10 30 200 -

Age: P. 20 months. (11/62 - 7/64).

Rainfall: 62.81"

Object:

To compare CB.36/14 and CB.38/22 with the released varieties N:Co.293 and N:Co.376.

Treatments: N:Co.293, N:Co.376, CB.36/14, CB.38/22.

Results:

| Variety   | Plant (20 months) |                   |                   |                                 |
|-----------|-------------------|-------------------|-------------------|---------------------------------|
|           | Tons Cane<br>p.a. | Sucrose<br>% Cane | Tons Suc.<br>p.a. | T.S.p.a.<br>as % of<br>N:Co.293 |
| N:Co.293  | 77.56             | 15.49             | 12.02             | 100                             |
| CB. 36/14 | 71.61             | 14.46             | 10.36             | 86                              |
| CB. 38/22 | 55.61             | 15.61             | 8.69              | 72                              |
| N:Co.376  | 66.89             | 14.18             | 9.46              | 79                              |

13th May, 1966.

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PRE-RELEASE CB VARIETY TRIAL

Catalogue No.: 175.

This Crop: 1st Ratoon.

Site: Doornkop Section, Doornkop.

Altitude: 1,300 ft.

Soil Series: Cartref.

Design: Random Block, 4 reps.

Variety: Various.

Fertiliser, lb.p.a.: 100N; 150K.

Water Regime: Dryland.

Soil Analysis:

|     | p.p.m. |    |    |     |    |
|-----|--------|----|----|-----|----|
| pH  | OM%    | P  | K  | Ca  | Mg |
| 5.1 | 2.8    | 10 | 30 | 200 | -  |

Age: R1. 15 months. (7/64 - 11/65).

Rainfall: 35.14"

Object:

To compare CB.36/14 and CB.38/22 with the released varieties N:Co.293 and N:Co.376.

Treatments:

N:Co.293, N:Co.376, CB.36/14, CB.38/22.

Results:

| 1st Ratoon |                   |                   |                   |                                 |
|------------|-------------------|-------------------|-------------------|---------------------------------|
| Variety    | Tons Cane<br>p.a. | Sucrose<br>% Cane | Tons Suc.<br>p.a. | T.S.p.a.<br>as % of<br>N:Co.293 |
| N:Co.293   | 36.01             | 12.24             | 4.41              | 100                             |
| CB. 36/14  | 28.32             | 12.13             | 3.44              | 78                              |
| CB. 38/22  | 28.09             | 12.62             | 3.54              | 80                              |
| N:Co.376   | 22.56             | 11.90             | 2.68              | 61                              |

Comments:

- (1) As with the plant cane results, N:Co.293 has yielded the highest in this trial.
- (2) CB. 38/22 enjoys second place with CB. 36/14, after the former variety's poor showing as plant cane.
- (3) N:Co.376 and CB.38/22 appeared to suffer the most from drought effects but whereas N:Co.376's response and recovery following the Spring rains was poor, CB.38/22 responded exceptionally well.
- (4) The placement of varieties as to Sucrose % Cane in 1st Ratoon is identical to that obtained in Plant Cane.

13th May, 1966.

SOUTH AFRICAN SUGAR INDUSTRY  
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PRE-RELEASE C.B. VARIETY TRIAL.

Catalogue No.: 175  
This Crop: 3rd Ratoon  
Site: Doornkop Section, B13(Z)  
Doornkop  
Altitude: 1,300 ft.  
Soil series: Cartref  
Design: Random block, 4 Reps.  
Variety: Various  
Fertilizer: 120N; 150K.  
Water Regime: Dryland.

Soil Analysis:

|  |      | p.p.m. |    |     |    |
|--|------|--------|----|-----|----|
|  |      | P      | K  | Ca  | Mg |
| pH                                       | OM%  |        |    |     |    |
| 5.2                                      | 2.76 | 12     | 33 | 212 | -  |
| <u>Age:</u> R3 : 11 months; 8/66 - 7/67. |      |        |    |     |    |

Object:

To compare C.B. 36/14 and C.B. 38/22 with the released varieties N:Co.293 and N:Co.376.

Treatments:

C.B. 36/14  
C.B. 38/22  
N:Co. 293  
N:Co. 376

Results:

| VARIETIES     | T.C.A. | S. % C. | T.S.A. |
|---------------|--------|---------|--------|
| N:Co.293      | 44.9   | 12.6    | 5.62   |
| C.B.36/14     | 37.2   | 14.0    | 5.19   |
| C.B.38/22     | 33.5   | 13.4    | 4.49   |
| N:Co.376      | 35.9   | 13.0    | 4.67   |
| MEAN          | 37.9   | 13.2    | 4.99   |
| S.E. of Mean  | 2.23   | 0.26    | 0.280  |
| L.S.D. (0.05) | 7.1    | 0.8     | 0.90   |
| (0.01)        | 10.2   | 1.2     | 1.29   |
| C.V. %        | 11.7   | 3.9     | 11.2   |