

SOUTH AFRICAN SUGAR INDUSTRY
AGRONOMISTS' ASSOCIATION

A(x)

Code : NT 1 ETvl/86/P
Cat. No.: 1614

TITLE : Nematicides on a sandy clay loam soil

1. PARTICULARS OF THE PROJECT:

This crop : :Plant

Site : :Mhlati Block 2

Region : :Northern irrigated

Soil system :Komatipoort

Soil form : :Shortlands

Design :Randomised block 6 reps

Variety :N14

Fertilizer/ : N P K

Ameliorants 150 15 90

kg/ha

Soil analysis : Date : 24/7/86

pH O.M.% Clay % P.D.I.

7,60 1,45 24 -

ppm

P K Ca Mg Zn Al

>80 107 1350 830 - -

Age : 12,2mths Dates : 24/7/86 -

31/7/87

Rainfall : 443mm

Irrigation : 1680mm

2. OBJECTIVES :

To determine whether irrigated cane grown in soils with a clay content greater than 10% responds to the application of nematicides.

3. TREATMENTS :

1. Control A - no nematicide

2. Control B - no nematicide

3. Temik at 20kg ha⁻¹

*4. Temik 10kg ha⁻¹ + 10kg ha⁻¹

5. Curaterr at 30kg ha⁻¹

* 2nd application 8 weeks after planting

Note on treatments.

The second application of Temik was applied over the emerging cane rows.

4. RESULTS :

Treatments	Cane tha^{-1}	Suc %c	Suc tha^{-1}	Stalk pop ₁ ($\times 1000\text{ha}^{-1}$) at 5,5mths	Stalk lengths (cm) at 5,5mths
Control A	111	14,0	15,5	165	85
Control B	113	13,5	15,3	162	85
Temik 20kg	125	13,8	17,3	174	101
Temik 10kg+10kg	130	-	-	169	100
Curaterr 30kg	126	-	-	158	90
MEAN	121			166	92
C.V. %	11,1				
LSD (P=0,05)*	18,0				
S.E.D. [†]	8,5				

COMMENTS

- * Growth measurements 5,5 months after planting showed small responses to Temik. No growth measurements were done at harvesting because of lodging.
- * The response of 18 t c ha^{-1} from the split application is statistically significant (P=0,05). It is possible that the split applications of Temik to plant cane may produce better responses under irrigated conditions. See NT3 (Cat. No.).
- * Responses to Temik and Curaterr applied as single treatments were similar (ns).

RAD/lp

2/12/87