

SOUTH AFRICAN SUGAR ASSOCIATION

AGRONOMISTS' ASSOCIATION

Code: NT3E.Tv1/86/P

Cat. No.: 1622

TITLE: Nematicides on loamy sands.

1. PARTICULARS OF THE PROJECT:

This crop: Plant cane  
Site: Laughing Waters-Kaalrug  
Region: Northern irrigated  
Soil system: Komatipoort  
Soil form: Katspruit  
Design: Random block 4 reps  
Variety: N14  
Fertilizer/     N           P           K  
Ameliorants: 122           60           162  
                  kg/ha

Soil analysis:     Date: 21/11/86  
pH   O.M.%   Clay %   Silt %   T.Sand %  
5,90                   5           5           90  
  ppm

P   K   Ca   Mg   Zn   Al  
79   64   207   85   -   -  
Age: 10,7mths   Dates: 24/11/86-16/10/87

Rainfall:           L.T.M.:

Irrigation:  
Summer mth: +32mm on 7day cycle  
Winter mth: +32mm on 9day cycle

2. OBJECTIVES:

- \* To determine the responses from nematicides applied to irrigated sugarcane grown in sandy soils.
- \* To determine whether responses from higher rates or split applications are different from the single recommended application in irrigated sugarcane.

3. TREATMENTS:

1. Control A }  
2. Control B }     No nematicides
3. Temik 20kg ha<sup>-1</sup>
4. Temik 10kg ha<sup>-1</sup> (in the planting furrow) + Temik 10kg ha<sup>-1</sup> over the cane row 8 weeks after planting.
5. Temik 40kg ha<sup>-1</sup>
6. Curaterr 30kg ha<sup>-1</sup>

4. RESULTS:

Growth measurement and responses at harvesting.

Treatments	Stalk height (cm)	Stalk pop. x 1000 <sup>ha-1</sup>	Heights x pop. (m)	% Response
Control	118	77	91	
Temik 20kg	140	83	116	27
Temik 10+10kg*	181	98	177	94
Temik 40kg	154	92	142	56
Curaterr 30kg	164	92	151	66
MEAN	151	88	135	
S.E.	4,4	11,4	16,9	
S.E.D.	± 7,0	± 5,6	± 12,0	

\* 2nd application 8 weeks after 1st application

COMMENTS:

- \* The trial area was harvested before cane mass could be determined.
- \* Growth responses indicate that the standard application of Temik at 20kg ha<sup>-1</sup> was clearly less effective than the split application in this irrigated sugarcane. There is further evidence of this in NTLE.Tvl/87 Cat. no. 1614
- \* Growth responses to Curaterr were superior to those from Temik applied at standard recommended rates.
- \* The superior response to split applications of nematicides needs to be confirmed for irrigated sugarcane.