

SOUTH AFRICAN SUGAR INDUSTRY

AGRONOMISTS' ASSOCIATION

Code: HW 306/86

Cat. No: 1561

Title: Panicum repens control in trays

1. Particulars of the project:

<u>This crop</u> : Weeds only	<u>Planting date</u> : 1.4.86
<u>Site</u> : Mt. Edgecombe traysite	<u>Spraying date</u> : 10.12.86
<u>Region</u> : N. Coast Coastal	<u>Assessment dates</u> : 8.1.87
<u>Soil system</u> : Berea	4.2.87
<u>Soil form/series</u> : Hutton/ Shorrocks	11.3.87
<u>Design</u> : 1 tray per treatment	<u>Irrigation</u> : Drip irrigated
<u>Variety</u> : -	
<u>Fertilizer/</u>	
<u>Ameliorants</u> : <u>N</u> <u>P</u> <u>K</u>	
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Weather condition at spraying:

Rainfall : On day of spray (m.m.)	: 2,0
No. days to 1st rain	: 6
No. m.m. at 1st rain	: 17,2
Sunshine hours	: 2,8
Dew	: Nil
Temperature (°C) : 8 a.m.	: 20,0
2 p.m.	: 21,0
Relative humidity (%) : 8 a.m.	: 73
2 p.m.	: 60

2. Objectives: To test chemicals for their long term control of Panicum repens.

3. <u>Treatments</u> :	<u>Rate (kg or ℓ prod ha<sup>-1</sup>)</u>
1. Velpar (24) + diuron (80)	2 + 2,5
2. MSMA (72) + diuron	3 + 3
3. Diuron + Actril DS (70)	2,5 + 1,25
4. Roundup (35)	4
5. Asulox (40)	11
6. Asulox + Actril DS	9 + 1,25

#### 4. Experimental

P. repens was transplanted into 6 trays. Foliage was cut back and treatments were applied when the grass was growing actively.

Spraying was carried out using a lever-operated knapsack sprayer fitted with a TK5 nozzle. Regrowth was 500 mm high at the time of spray.

#### 5. Results

Table I. Visual ratings of percent foliage scorch taken 29, 53 and 91 days after the treatments were applied.

Treatment	Rate (kg or ℓ prod.ha <sup>-1</sup> )	% foliage scorch		
		29 DAA*	53 DAA	91 DAA
1. Velpar + diuron	2 + 2,5	40	60	50
2. MSMA + diuron	3 + 3	40	50	50
3. Diuron + Actril DS	2,5 + 1,25	35	40	50
4. Roundup	4	75	85	80
5. Asulox	11	70	55	40
6. Asulox + Actril DS	9 + 1,25	60	55	40

\* DAA - Days after application of treatments.

#### Comments

No treatment achieved an acceptable level of control on Panicum repens.

#### Future

More treatments will be tested on Panicum repens to improve its control.