



MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Recommendation Sheet No. 49

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ADDITIONAL HERBICIDE RECOMMENDATIONS FOR SUGAR CANE

For the past few years, research in weed control has been directed towards two main objectives: one was to find herbicide treatments with sufficiently long residual action so that only one application would be sufficient instead of the usual two or three, and the other, to obtain new treatments safe-enough for controlling weeds in young plant and ratoon cane, particularly in the case of susceptible varieties. These two objectives have now been achieved and recommendations for different situations where these treatments can be applied are given below.

1. PLANT CANE

1.1 Pre-emergence of cane and weeds

One of the following herbicide treatments can be used:

1.1.1 Goal 2E @ 4.75 L/ha or 2 L/arp

1.1.2 Goal 2E + DCMU 80% @ (2.4 + 2.4) L/ha or (1 + 1) L/arp

The two treatments above will normally control weeds for about 6 months.

1.1.3 Harness + DCMU 80% @ (2.4 + 2.4) L/ha or (1 + 1) L/arp

1.1.4 Butisan S + DCMU 80% @ (1.8 + 2.4) L/ha or (0.75 + 1) L/arp

1.1.5 Harness + atrazine 50% @ (2.4 + 4.8) L/ha or (1 + 2) L/arp

1.1.6 Butisan S + atrazine 50% @ (1.8 + 4.8) L/ha or (0.75 + 2) L/arp

The four treatments above will control weeds for about 3 months. However, where graminaceous weeds are known to be abundant, 1.1.3 or 1.1.4 should be preferred to the other two.

1.2 Post-emergence of cane and weeds

In tolerant sugar cane varieties any of the 4 treatments 1.1.3 to 1.1.6 can be used in mixture with an amine salt of 2,4-D or with Actril-DS at usual rates. However, in susceptible varieties, 1.1.3 and 1.1.4 should be avoided.

2. **RATOON CANE**

2.1 Canes stubble-shaved at harvest

2.1.1 Pre-emergence of cane and weeds

Any of the six treatments recommended for plant cane can be used.

2.1.2 If new cane sprouts have appeared and are still young, i.e 2-3 leaf stage, only 1.1.5 and 1.1.6 can be used.

2.2 Canes selectively harvested (i.e. water shoots left)

2.2.1 Pre-emergence of weeds

Any of the treatments 1.1.3 to 1.1.6 can be used but where graminaceous weeds are known to be a problem, mixtures which include DCMU should be preferred.

2.2.2 Post-emergence of weeds

In tolerant sugar cane varieties any of the four treatments 1.1.3 to 1.1.6 can be used in mixture with an amine salt of 2,4-D or with Actril-DS at usual rates, but for susceptible varieties, 1.1.3 and 1.1.4 should be avoided.