MAURITIUS CANE INDUSTRY AUTHORITY
MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

RECOMMENDATION SHEET *No. 192, February 2018*

# Herbicide mesotrione for weed control in sugarcane

Mesotrione is an active ingredient which inhibits the p-Hydroxyphenyl pyruvate dioxygenase (HPPD), and ultimately affects carotenoid biosynthesis. It is formulated as a 10% soluble concentrate (SC) and has been tested for general pre- and early post-emergence weed control in plant and ratoon cane as an alternative to atrazine.

Trials carried out by the MSIRI have revealed mesotrione to be as effective as atrazine against broad-leaved weeds, and is well tolerated by the different sugarcane varieties. The herbicide mesotrione is being recommended with one of the following tank-mix partners for weed control in sugarcane:

| Situation | Mesotrione | Tank-mix Partner |
|---|---|---|
| *Pre-emergence of weeds* | **1.0 – 1.5 L/ha** (425 - 625 ml/arpent) | - oxyfluorfen<br>- s-metolachlor<br>- tebuthiuron |
| *Early post-emergence of weeds* | **1.0 L/ha** (425 ml/arpent) | - hexazinone + 2,4-D amine salt **or** fluroxypyr<br>- amicarbazone + 2,4-D amine salt **or** fluroxypyr<br>- s-metolachlor + 2,4-D amine salt **or** fluroxypyr<br>- tebuthiuron + 2,4-D amine salt **or** fluroxypyr |

**Notes:**

- *higher rates of mesotrione to be applied where longer residual activity is required*
- *the rates of the tank-mix partners are specified in a spreadsheet on Herbicide Recommendations which may be downloaded from our website (www.msiri.mu)*
- *fluroxypyr should be opted whenever vine weeds or shrubs are predominant*



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