



MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Recommendation Sheet

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Herbicide treatment for control of *Clidemia hirta* (Watook) in sugar cane

During the recent years *Clidemia hirta* (L.) D. Don (Watook), a woody shrub, has invaded many sugar cane fields located in the humid and super-humid regions of the island. Initially, infestations were observed in fields found in the vicinity of hunting grounds. It is suspected that birds, particularly *Pycnonotus jocosus* L. ('Condé'), which feed on *C. hirta* fruits, have been responsible for its rapid propagation. The shrub produces a large amount of fertile seeds (about 4 000 000)/plant/year and it may reach more than one metre in height at adult stage.



Adult plant



flower



Mature fruits

As Watook is now a serious problem and is not effectively controlled by conventional herbicide treatments, several new post-emergence herbicide treatments have been evaluated. The tank-mix metsulfuron methyl + fluroxypyr has been found to be the most effective and is being recommended as follows:

Recommendation

Herbicide treatment	Dosage rate	
	per hectare	per arpent
Escort® (metsulfuron methyl 600 WG)	0.024 kg	0.01 kg
+	+	+
Starane® (fluroxypyr 200 EC)	1.2 – 1.8 L	0.5 – 0.75 L

Note: An adjuvant at 0.25% v/v should be added to above treatment

- *Higher rates of fluroxypyr should be used on more developed Watook plants*
- *The above tank-mix should be directed on Watook plants, avoiding as far as possible the young cane shoots, more particularly in susceptible varieties*

Your attention is drawn that guideline and/or advice is restricted for the purpose for which it is recommended only. MSIRI board shall not be responsible for any act that may arise out outside the purview of these guidelines.

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