



Adult borer feeding on exposed inner tissue of cane stalk.

SUGAR CANE WEEVIL BORER

BEST OPTIONS TO MANAGE DAMAGE

HISTORY

Sugarcane Weevil Borer damage is worst in areas that practise green cane trash blanketing. The greatest effect borers have is on CCS, decreasing the sugar content by an average of 1.2 units CCS when all stalks are damaged.

The best options to date for managing borer damage on farms while retaining a green cane trash blanket are outlined below. Any one practice on its own will not control borer damage. The various practices must be used together. Further work is being done to improve these options.

SHORT-TERM CULTURAL PRACTICES



Weevil borer damage

REDUCE/MODIFY HARVEST RESIDUE

Billets, whole stalks and cane attached to tops that is left after harvest provide a good place for borers to breed. The following practices will reduce borer harbourage: ensure the harvester is operating efficiently; use a shredder topper to break up cane attached to tops; use a trash mulcher to break up pieces of cane left in the field after harvest.

REDUCE STALK BREAK AGE

Borers readily invade damaged stalks. Anything that damages the rind of a stalk allowing the inner tissue to be exposed will lead to increased borer damage eg growth/wind cracks, damage from machinery, rat damage. Where rats are a problem, the most borer tolerant variety will not prevent borer damage as they will enter the stalk where there is a rat bite. It is important to control rats. Wind damage is beyond our control.

LONG-TERM OPTIONS

BORER RESISTANT VARIETIES

Varieties vary in susceptibility to borer damage. Characters such as rind hardness, natural stalk chemistry and trashing habit determine the level of tolerance. Varieties with growth cracks and internal 'pipes' tend to suffer damage. BSES (with funding from SRDC) is working to breed tolerance varieties. BSES released the variety Q175 in 1997 specifically because of its borer tolerance.

Variety susceptibility to borer damage		
Low	Moderate	High
Q117	Q113	Q107
Q135	Q124	Q115
Q161	Q152	Q120
Q175	Q158	Q138
	Q160	Q162
	Q166	

The table, left, is a guide to the level of borer tolerance of some commercial canes. Varieties react differently on different soil types and in different localities so these ratings may vary. Local knowledge on variety performance is essential in determining a variety's susceptibility.

CHEMICAL CONTROL

- * Rhône-Poulenc Rural, under the guidance of BSES, is developing Regent® 200SC for the control of sugarcane weevil borer. Three years of trial work have shown that a single spray of Regent to the sugarcane stool, at the first millable internode stage, will protect a crop from high borer damage. Reduced damage has resulted in increased CCS by at least 0.5 unit, thereby, demonstrating a return-on-investment for the grower.
- * The National Registration Authority has issued a permit for the commercial evaluation of Regent® 200SC in sugarcane.

APPLICATION INFORMATION



Regent® is applied as a directed fine spray to the stool when it has reached the first millable internode stage.

- * Only treat sugarcane where it is known to be susceptible due to its variety and location.
- * Use interrow or overrow machinery to spray the crop when it has reached the first millable internode stage during December to February.
- * Monitoring with baits, consisting of five split billets wrapped in black plastic, may be useful in confirming pest presence in suspect crops.
- * Apply as a fine spray directed at the stool area. Good coverage over the entire stalk to 40cm height and 10cm around the base is important. A pass on either side of the stool is required.
- * A minimum water volume of 250L/ha is recommended. Add a non-ionic wetting agent, such as X-77® at 100mL/100L.
- * Best results have been achieved with eight size 6 hollow cone nozzles per row working at 3 bar (44psi) pressure.

Directions for use					
Crop	Pest	State	Rate	WHP	Critical comments
Sugarcane	Sugarcane weevil borer	Qld only	375 mL/ha (approx. 5.7mL/100 m row)	12 weeks	<ul style="list-style-type: none"> • Apply during the summer months of December to February when the crop has produced the first millable internode of cane. Utilise bait-monitoring to confirm pest presence. • Use hollow cone nozzles as a directed spray to cover the base of the sugarcane stool and up the stalk to a height of 40 cm. Treat both sides of the stool ensuring coverage of all stalks, soil and trash in an area 10 cm surrounding the stool. • Add 100 mL/100 L X-77® non-ionic wetter and apply in a minimum water volume of 250 L/ha (approx. 3.8 L/100 m row).

Contact for further information:

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