

LOUISIANA RECOMMENDATIONS FOR CONTROL OF SUGARCANE INSECTS

The sugarcane borer is the most destructive insect attacking the Louisiana sugarcane crop. Wireworms, the sugarcane aphid, sugarcane beetle, sugarcane mealybug, root stock weevils, and springtails are minor pests for which no controls or spot controls are consistently recommended.

SUGARCANE BORER

Cultural Practices

The following farming practices can reduce sugarcane borer infestations and damage:

1. Plant non-infested seed cane to improve crop stands. Sugarcane borer larvae in seed cane can destroy 20% or more of the vegetative buds (eyes), and contribute substantially to overwintering populations.
2. Plant corn as far as possible from sugarcane to reduce mid-summer moth migration from senescing cornfields to sugarcane.
3. Plow out old stubble as quickly as possible after final harvest to reduce the number of overwintering larvae.
4. Scrap heavily infested fields of mill cane during harvest to reduce the number of overwintering larvae.
5. Leave crop residues such as cane tops, pieces of broken stalks, or old stubs exposed on the soil surface throughout winter to obtain maximum kill of larvae by low temperature.

Varietal Resistance

Some varieties of sugarcane withstand sugarcane borer attack better than others. The following commercial varieties are ranked in order of their response to attack. Within resistance groups those varieties that grow off quicker early in the season are more likely to get early heavy infestations. In addition, because of fewer fire ants and other arthropod predators planted cane fields often have earlier treatable infestations.

RELATIVE SUSCEPTIBILITY TO BORER INJURY	<u>VARIETIES*</u>	
	Recommended	Not Currently Recommended
Resistant	**Lol-283, HoCP85-845, L699-226	**HoCP85-845
Susceptible	HoCP96-540, Ho95-988, L97-128 L99-233, HoCP00-950	**CP70-321 LCP85-384, HoCP91-555, Ho95-988

* Based on infestations in replicated on-farm varietal trials.

** Resistance to Mexican rice borer.

Plant each variety in as large an acreage block as possible. This method helps the scouting program and cuts down on the treatment of resistant varieties when mixed with susceptible varieties. Plant HoCP85-845 wherever appropriate; this variety will greatly reduce the number of insecticide applications needed for control of damaging infestations. Use of resistant varieties supplies about 25% of the suppressive effect annually to control the sugarcane borer.

Sugarcane borer control:

Insecticide	Dosage per Active Ingredient/lbs/Acre	Dosage per Acre	**Last Application to Harvest
Karate	0.033	2.0 ozs	21 days
Asana XL	0.033-0.05	5.5-9.8 ozs	21 days
Baythroid	0.033	2.1 ozs	15 days
Confirm 2F	0.09-0.12	6.0-8.0 ozs	14 days
Mustang Max	0.01875-0.025	3.0-4.0 ozs	21 days
* Prolex	0.0125-0.02	1.28-2.05 ozs	21 days
Proaxis	0.0125-0.02	3.2-5.12 ozs	21 days
Diamond 0.83EC	0.052-0.078	8.0-12.0 ozs	14 days

Mexican rice borer control:

Diamond 0.83EC	0.078	12.0 ozs	14 days
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*Gamma isomer of Karate

** Minimum number of days from last application until harvest

NOTE: Whenever treatable, sugarcane borer and tie vine infestations occur in the same fields during late summer. You can apply borer sprays and 2-4-D in the same airplane [minimum five (5) gallons water/acre] or ground sprayer tank mix unless otherwise stated on the label. These pesticides are compatible. Their effectiveness is not reduced in combination and there are no more drift hazards associated with use in combination than with the total effects when each is used separately. This saves the cost of an additional application.

WARNING: Re-entry times for workers entering groves and/or treated fields should be strictly observed. Be sure to check the label for this information.

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TIMING APPLICATION: It is very important that fields be checked at weekly intervals from mid-June through September 15, that insecticides be applied only when economically injurious borer infestations exist, and that 5% stalks infested with live larvae are in leaf sheaths. **NO APPLICATION SHOULD BE MADE DURING RAIN.** Applications may be made after September 15 when borer populations could damage late harvested sugarcane as long as the PHI is considered.

INSECTICIDE APPLICATIONS SHOULD BE MADE ONLY AFTER JOINTS HAVE BEGUN TO FORM AND WHEN ECONOMIC INFESTATIONS ARE FOUND.

The need for thorough and competent checking of fields to determine where and when to use insecticides is most acute. Field checking permits the use of insecticides in a way that will:

1. Prevent the unnecessary destruction of natural enemies of the sugarcane borer.
2. Eliminate the unnecessary expense of applying insecticides where they are not needed.
3. Reduce fish kills and adverse effects of insecticides on other wildlife.
4. Prolong the useful life of new insecticides by delaying the development of resistance.
5. Reduce hazards of insecticide contamination of drinking water.
6. Reduce amount of insecticide accumulating in the soil that could cause excess residues in future crops.

WIREWORMS

Soil treatment is recommended to control wireworms where sod land is planted to cane or where wireworms are a problem. Wireworm damage generally occurs in spots and is usually confined to sandy loam soils.

Apply granular insecticide over seed pieces in the open furrow in a band 12-16 inches wide so that all the seed pieces have contact. The application should be made just before the seed pieces are covered with soil.

Insecticide Recommendations for Control of Soil Insects:

<u>Formulation</u>	<u>Amount of Active Ingredient/Acre</u>	<u>Total Amount of Actual Material/Acre</u>
Thimet 20G	1.0-1.5 lbs/A.I./acre 5.0-7.5 lbs/acre	Apply in furrow directly around planted cane in a 12-inch band and cover with soil.
Mocap 20G	1.0-1.5 lbs/A.I./acre 5.0-7.5 lbs/acre	Same.

No treatments should be made without sampling to determine if an infestation of wireworms exists.

Note: Liquid formulations of wireworm insecticides are not recommended because their control does not last long enough and they are extremely hazardous to the applicator.