SASRI's Recommendations for Eldand Control

While it is not possible to eradicate eldana completely, one can achieve a degree of control which will minimise its effect on sugarcane yield. No single control measure will provide the answer to the eldana problem. SASRI therefore advocates an Integrated Pest Management strategy against eldana – in other words, control is based on combinations of selective control measures at appropriate times in the crop/pest cycle.



Choose appropriate varieties

Choose the best and most suitable varieties for your conditions. Planting resistant varieties in areas where eldana is prevalent is an important and effective control measure against this pest. This becomes even more important when drought occurs and eldana numbers increase in stressed cane.

Use only clean, healthy seedcane

Ensuring that seedcane is of high quality is probably the simplest and least expensive step that can be taken towards improving sugarcane productivity and maintaining high yields. If there is eldana in seedcane, then it stands to reason that your young cane will have eldana, and this in turn will lead to disastrous yields and continuing eldana problems in future ratoons.

Reduce moisture stress

A stressed crop is more susceptible to eldana damage. Identify soils that are prone to moisture stress, and that will need priority in treatment for eldana. Practices such as minimum tillage, strip cropping, conservation structures, trashing at harvest and proper weed control will all help conserve moisture.

Manage nitrogen applications

Excessive applications of nitrogen encourage eldana. Reduce the nutrient available to the pest by following FAS recommendations, and by reducing applications where specific growth-limiting factors are identified.

Address silicon deficiency

A leaf analysis provides a realiable guide to predicting silicon deficiency. Ideally, silicon deficiency is best corrected at crop establishment by incorporating the silicate source several weeks before planting, as one would do with lime. Also monitor the nitrogen:silicon ratio and the silicon status of the stalk as these are indicators of potential eldana damage.

Select carry-over fields carefully

Borer populations increase as the crop matures. When selecting fields for carry-over, take the following into account: the resistance category of the variety, the potential for the crop to experience stress, and the historic and current eldana levels. Always abide by your LPD&VCC threshold levels.



Practise stringent field hygiene

Cane should be cut as low as possible leaving no stubble. All whole stalks and pieces of stalk must be removed from the field. Loading zones should also be cleared of all stalk material left behind. Burning heavily infested fields before harvest is an accepted control measure against eldana as it reduces the chances of ratoon crop infestation.

Conduct regular surveys

Conducting your own regular surveys will give an idea of the level of infestation and help decide harvest priorities. By doing so, infestations will be noticed before it is too late to take action. Remember that frequent small surveys are more useful than infrequent detailed surveys.

Abide by Local Pest, Disease and Variety Control Committee regulations and guidelines

The LPD&VCCs are legally constituted bodies whose existence is crucial to the industry's well-being. Their regulations and guidelines are designed to protect your interests by minimising the threat posed by pests and diseases.

permission. Whilst every effort has been made to ensure that the information



Pre-trash carry-over fields

Pre-trashing cane fields that will be carried over reduces eldana damage to the standing crop. The optimum time is before or at the first moth peak, during the period August to October.

Use insecticide in carry-over fields

The insecticide alpha-cypermethrin (Fastac) has been registered for use against eldana in carry-over cane. This is an important development in combatting eldana. Using Fastac in carry-over cane will allow the crop to mature while minimising damage.