

SUGARCANE PESTS, DISEASES, AND WEEDS



As Australia's specialist sugarcane research organisation, Sugar Research Australia (SRA) has an important role to help minimise and control the risk to production resulting from pests, diseases, and weeds.

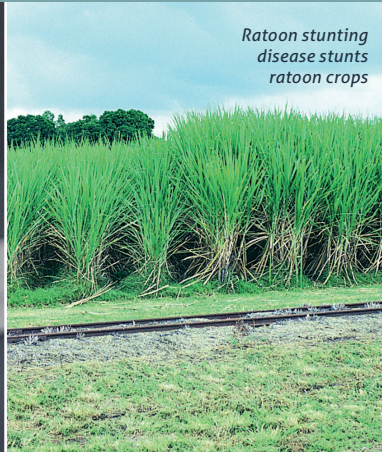
Severe pest and disease outbreaks in the Australian sugarcane industry can cause heavy losses to productivity and profitability, while weeds can also cause significant losses by competing with the crop.

Previous outbreaks of diseases such as Fiji leaf gall, orange rust and smut have cost the industry hundreds of millions of dollars and have impacted the sugarcane plant breeding program, and on-farm management.

Canegrubs are a common sugarcane pest



Ratoon stunting disease stunts ratoon crops



Examples that have been known to impact the Australian sugarcane industry are listed below:

PESTS

Canegrubs
Soldier flies
Rodents
Feral pigs

DISEASES

Ratoon stunting disease
Chlorotic streak
Pachymetra root rot
Orange rust
Smut

WEEDS

Guinea grass
Johnson grass
Sicklepod
Convolvulus vines
Nutgrass

WEED WATCH

Yield loss from weed competition, along with the cost of weed control in Australian sugarcane, has been estimated to exceed \$70 million dollars annually. Weeds compete with crops for water, light, nutrients and space, and can also host pests and diseases.

The escape of ornamental garden plants from backyards into agricultural settings can be harmful, so it is important to ensure plants are contained to pots and gardens to prevent them from becoming invasive.

When spraying weeds, always follow instructions on product labels to protect neighbouring crops and riparian zones from spray drift and waterways from runoff, to ensure personal safety, and to prevent herbicide resistance in weeds from developing.

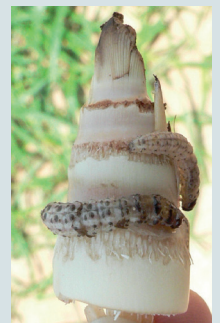


Vines are among weeds that can strangle crops, impacting yield

SPOTLIGHT: EXOTIC MOTH BORERS

An example of an exotic pest that could cause substantial damage to the Australian sugarcane industry is the exotic moth borer.

Not currently seen in Australia, exotic moth borers cause significant damage to sugarcane in Papua New Guinea, Indonesia, and other neighbouring countries, making them a high risk for the Australian industry.



Exotic moth borer larvae

SRA is collaborating with the Indonesian Sugar Research Institute and Ramu Agri Industries to test a number of control measures. The project is identifying pre-emptive strategies that can be employed in the event of an incursion. Building knowledge and being prepared before it happens, is one of the best ways to manage the pest if it arrives in Australia.

In countries affected by moth borers, sugarcane yield is reduced by up to 70 per cent in extreme case.



Queensland Government

SRA acknowledges the funding contribution of the Queensland Department of Agriculture and Fisheries for the research initiative: Moth borers – How are we going to manage them when they arrive?

INCURSION PREPAREDNESS

Exotic diseases and pests present a significant threat to the continued security of cane supply for the Australian sugarcane industry. Being prepared for an incursion of an exotic pest or disease will greatly increase the chances of eradicating the invader, or minimising losses if eradication is not possible. Incursion management plans give detailed information on the pest and how best to respond during an incursion.

BIOSECURITY IS IMPORTANT

Everyone has a role to play in safeguarding Australia from exotic and established pests and diseases, and managing invasive weeds.

Protecting the Australian sugarcane industry from losses caused by animal and weed pests and diseases is the fundamental purpose of the biosecurity program at SRA.

MOVEMENT OF SUGARCANE PLANT MATERIAL

Sugarcane plant material is not to be moved between different sugarcane biosecurity zones without appropriate biosecurity certificates.

Sugarcane plant material includes:

- stalks
- billets
- leaves
- tissue cultured plantlets
- potted plants

Stopping the entry, establishment and spread of unwanted pests, diseases and weeds is vital for our industry.

If unchecked, yield losses would be high and devastating to our industry.

Our actions can create or mitigate risks. Biosecurity protects our home and our way of life.

Report anything usual on 13 25 23 or through the Australian Government's Exotic Plant Pest Hotline – 1800 084 881 (plant pests and diseases, weeds and bees).

QUARANTINE WITHIN AUSTRALIA

Quarantine has never been more important to the Australian sugarcane industry than it is today. Fiji leaf gall, leaf scald and mosaic disease are three potentially devastating diseases that are present in Australia but are now under active control.

Quarantine between sugarcane districts in Australia has helped the industry restrict the spread of these serious diseases. While Fiji leaf gall caused massive losses in the Bundaberg district in the 1970s, it has not been found north of Proserpine due to strict internal quarantine regulations.

The Biosecurity Act (2016) (Qld) and Biosecurity Act (2015) (NSW) mean that everyone must take reasonable steps to ensure that they do not spread a pest, weed seed, disease, or contaminants, and that everyone has a responsibility to report unusual events that might be related to biosecurity.



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