

Biosecurity in the Australian sugar industry

What is it?

Biosecurity is the protection of the Australian sugar industry from infectious diseases, pests and other biological threats. It is achieved through systems that aim to prevent pest and disease introduction or spread, or to control an outbreak if it occurs, and are reliant on state and national policies for dealing with an event. The Sugar Industry Biosecurity Plan provides a detailed plan for responding to an incursion of an exotic pest which can be accessed on line at www.planthealthaustralia.com.au.

Stopping the entry, establishment and spread of unwanted pests and diseases is vital for our industry. If unchecked, yield losses would be high and devastating to our industry.

Quarantine

Quarantine has never been more important to the Australian sugar industry. There are endemic (in Australia) and exotic (outside Australia) pests and diseases. It is important to stop the spread or entry of these pests into different regions or crossing our borders. Failure to do so could potentially devastate our sugarcane. For now, diseases that are present in Australia are under active control and that's the preferred way of keeping it. Quarantine between sugarcane districts in Australia has helped the industry restrict the spread of serious diseases like Fiji leaf gall and mosaic. Fiji leaf gall caused massive losses in the Bundaberg district in the 1970's but it has never been found north of Proserpine. This is because of strict internal quarantine regulations.

Queensland's *Biosecurity Act 2014* and *Biosecurity Regulation 2016* control the movement of sugarcane and sugarcane machinery between Queensland's sugarcane biosecurity zones, and controls pests and diseases within these zones.

Movement of plant material & machinery

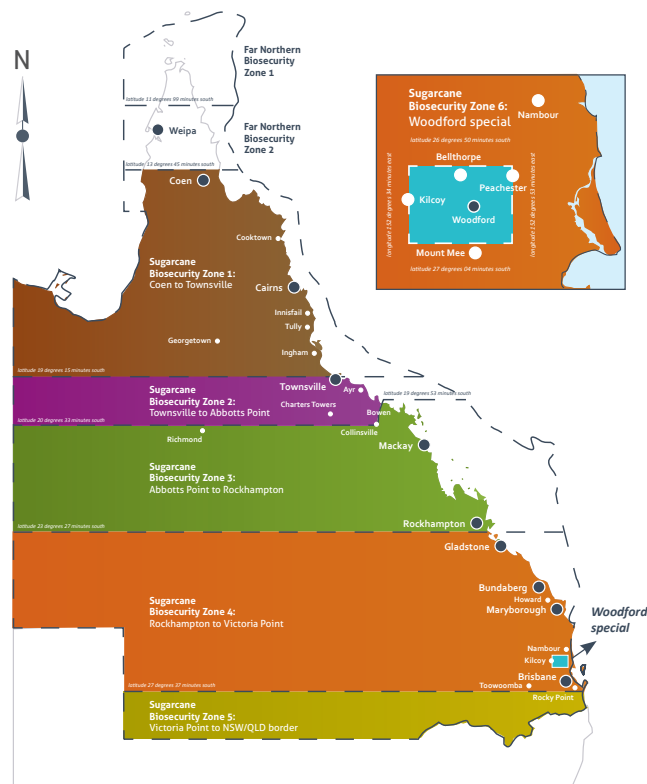
Plant material or machinery that has been in contact with a sugarcane plant or soil on which a sugarcane plant is or has been growing **must have a Plant Health Assurance Certificate (PHAC)** to move between sugarcane biosecurity zones. The purpose of this regulation is to prevent the movement of important sugarcane pests and diseases such as leaf scald, ratoon stunting disease, Fiji leaf gall, sugarcane mosaic and sugarcane striate mosaic. Approvals can be obtained by

contacting your local Productivity Service or DAF – Biosecurity Queensland.

Exotic pests & diseases

Across our borders are pests and diseases that could cause major damage to our sugar industry. If left uncontrolled, they could cause our industry large losses. For this reason it is important that we follow biosecurity legislations by working with DAWR to prevent illegal entry of sugarcane. All new sugarcane varieties imported to Australia pass through a high security post-entry quarantine check to ensure no diseases or pest are brought in, and any suspected illegal entry of canes into the country is reported. Growers and other industry people should wash clothes after visiting sugarcane overseas.

Map of Sugarcane Biosecurity Zones within Queensland



Exotic pest threats to our industry



Sesamia grisescens – Ramu shoot borer



Scirpophaga excerptalis – Sugarcane top borer



Eumetopina flavipes – Island planthopper



Dorystenes buqueti – Longhorn borer



Fulmekiola serrata – Sugarcane thrips



Ceratovacuna lanigera – White Woolly Aphid



Diatraea saccharalis – Sugarcane borer



Eldana saccharina – African sugarcane moth borer



Chilo infuscatellus – Early shoot borer



Chilo auricilius – Gold-fringed rice borer



Chilo terrenellus – Stem borer



Chilo sacchariphagus – Striped sugarcane borer

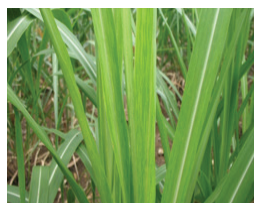
Exotic disease threats to our industry



Downy Mildew – *Peronosclerospora* sp.



Ramu Stunt – Suspected Virus



Mosaic – Various exotic mosaic viruses



White Leaf – *Phytoplasma*



Grassy shoot – *Phytoplasma*

SRA has research programs aiming at minimising the risk of exotic pests and diseases, and is actively preparing for incursions via developing diagnostic tests and identifying effective control strategies such as biological and chemical control and resistant varieties.

If you suspect you may have seen any of these pests or diseases please contact the exotic pest hotline on 1800 084 881, SRA, or your local Productivity Service