

Case Study

Refining Nutrient Management in Late Harvest Ratoons



LANDHOLDER	Wayne Gattera
LOCATION	Nerada
CATCHMENT	Johnstone
RAINFALL	3283 mm
PROPERTY SIZE	750 ha
ON-GROUND PROVIDER	CANEGROWERS Innisfail

Project Catalyst is a grower led, sugar cane innovation and adoption project that explores, develops and validates farm management practice change to improve the enduring water quality of the Great Barrier Reef.

BROADER ADOPTION VALIDATION & GROWER SUPPORT

Founded in 2009, the project operates in the Mackay Whitsunday, Burdekin and Wet Tropic regions to deliver valued practice change outcomes and develop methods for industry adoption. Under the Broader Adoption and Grower Support program, professional on-ground service providers assist selected growers to adopt and validate appropriate change practices. Service providers continue to monitor implementation benefits and derived environmental performance improvements. Through targeted extension activities, the program seeks to accelerate the uptake and broader adoption of improved farming practices at local, regional and industry levels.



Wayne's fertiliser box











2021

•••• Goal

To assess the potential to reduce nutrient rates in late harvested ratoon crops without affecting productivity.



Reduced rate left of flagged row full rate on right

Overview

Late harvested ratoon crops are generally impacted by less favourable climatic conditions. Here in the wet tropics, this is generally with the onset of the wet season. These poor climatic conditions can potentially lead to reduced productivity in late cut ratoons which can lead to increased nutrient losses. Consequently these rations are less likely to respond to nutrient inputs than crops ratooned and fertilised earlier in the season.

As such reducing nutrient rates in late harvested cane may not lead to a reduction in productivity. When refining nutrient rates in these situations it is important to consider crop class and condition, soil type and position in the landscape and the climate outlook.

Action

Following steps 5 & 6 of SIX EASY STEPS, Wayne was looking for ways to refine his nutrient management while maintaining productivity. After a full review and update of Wayne's whole of farm nutrient management plan was completed, a late harvested block that Wayne thought would be suitable to reduce fertiliser application rates was identified. The nutrient requirements of the block were identified and a reduction in application rate of 16% was decided, this equated to a reduction of 26kg N/ha.

Crop growth is being monitored.

Outcome

At this stage Wayne is happy with the growth of the ratoon crop and is intending to maintain this practice across suitable ratoon blocks in the future.



Demonstration block is on a Pin Gin soil series











