2021

PROJECT CATALYST

Case Study

Lowered Fertiliser Rates on Older and Late Cut Ratoons

LANDHOLDER	Wade Tibaldi
LOCATION	Mossman
CATCHMENT	Mossman
RAINFALL	2000 - 3000mm
PROPERTY SIZE	174ha
ON-GROUND PROVIDER	Mossman Ag Services

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 bene its 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.

Lowered Fertiliser Block

Cane Cop Mossman

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Goal

The goal is to work with Wade, refining his lowered fertiliser rates on older and late cut ratoons.

Lowered Fertiliser Block

Overview

Grower Wade Tibaldi and father Peter have spent a lot of time land levelling their blocks, and aligning blocks to best suit the lay of the farm. The farm can be very wet at times, and stay wet for weeks at a time during the wet season. Wade looks to reduce his fertiliser rates and costs where possible, knowing that on some ratoons they are not capable or achieveing high yeilds. Either due to their age, or other limiting factors. Wade is interested in continung this practice on a case by case basis on blocks he is prepared to reduce. Through replicated trials on other farms in Mossman this has shown to be a suitable pratice, and reduces both potential fertiliser losses and costs with excess fertiliser.

Lowered Fertiliser Block

Action

Initially spoke with with Wade about options for reduced rates on some blocks, produced Nutrient Management Plan.

More than 10 years ago Tibaldi's moved to controlled traffic rows and mounded beds; an added benefit of this is they have seen they get longer and more ratoons. This also helps with reducing waterlogging, with the interspace acting as a channel for drainage and the mounds reducing waterlogging effects. This also depends on soil types and varieties, with some out preforming others. Wade reduced his rate from 6ES on a number of blocks across his farm. The 2019 harvest data was assessed for those blocks, the result was that the reduction in fertiliser did no have a negative impact on yield, and resulted in a cost saving. He then continued this practice into 2020, making the decision in the 2020 season which blocks he could reduce his rates on. These blocks are preforming as expected, and will be harvested in 2021.

Outcome

With the help of the Nutrient Management Plan, he determined what his blocks are actually yielding to help determine the fertiliser rates. He has approximately 25% reduction on 6ES rates in some cases.

In relation to using lowered rates and subsequent yields he says, "I have got what I expect out of it"."Years ago growers were only growing to 3 or 4 ratoons, now we can see our ratoon ages extended with the controlled traffic. " Wade is content with the results from the reduced rates on the older and later cut ratoons. He will continue this practice and monitor results and seasonal outlooks.

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