

# **Case Study**

### Implementation of Minimum Tilled Legume Fallow Crops



LANDHOLDER	Mark Zatta
LOCATION	Abergowrie
CATCHMENT	Lower Herbert
RAINFALL	1756mm
PROPERTY SIZE	608ha
ON-GROUND PROVIDER	HCPSL

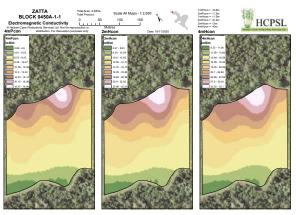
**Project Catalyst** is a grower led, sugar cane innovation and adoption project that explores, develops and validates farm management practice change to improve the enduring water quality of the Great Barrier Reef.

## 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.



Legumes planted with zero till



EM mapping











#### 2021

#### •••• Goal

- -To start incorporating legumes crops straight into the old cane rows for the fallow periods.
- -To improve overall soil health and farming sustainability
- -To increase time management efficiency



Tissue culture cane

#### Overview

Cultivation of the soils burns off soil carbon and disturbed/damages soil fauna and flora, which are the foundations of soil health. By planting the legumes straight into the old cane row with minimum cultivation needed ,Mark is hoping to improve his overall soil health, reduce erosion during the wet season and better manage compaction issues within his fallow blocks.

By reducing his cultivation practices Mark knows that he can improve his time management of farm operations leaving more time and money to go into prioritised farming goals.

#### • Action

- Plant legumes into old cane rows with a minimum of one pass with the wavy disc over the old cane stool.
- Reduce tractor hours by reducing cultivation to give himself more time for other farming operations.

#### Outcome

- 100% of fallow blocks are being planted with legumes as they come into rotation.
- Reduced tractor hours and fuel
- Trying to plant mixed species fallow crops but is having trouble with cockatoos and other pest animals



Planting tissue culture









