



Case Study

Bare Fallow to Legume Fallow



LANDHOLDER	Mark Aquilina
LOCATION	Mourilyan
CATCHMENT	Johnstone
RAINFALL	3283 mm
PROPERTY SIZE	42.3 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.



Great Barrier Reef Foundation



●●●● Goal

To move from spray out fallows to legume fallow, with the aim to improve soil health and the production of the following cane crop.



Fallow block February 2022

●●●● Overview

Mark is interested in growing legume cover crops on his fallow blocks. Currently his standard practice is to spray out the ratooning cane at the end of the crop cycle and any weeds are managed throughout the fallow period with broad spectrum herbicides as required. Mark hopes that the legume cover crop will provide good ground cover reducing erosion risk, suppress weeds and improve soil health through crop rotation.

The demonstration site is mostly a Mundoo soil series, a red basaltic clay classified as a Krasnozem.



Mundoo Soil Profile

●●●● Action

When planning for the fallow Mark had to decide if the block he is fallowing this year is suitable for cover cropping as well as how he plans to manage the fallow crop focusing on planting, weed control and termination.

This years fallow block required leveling to improve drainage. It is important that paddock constraints including poor drainage are corrected prior to planting a fallow crop. Due to delays with the leveler and the onset of the wet season Mark has not yet been able to plant a fallow crop.

●●●● Outcome

Although Mark hasn't been able to plant a fallow crop in his fallow yet he is still considering a late planted fallow crop if he is able to level the block soon.

Going forward Mark is planning on planting cover crops in his fallow blocks.

