2021

PROJECT CATALYST

Case Study

Mixed Legume Follows and Lower N Rates in Plant Cane After a Successful Legume Crop

LANDHOLDER	PCCCF2020BAV19
LOCATION	Forest Home
CATCHMENT	Lower Herbert
RAINFALL	2950.5 mm
PROPERTY SIZE	36 ha
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 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.

Friable soil and worms indicate better soil structure

Low lying wet country

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Mixed Legume Follows and Lower N Rates in Plant Cane After a Successful Legume Crop

Goal

To grow mixed legumes on all fallow blocks when possible. To trial different N rates in plant cane after a successful legume crop.

Germinating mixed legume crop of Ebony cowpea and Rongai Lablab

Overview

The grower wants to improve soil health across his farms by growing mixed legumes on his fallow block when possible.
By growing mixed legumes the grower is hoping to reduce weed pressure during fallow periods and reduce erosion after serious rain events.

Better erosion control for wet blocks

Action

-Pre-mound & lime fallow blocks in preparation for planting mixed legumes.
-Season 2019/2020 the grower has planted some of his fallow blocks to mixed legume crops. (Traditional mix of Ebony cowpea and Rongai Lablab)
- Season 2020/2021 once again the grower was able to plant some fallow blocks with a Traditional mix. Due to weather condition the fallow crops have been planted a little later than normal but have still been successful enough to reduce erosion which is his main concern around this time of year.
-Season 2021/2022. The grower has planted his fallow blocks with mixed legume crops and will trial different N rates in his plant cane when the cane planting season comes.

Outcome

-Season 2019/2020 the grower was successful in getting some traditional mix legume crops of Ebony Cowpea & Rongai Lablab onto his fallow ground.
-The season of 2020/2021 has been planted a little later than intended due to weather complications ,but the grower has stated that he is mainly wanting to control erosion and sediment runoff during the wet season and he is not overly concerned that his legume crop will have a shorter duration than normal as erosion during the wet season is his biggest concern. Due to weather circumstances and the shorter life cycle of the legume crop the grower will wait till the 2021/2022 season to trial different N rates in his plant cane as he feels that the legume crops have not come to there full potential.
-Season 2021/2022 has been a successful season for growing legumes and the grower will trial different N rates in his plant cane as suggested in his NMP.

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