2020

PROJECT CATALYST

Case Study

Direct Drill Legume Fallow

LANDHOLDER	PCCCF2020BAV13
LOCATION	Martyville
CATCHMENT	Johnstone
RAINFALL	3283mm
PROPERTY SIZE	85.3ha
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 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.

Fallow block pre cover crop planting

Early establishment looking from Direct drill to broadcast cover crop

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2020 Direct Drill Legume Fallow

Goal

Support growers who are already planting legumes to take the next step to direct drilled crops. With the aim of reducing cultivation prior to the wet season therefore reducing the risk of erosion.

Direct drill and broadcast soybeans 2 months after planting

Overview

The grower is interested in direct drilling cover crops into the old cane row to reduce the erosion risk during the fallow period.
The grower previous fallow management was to disc out the block, broadcast the cover crop seed and then incorporate the seed with another pass of the discs.

Direct drill soybeans 6 weeks after planting

Action

The grower and local Project Catalyst extension officer discussed both the current fallow management and direct drill and decided to plant the fallow block half broadcast and incorporated and half direct drill.
With a large wet season predicted Leichardt soybeans were chosen for the cover crop due to their tolerance to wet conditions.
The broadcast section of the block was cultivated on the 15/12/2021 with sections of the block planted on the 20/11/2020 using a spreader for the broadcast section and the MSF direct drill planter for the rest.
The ratooning cane in the direct drill section of the block was sprayed out with a mix of selective and non selective herbicides on the 19/12/2020.
Both the broadcast and direct drill cover crops are being monitored and will be biomass sampled for comparison once they reach maturity.

Outcome

There are no results available yet, however we will continue to monitor the cover crops progress and take biomass samples once the soybeans reach maturity.

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