



# Case Study

## Assessing Banded Chicken Manure in Plant Cane



<b>LANDHOLDER</b>	PCCCF2020BAV13
<b>LOCATION</b>	Martyville
<b>CATCHMENT</b>	Johnstone
<b>RAINFALL</b>	3283 mm
<b>PROPERTY SIZE</b>	85.3 ha
<b>ON-GROUND PROVIDER</b>	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.



Demonstration block February 2022



Applying the chicken manure



Great Barrier Reef Foundation



## ●●●● Goal

To assess benefits of using banded chicken manure in plant cane on yield and to reduce the applied rate of synthetic fertiliser.



Chicken manure band in the cane row prior to fill in

## ●●●● Overview

Having previously broadcast chicken manure onto fallow paddocks prior to planting cane, the grower was interested in the potential benefits of banding the chicken manure at low rates onto the cane row post planting.

Following a discussion with the local Project Catalyst extension officer about another Project Catalyst trial utilising banded mill ash, the grower decided to establish a demonstration block to assess the use of banded chicken manure in plant cane.

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



Mundoo Soil Profile

## ●●●● Action

Assessed the nutrient requirements of the plant block in conjunction with developing a whole farm nutrient management plan.

The grower decided to reduce his nitrogen rate in plant by 10kg/ha where the chicken manure was applied.

Carried out soil health testing using the SRA Soil Health Tool Box. Cane was planted on the 24/09/21. Chicken manure banded onto the row prior to fill in at 1.5 & 2t/ha.

The crop will be monitored through out the growing season and taken through to harvest.

After harvest, another round of soil health testing was carried out using the SRA Soil Health Tool Box to assess any changes in soil health during the crop.

The intention is to carry out the soil health testing again at the end of the crop cycle to assess any longer term benefits of the chicken manure.

## ●●●● Outcome

At this stage there is no visible difference in crop growth between the synthetic fertiliser only and the 2 manure rates. For future plant crops the grower intends to continue applying the manure and also get the manure's nutrient content tested to further refine his nutrient management practice.