



Case Study

Mixed Fallow Legumes and Rotational Cash Crops



LANDHOLDER	Lawrence and Hayden DiBella
LOCATION	Forest Home, Ingham
CATCHMENT	Lower Herbert
RAINFALL	1951mm
PROPERTY SIZE	100ha
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.



Great Barrier Reef Foundation



●●●● Goal

To grow a rotation of mixed legume crops with short term cash crops like pumpkins and sweet potatoes between cane crops.



●●●● Overview

Hayden and Lawrence want to make the most of their smaller property by growing a mix of cash crops like pumpkins and sweet potatoes, as well as mixed legume crops for soil health, to gain financial and soil health gains for sustainable farming into the future.

By growing short term cash crops Hayden can continue to make a profit off of his fallow land while achieving a break in the mono culture of his cane crops. They also include mixed legume crops on their fallow land for soil health purposes keeping the soil sustainable for future agricultural crops.



●●●● Action

- Lime fallow blocks and mound in preparation for either mixed legume crops or short term cash crops.
- Grow crops on fallow land for either soil health purposes or income purposes.
- Grow plant cane crops with reduced fertilizer due to inputs from previous rotational crops.

●●●● Outcome

Hayden and Lawrence have been successfully in rotating their cash crops on fallow land and maintaining their cane crops cycles to always have some sort of income coming in from all land sources on their farms.

By rotating their crops from mixed legumes for soil health purposes to growing short term cash crops for income, they can break the mono-culture of a five year or longer cane crop cycle, keeping their soils sustainable and healthy for future agriculture. Growing mixed legume crops allows them to improve and rest fallow soil in between cropping. Mixed legume cropping also allows them to reduce herbicide and chemical fertilizer due to the many benefits that come from growing mixed legume crops.