



Case Study

Implementation of Mixed Legume Species Fallow with Reduced Nitrogen

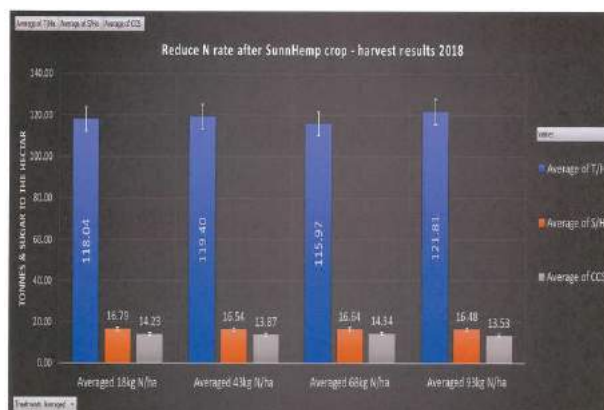


LANDHOLDER	Richard Hobbs
LOCATION	Sunnybank
CATCHMENT	Lower Herbert
RAINFALL	2920mm
PROPERTY SIZE	75 ha
ON-GROUND PROVIDER	HCPSL

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.



Great Barrier Reef Foundation



●●●● Goal

To plant all fallow blocks under a mixed legume fallow where possible, so Richard can reduce his nitrogen rate in his plant cane blocks across his farm when they come into rotation.



●●●● Overview

By planting his fallow ground with a mix of different legumes, Richard can reduce weed suppress and erosion in fallow blocks. Richard is also aiming to improve his organic matter and soil health across his farm. Richards main aim for planting mixed fallows legume crops is so he can reduce his nitrogen rates in his plant cane rotation.

●●●● Action

- Trials have taken place at Richards farm to confirm with confidence that he can reduce his nitrogen rate in plant crops without losing yield or sugar.
- Trials looked at a number of different rates of nitrogen after a good legume crop.
- Trials confirmed that it is really only possible to reduce nitrogen rates in plant cane after legume fallows and not in 1st ratoon cane without losing yield.
- Confirming that the benefits of the legume crops were only seen in the first cane cycle.

●●●● Outcome

Richard plans to plant all fallow blocks under a mixed legume crop where possible and weather permitting, so he can then reduce his nitrogen rates when planting his cane.

