



# Case Study

## Are Multiple Break Crops Economical?



<b>LANDHOLDER</b>	N & JJ Blackburn Family Trust (Chris & Lee Blackburn)
<b>LOCATION</b>	North Eton (Central Region)
<b>CATCHMENT</b>	Sandy Creek
<b>RAINFALL</b>	Mean 1413 mm, Median 1336 mm
<b>PROPERTY SIZE</b>	80ha
<b>ON-GROUND PROVIDER</b>	Farmacist Pty Ltd Author: John Turner

**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.



Fig.1 Winter sorghum crop (2020)



Fig.2 Lee Blackburn with newly acquired grain storage silos



Great Barrier  
Reef Foundation



## ●●●● Goal

To integrate extended break cropping into the farm system and evaluate the economic outcomes.

## ●●●● Overview

Whilst research undertaken as part of the Sugar Yield Decline Joint Venture determined that long-term breaks in the monoculture of sugarcane resulted in significant increases in soil health and sugar cane production, there is little regional specific economic evaluation to support the practice as a business decision.

Short fallow/break crops over the wet season are the traditional practice in the Australian sugar industry. The Blackburn's trust that there are soil health and sugarcane production benefits, but do the economics stack-up for ongoing cash-flow?

This trial is conducted over 18 months and three break crop cycles.



Fig.4 Early plant summer soybean crop expected to be followed by peanuts (2021)



Fig.3 Summer soybean crop (2020)

## ●●●● Action

Chris and Lee, in consultation with Farmacist, wanted to investigate the best options to break the sugarcane monoculture and optimise farm income when adopting an extended summer-winter-summer fallow.

They have successfully harvested summer soybean and winter sorghum crops. The paddock is now planted to soybean again for the final break crop.

## ●●●● Outcome

First summer soybean crop: Opportunistically the price at the time of harvest was 100% above the historic average at approximately \$850/t. The crop yield was 3t/ha. Return (after deductions) was \$600/ha. Winter sorghum crop: Price at harvest was \$300/t. The crop yield was 7t/ha. Return (after deductions) was \$350/ha.

The combined two break crops were grown in one year, therefore return can be compared against annual sugarcane return. This basic economical analysis assists growers to evaluate the implications of adopting this practice.

Lee and Chris believe multi break crops have a future in their farming system and are investigating other suitable summer and winter crops to diversify their crops and risk portfolio.

For further information contact John Turner (Farmacist) Mb. 0437 561 921.