



# Case Study

## Banding Mill Mud on Ratoons



<b>LANDHOLDER</b>	Josh Searle
<b>LOCATION</b>	Rita Island
<b>CATCHMENT</b>	Burdekin
<b>RAINFALL</b>	984mm
<b>PROPERTY SIZE</b>	33ha
<b>ON-GROUND PROVIDER</b>	Farmacist-Burdekin

**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 use banded mill mud on ratoon cane to both improve yield and soil water holding capacity on lighter soils.



●●●● Overview

Mill mud is a commonly used ameliorant in the Australian sugarcane industry for a multitude of reasons. Mill mud contains a high percentage of organic carbon, organic nitrogen, phosphorus, potassium and calcium, all of which are essential for plant growth. Mill mud also can improve soil health through better water retention, improving the Cation Exchange Capacity of the soil, soil texture, soil structure and soil biology. Banded mill mud has been an increasingly popular option to apply mill mud for Burdekin growers. Banding mill mud makes it a more economically viable option to growers who are further away from the mill(s) as they can cover more area with less product.



●●●● Action

Josh purchased his farm in 2019 and has been working on improving the soil condition. Due to the farm's location (nearby the Burdekin River and the coast), Josh intends to trial banding a mill mud/ash mixture on a sandy soil block to investigate whether it will improve the water holding capacity and yield of that block.

Josh's farm is also well outside the traditional area that mill mud is applied to (far from either of the mills) so it will be interesting to compare whether the mud/ash application will be worth it the investment!

Between Josh and Farmacist staff, a mill mud/ash application map was developed - designed to both target poor yielding regions in the block and trial banded mill mud/ash. The mud/ash was applied according to the map.

●●●● Outcome

Targeted application and banded mill mud/ash is a viable option for Josh should he wish to apply mill mud/ash on other areas of the farm.

The block has not been harvested yet so the results of the application can not be properly assessed; however, Josh reports that the block is growing well and looking more even than the previous year.

It will be interesting to see how the banded mill mud performs compared to the regions in the paddock that received a targeted application (higher rates on poor yielding zones and no mud/ash on high yielding zones).

