



Case Study

Implementation of EM Mapping, Sodic Soil Management and Fallow Cropping Systems

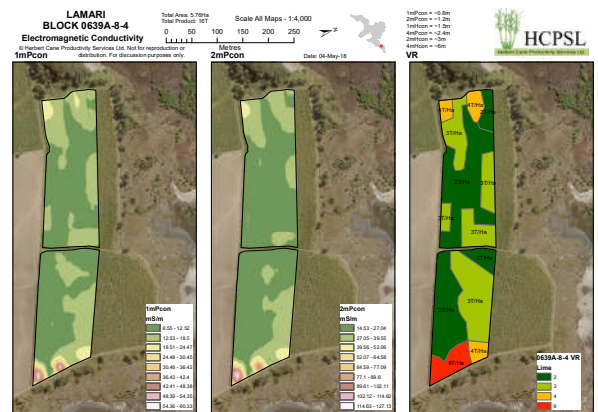
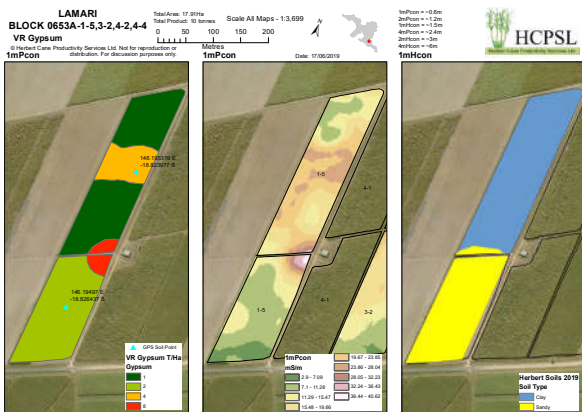


LANDHOLDER	Sam and Santo Lamari
LOCATION	Coolbie and Yuruga
CATCHMENT	Lower Herbert
RAINFALL	2672mm
PROPERTY SIZE	167ha
ON-GROUND PROVIDER	HCPSL

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.



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●●●● Goal

By using EM mapping and green manure fallow cropping the Lamari family hope to better manage their sodic soil issues amongst their cane blocks on both farms in the Bamabroo area. At the Yuruga farm there is potential to grow soybeans as cash crops when weather permits.



●●●● Overview

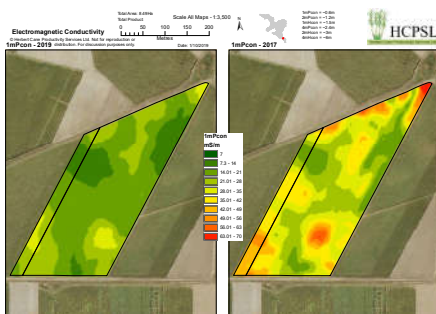
By using precision agriculture to find and map the problem sodic soils amongst their farms the Lamari family are hoping to put the right ameliorants into the problem zones. This and fallow break cropping to add organic matter and improve soil health across their properties, the brothers are hoping these new farming practices will help improve farm sustainability, cane yield/sugar and be an economically sound practice.

●●●● Action

- Mixed species fallow crops to be planted during fallow periods at the Coolbie farm.
- Soybeans to be grown at the Yuruga farm for potential cash crops if weather permits, if the cash crop cannot be harvested the soybeans will still be used as fallow crops.
- EM mapping blocks before planting.
- Using precision ag to apply variable rates of ameliorants into problem zones. Both Ash and Gypsum.

●●●● Outcome

- Nearly all blocks on both farms are EM mapped.
- Prescription maps and application of variable rates of ameliorants has commenced.
- Fallow crops will be planted on all fallow blocks where possible.
- Trying for Cash fallow crops on the Yuruga farm was unsuccessful in the 2018/2019 season due to weather ,but the Lamari brother will try again this season.



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