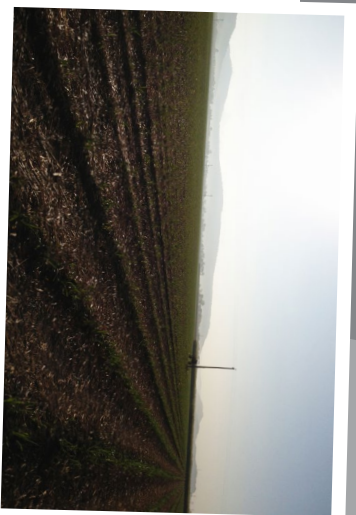




# Field Trip Case Study

Lou and Betty Raiteri

Quantifying the effects of microbial additions to sugarcane soils on crop productivity.



Block pre-application (early in morning).

Trials were implemented in four major districts within the Australian sugarcane industry to identify and objectively measure the effects of microbial additions under different sugarcane systems, climatic conditions and soil types that may lead to the positive impacts of sugarcane growth, soil health, and economic benefits. Each region was tasked with a specific trial relevant to growers in the region.

	Mackay	Proserpine	Burdakin	Herbert
	Reduced Nutrition	Effect of different feedstocks	Accelerated trash breakdown	Effect on parasitic populations
Treatment 1	100% Nutrition (Control)	100% Nutrition (Control)	No Trash + No Biology (Control)	No Biology (Control)
Treatment 2	100% Nutrition plus Biology	100% Nutrition + Mill Mud	No Trash + Biology	Biology @ 150 L/ha
Treatment 3	70% Nutrition	100% Nutrition + Biology	Trash + No Biology	Biology @ 300 L/ha
Treatment 4	70% Nutrition + Biology	100% Nutrition + Mill Mud + Biology	Trash + Biology	NIL

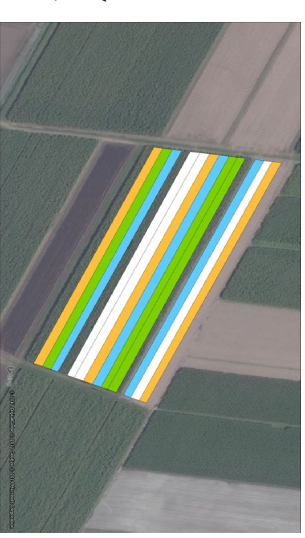
The Proserpine trial was designed to investigate whether or not an available feedstock such as mill mud, in conjunction with applied biology, could sustain higher populations of microbes and what effects might be observed or expected. This trial was applied on Lou Raiteri's farm in Proserpine on the 16th of September 2013.

Treatment	Description
1	100% nutrition (160N, 114K, 18S) - Control
2	100% nutrition + mill mud banded at 100 t/ha
3	100% nutrition + biology applied at 180 l/ha
4	100% nutrition + mill mud + biology

Measurements involve:

- Yield, CCS, tonnes of sugar produces
- Profitability
- Changes in soil chemistry over time
- Changes in soil physical properties over time
- Changes in biological populations over time
- The effect of different feed-stocks on biology

Trials are funded under the SRA GIP project scheme.



Biology being loaded.



Lou setting up applicator.

A big thanks to Lou and Betty Raiteri for hosting the 2014 Project Catalyst Field Trip.

