



Central SOIL HEALTH PROJECT

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2019/903

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Project leaders:
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ABOUT THIS PROJECT

This project is an industry partnership of the Central cane growing region of Queensland. Over two years, ten paired sites will be established across three mill areas to determine the soil health, root health and business impact of transitioning to an Improved Farming System (IFS). Long-term IFS sites, of at least ten years, will be matched with near-by sites using traditional farming practices. Physical, chemical and biological soil parameters will be measured, along with root development testing, to determine variation between the sites within each pair and therefore the long-term impact of implementing IFS practices. This work will assist the industry to determine the best set of soil health indicators for this region.

Importantly, the economic implications of transitioning to IFS will be investigated and communicated. Each paired site will be supported by a local group of growers and service providers who will come together at key points in the project to discuss and debate different approaches to IFS strategies and support one another in investigating options for their own farming business. The project will conduct topic specific field days as determined by these groups.



SRA's Soil Health Extension Toolkit will be validated in the field throughout the two-year project. Local service providers will be trained in the use of the toolkit and will assist to validate soil measurement parameters for the Central region. These partners will take the toolkit into the field, working alongside growers, to test its success as an easy method for identifying potential soil/production constraints.

This project builds on the success of SRA's Project "Measuring soil health, setting benchmarks and supporting practice change in the Sugar Industry" (2017/005) in the Burdekin and Herbert. To read more about this project visit the Soil Health Toolbox webpage.

This Central project is being conducted in parallel with a similar project in the Wet Tropics region (Project 2019/904).

HOW IS IT BEING DELIVERED?

The following activities are underway in the Central region:

- 10 paired sites will be established over two years, located across the region to represent different soil types, micro-climatic zones and management practices.

- These sites are being tested for soil physical, biological, chemical and crop root health parameters to measure the impact of long-term IFS practices.
- The project is delivering a platform for growers and service providers to discuss, debate and challenge management strategies, supported by underpinning local soil and crop research knowledge.
- Two IFS demonstration sites, already underway in the region through SRA Project 2018/008, will be utilised by the project so growers can visualise and discuss the management of fallow and intercropping practices in their local area.
- Certain soil health indicators will be measured by the project using the SRA Soil Health Extension Toolkit. This is a resource for advisors and growers to identify soil constraints and explore changes to management practices that stack-up economically.

WHAT ARE THE OUTCOMES FOR GROWERS?

- Local data to demonstrate soil health benefits of transitioning to an IFS and greater understanding of long-term productivity and profitability impact.
- A more cohesive and knowledgeable extension support network which can provide tailored soil management advice with increased confidence to meet the needs of each farming enterprise.
- A collaborative approach on soil health key messages to improve understanding for growers.
- Tools and training developed for in-field, real-time measurement so that identifying soil/production constraints, and making more informed solution decisions, is a shared and supported process between advisor and grower.

WHAT IS THE RESEARCH SHOWING SO FAR?

For service providers, the Soil Health Extension Toolkit has been developed and will soon be available.



MORE INFORMATION

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