

## Trial Summary

# Evaluation of the CONVERTE Plantfood in Cotton, Boggabri NSW

### Trial Objectives

Evaluate the impact of Converte Plantfood on irrigated Cotton yield and soil health in Boggabri NSW. Four replicated treatment rows were studied, each row being 850m long, 12 m wide and four hectares in area. Each replicate comprised a control area, a single dose of Plantfood at 250ml / ha and a double dose of 500ml/ha. The Cotton was planted with 12.8 seeds /m on 12/10/20 and the variety was S746B3F.



### Trial Methodology

The Cotton crop was treated with high levels of nitrogen fertilizer at 170kg / ha and 10kg of chicken waste organic matter per m<sup>2</sup>. The expected yield was 12.5 t per hectare. The first application of Plantfood was at the 10-12 node stage and the second application at pre-flowering. Plants were monitored for differences in growth and yields recorded at harvest 4/5/2021.

### Key Trial Findings

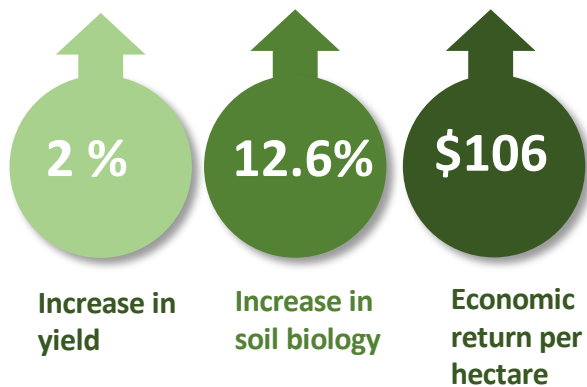
The addition of Converte Plantfood resulted in:

- Higher Yield in both treatment areas over the control;
- Economic benefit ranging from \$47 to \$106 per hectare
- Measurable improvements in soil biological health and function



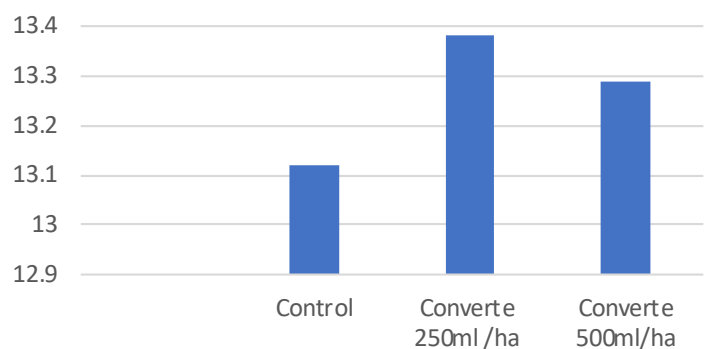


## Results



- The application of Converte Plantfood in an intensive cropping scenario delivered a 12.6% improvement in soil biological function;
- The biology improved significantly with a double dose of Plantfood but delivered less in terms of yield;
- There was an 105% increase in VAM fungi in the soils treated with 500ml Converte Plantfood;
- In soils treated with 250ml Converte Plantfood there was a 88% increase in soil Protozoa;
- A 9% increase in Actinomycetes was recorded which is important for forming stable humus ;
- An economic return of \$47 and \$106 per hectare was achieved for the double and single doses of Plantfood respectively.

Yield / ha



## Conclusions

- The results show significant improvements in biology in the double dose areas, and the single dose is selectively improving the soil biology with a greater yield benefit.
- Soil phosphorus is being utilized better in the Converte single dose area;
- A yield increase and economic gain was recorded over the control for both treatments;
- Further work is required to assess the benefits of adding a double dose of Plantfood, both for soil health benefits and accrued benefits in yield and dollars returned;
- This trial will continue into wheat crops planted in June 2021.