

Trial Summary

Bio stimulant Plantfood and Seed Primer on Canola, Urana NSW

Trial Objectives

To improve soil biota abundance and diversity while also increasing the quality (oil content) and quantity (yield) of canola. Determine if soil compaction is reduced with the increase of soil biology and increase the efficiency of nutrients applied by improving soil health and function. This trial targeted one paddock that was divided into 6 treatments, with which to test the response of Convertte's Seed Primer and Bio-stimulant Plantfood on Canola variety 44T02.

Trial Methodology

The treatment areas were treated with 2 t/ha of lime and 170kg/ha of urea prior to sowing. Convertte Seed Primer was applied at sowing and after sprouting for the Bio stimulant Plantfood via boomspray at single application (250mL/ha) and double application (500mL/ha) on their respective trial rows. The crop was monitored for differences in growth and harvest data provided by S. Urquhart.

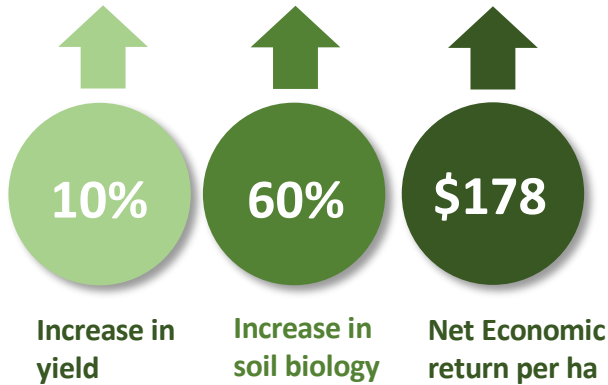
Key Trial Findings

The addition of Convertte Bio stimulant Plantfood and Seed Primer combination resulted in:

- Treatment areas had up to 10.5% increase in yield compared to the control
- Up to \$178 net economic return per hectare in treatment areas
- An improvement of up to 4.36% in oil content compared to control
- Increase in VAM fungi by 245%
- Measurable improvements in soil biological health and function

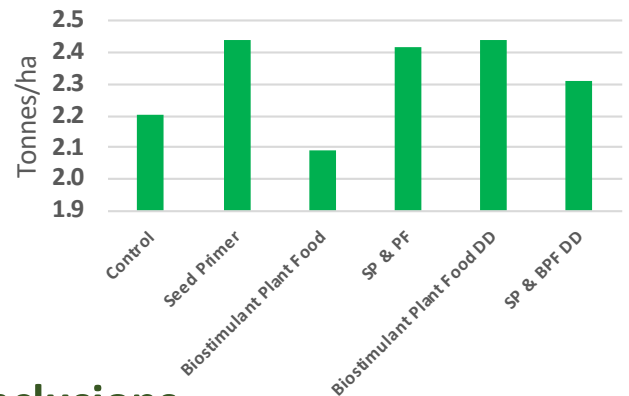


Results



- All areas of soil biology measured had an improvement compared to the control, except the microbial diversity in the single dose which had a difference of 0.2.
- Disease and drought resistance increased in the single dose row to 71.8% and 57.7%, and the double dose row at 76.9% and 65.3%, compared to control row with 58% and 54.4% respectively
- There was a 74% increase in VAM fungi in the soil treated with 250mL Converte Bio stimulant Plantfood and 245% increase in the 500mL treatment area;
- Greater increases in fungi were observed. Total microbes increased 30% in single dose Plantfood treatments and 60% in double doses.
- All treatment areas had an improvement in oil content compared to the control, except the Seed Primer and Bio stimulant Plantfood combined.

Yield per Hectare



Conclusions

- Converte Bio stimulant Plantfood has had a considerable improvement in disease and drought resistance for both rates used.
- When added to the seed primer and at a rate of 500ml/ha there was significant positive effect on the crop yield of 10%. Interestingly the seed primer alone also resulted in a 10% yield increase, whereas the Plantfood single dose resulted in a lower yield 3.85% below the control. The low result for plantfood alone looks like an anomaly in the results and will be investigated further in future studies.
- The large increase in VAM fungi was a clear indication that the soil biology is being supported by the Plantfood addition, especially at double dose applications.
- The best net economic returns were made on the Seed Primer (\$176 / ha) Seed Primer and Plantfood treatment (\$141 / ha) and the double dose Plantfood treatment (\$178.0 / ha).