



Independent Evaluation of CONVERTE Seed Primer and Plantfood in Lettuce

Trial Objectives

Evaluate the impact of Converte Plantfood on lettuce grown under controlled glasshouse conditions. Nine different treatments were tested including:

- T1 Control**
- T2 Chemical Fertiliser**
- T3 Universal Natural Plantfood (UNP)**
- T4 Converte Seed Primer (CSP)**
- T5 CSP + UNP**
- T6 Chemical + UNP**
- T7 Chemical + CSP**
- T8 Chemical + UNP + CSP**
- T9 Microbial Inoculum**

The T6 and T8 treatments were expected to out-perform other treatments for plant growth, as Converte inputs are designed to compliment the NPK fertilizer inputs. For root mass the T5 treatment was expected to deliver the greatest root dry weight.

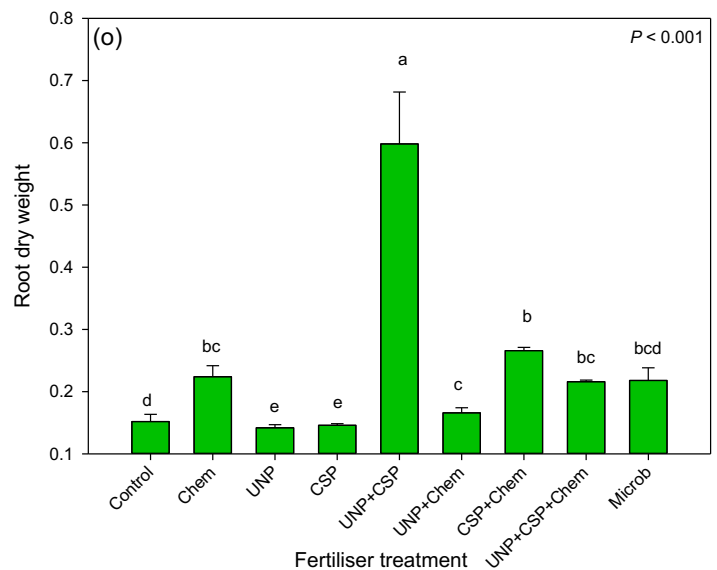
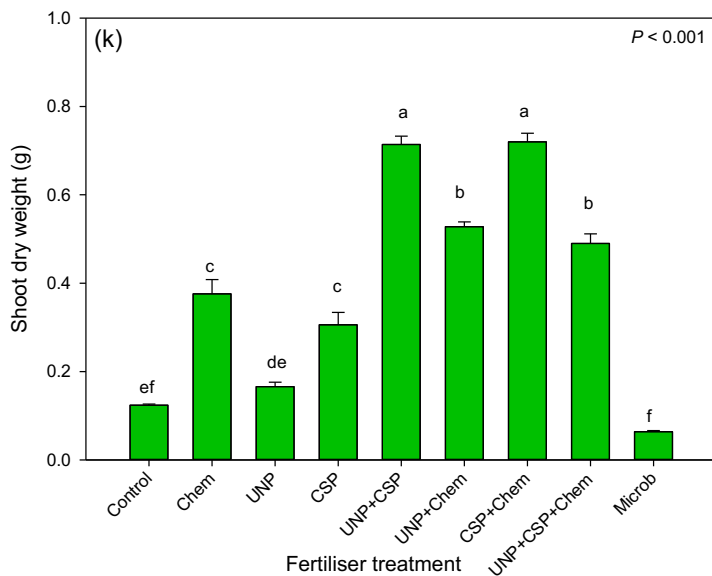
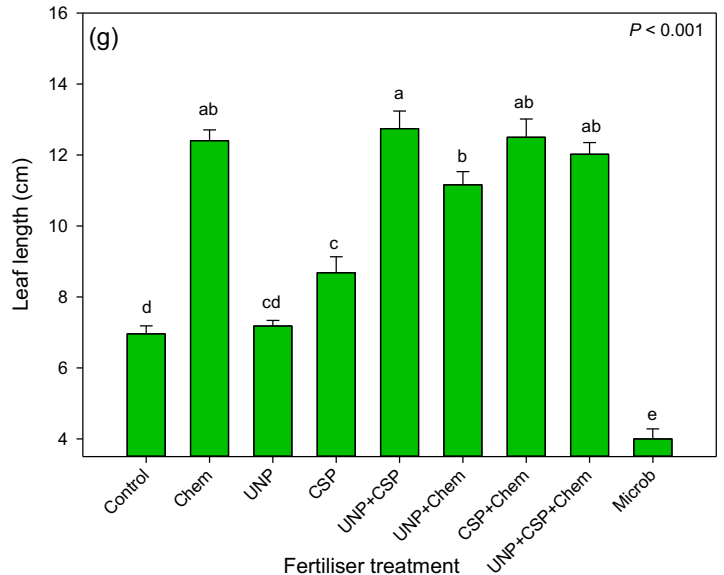
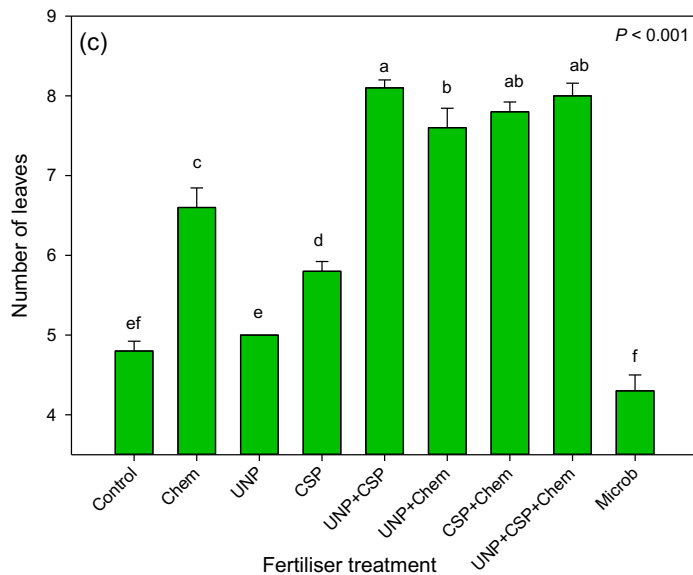
Trial Methodology

The trial was conducted as part of PhD work at the University of Western Sydney. Glasshouses were light and temperature regulated, water rates and inputs were applied in accordance with their label requirements. The trial measured four indicators of growth including:

- i) Leaf number
- ii) Leaf length
- iii) Shoot dry weight
- iv) Root dry weight



Results



No. of leaves: The CSP and UNP combinations outperformed the standalone treatments. The CSP and UNP performed best with approximately 25% increase in leaf number.

Leaf Length: the best results were achieved with fertiliser alone and CSP and UNP combined.

Shoot Dry Weight: Here we have a significant increase with the UNP and CSP combination treatments. Both UNP+CSP and CSP+fertiliser increased shoot weight by 95%.

Root Dry Weight: the root growth was influenced dramatically 140% by the UNP + CSP treatment.

Conclusions

- The results support the growth of lettuces with a combined treatment of CSP and UNP being the best performing option.
- Adding the CSP with fertiliser treatments had a significant positive impact on growth and yield;
- UNP performed best when in combination with the CSP and or with chemical fertiliser;
- CSP performed best when in combination with the UNP and or with chemical fertiliser;
- Microbial inoculants performed poorly.