

## EM Fert Enhance

EM Fert Enhance (EM Dry) is a microbial inoculant that enhances fertiliser efficacy and increases the biological activity of the soil. EM Fert Enhance is a Soil Enhancing mixture of quality natural materials which have been carefully fermented using our liquid microbial inoculant. These natural materials provide a ‘home’ for the microbes allowing prolonged activity.

### How Does EM Fert Enhance Work?

The function of the microbes in EM Fert Enhance creates a more efficient use of added nutrients, generating a better growth response from fertiliser inputs. They do this by solubilising nutrient compounds to make them available for uptake by the plants root system; this also includes “locked up” compounds, previously unavailable to plants. In addition microbial activity is stimulated in the soil to contribute towards improved plant growth.



Research has shown that EM Fert Enhance combined with fertiliser can assist in:

- Stimulating nutrient transfer in the soil
- Increasing the soil organic matter content and available nutrients
- Providing nutrients and stimulatory compounds to growing plants
- Improving the soil porosity and permeability
- Increasing the micro-biomass of the soil

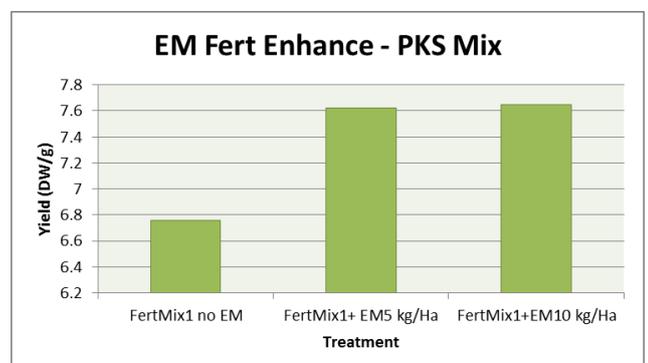
### Benefits of Using EM Fert Enhance

- Release nutrients from the soil
- Reduce fertiliser wastage
- Reduce leaching
- Increase soil microbial activity
- Improve soil structure and water holding capacity
- Increase photosynthetic capacity of plants
- Suppress soil borne pathogens and pests
- Improve plant growth



### Organic Matter Breakdown

EM Fert Enhance will also help the decomposition process of organic matter which is supplied by pasture residuals, (dead matter) recycling crop residues, green manures and animal manure. In addition, this process leads to increased humus, enhancing fertility and soil health. An increase in humus will enhance water holding capacity in the soil and improve the mineral utilisation. Earthworm numbers will also increase with the use of EM Fert Enhance to further aid soil health and performance.

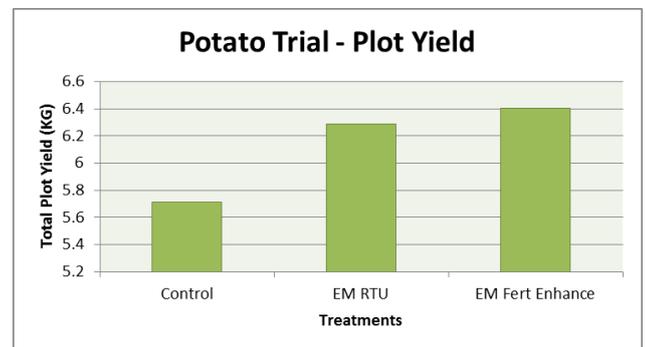
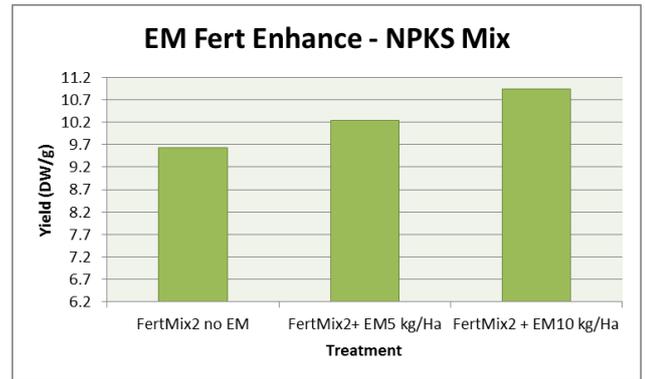


## Research

Recent research conducted by EMNZ, showed a significant increase in yield can be gained when adding EM Fert Enhance to a fertiliser blend. The trial had 10 replicates, and was maintained and harvested by technician, Dr Sonya Olykan (BHU, Lincoln University), and the data analysed by Dr Tim Jenkins. The test crop was triticale. The results showed that EM Fert Enhance gave a statistically significant increase in yield (5% significance). In treatment (Fert Mix) 1 we saw a 13 % increase on the treatments that used EM Fert Enhance with 10kg per ha slightly out performing 5kg per ha.

In the treatment Fert mix 2 which was a NPKS Blend we saw both EM Fert Enhance treatments significantly outperform the control with the 5kg treatment showing a 6% increase in yield and 10kg per ha showing an impressive 14% increase.

In the 3<sup>rd</sup> Graph (opposite) ran a field trial on Potato's. This trial showed that EM Fert Enhance when applied at 10Kg per Ha increased the yield by 12% on the control.



## Applications of EM Fert Enhance

Using EM will improve crop and pasture yields and enhance fertiliser performance. Crops can be treated frequently during the season with an accumulative effect apparent. The below applications outline the many ways EM can be applied to enhance your farms productivity.

### Fertiliser

- EM Fert Enhance (DRY) at 5-15 kg/ha with your fertiliser mix

### Reduce your N use with EM

- EM Fert Enhance (DRY) at 5kg/ha with dry/granular N

