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Great Land Plus®

Griffith Maize Agronomy Trial 2024/25

Welcome to the Griffith maize agronomy trial by Terragen BioTech Pty Ltd.

This research aims to explore the use of Great Land Plus® in Maize to manage crop productivity while reducing reliance on synthetic fertilisers.

This research explores the use of GLP in maize at two application timings, in furrow and early crop emergence, with full rate of fertiliser and 25% reduced fertiliser.

Trial was conducted by independent research organisation in Eurofins/Kalyx.

TRIAL SITE OVERVIEW

Sown:	22nd October 2024
Harvested:	28th March 2025
Variety:	Pioneer P9978
Standard Fertiliser:	Urea x 2 Applications

OBJECTIVES

To test the hypothesis that using Great Land Plus® reduces requirement for synthetic fertilizer inputs while maintaining crop yield and improving plant health and uniformity

Test the application timing of plant bio-stimulant Great Land Plus® and its effect on crop growth and yield

Support data driven recommendations for sustainable agriculture practices using Great Land Plus®.

TRIAL METHODOLOGY

Location:	Griffith NSW
Duration:	Conducted in the 2024/25 season starting 22nd October and finishing 28th March 2025
Experimental Design:	Randomized complete block. 6 replicates, 5 treatments, 30 plots. Plots 10m long, 2m wide
Key measures:	Crop Yield, Biomass, Plant leaf nutrients and available soil nutrients

Trial Results

No NIL treatment due to application error

TREATMENT NAME & RATE

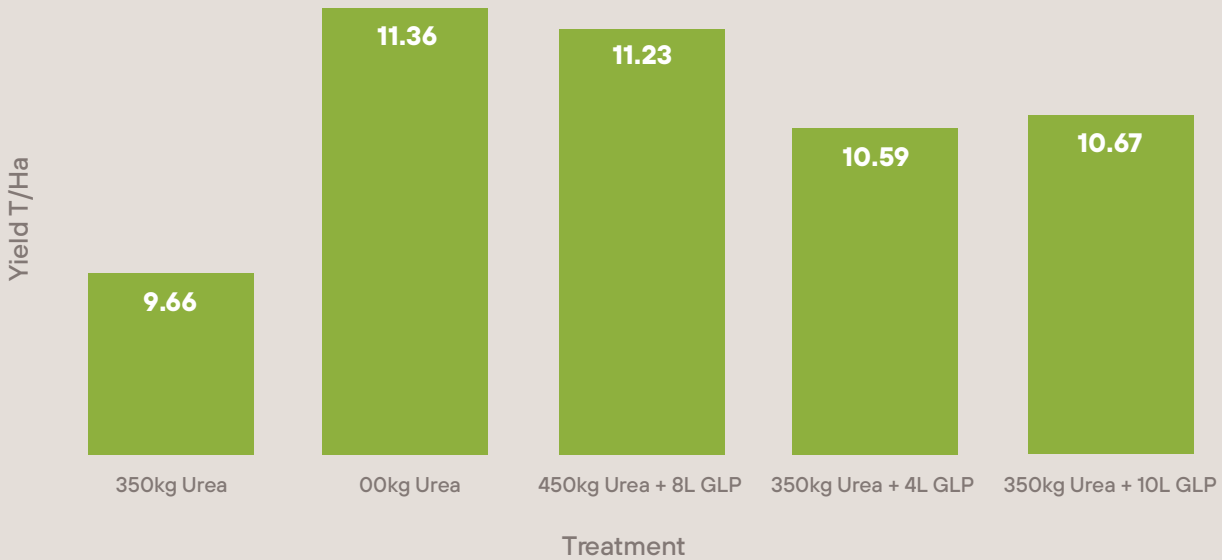
1. Straight Fertiliser – 350kg Urea
2. Straight Fertiliser – 600kg Urea
3. 450kg Urea 2 x 4L GLP (In furrow & 4 WAS)
4. 350kg Urea 1 x 4L GLP (4 WAS)
5. 350kg Urea 1 x 10L GLP (4 WAS)

KEY POINTS:

» **Yield & Profit:** Great Land Plus® (4L) with 350kg Urea boosted yield by **9.6%** and increased gross margin by **$287/ha** vs 350kg Urea alone.

» **Cost Savings:** 450kg Urea + 8L Great Land Plus® matched the yield of 600kg Urea, saving **$60/ha** in inputs.

GLP MAIZE NUTRIENT ENHANCEMENT TRIAL GRIFFITH NSW 2024/5

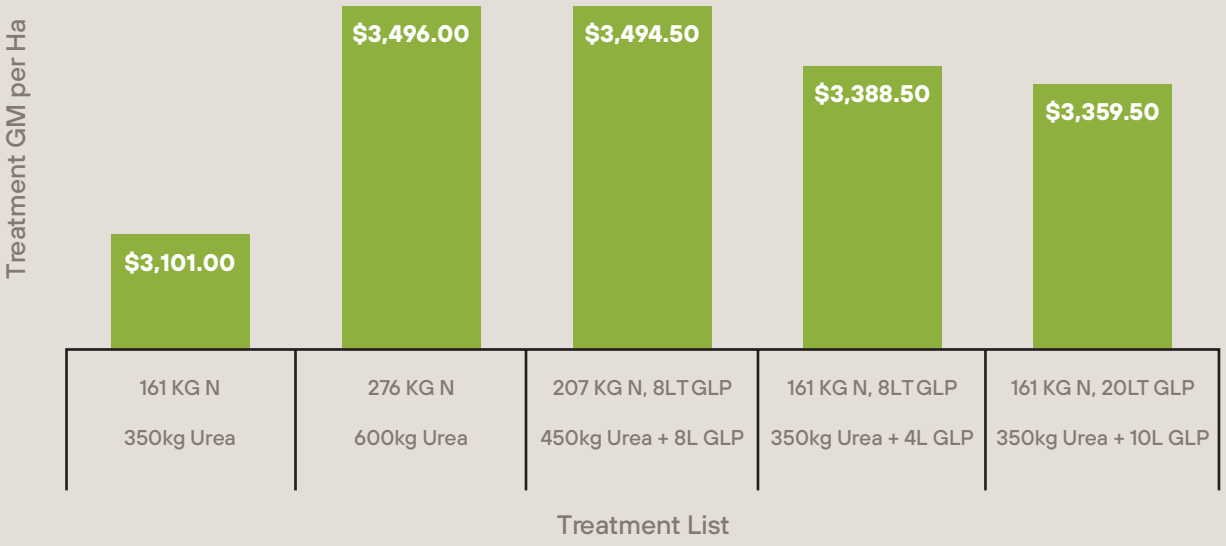


Key Trial Insights – Great Land Plus® (GLP) Performance

- **GLP enhances fertiliser efficiency:** Application of **350kg Urea with GLP** consistently outperforms **350kg Urea alone**, demonstrating improved nutrient uptake and yield.
- **Cost-effective yield maintenance:** A program using **450kg Urea + 2 x 4L GLP applications** maintains yield levels comparable to **600kg Urea**, delivering an estimated **$60/Ha input cost saving**.
- **Replicated trial validation:** These results confirm that integrating **plant-promoting bacteria** like those in GLP can **improve and sustain crop yields**, offering a viable strategy for reducing fertiliser inputs without compromising performance.

Trial results demonstrate the application of GLP provides a solution to fertiliser shortages.

GRIFFITH GLP MAIZE TRIAL
TREATMENT GM 2024/5



GRIFFITH GLP MAIZE TRIAL
2024/5

Maize Trial Summary – Griffith NSW

Conducted by Kalyx – Lee Gullifer

OBJECTIVE

To test the hypothesis that using Great Land Plus® can support lower requirement for synthetic fertiliser inputs while maintaining crop yield and improving plant health and uniformity.

KEY FINDINGS

- ✓ Reduced Fertiliser Dependency: A reduction in fertiliser can be achieved without compromising crop performance when GLP is included in the program.
- ✓ Optimal Application Rate & Timing: 4L rate of GLP provided the greatest performance and cost savings compared to standard fertiliser programs.
- ✓ Sustainability Benefits: This method enhances nutrient efficiency, lowering input costs while maintaining yield potential.

CONCLUSION

Incorporating plant growth promoting bacteria products like **GLP into fertiliser programs** presents a promising approach for maize growers seeking **cost-effective and sustainable nutrient management solutions**. Further trials may explore **long-term soil health benefits** and broader scalability.

Thanks to Lee Gullifer trial investigator from Kalyx.

For further information regarding the trial please contact Terragen Business Development Manager – Plant Bio-stimulants

GRAHAM PAGE
E: grahamp@terragen.com.au
P: 0418 849 892