

GREAT LAND

- ✓ Advanced Biotechnology
- ✓ Quality Assured
- ✓ Australian Owned & Made

LIQUID BIOLOGICAL SOIL CONDITIONER

TRIAL REPORT SUGARCANE – REPLICATED POT TRIAL

BURDEKIN, QLD

Independently Conducted by Farmacist**

Aim: Determine the effect of Great Land treatment on root development in plant sugarcane.

Design: Randomised Complete Block (RCB) design, pot experiment: Three treatments x four replicates.

Treatments:

- **T1:** Control.
- **T2:** Great Land @ 25* L/ha (0.5 mL/pot), applied at planting with a metered syringe then irrigated.
- **T3:** Great Land @ 50* L/ha (1 mL/pot), same application method as T2. Setts for T2 and T3 were dipped in undiluted Great Land prior to planting.

All treatments: homogenized soil; cane variety (KQ228); same planting depth; no insecticides; same fertiliser regime - dissolved solutions of MAP, SOP and Easy N; and, same watering intervals with automated irrigation using 4 L/hour drippers.

Assessments: Measurements of root mass, stalk height and tiller counts were taken for three setts collected from each treatment at seven week intervals from planting, up to 21 weeks. Dried root mass was determined in a process of cleaning, oven drying and removal of inorganic materials.

Results: At 21 weeks from planting, root mass in treated plants was more than 80% higher than untreated plants. Above ground biomass was over 60% higher in treated plants at the same period. Notably, these differences were only observed later in the crop's development. In addition, there was no difference in growth response between the two different rates of Great Land treatment

Tillering and stalk elongation were not affected by treatment with Great Land over the duration of this experiment.

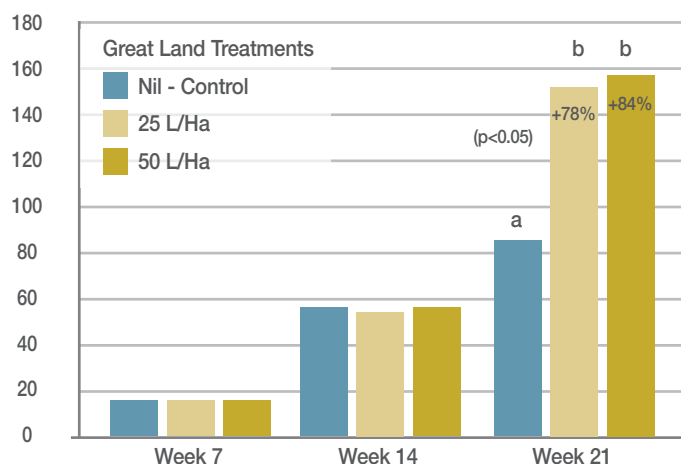
Conclusions: The significant enhancement of sugarcane root mass by treatment with Great Land at planting will improve the uptake of nutrients and water use, maximising yield of plant cane, reduce plant loss during harvest and help to maximize yields in subsequent ratoon crops.

Further research is required to demonstrate the effect of Great Land in later stages of crop development and yields.

* Trial application rate equivalent to new Great Land formulation, released December 2018.

** Farmacist Pty Ltd, Home Hill, QLD.
www.farmacist.com.au
Full report available on request.

Root Dry Matter Mass (grams)



Above Ground Biomass Fresh Weight (grams)

