

Sugarcane – Replicated Pot Trial, Burdekin, Qld - Independently Conducted by Farmacist*

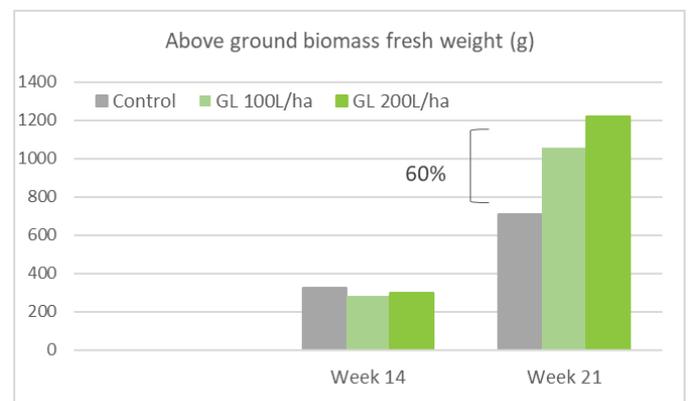
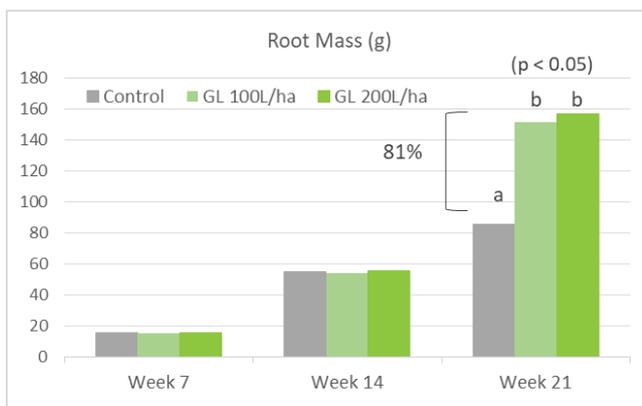
Aim: Determine the effect of Great Land treatment on root development in plant sugarcane.

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

Treatments: T1: Control
 T2: Great Land @ 100 L/ha (2 mL/pot), applied at planting with a metered syringe then irrigated
 T3: Great Land @ 200 L/ha (4 mL per 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 at 4 L/hour drippers.

Assessments: Three sets of each RCB experiment, harvested at 7 week intervals: 7, 14 and 21 weeks ex planting. Measurements taken of root mass, stalk height and tiller counts on harvesting each set. Root mass obtained by washing, oven drying, burning for removal of inorganic materials.

Results: At 21 weeks from planting, root mass in treated plants was significantly higher than untreated plants. Above ground biomass was also higher in treated plants at the same period. Notably, these differences were only observed later in the crop's development and that no differences were found between the two levels 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.

Demonstrating the effects of Great Land in later stages of crop development and yields shall be the subject of future trials.

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

