Tomato Trials Summary

A sustainable solution for higher yields and improved profitability

Tomato Trials, Cedenco, Victoria,

Aim: Evaluation of the impact of Great Land (GL) on tomato plant growth and product yields.

Design: A multi trial program was conducted over 2011 and 2012 using variable soil types that included replicated pot trials and larger scale field trials. This report is a brief overview of notable portions of the trials.

Treatments: Pot trials with seedling drench treatments aimed to observe early plant and root growth responses from Great Land and NPK fertiliser treatments to seedlings grown in a glasshouse.

Field trials with surface sprayed treatments of Great Land at two different rates around flowering.

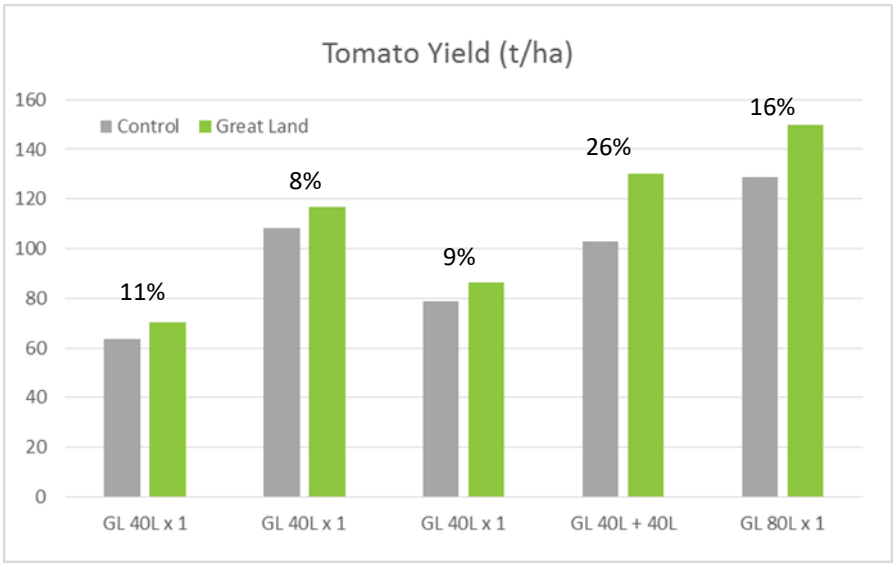
Assessments: Visual assessment from early stages pot seedling trial. Tomato yields from field sections.

Results: **Seedling Trials:**

Early stage plant and root growth showed consistently better establishment in Great Land treated pots, as illustrated by the photo below of representative samples.

Growth responses were consistent across all soils.

Field Trials: the chart below summarises consistent trends of increased tomato yields arising from Great Land application at flowering as a surface spray, across varying soil types.



Typical Plant/Root Growth

Left: GL Treated Right: Untreated

Great Land

Terragen

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Tomato Emergence and Establishment Trial, Cedenco, Victoria. September 2012

Aim: Visual assessment of the impact of Great Land (GL) on tomato seed emergence and establishment.

Design: 10 seeds (replicates) were planted in each of 5 trays (treatments). Germination and establishment in an open temperature greenhouse in Lara, Victoria. Total duration of trial 38 days.

Treatments: Five treatments:

'Control' (UTC):	No treatment
'GL Only':	GL @ 40L/ha applied in furrow at planting
'GL + Confidor':	GL @ 40L/ha in furrow + Confidor @ 700mL/ha
'FF':	Flowphos NPK fertiliser @ 40L/ha applied in fertigation. (No GL applied)
'GL + FF':	GL @ 40L/ha in furrow + Flowphos @ 30L/ha applied in fertigation.

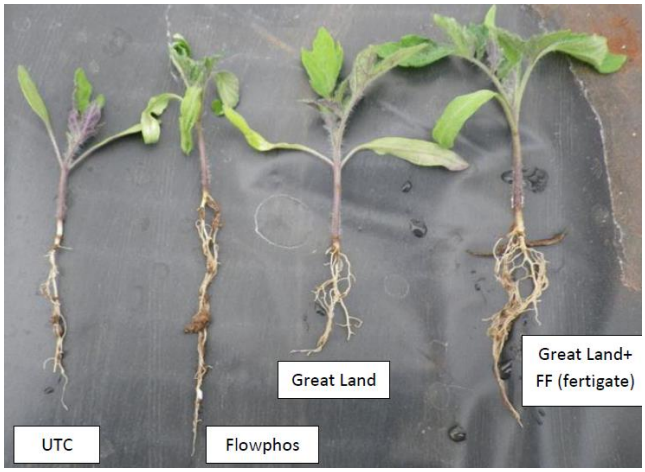
Assessments: Visual assessments: speed of emergence and crop establishment - early growth of plants and roots.

Conditions: Spring conditions prevailed for most of the trial. Optimum moisture levels were maintained except for one week of very dry conditions in the 4th week after planting.

Results: Faster germination - all three GL treatments reached full cotyledon stage 1.5 days earlier than untreated. Flowphos only treatment (FF) showed no improvement in emergence. Benefits from NPK added at planting were only apparent from around 3 weeks after planting. The addition of Confidor in this study showed no visual difference against the 'GL only' treatment for seed emergence or early growth.

Response to stress – after the dry period over week four, GL treated plants were observed to withstand moisture stress better than other treatments. Superior resilience was observed in GL + FF treatment.

After establishment: 28 days post planting



End of Trial Observations: 38 days post planting

Left: Untreated Control Right: Treated GL + FF

Conclusions: The trial demonstrated that Great Land benefits seed emergence and early growth of roots and plants. In addition, results indicate synergistic benefits arising from the use of Great Land with moderate amounts of added fertiliser, in this case NPK with Flowphos.