TRIAL REPORT:
June 2018

Avocados (Hass): Costa Group, 'Avocado Ridge', Bundaberg Region, QLD
Independently overseen and reviewed by 3rd Shed Pty Ltd

Aim: To determine the effect of Great Land treatment on harvest yield and grading of avocados.

Farm System: Conventionally farmed avocados, Hass variety, planted in 2013. 8m x 6m configuration. Red loamy soils. Sprinkler irrigation system.
Fertiliser program for the season included gypsum, soft rock phosphate, humate and trace minerals through fertigation.

Conditions: Good growing conditions were experienced for most of the season. Above average rainfall was received from October 2017 through February 2018.

Trial Design & Scope: Replicated strip field trial conducted over 12 months. Total 598 Hass trees included in the trial having a paddock area of 2.9 hectares. Seven (7) rows per experimental group - every odd numbered row was treated with Great Land and even numbered rows were untreated controls (UTC). Fruiting trees per row averaged approximately 43, ranging from 32 to 47 trees/row.

Treatments: Great Land was applied through the fertigation/sprinkler system, injected into the line during the middle third of the irrigation event. During treatment events, valves on the header of each control row were closed. Great Land has been applied for 18 months prior to this harvest, however for the 12 months before harvest, treatments were at a rate of 40 L/ha (paddock area) every three months: Jun-17, Sep-17, Dec-17 and Mar-18. All other agronomic practices, fertilising and chemical usage were the same across all treatments.

Assessments: Harvested in May 2018, yield was measured by picking into bins identified separately for each row, then bin weights were recorded in the packing shed. Size grading of total fruit in each of the two experimental groups (not by individual rows) was recorded on packing.

Results: Rows treated with Great Land produced 10% higher yield compared to untreated control rows and the difference is statistically significant ($p < 0.05$). This translated to a revenue gain of $6,250 per ha, based on $5.00/kg average farm gate revenue for harvested fruit. Size grading data showed no difference between treated and control groups.

Costa, Avocado Ridge
Average Harvest (Tonnes / Hectare)
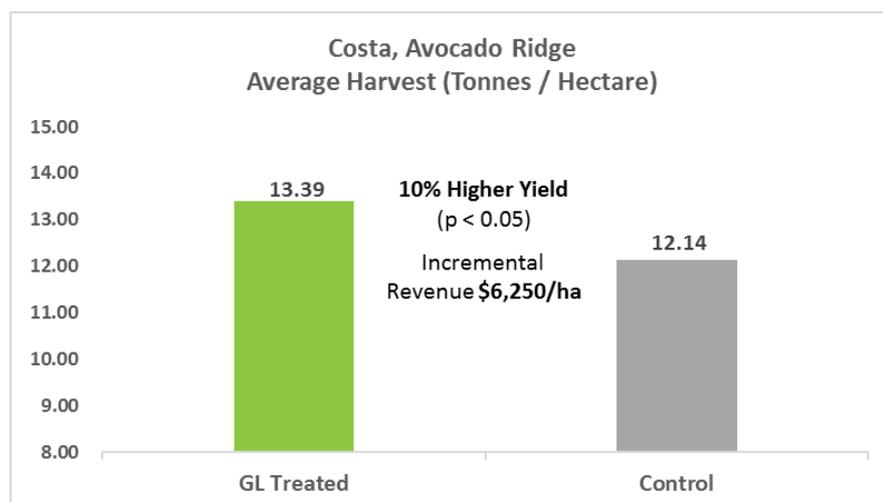
Conclusions: Great Land application has produced a significantly higher yield for the avocado operation. As the size grading showed no difference, additional yield has been derived from a better flowering set and improved tree health to support a greater number of fruit. Additional benefits from enhanced soil and plant health will positively influence ongoing productivity.