Healthy Plants – Healthy People

MACADAMIA BOTANIC GARDENS
With SOIL BIO-BOOSTER

By Trevor Galletly[i] Peter Van Beek[1], Version 3 – Jan 2025

Summary

One year old macadamia transplants were struggling to grow and survive.
Bio-Booster was applied and gave excellent growth in 100 days.

Background

In mid-April 2020, 11 young macadamia trees, *Macadamia jansenii,* had been transplanted in the Botanical Gardens. Commercially grown macadamias are another sub-species of macadamia. These 11 are being grown to ensure some genetic diversity is maintained.

After transplanting, the trees were irrigated and mulched with wood chips – all standard procedure. From there on, they received the same treatment as the rest of the gardens.

In May 2021, two had died and the others were not doing well, mainly due to wind and soil conditions. Topsoil was basically not present and the silty loam subsoil was very compact and dense. On 10 May 2021, two of the surviving nine trees were treated with **Bio-Booster** and minerals detailed below.

On 30 August 2021, 112 days after treatment, they were inspected. Another three untreated ones had died and the remaining four were not doing well.

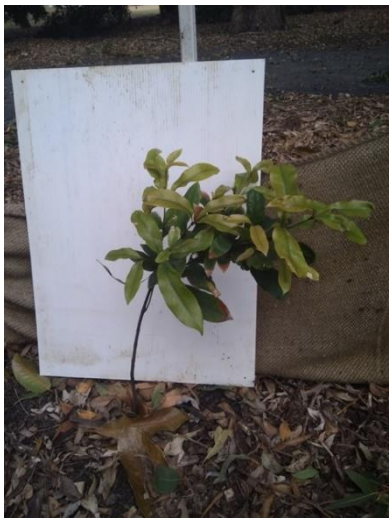


Photo 1 Best untreated tree

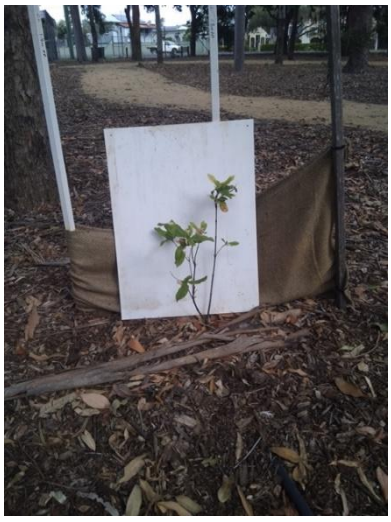


Photo 2 Second-best untreated tree

The contrast with the treated ones could not be starker.
Photos 1 – 4 were taken 30 August 2021. (The same white board was used in all photos.)

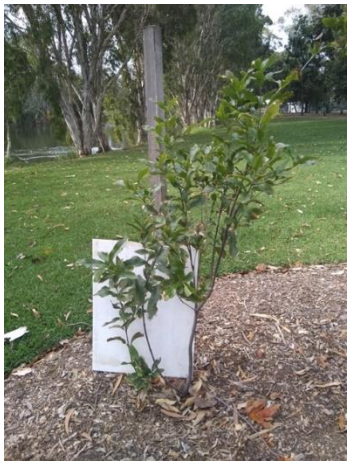


Photo 3 Best treated tree

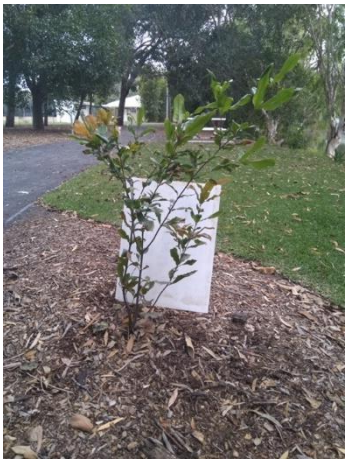


Photo 4 Second-best treated one

In May, the trees had shown leaf chlorosis and a small amount of growth. This was taken into account in the treatment. The soil into which they were planted showed no crumb structure or softening which indicates an almost complete lack of soil-biology activity.

The treatment consisted of:

- Bio-Booster (1 Litre/tree)
- Calcium (10 g/tree of very fine lime)
- Zinc (10 g/tree of zinc sulphate heptahydrate)
- Humic acid (10 ml/tree)
- Sea Minerals (10 ml/tree)

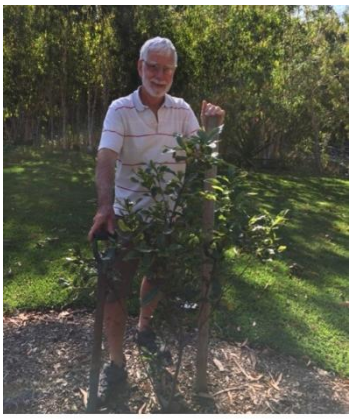
The Bio-Booster and minerals were applied in a watering can half a metre from the tree.

The treated trees showed two to four times increase in size and healthy leaves. Most importantly, the top 10 mm of soil showed crumb structure and more roots. This indicates that the introduced soil-biology had developed and multiplied rapidly.

The trial confirms our view that to get healthy trees, we need to supply and balance the nutrients and soil biology. This requires a much wider range of minerals than has been realised until recently. And where the biology is not present, it can be re-introduced in a much shorter time than is currently believed.

To give an indication as to how fast that can happen, the tree below grew about one metre in 112 days - from being stunted about knee-high to what the photo shows.

Photo 5 Trevor and the best tree Nov 2021



Summary

More than double the growth, no yellow leaf deficiency and softening soil

All that in 112 days and in lifeless, compact subsoil – and after 13 months of no growth whatsoever. It shows the awesome power of Nature when given the right ingredients.

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