



Leptospermum propagation for high grade bioactive honey plantations

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Speaker Bio

Tate has completed a Bachelor of Science (Advanced) at The University of Adelaide with a Botany and Soil Science major. He is undertaking a Doctor of Philosophy at The University of Adelaide. The focus of his research is understanding genetic diversity and propagation requirements of *Leptospermum scoparium* and *L. continentale* to produce bioactive honey within South Australia. Tate's project will provide an opportunity to develop new skills through the interactions with experienced research scientists and industry.

Presentation

Manuka honey, produced from *Leptospermum scoparium*, is highly valued for its medicinal properties as well as its marketability as a health food. As a result, the interest in and subsequent demand for Manuka honey and other bioactive honey produced from *Leptospermum* is every increasing. Currently, most bioactive *Leptospermum* honey is produced from wild strands with varying levels of DHA in the nectar. The industry is interested in developing plantations of *Leptospermum* with improved DHA concentrations. To do this, plants will need to be propagated from cuttings and/or seed to set up plantations. Methodology on tissue culture has been developed but this requires specialty facilities and capital to establish. An alternative is to propagate plants from cuttings.

Cutting propagation is a method of clonal propagation which requires far less input and time to achieve. However, detailed propagation and transplant techniques are lacking in published literature which resulted in poor success rates in our nursery. To overcome this, an experiment was designed to look at the effect of genotype, auxin application rate and transplant survival on *L. scoparium* from the southern Grampians region in Victoria.

This method has also been applied to an important contender for bioactive honey in South Australian, *L. continentale*; differences in the effectiveness of treatments is being explored.

Leptospermum scoparium produces Manuka honey and we have investigated propagation methods to support high value selections.

