

Investigation of the anti-microbial properties of endophytes from *Santalum lanceolatum*

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Abstract. *Santalum lanceolatum* is a native Australian plant which has a history of prior use by the indigenous Australian population to treat infections. This project looks at the fungal endophytes present in *Santalum lanceolatum* and whether bioactive compounds from the endophytic fungi may be able to be used as antimicrobials. At this stage two sites in the Darling Downs region have been sampled with both sites producing a wide variety of endophytes from the plant tissue when grown on potato dextrose agar. One site has already been screened on Sensitest agar against ATCC type strains of *Staphylococcus aureus*, *Serratia marcescens*, *Escherichia coli* and *Candida albicans*, with no observable inhibition as to the growth of these pathogens. If any bioactive compounds are found to be effective, then the molecular structure of the compound is to be identified along with the sequencing of the ITS-DNA of the endophytic fungi from which it came. Work on this project will be continuing throughout 2014.

Keywords. Endophyte, *Santalum lanceolatum*, bioactivity.

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