

Enhancing the formation of heartwood in sandalwood in Vanuatu



Key details

Location

Vanuatu

Duration

Start Mar 2017

End Nov 2019

Budget

AUD 250,000

Commissioned organisation

The University of Western Australia

Partners

Department of Forests

Project Leader

Liz Barbour - University of Western Australia

ACIAR Research Program Manager

Dr Nora Devoe

Program

Forestry

Project code

FST/2016/054

sandalwood heartwood formation through the identification and implementation of chemical treatments. Knowing the genes and enzymes that produce sandalwood oil provided a basic understanding. Missing was understanding gene regulation as sandalwood heartwood and oil yield fluctuate widely between trees. This work builds on earlier ACIAR work on sandalwood silviculture and breeding in Vanuatu.

Project outcomes

- Synthesising the current literature on heartwood formation in Sandalwood.
- Establishing research and site relationships for Sandalwood heartwood stimulation experiments in Vanuatu.
- Testing and identifying compounds that stimulate heartwood formation in tree branches.
- Exploring non-invasive treatment applications that stimulate whole-tree oil production.
- Promoting an understanding of heartwood formation and silviculture techniques to stimulate its production in Vanuatu through close collaboration with the Vanuatu Forest Department.

Overview

The project aimed to identify practical methods to increase heartwood development in Vanuatu Sandalwood.

Sandalwood offers farming diversity and an economic opportunity for Vanuatu. Heartwood formation and sandalwood oil deposition, determines sandalwood value. This project explored the regulation of

