Shooting for success with sandalwood seeding

Left: Lisa Blanch and daughter

Key Messages

sustainable

agriculture

- Native sandalwood plantations are an option to regenerate unproductive agricultural land and can provide an alternative on-farm income.
- Methodical preparation of a site and good quality seedlings are important for successful plantation establishment.

Project Snapshot

Land Manager's	Lisa Blanch
Name/s:	
Property Size:	40ha
Location:	Beverley
Annual rainfall (mm):	350mm
Enterprise mix:	Nursery and Cropping
Soil types/vegetation	Sand, Ioam
types:	

Her story

Horticultural scientist, Lisa Blanch and her family operate the Talbot Nursery in Beverley, a wholesale business specialising in the propagation of native plants. She decided to seek funding through the Soil Conservation Incentives Program because she wanted to trial a new technique for planting *Santalum spicatum* (Sandalwood). "I have witnessed so many unsuccessful plantations and wanted to establish sites that would stand the test of time, and ensure long-term environmental and economic benefits", Lisa explained. Unlike the traditional method, 'same day' establishment is not reliant on multiple good seasons to be successful.

"There is such an advantage in implementing 'same year establishment' and I'm hoping that this site will be a successful demonstration site to show the reasons why".

As a member of local community groups Friends of the Dale River and Beverley Naturalists Club, Lisa was eager to see her land restored. She has seen many times before how once unproductive sites can increase biodiversity, habitat and river health if properly re-vegetated.

"Sandalwood plantations have the potential to reduce runoff and sediment load into the waterway, which in turn will improve the health of the river".

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The trialling process

Two sites on the Blanch's property, adjacent to the Dale River were selected to trial 'same day' plantation establishment of sandalwood hosts. Summer weed control was performed in January and April using glyphosate, then again two weeks prior to the planting with a mix of glyphosate (1L/ha) and simazine (1kg/ ha). Rabbit warrens on the property were also baited and ripped prior to planting.

Following an insecticide spray in July 2012, a mixture of sandalwood host seeds were direct seeded in two rows spaced one metre apart with a 7-10 metre inter-row. A small amount of superphosphate was also blended into the direct seeding mix. The host seeds included Acacia acuminate (Jam wattle), Acacia multispicata (Jam), Acacia meisneri (Meisner's Wattle), Acacia pulchella (Prickly moses), Acacia microbotrya (Manna wattle), Acacia lasiocalyx (Sliver wattle), Allocasuarina huegeliana (Rock sheoak) and Hakea presseii (Christmas tree). Both self-grown and locally sourced Acacia saligna (Golden wattle) seedlings were then hand planted along the rows, followed by pre-treated sandalwood seeds. "Both the host and sandalwood species germinated well", Lisa said. "I expect the plantation will reduce water and wind erosion across the sloping landscape, and improve the aesthetics of the area".

In the long-term the Blanch's goal is to harvest the sandalwood nuts to gain an economic benefit from the plantation. "The properties of the sandalwood nut and oil have many uses and I hope there are further developments in the industry", Lisa said. She encourages other landholders to regenerate their unproductive land.

Lessons Learnt

Lisa found it very useful to call local Natural Resource Management Officers (NRMO's) and Dr Geoff Woodall (University of WA) for their technical advice when implementing the project. Although Lisa already has experience growing native seedlings, their expertise helped to achieve a better result.

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Acknowledgements: Dr Geoff Woodall (University of WA)





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