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AUSTRALIA'S BUSH FOOD POTENTIAL IN THE RANGELANDS: WILD HARVEST OR PLANTATION PRODUCTION?

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ABSTRACT

Australia's bush food industry is currently worth \$5 million at the farm gate. Two rangeland plants, the desert lime (*Eremocitrus glauca*) and wild thyme (*Ocimum tenuiflorum*) have potential within this industry. Harvest from the wild is limited, with plantations seen as essential to provide consistent supply to meet demand. There is little published information on these species.

INTRODUCTION

Two arid zone crops, the desert lime (*Eremocitrus glauca* (Lindl.) Swingle) and native thyme (*Ocimum tenuiflorum* L.) have been selected as case study crops for this paper. Both of these crops show potential within the bush food market, and are becoming more readily accepted and utilised by processors within the industry. Desert lime produces a small fruit, whilst the leaf of native thyme is being used as a herb. At present all Queensland supply of these crops comes from wild harvest, with some water augmentation of desert limes.

There is little published information available on these plants. Desert lime has been researched overseas as a source of genetic material for commercial citrus (Rahman and Nito 1994). In Australia desert lime has recently been considered a woody weed which should be controlled (e.g. Csurhes 1993). Wild thyme has mostly been considered for medicinal uses in Asia. Both species were reputedly used by Aboriginal people prior to European settlement.

THE CASE FOR ESTABLISHING PLANTATIONS

Australia's bush food industry is currently worth \$5 million at the farm gate, and \$15-20 million overall. The industry aims to increase this to \$100 million over the next three years. The demand for both desert limes and wild thyme has been increasing since the first Queensland harvests over the 1993-94 summer (Table 1). The projected demand is encouraging, with estimates drawn from a feasibility study currently being undertaken. Supply, however, has been erratic with the current season the worst. Drought and heavy frosts combined to greatly restrict the Queensland crop. Consistency of supply needs to be guaranteed, at least from season to season. Additionally, many people within the industry require consistency of supply throughout the year (e.g. restaurants). It is possible that demand for the desert lime will drop considerably next year in response to the poor supply this year. One processing company was hoping to enter the market place with a line of products based on limes, and another existing processor had planned on extending their production of lime-based products. The financial effects on these companies are likely to be strong, and the flow on effects are yet to be seen.

Table 1. Fluctuations in Queensland price, demand and supply of desert lime and wild thyme.

	Desert lime				Native thyme			
	93-94	94-95	95-96	2 yr proj ¹	93-94	94-95	95-96	2 yr proj ¹
Price* (\$/kg)	7.50	6.50	6.50	6.50	80.00	55.00	55.00	55.00
Supply (kg)	266	1180	250	1000 to 15000	75	2	25	50 to 500
Demand (kg)	266	1500	3000	3000 to 25000	12	11	37	100 to 300

* farm gate price.

¹ two year projected estimates for the 1997-98 season based on current domestic market trends, feasibility study results and wild harvest levels.

The demand for wild thyme from processors was initially low, primarily as a result of overpricing at the wholesale entry point. The pricing has been altered, further promotion undertaken and the demand is now steadily increasing. However, if the industry relies on wild harvest of thyme leaf, it is expected that similar problems will occur as with limes. There are already signs of problems for next year, with drought conditions within inland Queensland currently restricting the harvestable area of thyme. The projected demand for both crops is based on the domestic market. Both authors were involved in the promotion of bush food at Amsterdam and Munich during the Queensland Tourism and Travel Corporation's Travelling European Roadshow in September 1995. The response to the various meats, sauces, dips, jams and other processed products was overwhelming. One importer indicated that to conduct market trials of desert lime in Europe, approximately 20,000 to 30,000 kg would be required. This suggests that export demand would far outstrip current, or potential, supply.

It would seem that to fulfil existing and potential demand, at least some plantation production of both desert lime and native thyme is required. It is likely that more problems of supply will be encountered for each species within the next 2 years, especially if demand increases as expected (Table 1). Legislation may also restrict the wild harvest of plant material within Queensland (Lavarack 1995), although at present there are no known bush food plants under threat (Anon. 1995). Other issues, such as quality assurance, have not been discussed but it is anticipated that plantation production would be preferable over wild harvest. Research is required to determine plantation establishment, production and harvesting techniques. Further market research is needed to determine realistic levels of demand to facilitate industry establishment and development in Queensland.

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