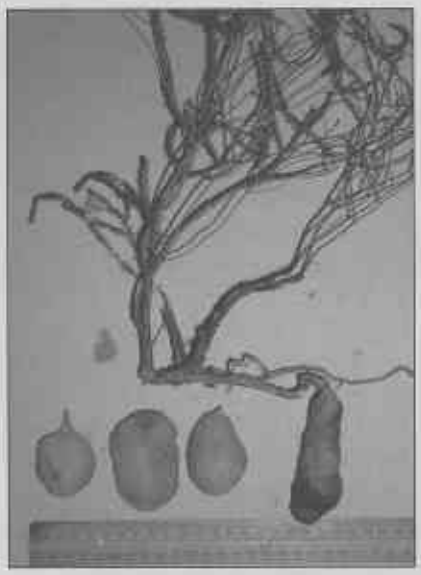
ECONOMIC ASPECTS OF BIODIVERSITY

AUSTRALIAN NATIVE PLATYSACE TUBERS: FROM THE BUSH TO YOUR SHOPPING BASKET

Geoff Woodall

NUMEROUS Australian native species are tuberous and within the Western Australian flora there are a least 172 species. Several tuberous species of *Platysace* from southern Western Australia were important food for indigenous people prior to the introduction of western culture. *Platysace* species (19 native to WA) are in the Apiaceae, an important horticultural family that includes many other important edible species such as carrots, parsley, parsnip, dill and coriander.

Over the last few years the horticultural potential of *Platysace* species from southern WA has been assessed. *P. deflexa* appeared to be the species with the best horticultural potential, principally because this species produces numerous large, visually attractive tubers that are pleasant to eat. Field observation suggest that mother plants of *P. deflexa* quickly recover after tuber harvest and rapidly produce new tubers in soil that was disturbed during harvest. This growth characteristic should allow adaptation to broad scale cultivation. This species is a small perennial rhizomatous shrub, up to 50 cm tall, with aromatic leaves and white flowers. It grows naturally in the nutrient poor sandy soils of the Jeramungup-Ravensthorpe area of Western Australia. Field excavations have indicated that a mature plant can produce numerous tubers, 2-5 cm in diameter, 5-15 cm in length and 0.5-1 kg/plant. While *P. deflexa* appears to have considerable potential for human consumption, we know little about its biology, propagation and cultivation requirements. Their tubers are nutritionally similar to other common and widely eaten vegetables (eg. carrots).



P. deflexa *plant with tubers.* ▲

Healthy P. deflexa *plants at field trial site.* ▶

There does appear to be a market for *P. deflexa* tubers. Tubers from Ravensthorpe were washed, packaged then distributed to bushfood suppliers and chefs. Most members of the bushfoods industry, including cooks, endorsed the product (raw and cooked tubers) after preliminary tastings. When eaten raw, tubers are crisp, crunchy, sweet and with a slight radish taste. Cooked tubers are crunchy and taste similar to cooked squash. One chef suggested that raw tubers could be used in much the same way as radish. He suggested that they would complement a spicy salad, that is, a salad that contained rocket and or other hot/spicy ingredients. Other industry representatives commented that the colour (yellow outer skin) of the tubers was an attractive feature of the product and that they were impressed with its long shelf life (at least 8 weeks at 10°C).

Tubers of P. cirrosa *on right (dark brown skin),* P. deflexa *on right (yellow skin).*

In Albany, plants have been propagated from tubers, seed and suckers. A small experimental plot has also been established at Gairdner. The five-year objective is to take this species from "the bush to your shopping basket". So in a few years time look out for *Platysace* tubers at your nearest supermarket! You'll be supporting a new native plant based industry.

Geoff Woodall is a researcher at the Centre of Excellence in Natural Resource Management, Albany. He has been working on comercialising Platysace *spp. for some time, looking at four species (inc* P. cirrosa, *featured in WW 7/1 p 20). To find out more, contact him on ph. 08 9892 8427,*
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