AUSTRALIAN DRYLAND ACACIAS WITH EDIBLE SEEDS.

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In 1998 the temperate Australian dryland *Acacia* flora (about 350 species) was assessed for its potential to produce seeds for human food in semi-arid regions of southern Australia[1]. Based on reports of traditional use by indigenous Australians and on a number of other important plant attributes, 47 species were identified as potential candidates. Although these species included representatives from most or the major dryland groups of *Acacia*, the 18 "best prospects" belonged to a single group, namely, tall shrubs or small trees characterised by one-nerved phyllodes and flower heads arranged in racemose inflorescences (section Phyllodineae).

This study was an extension of similar research based on the edible seeds of a number of tropical dry zone Australian acacias, notably *A. colei* and *A. elachantha*, for use in sub-Saharan Africa[2]. The rationale for working on southern Australia species was the need to identify deep-rooted, drought-tolerant perennial plants to complement existing shallow-rooted annual crops and/or pastures in an effort to help reverse land degradation in these regions. The potential to generate a commercial benefit from growing dryland acacias with edible seeds was also seen as an important factor.

Although much of the critical information necessary for the effective utilisation of edible dryland acacias is not yet available, the 18 "best prospect" species possess promising morphological, biological, ecological and silvicultural attributes. This talk will discuss these characteristics.

Acacia victoriae and *A. murrayana* in particular have outstanding attributes for planting as dryland acacias with edible seeds. Their seeds have good nutritional characteristics and were commonly used as food by Aborigines. Wild populations are adapted to a wide range of conditions, grow rapidly and produce moderate to heavy seed crops in most years. Both species are easily propagated from seed and plantations can be established by direct seeding. Over-mature, declining stands may be regenerated by coppicing and/or shallow ripping to induce root-suckering. *Acacia victoriae* is currently considered the most important edible wattle species in the Australian bushfood industry.

[1]Maslin, B.R., Thomson, L.A.J., McDonald, M.W. and Hamilton-Brown, S. (1998). *Edible wattle seeds of southern Australia. A review of species for use in semi-arid regions.* 108 pp. (CSIRO: Australia.)

[2] House, A.P.N. and Harwood, C.E. (eds) (1992). *Australian Dry-Zone Acacias for Human Food.* 151 pp. (ATSC/CSIRO: Melbourne.).