

AN OUTSTANDING FOOD SOURCE OF VITAMIN C

Brand JC, Cherikoff V, Lee A, Truswell AS,
Lancet 1982; 2:873

SIR,—We have found, in a wild fruit, fifty times as much vitamin C as is present in oranges, and this may be the richest natural source of this vitamin in the world. In our study of the nutritional composition of: bushfoods used by Australian Aborigines, samples are collected by Aboriginal health workers and others and air freighted to Sydney. In three samples of *Terminalia ferdinandiana* we found ascorbic acid contents of 3150, 2850, and 2300 mg per 100 g edible fruit. The samples came from three different areas near Darwin (Northern Territory) in two successive seasons, 1981 and 1982.

We used reverse phase high performance liquid chromatography on two prepacked 25 cm 'Lichrosorb RPB' 10µm columns connected in series with a 3cm guard column. The mobile phase is water with pH adjusted to 2.5 with metaphosphoric acid and detection is by a spectrophotometer at 245nm. Any dehydroascorbic acid is converted to ascorbic acid. We confirmed values for ascorbic acid in *T. ferdinandiana* fruit by dinitrophenylhydrazine and dichloroindophenol methods.

Terminalia spp. are tropical trees of the Combretaceae family (to which the almond also belongs). *T. ferdinandiana*, Excell ex S.T. Blake is a tall slender tree growing up to 10 m with large, pale green leaves. It is found along the north-west coast of Australia. The fruit grows along the branches and matures from March to August; it is about 2 cm long and 1 cm in diameter, light green to green with a red blush in colour and contains a single large pip. Near settlements or camps all the fruit on the trees is eaten, especially by children. It is not a staple food, nor one for which a special expedition might be made. One Aboriginal name for the fruit is manmohan, in the language of people in Western Arnhem Land.

Citrus fruits have around 50 mg vitamin C per 100 g; at 100 mg or above come (uncooked) broccoli, sprouts, kale, cauliflower, parsley, nettles, green mango, and kiwi fruit; around 200-300 mg are blackcurrants, guavas, peppers, cashew fruit pulp, some tropical vegetables, and a few bush fruits. At the top of the league table of vitamin C, expressed in mg per 100 g raw food, are sea buckthorn (*Hippophae rhamnoides*, 450), amla or emblic (*Emblica officinalis*, 600), rosehips. (*Rosa canina*, 1250), dattock fruit (*Detarium senegalense*, 1290), and acerola or Barbados cherry (*Malpighia pumcifolia*, 1000 to 2330).

We thank the Australian Institute for Aboriginal Studies for financial support; Ms Robin Lion and colleagues and Mr Clyde Dunlop for collecting samples; and Mr G. Hutchison, Mr L. Lawler, Dr Dermot Smyth, and Captain L.J. Hiddins for advice

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