

Medicinal Plant Images

Medicinal Plant Images

I.E. Cock^{a,b*}

^aEnvironmental Futures Research Institute, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, Australia

^bSchool of Natural Sciences, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, Australia



Figure 1. *Petalostigma pubescens* (commonly known as quinine bush) unripe fruit and leaves. *Petalostigma* is an Australian Euphorbiaceae genus which consists of 7 species. They grow to between 2 and 10 metres in height and have bright orange fruit (when ripe). *Petalostigma* species were used extensively by indigenous Australians to treat a myriad of bacterial, fungal and viral diseases.¹ *P. pubescens* bark and fruit decoctions were used extensively by Australian Aborigines as an antiseptic and to treat sore eyes. Fruit were also held in the mouth to relieve toothache.¹ Despite its common name, there is no scientific evidence to support the presence of quinine in the fruit or leaves (the common name is presumably due to the extremely sharp bitter flavour of the fruit). Recent studies have confirmed the antibacterial, antifungal and antiviral activity of extracts of the leaves and fruit of this plant.^{2,3} This photograph was taken at Griffith University, Brisbane, Australia in 2011 by Dr Ian Cock.

*Correspondence author:

Dr. Ian Cock

Environmental Futures Research Institute, and School of Natural Sciences, Nathan Campus, Griffith University, 170 Kessels Rd, Nathan, Brisbane, Queensland 4111, Australia

Tel: +61 7 37357637

Fax: +61 7 37355282

E-mail: I.Cock@griffith.edu.au (I. E. Cock)



Figure 2. *Tulbaghia violacea* (wild garlic) is a bulbous plant which occurs in southern Africa. All portions of the plant have a strong smell of garlic when damaged. *T. violacea* has numerous traditional medicinal uses including the treatment of colds and fever, as well as in the treatment of asthma, inflammation, tuberculosis and oesophageal cancer.^{4,5} Decoctions are useful in the treatment of gastro-intestinal problems. Recent studies have also indicated the potential of *T. violacea* in the prevention and treatment of rheumatoid arthritis by blocking the microbial triggers (*Proteus mirabilis* and *Proteus vulgaris*).⁶ This photograph was taken in Johannesburg, South Africa in 2013 by Dr Ian Cock.

1. Cock IE. Medicinal and aromatic plants – Australia. In Ethnopharmacology, Encyclopedia of Life Support Systems (EOLSS) 2011. Developed under the auspices of UNESCO. Oxford UK; EOLSS Publishers; 2011. Available from <http://www.eolss.net>.
2. Kalt FR, Cock IE. Gas chromatography-mass spectroscopy analysis of bioactive *Petalostigma* extracts: Toxicity, antibacterial and antiviral activities. *Pharmacognosy Magazine*. 2014; 10 (37 Supplement): S37–49.
3. Kalt FR, Cock IE. The medicinal potential of Australian native plants from Toohey Forest, Australia. *The South Pacific Journal of Natural and Applied Sciences*. 2010; 28(1): 41–7.
4. Van Wyk BE, van Oudtshoorn B, Gericke N. Medicinal plants of South Africa. 2nd Edition. Briza Publications; 2009. Pretoria South Africa.
5. Hutchings A, Scott AH, Lewis G, Cunningham A. Zulu medicinal plants: an inventory. University of Natal Press; 1996. Pietermaritzburg, South Africa.
6. Cock IE, van Vuuren SF. Anti-*Proteus* activity of some South African medicinal plants: their potential for the prevention of rheumatoid arthritis. *Inflammopharmacology*. 2014; 22(1): 23–6. DOI 10.1007/s10787-013-0179-3.