

Medicinal Plant Images

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DOI : 10.5530/pc.2015.4.11



Figure 1: *Syzygium leuhmannii* leaves and fruit. *Syzygium* is a large genus of evergreen flowering plants of the family Myrtaceae which consists of approximately 500 species. Plants of this genus are widespread, occurring in tropical and subtropical regions of South-East Asia, Australia and Africa. Many *Syzygium* species produce edible fruits and berries (eg. *Syzygium jambos*, commonly known as rose apple). In the commercially most important species *Syzygium aromaticum* (clove), the unopened flower bud is used as a spice. This plant also has uses in traditional medicine due to its anaesthetic properties.⁵ The antibacterial activity of *S. aromaticum* is also well known. Numerous studies have reported on the antibacterial⁶ and antifungal⁷ activities of oils and extracts from this plant. Other *Syzygium* species from Africa⁸ South East Asia (*Syzygium jambos*),⁹ India (*Syzygium lineare* and *Syzygium cumini*)¹⁰ and Australia¹¹⁻¹⁵ have also been shown to have antimicrobial activity. Recent reports have also highlighted *Syzygium australe* (Bush Cherry) and *Syzygium leuhmannii* (Riberry) extracts as having exceptionally high antioxidant contents.¹⁶ Antioxidants have been associated with the prevention of cancer, cardiovascular disease and neurological degenerative disorders.¹⁷⁻¹⁹ They are also linked with anti-diabetic bioactivities and have been associated with the reduction of obesity. Antioxidants can directly scavenge free radicals, protecting cells against oxidative stress related damage to proteins, lipids and nucleic acids.²⁰ Thus the *Syzygium*s have potential in the treatment of a significant number of diseases and medical conditions related to cellular redox state. This photograph was taken in Brisbane, Australia in 2014 by Dr Ian Cock.

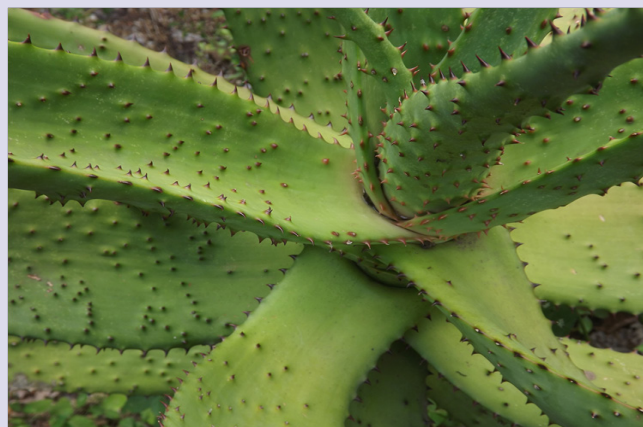


Figure 2: *Aloe marlothii*: Aloe is a genus of approximately 400 succulent plants, many of which are native to Africa. Several Aloe species have well known medicinal properties which include accelerated wound healing, as well as antimicrobial, anti-inflammatory, immunomodulatory and antioxidant bioactivities (as previously reviewed).¹⁻⁴ This photograph was taken in Kirstenbosch Botanic Gardens, Cape Town, South Africa by Dr Ian Cock in December 2010.

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