

Medicinal Plant Images

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Figure 1: *Syzygium australe* 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.¹ The antimicrobial activity of *S. aromaticum* is also well known. Numerous studies have reported on the antibacterial² and antifungal³ activities of oils and extracts from this plant. Other *Syzygium* species from Africa⁴⁻⁶ South East Asia (*Syzygium jambos*),⁷ India (*Syzygium lineare* and *Syzygium cumini*)⁸ and Australia⁹⁻¹³ 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.^{14, 15} Antioxidants have been associated with the prevention of cancer, cardiovascular disease and neurological degenerative disorders.¹⁶⁻¹⁹ 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.¹⁹ 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 2015 by Dr Ian Cock.

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Figure 2: *Crinum pedunculatum* flowers. *C. Pedunculatum* (commonly known as swamp lily, river lily, mangrove lily) is a large bulbous perennial (approximately 2 metres tall) found in stream and tidal areas of the Northern regions of Australia, as well as in Papua New Guinea and in some Pacific islands. It has a large bulb with long, strap shaped leaves radiating from it. The flowers are white with prominent purple anthers. Australian Aborigines from the coastal regions of northern New South

Wales and Southern Queensland used *Crinum pedunculatum* (Figure 33) to treat marine and insect stings.¹ The bulb was ground to a paste which was applied directly to the affected area. This photograph was taken in Brisbane, Australia in 2014 by Dr Ian Cock.

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