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Medicinal Plant Images

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Figure 1: *Khaya senegalensis* (Desr.) A. Juss. (family Meliaceae). *Khaya senegalensis* (Desr.) A. Juss. (family Meliaceae), commonly known as as African mahogany, Gambia mahogany, Senegal mahogany and Khaya wood, is an evergreen Central and Western African tree, with a broad geographical range. It is used as a traditional by multiple ethnic groups, as reviewed in.[1] Stem bark decoctions are used to treat various skin diseases, dairrhoea and dysentery, fever, jaundice, malaria, sexually transmitted diseases.[2-6] They are also used to treat gastrointestinal parasite/helminth infestations.[2,3,7] Whilst limited scientific studies have examined the therapeutic bioactivities of this species, several studies have reported that *K. senegalensis* bark preparations have noteworthy anti-cancer,[8-10] inflammatory[8,11] and anti-hyperglycaemic activities[12] and these properties have been linked with the high antioxidant contents of the bark.[2] Additionally, several studies have examined the anti-protozoal properties of *K. senegalensis* bark, which was reported to inhibit the growth of *Plasmodium falciparum*, *Trypanosoma evansi* and *Trypanosoma brucei*,[14] as well as *several Leishmania* spp.[11] Several studies have also reported that *K. senegalensis* extracts have antibacterial activity against multiple bacterial pathogens.[15,16]

Figure 2: *Petalostigma triloculorae* (commonly known as quinine bush) tree. *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.[17] *Petalostigma pubescens* and *P. triloculare* 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.[17] 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.[18,19] Additionally, a recent study also reported that Petralostigma spp. extracts also potentiated the activity of some conventional antibiotics, even against bacterial that are otherwise resistant to those antibiotics.[20] This photograph was taken at Griffith University, Brisbane, 2025 by Dr Ian Cock.

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