

## Medicinal Plant Images

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**Figure 1:** *Petalostigma* is an Australian genus of the Euphorbiaceae family. The genus consists of seven species, including *Petalostigma pubescens* and *Petalostigma triloculare*, which are collectively known as 'quinine tree'. Both trees grow to between 2 to 10 metres in height, with bright orange fruit. Infusions of *P. pubescens* and *P. triloculare* bark or fruit were used in traditional Australian Aboriginal medicine for relieving sore eyes and as an antiseptic.<sup>1</sup> Indeed, *Petalostigma* spp. were used extensively by Australian Aborigines to treat a myriad of bacterial, fungal and viral diseases.<sup>1</sup> Recent studies have demonstrated that fruit and leaf extracts of these species have broad spectrum antibacterial activity.<sup>2,3</sup> Furthermore, those extracts were powerful potentiators of the activity of conventional antibiotics (particularly tetracycline), even in antibiotic resistant bacterial strains.<sup>3</sup> Fruit of both species were also held in the mouth by Australian Aborigines to relieve toothache.<sup>1</sup>



**Figure 2:** *Terminalia ferdinandiana* Exell. fruit. Plants of the genus *Terminalia* are amongst the most widely used plants globally in traditional medicines. *Terminalia* spp. are characterised by their high antioxidant capacities as well as their high tannin and flavonoid contents and it is likely that these compounds contribute to many of the therapeutic properties of members of this genus.<sup>4</sup> The Australian species *T. ferdinandiana* has been reported to have potent inhibitory activity against bacterial pathogens,<sup>5-12</sup> including Methicillin Resistant *Staphylococcus aureus* (MRSA) and extended spectrum  $\beta$ -lactamase *Escherichia coli*.<sup>13</sup> *T. ferdinandiana* extracts also block the growth of the gastrointestinal protozoal parasite *Giardia duodenalis*<sup>14,15</sup> and inhibit the proliferation of cancer cells by inducing apoptosis.<sup>16</sup>

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