

***Eucalyptus x patentinervis* (Half Mahogany)**

There's a remnant tree growing on the footpath in Moorindal Street between Read and George Streets, Tewantin, that had me puzzled until I observed it flowering in winter last year.



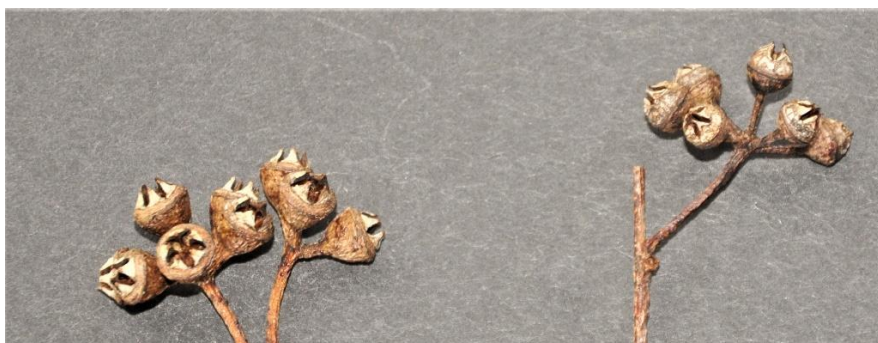
The buds and flowers are similar to those of *Eucalyptus tereticornis* (Queensland Blue Gum) but the bark is dark, rough and fibrous, nothing like that of a Blue Gum.



Then I recalled hearing of the existence of a natural hybrid between *Eucalyptus tereticornis* and *Eucalyptus robusta* which is found in parts of eastern Australia where those two species are known to grow close to one another. That makes sense, but what other requirements are there for hybridisation to occur naturally. Both species must flower at the same time of year. If they don't, hybridisation is only possible through human intervention. It is also believed that the species need to be genetically compatible, i.e., have the same number of chromosomes.

The genus *Eucalyptus* was named in 1788 by a Frenchman, de Brutelle, and when the first attempt was made to organise them into a systematic order (Willdenow 1799), only 12 species were known. With approximately 900 species currently belonging to the tribe *Eucalypteae*, which includes the closely related genera of *Eucalyptus*, *Corymbia*, and *Angophora*, identification can be difficult. In an attempt to place individual plants into groups with observed reproductive affinities (such as the arrangement of flowers and shape of the fruit), a system of classification was created by Pryor and Johnson in 1971 in which the species are organised into seven subgenera. In the *Eucalyptus* genus, the subgenus *Symphyomyrtus* is the largest of these and consists of about 330 species, is botanically complex and has been further divided into 9 or 10 sections. Within this subgenus, *E. robusta* is placed in section *Transversia* and *E. tereticornis* in section *Exsertia*, the Red Gum group. *Eucalyptus robusta*, seemingly somewhat promiscuous, is known to also cross naturally with *E. botryoides*, *E. grandis* and *E. saligna*, all in its own section, *Transversia*, *E. globulus* in section *Maidenaria* and *E. bancroftii* in section *Exsertia*. Thus, we can see a pattern of hybridisation occurring between closely related species of Eucalyptus. As genetic analysis of all living things becomes more prevalent and taxonomic classification of plants more sophisticated, botanists are able to tell us (if we really want to know) how plants have evolved and how species relate to each another. There is debate around whether a natural hybrid should be named as a subspecies, a variety of a species or its own species.

Getting back to our hybrid: *Eucalyptus x patentinervis*, also known as Bastard Mahogany or more politely, Half Mahogany, is not uncommon but highly variable, not so much in the flowers, fruit and leaves as in the bark: understandably, as the parent species have such differing types of bark. This variation seems to depend on location, which ranges over the distribution overlap of the two species, i.e., from Rockhampton, Qld. to Jervis Bay, N.S.W. The fruit, with its exserted valves, is similar to that of *E. tereticornis* but slightly larger.



E. x patentinervis

E. tereticornis

A number of *E. x patentinervis* have been identified in the Weyba Creek area by Arthur Harrold but I've yet to pinpoint them. On the now vacant block of land in Myles Street, Tewantin where the House of Bottles once stood, there is a prime example of the similar conditions the two parent species enjoy: a Swamp Mahogany and a Queensland Blue Gum, both probably regrowth, happily growing a few metres apart. I don't fancy their chances, however, of enjoying their close relationship for long if the new owner decides to build a house.



Robert M Price, March, 2021