

SHORT COMMUNICATION

***Pittosporum tinifolium* A.Cunn.: a corrected name and reinstatement at species level for the Queensland species currently known as the rusty-leaved pittosporum, *Pittosporum ferrugineum* subspecies *linifolium* (A.Cunn.) L.Cayzer *et al.* (Pittosporaceae)**

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Pittosporaceae is a mostly Australian flowering plant family characterised by narrow endemism and very few wide ranging species (Cayzer *et al.* 2000). The poorly known, ‘rusty-leaved Pittosporum’, *Pittosporum ferrugineum* W.T.Ait., is one of the few species in Australia believed to have a range to at least Australia’s northern neighbours in Malesia, if not further into Asia. The uncertainty surrounding this taxon is in part due to the brief and ambiguous protologue by Aiton, and the subsequent difficulty in establishing which taxon of many is the original source of the unremarkable, almost sterile type specimen of Aiton’s *Pittosporum ferrugineum* s.str., taken in 1795 from ‘shrubs’ (Bentham 1863) cultivated at Kew.

Previous reviewers of *Pittosporum*, including Bentham (1863), Ridley (1922) and Cooper (1956) had already highlighted different ‘forms’ across the range, but had insufficient information or specimens available to make formal separations. As part of a revision of the family within Australia, originally intended for the *Flora of Australia* series, Cayzer *et al.* (2000: 890, fig. 18) also recognised that at least two ‘forms’ of this taxon occurred in disjunct distributions in north-east Queensland. Until this taxon could be fully investigated across its purported

range, Cayzer *et al.* (2000) suggested several subspecies including:

- *P. ferrugineum* subsp. *ferrugineum*, reportedly the taxon in Australia at its northern extremities in Queensland (north of Cooktown) and Northern Territory; and
- *P. ferrugineum* subsp. *linifolium* (A.Cunn.) L.Cayzer *et al.* based on *P. linifolium* A.Cunn., the earliest of several synonyms at species level for this fairly common taxon in coastal areas of Queensland (south of Cooktown).

The rusty-leaved pittosporum complex has recently been comprehensively investigated across its range (Cayzer & Chandler in prep.), and several changes are needed in these taxa.

First, the epithet *linifolium* needs correction. Bentham (1863: 112) states quite emphatically in his *Flora Australiensis* that the species name ‘*linifolium*’ was a printing error: ‘*P. tinifolium* (*linifolium* by an error of the press) A.Cunn. ...’. There is also no suggestion here by Bentham, nor in the (apparently error prone) protologue publication that the manuscript name should be attributed to Richard Cunningham, as cited by Chapman (1991), in the *Australian Plant Name Index*. Accordingly, this species should be cited as *Pittosporum tinifolium* A.Cunn.

Second, the revision by Cayzer and Chandler (in prep.) shows that Cunningham’s Queensland taxon should be reinstated at

species level. *Pittosporum ferrugineum* s.str. sensu W.T.Aiton occurs in northern Australia north of Cooktown in Queensland and in the Northern Territory. *P. ferrugineum* is now known to be uniquely \pm monoecious with few flowered inflorescences held barely past the surrounding foliage. Cunningham's

Pittosporum tinifolium is functionally dioecious, with inflorescences of aggregated umbels of male or female flowers held prominently above the surrounding vegetation on slender, nodding stalks. A key to the two 'rusty-leaved' *Pittosporum* species in Northern Queensland follows:

- 1 Leaves elliptic to almost orbicular, thick-coriaceous, upturned, apices rounded or acute; inflorescences multi-flowered stalked umbels exerted well past surrounding foliage. Common and endemic to coastal areas south of Cooktown, in Cook, North Kennedy and Port Curtis districts, Queensland **Pittosporum tinifolium**
1. Leaves narrow elliptic to elliptic, thin-coriaceous, downturned, apices tapering, terminating in an acuminate drip tip; inflorescences from single flowers to fewer flowered umbels barely past the surrounding foliage. In Australia, sporadic in coastal areas north of Cooktown in Queensland (including islands in the Torres Strait) and Kakadu, Northern Territory **Pittosporum ferrugineum**

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References

- AITON, W.T. (1811). *Pittosporum*. *Hortus Kewensis or, a Catalogue of the Plants Cultivated in the Royal Botanic Garden at Kew* 2nd edition ii: 27–28. Longman et al.: London.
- BENTHAM, G. (1863). Order X11. Pittosporaceae, *Flora Australiensis* 1: 109–114. L.Reeve & Co: London.
- CAYZER, L.W, CRISP, M.D. & TELFORD, I.R.H. (2000). Revision of *Pittosporum* (Pittosporaceae) in Australia. *Australian Systematic Botany* 13: 888–890.
- CAYZER, L.W. & CHANDLER, G.T. (in prep.). Unravelling the 'rusty leaved' *Pittosporum* complex (Pittosporaceae: *Pittosporum ferrugineum* W.T.Ait.) in Eastern Indonesia and Papua/New Guinea.

- CHAPMAN, A.D. (1991). *Pittosporum* Gaertner (*nom. cons.*). *Australian Plant Name Index K–P*: 2297–2300. Australian Flora and Fauna Series Number 14. Australian Government Publishing Service: Canberra.
- COOPER, R.C. (1956). The Australian and New Zealand species of *Pittosporum*. *Annals of the Missouri Botanical Garden* 43: 87–188.
- CUNNINGHAM, A. (1840 publ. Oct 1839). XIII. – Florae Insularum Novae Zelandiae Precursor; or a Specimen of the Botany of the Islands of New Zealand. *Annals of Natural History* 4: 106–110.
- RIDLEY, H.N. (1922). Order X11. Pittosporaceae. *The Flora of the Malay Peninsula* 1: 135–136. L.Reeve & Co.: London.