

SYZYGium AND RELATED GENERA (MYRTACEAE) IN AUCKLAND

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The Australian members of this alliance have been expertly revised by Hyland (1983) making it possible to improve acquaintance with the five species in Syzygium, Acmena and Waterhousea that are grown in Auckland for ornament and shelter. These are essentially trees of warm latitudes along Australia's eastern coast but they find our climate and probably richer soils congenial and often it seems grow better here than in their homeland. None however have properly naturalized though undispersed juveniles and a few adults do occur.

The disposition into genera is based largely upon characters of the fruit and seed. What appears to be a simple baccate "monkey apple" may conceal unusual features like ruminant cotyledons or a missing seed-coat, so the fruits of these species, produced here in abundance are very interesting to dissect and compare.

Leaf silhouettes of the five Australian species are shown in Figure 1A.

Acmena smithii

lillipilli, monkey apple (NZ)

Very common around Auckland as a street or specimen tree and in hedges. Seedlings occur close to the plantings but most succumb to scale and thrips.

Some of the seedlings at Purewa cemetery have a lignotuber, unlike most Australian forms of the species (Figure 1B).

Waterhousea floribunda

weeping lillipilli

(formerly Syzygium floribundum, Eugenia ventenatii)

Only seen in a few old gardens, e.g. at Highwic, The Pines, Western Park, being fine trees to c. 15 m tall 80 cm dbh and especially beautiful in spring with their pendent new foliage of pink and yellow; a species which should be much more often grown in this country.

Syzygium australe

brush cherry

(formerly S. paniculatum)

Occasional in older gardens especially of Epsom and Remuera, as a specimen tree or in a hedge often with lillipilli. Despite the common name (in Australia the species grows as a rheophyte, that is, a plant subject to inundation by river waters) Auckland's oldest trees are of considerable size, often 12 m or so tall with several trunks.

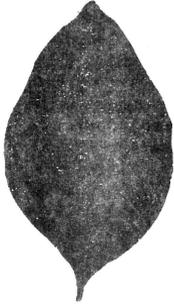
Like some other Australian Syzygium species (but not S. oleosum or S. paniculatum discussed below) brush cherry has rather unusual structures in its branchlets — these are the small fleshy supra-nodal pockets formed by coalescence of the wings that carry down from the petiole margins (Figure 1C). As the branchlet develops its bark the pockets shrivel and soon become indistinct. Since they seem properly developed on the newest growth they might be protective structures (dummy leaves?) or domatia; they appear not to be nectaries.

Hyland notes that brush cherry occasionally produces a seedless crop of fruit. Both the trees at Highwic, but no others I have so far seen, did that in their late '86 crop.

Naturalization to adulthood may occur in a few overgrown gardens, e.g. at Ewelme Cottage, Parnell.



Acmena smithii



A



Waterhousea floribunda

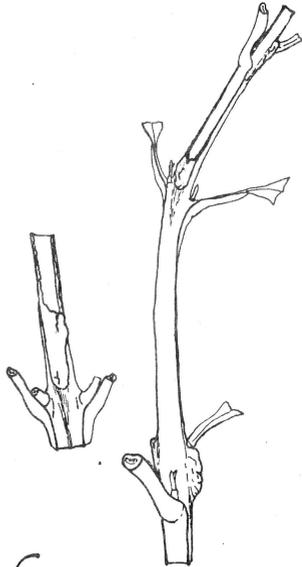
Syzygium



oleosum paniculatum australe



B



C

Syzygium oleosum

blue lillipilli

(formerly S. coolminianum)

Apparently not previously recognized as growing in New Zealand. I have seen only one old tree, on the Pah Farm estate (now Catholic Church land), Hillsborough. It resembles Beilschmiedia tawa in habit, and is easily distinguished from S. australe and S. paniculatum by its narrow conspicuously gland-dotted leaves and blue-purple oily-tasting fruit.

Blue lillipilli is a widely-distributed tree near the Australian east coast south to about latitude 36°; it resembles S. paniculatum in leaf venation and glandular pattern and has been confused with that species both in the wild and in cultivation. Hyland discovered that the seeds of S. paniculatum are invariably polyembryonic (2-8 embryos per seed) but did not see this feature in S. oleosum; I have found that the larger fruits of the Pah Farm tree often have such seed.

Syzygium paniculatum

This species was not recognised until Hyland's work. It is cultivated in Australia and California but is rather uncommon in Auckland. The largest trees here (e.g. at Myers Park, Pt Erin Park, Epsom Girls Grammar School) are perhaps of only moderate age but they are already close to if they do not exceed the maximum size attained in Australia (15 m tall 35 cm dbh).

S. paniculatum resembles the more common S. australe but has harder redder bark, lacks twig pockets and has more glands in the leaves. The fruits are near-identical but seeds of S. australe are always monoembryonic.

A tree of the widely cultivated Asian-Pacific species Syzygium jambos rose apple, used to grow at 37 Pupuke Rd, Takapuna. Presumably an old planting and probably the only one in this country, it was c. 7 m tall in 1971. It no longer exists.

The native species S. maire (formerly Eugenia maire) being a wetland species has not been cultivated in Auckland but is now offered by at least one nursery.

REFERENCE

Hyland, B.P.M. 1983. A Revision of Syzygium and Allied Genera (Myrtaceae) in Australia. Australian J. Bot. Suppl. Ser. No. 9 1-164.

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FIGURE

- A Leaf silhouettes, x2/3. Shape and size of Acmena smithii, Syzygium australe especially variable.
- B Lignotuber of a 30 cm tall Acmena smithii seedling, x1.
- C Pockets on the new growth of Syzygium australe, x4.