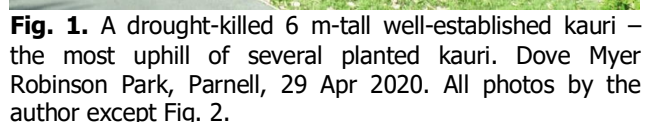


* = adventive P = planted

Monocotyledons

Ewen K. Cameron

One of the commonest street tree species in our urban area, in fact the commonest in Auckland City is titoki (*Alectryon excelsus*, Fig. 5) (Wilcox 2012: table 9), and unlike many other species, it flourished during the drought – none were seen suffering or dying. Titoki are also prominent trees of Auckland's





Figs. 2–7: **2.** Dying kāpuka (*G. littoralis*) and healthy puka (*Griselinia lucida*) side-by-side at the Ōrākei Marae. Photo: Yumiko Baba, 10 Mar 2020. **3.** A drought-killed kāpuka hedge, 170 Sandringham Road, Auckland. Google Maps (street view) shows it as healthy in Oct 2019. Photo: 29 Sep 2020. **4.** Poor Knights Islands *Myrsine aquilonia*, in our garden at Thames St, Balmoral, 17 Apr 2020. **5.** Titoki, Auckland's most successful street tree, Thames Street, Balmoral, 23 Sep 2020. **6.** A single bunch of titoki capsules. Matipo Street, Balmoral, 23 Jun 2020. **7.** Close-up of titoki capsules: closed and open showing the seed with the fleshy red aril. Matipo Street, Balmoral, 23 Jun 2020.

natural forest areas, particularly in the volcanic rock forests, e.g. see Cameron (2018) – obviously well adapted to the local habitat. Not only did street titoki survive, they also fruited abundantly during this period of drought, unlike I've ever seen before. Large bunches of capsules were common on most trees (Fig. 6), from May to at least late September when a small amount of fruit was still present. The fruiting was most obvious on the footpaths underneath the trees, which were abundantly covered with: pieces of brown capsules (the 'lids'), jet-black seeds and scarlet arils (Fig. 7), the latter readily sought-after by blackbirds. Under many trees in June the footpath was scarlet with arils and the capsules crunched as you walked under the trees. Moore & Irwin (1978: 92) mentioned Māori valuing the crushed titoki oil which was usually reserved for the chiefly caste, and "occasionally there would be a summer when the berries of the titoki were more plentiful than usual, and there was enough for commoners also". Well, 2020 was a year for the commoners, but the peak fruiting was more May–June than summer – were the trees confused by the long drought and had an early/late second flowering?

See Gardner (2008, 2013) for the sexual expression of Auckland's titoki street trees which he found to be roughly 1:1 – fruiting trees to non-fruiting trees (i.e. male). Unfortunately, I failed to record the number fruiting to non-fruiting, but my impression was that some 75% of the trees were fruiting to some degree.

Congratulations to Auckland Council for abundantly planting titoki as street trees – a great choice, virtually maintenance-free, and with many other favourable characteristics (Wilcox 2012, p. 89). Drought-tolerance needs to be a requirement for future street plantings, and there also needs to be a budget for watering recent plantings during future droughts which are likely to become more frequent. It was disappointing to see so many relatively recent Council plantings perish during the recent big drought – we can do better. For starters, no more kāpuka; use puka (*Griselinia lucida*) instead.

Acknowledgements

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Lichenising (botanizing) during the lockdown

Dan Blanchon

The lockdown was a bit of a challenge for us – we started renovations to our house two weeks before Alert Level 4, and due to a complete lack of internal walls and plumbing we were exiled to a small Airbnb apartment in Mt Eden for the duration. The upside of this was our proximity to Maungawhau for our daily walks. On one of these walks we were pleasantly surprised to stumble across a small population of *Cladia blanchonii* on rocks half way to the summit (Fig. 1). This species (a coral lichen) was segregated from *Cladia aggregata* (no longer recognized as being found in New Zealand) by Parmen et al. (2013) and Sittiporn Parmen and Thorsten Lumbsch kindly named it after me. Despite extensive surveys for *Cladia blanchonii*, very few populations are known in New Zealand and it seems to be genuinely

rare here (it is also found in Tasmania and SE Australia). Collections of *Cladia* from the upper North Island are more likely to be *Cladia gorgonea* (on rocks) or *Cladia inflata* (on soil below trees or on tree fern bases in forest). Two small populations are known from the Waitakere Ranges; others recorded are Ngaio (now gone), Mt Kaukau, Matiu-Somes Island, Ngakawau, and the Catlins River, and the largest populations are known from the Chatham Islands (Peter de Lange *pers. comm.*). On the mainland the species seems to favour rocky sites that are dry in summer, but where fog, sea mist or low cloud provide ample moisture in winter. On the Chatham Islands the species prefers open skeletal soils and saprolite in places often subjected to salt blast (Peter de Lange *pers. comm.*).