

SIX PLANTS WHOSE NATIVITY TO NEW ZEALAND HAS BEEN DOUBTED

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Bidens pilosa (Compositae)

beggar's ticks, koheriki

Originally described by Linnaeus in 1753 as a plant of cultivated ground in "Virginia" (North America) B. pilosa appears likely to be native to Central or South America where the species is most variable — see the monograph of Sherff (1937). It is now a cosmopolitan weed of warmer climates.

B. pilosa was present in the China-South East Asia region in the seventeenth century (Sherff p.397) perhaps as an introduction of the Portuguese. In the Pacific though it was absent until much later. At Amboina in the Molucca Islands Rumphius (fl. 1663-1701) knew only the similar but oriental species B. biternata, and it was this that was collected by Forster from Tongatapu and by Banks and Solander from Australia (Sherff pp.391-2). B. pilosa is absent, too, from the earliest species lists for Lord Howe I., Norfolk I. and Kermadec Is. (e.g. Endlicher 1833), and the earliest specimen from the Hawaiian Islands dates only from the 1840s (Degener 1939).

In fact the earliest Pacific material definitely attributable to B. pilosa* comes not from the tropics but from the Bay of Islands, New Zealand, in the 1820s and '30s (Lesson, De Candolle 1836 p.596; Baron C.A.A. v. Hugel, Sherff p.424). Cunningham (1838) recorded it for northern New Zealand "Most frequent in cultivated ground" but mistakenly cited Forster as an authority for the species in New Zealand, being misled in this apparently by De Candolle (1836 p.596).

The first record of B. pilosa in New Zealand occurs outside the botanical literature, in a note of Cruise (1824 p.315) on the Bay of Islands: "a great part of the country is overrun with cowitch ...". Cowitch obviously could not be the Mucuna or other stinging-hair bearing tropical plants that the Oxford English Dictionary refers to, and remained a mystery to me until I noticed in Richard Taylor's early N.Z. natural history compilation (1870) its identification as B. pilosa. A local name then, and a rather good one for a prickly-seeded nitrophilous weed, it seems to have rapidly fallen into disuse in this country as the plant itself declined (but note the similarity to the Maori "koheriki" !). I was pleased to meet the name in one other place, in a work on edible plants in Java (Ochse and Bakhuizen van den Brink 1977) where "N.Z. cowage" is given as one of the (presumably Javanese) names of B. pilosa. I have not been able to date that usage.

Cruise went on to say that the Maori attributed the introduction of B. pilosa to the visit of Marion du Fresne in 1772. This expedition did plant "seed of all sorts of vegetables ... from the Cape of Good Hope" (Crozet 1891 p.75) but unfortunately for a resolution of the problem the earliest Cape Flora, that of Thunberg made just one year after Du Fresne's provisioning stop there, has no reference to B. pilosa (Dr. J.P. Rourke pers comm.); also the earliest South African specimen listed by Sherff (p.417) dates only from 1839. Perhaps the plant stowed away at the expedition's earlier ports in the Indian Ocean.

Once locally common in cleared ground and open coastal habitats of northern New Zealand (e.g. Adams 1889 p.34) B. pilosa occurs today mostly not as a weed but as a seemingly-native plant of remote places

* An Australian Banks and Solander sheet in BM has been determined by Sherff as this species but is not listed by him (1937) as such; I suggest it is B. biternata.

such as the northern offshore islands. While a diminution in range and abundance is probably not an uncommon history for early weeds in N.Z. especially subtropical ones near their climatic limits the details for B. pilosa remain to be elucidated. Why, for example, has the plant become extinct on Auckland's volcanic cones, when these places would seem to offer it a continuing succession of suitable habitats?

Corynocarpus laevigatus (Corynocarpaceae) karaka

Attention has been drawn several times to the Maori tradition that karaka had been brought by them to New Zealand; recently Stevenson (1978) examined material from New Caledonia and Vanuatu (New Hebrides) and decided that the species there is none other than C. laevigatus.

An origin of karaka in that region would agree with the findings of Yen and Wheeler (1968) that what seem to be old Maori cultivars of another food plant, the taro, resemble in their chromosome number Melanesian rather than Polynesian plants. Also, the absence of an insect fauna specialized for feeding on karaka in N.Z. (Dugdale 1975) suggests that the plant might be relatively new to this country.

A difficulty, perhaps, is that Corynocarpus does not seem to be known as a food plant in Melanesia (e.g. Jardin 1974).

Hibiscus diversifolius, H. trionum (Malvaceae)

There seems to be no good reason for regarding these plants as New Zealand natives. They do not occur in the earliest collections and I can find no record of their having been used by the Maori, e.g. for cordage or decoration. The lack of a Maori name containing "au", the general Polynesian word element for hibiscus and similar plants (e.g. whau Entelea arborescens, aute Broussonetia papyrifera) seems particularly significant and I am not convinced of the antiquity or genuineness of "puarangi", a name listed by Allan (1961) but not in Williams' dictionary (1971).

Potentilla anserina (Rosaceae) silverweed

The first N.Z. collection of this common and variable Northern Hemisphere weed was made by Raoul at Akaroa in the early 1840s. Described by him as a new species P. anserinoides it has persisted as a rather unconvincing native in N.Z. Floras up to the present day.

Hooker (1864-7) made reference to Banks and Solander material but apparently in error as the plant does not occur in Solander's manuscript N.Z. flora. Robert Brown collected plants in Tasmania in 1804 (Bentham 1864 p.429) but in my opinion it could well have been introduced by then. It is not found in the mountains of Australia, New Guinea or Java.

As well as being absent from the earliest collections P. anserina appears to have been foreign to the Maori, especially in that the edibility of the root was unknown. Secondly, its only Maori name "kowhai kura" is probably a misidentification, being said to be shared by Geum urbanum "plants used for scenting oil" (Williams 1971). G. urbanum has this property but Potentilla species apparently not (Hyde 1976); there evidently has been a confusion between these two similar-looking adventive herbs.

Sonchus asper (Compositae) prickly sow-thistle, pororua

Perhaps a long-time associate of man in the Northern Hemisphere Sonchus asper was also native to New Zealand, having been found by Banks and Solander at five localities, in grasslands and cultivated ground (Solander ms. as S. oleraceus; Allan 1961 p.760).

It was one of the few plants eaten by the pre-European Maori as a

green vegetable, even though its bitterness made it (proverbially) unpalatable, and was soon replaced in Maori diet by adventive species notably Sonchus oleraceus (Colenso 1880 p.123; 1881).

The only other very early Pacific collection of S. asper appears to be that of Forster from Tongatapu (Seemann 1865-73 p.145) so there must be doubt as to whether the plant was ever a weed throughout Polynesia. However, in a revision of the genus Boulos (1973) has segregated some S. asper material from Australia, New Guinea and New Zealand as a new species S. hydrophilus, endemic to this region and possibly being a polyploid derivative of S. asper. The Banks and Solander and the Forster specimens are, one supposes, S. hydrophilus.

I would speculate that S. hydrophilus might have originated in the upland gardens of prehistoric New Guinea and perhaps reached New Zealand without help from the Maori. Virtually nothing seems to be known about the ecology of this taxon.

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FUCHSIA

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Wouldn't it be pleasant to give these lovely plants their correct name, in pronunciation as well as in spelling? The name honours a noted German botanist Leonard Fuchs, 1502-1566. I have no doubt that he pronounced his name Fooks. Indeed the name has been Anglicised by some Fuchs, to Fookes and Ffoulkes and ffoulkes. Therefore these plants should be Fooksia not Fewsha. This was brought home to me in two ways recently. A friend who passes a small nursery on his way home from town noticed that they had Fushias for sale. He corrected this spelling but found next morning that they had gone back to their original Fushias. After three attempts he gave up! The nursery folk probably thought that they had been victims of a prankster, or had been hit by some odd sort of vandalism.

Recently I wrote a submission in which I had twice printed, for clear positive spelling, Fuchsia procumbens. I had my submission typed and photostat copies made of it. Only after several had been sent out did I notice that the typist, a skilled professional young lady, had typed Fuschia. Thus she had all the letters but had placed them incorrectly. Obviously she knows Fewshas and it was natural for her to type the name as it sounded to her.

I like using Maori as well as botanical names, and for Fuchsia procumbens have two that are delightfully descriptive. They are
rere ua — raindrops, and
to-te-ra — sunset.

If enough of us who like to mess around with plants would care to pronounce Fuchsia Fooksia then correctly Fuchsia it would become. Mistakes would be avoided and we would be commemorating Leonard Fuchs and his Fuchsia. Let's do it!

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