PSEUDOPANAX ON BANKS PENINSULA

HUGH WILSON

The ivy family, Araliaceae, ranges throughout most of the temperate and tropical regions of the world, but is much more abundantly represented in the tropics. Two important centres of its distribution are Indo-Malaysia and tropical America. Conversely the closely related carrot family, Apiaceae (often still known as Umbelliferae), is concentrated in temperate latitudes. It is larger than the Araliaceae, with about 3000 species in 300 genera, as well as being predominantly herbaceous.

With about 1000 species in 50 or 60 genera, the Araliaceae is only a moderately sized family, but for a temperate country New Zealand has a good diversity and abundance of araliads. One species of *Meryta* (puka) is a small tree restricted to the far north, and three species of *Stilbocarpa* (pūnui) are found only from Stewart Island southwards. (They are unusual among Araliaceae in being herbaceous.) *Schefflera* (sevenfinger or patē) is interesting in that it is the southernmost species of an otherwise almost entirely tropical or subtropical genus of around 150 species. It is found throughout New Zealand, as far south as Stewart Island. With its large digitate leaves it looks distinctly tropical, and seems a bit out-of-place when snow-covered in, say, the montane forest remnants of Banks Peninsula. Here sub-zero winter winds can shrivel the big compound leaves. I have seen exposed specimens on Hinewai Reserve completely defoliated, but they sprouted again in the spring.

By far the largest araliad genus in New Zealand, though, is *Pseudopanax*, with around 15 species. On Banks Peninsula, six species are native, and they form an interesting and conspicuous element of the vegetation. Five of them (all expect *P. ferox*) occur naturally on Hinewai Reserve, where *Schefflera* is also abundant.

Pseudopanax anomalus is well-named; it is the only member of the family to adopt the small-leaved, tangle-branched ("divaricating") shrub habit. It is scattered widely across Banks Peninsula in shrubland, scrub and forest, although somewhat local (Fig. 1). On my Banks Peninsula Botanical Survey my 1260 gridded sample sites hit *P. anomalus* only once.

The commonest *Pseudopanax* on Banks Peninsula is *P. arboreus*, the lowland fivefinger or whauwhaupaku (55 hits, mostly in forest). Above about 500 metres altitude the place of *P. arboreus* is taken over by *P. colensoi*, mountain fivefinger or orihou (17 hits). These are similar-looking species (*P. arboreus* has much longer petiolules (leaflet stalks), more distinct venation, and five to seven leaflets), but although they often grow beside each other in a mid-altitude zone of overlap, obvious hybrids seem to be very uncommon. Most plants of *P. colensoi* on Banks Peninsula have five leaflets, on short but evident petiolules (occasionally leaves have six leaflets). However on Mount Herbert in particular there are plants with mostly three-leafletted leaves and often very short petiolules; these seem

indistinguishable from var. *ternatus*, which some botanists have suggested should be regarded as a distinct species.

Both lowland and mountain fivefingers are often damaged by possums, especially in the winter, when the ground beneath certain trees can be littered with green leaves after possums have eaten only the petioles. Both species are also dreadfully vulnerable to being ringbarked (and thus killed) by goats.

Of the two lancewoods, *Pseudopanax crassifolius* (common lancewood or horoeka) is widespread and common (25 hits), despite being attractive to possums too. The bizarre change from the unbranched juvenile, with its long, stiff, downward-pointing leaves, to the round-headed adult tree, with "normal"-looking leaves, never fails to arouse comment and wonder, and a good share of scientific speculation. The fierce lancewood (*P. ferox*) is one of Banks Peninsula's noteworthy plants. Nationally it is listed in the New Zealand Botanical Society Local Plant List (1995) - a "watchlist" for taxa which are sufficiently restricted to warrant noting and some monitoring. Banks Peninsula is one of its few strongholds; it could be described as "quite common" here (five hits on my survey). It only occurs in the drier perimeter of the Peninsula, however (Fig. 2), whereas *P. crassifolius* avoids the driest places, loves the high-rainfall sites, and is much more widespread. The two species often meet but I have never found a hybrid.

Pseudopanax edgerleyi or raukawa (Fig. 3, 4) is the rarest of the six Banks Peninsula species. When it was first brought to my attention in 1981 by Arthur Ericson and a Le Bons Bay farmer I wondered at first whether it might have been accidentally introduced from Westland on boots or logging machinery. Later, after my survey turned up about 20 indubitably wild plants of all ages (Fig. 3), I decided it was definitely part of the native flora of Banks Peninsula, though I marvelled that it had been overlooked for so long. Then I found a reference to it back in 1932. William Martin, in "The Vegetation of Marlborough" wrote: "Incidentally it has been my good fortune to make the first discovery of this tree on Banks Peninsula ...". Until 1994 the nearest known wild raukawa to Hinewai Reserve were a few saplings on tree fern trunks in the upper Grehan Valley, over the Purple Peak ridge crest, on our neighbour Graeme Curry's land. I made a quick search for an adult tree in the vicinity but couldn't locate any. In late March, 1995 Graeme told me he had seen "a strange-looking *Pseudopanax*" in his bush gully close to where Pauline Cara and I had found the saplings in April 1987. I nipped over the hill and followed Graeme's verbal directions - to find three adult raukawa. One of the three was loaded with fruit, mostly green but a few ripe. As the bellbird (or blackbird, or kererū) flies, it is about 1 kilometre from this tree to Big Beech Track in Hinewai Reserve where we found a raukawa seedling in 1994.

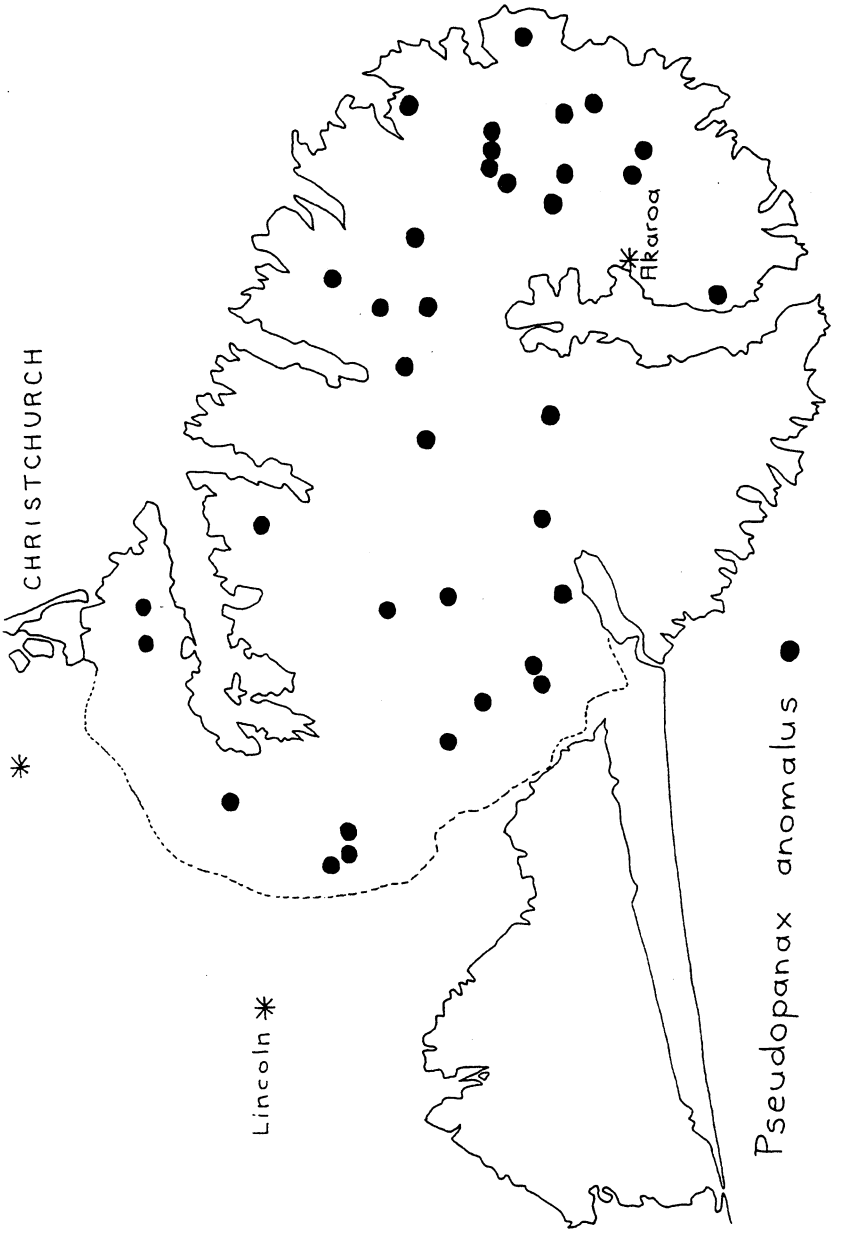

Fig. 1 Distribution of *Pseudopanax anomalus* on Banks Peninsula

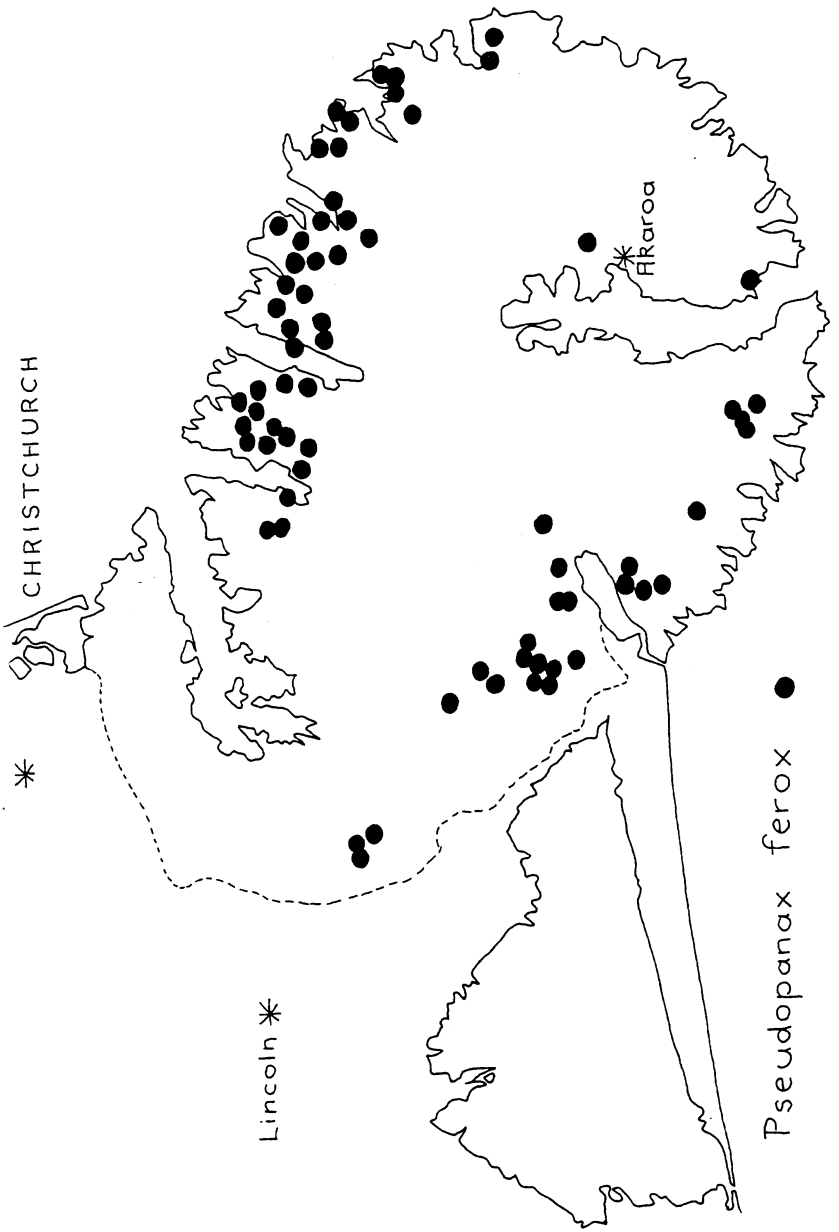

Fig. 2 Distribution of *Pseudopanax ferox* on Banks Peninsula

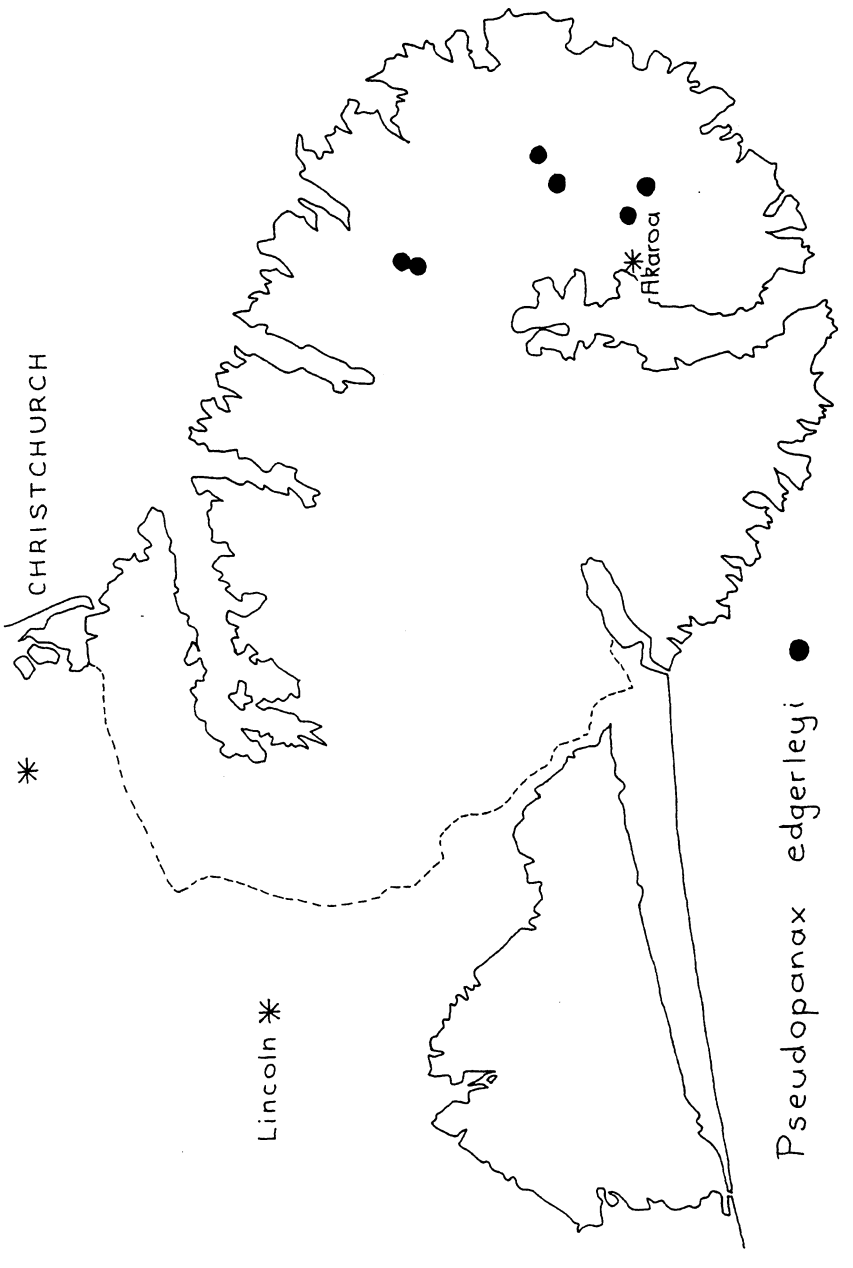

Fig. 3 Distribution of *Pseudopanax edgerleyi* on Banks Peninsula

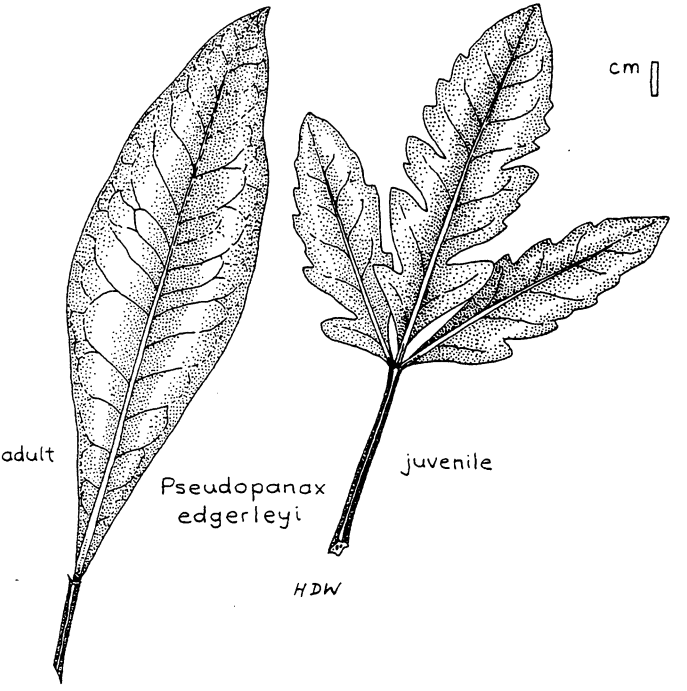

Fig. 4 Adult and juvenile leaves of raukawa, *Pseudopanax edgerleyi*

The presence of raukawa on the Peninsula may explain the records of J.F. Armstrong (1870) and J.B. Armstrong (1880) for *Pseudopanax simplex* (as *Panax simplex*) or haumakāroa. William Martin in 1963 considered the record might be valid, but no-one else has ever recorded the species on the Peninsula before or since. The Armstrong locality is given as 'Dry Bush' on the Port Hills, whereas all the known occurrences now of *Pseudopanax edgerleyi* are within Akaroa Ecological District. Juvenile leaves of *P. edgerleyi* and *P. simplex* can be confused, although a simple smell test can separate them: crushed *P. edgerleyi* leaves are deliciously aromatic whereas *P. simplex* leaves are not. Apart from Banks Peninsula, raukawa occurs widely through the North and South Islands, and locally on Stewart Island.