

Hidden treasures of the Dunedin Botanic Garden

At the end of July a small group of us were lucky enough to be given an insider's tour of the Dunedin Botanic Garden by Tom Myers. First stop was the impressive Rene Orchiston collection of endemic weaving flax varieties (*Phormium*), all with their traditional Maori names and differing colours, textures and traditional uses, and not yet listed on the visitor's guide. We walked on past the native wetland area, which abounded in sedges and rushes, and then carried on along the Lovelock bush track, where here and there were odd out-of-range kauri, *Agathis australis* and rewarewa (New Zealand honeysuckle, *Knightia excelsa*), that caught the eye amidst the second growth bush, once they were pointed out.

The track led us across the road to the welcome warmth of the propagation house, where we could marvel at strange plants from around the world, such as cycad palms of ancient lineage, insectivorous pitcher plants, sticky *Drosera* sundews, prickly cacti and various thorny plants that are so under-represented in New Zealand.

Tom told us about their Integrated Plant Management System, which aims to maintain plant health by using bio-controls and rapid removal of sick plants to minimise reliance on chemical sprays. The conversation turned to the consequences of ripening hormones that are sprayed over pea, barley and other crops so that they can be harvested in one swoop. The residue left on fresh pea straw used as mulch can cause garden plants to bolt and go to seed, so the trick is to let straw for mulching weather for a year before using on the garden.

The finishing treat was having Tom explain the International Seed Exchange programme that operates between botanic gardens around the world, and being shown the seeds and list of 100 species he had prepared for exchange. Interestingly, two of the species most requested from overseas are our tree fuchsia, *Fuchsia excorticata* and our fierce stinging nettle, *Urtica ferox*, both unusual in their genera in having tree forms.

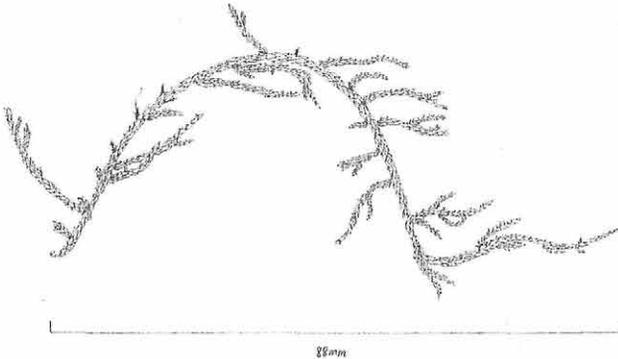
Plant Profile: *Lembophyllum divulgum* (Hook. f. & Wils.) Lindb. By John Steel

Order: Bryales
Family: Lembophyllaceae

This is a fairly common moss to be found on the bark and exposed roots of trees, on rocks, on old logs in damp forested areas, e.g. in the mixed, broad-leaf forest in Leith Valley Dunedin, or in open grassland. The name stems from the Greek word, *lembos*, a small, round boat, and the Greek word, *phyllos*, a leaf, and refers to the almost round and deeply concave leaves, which cannot be flattened on a microscope slide without folding or tearing. The epithet, *divulgum*, refers to the irregular branching pattern. It is the only member of this small genus found in New Zealand. It is also very common in Australia.

Forming dense, brownish to dark-green clumps, it is easily recognised by the string-like branches about 4-5cms long, formed by tightly overlapping leaves, with shorter secondary branches tapering to short blunt-pointed tips. The leaves are up to about 1mm in diameter and have a stout nerve or costa, extending to approximately half way up the leaf, easily seen with a x10 hand lens.

It is extremely variable according to its habitat. In forest, it reaches its maximum size and has a pretty, dark olive-green colour. In coastal grassland, such as that at Tunnel Beach, it can be very small, quite densely packed and almost black in colour



Lembophyllum divulsum, drawn by Inge Andrew

BOOKS

Book review – by John Steel

Simpson, P. (2000). *Dancing leaves: the story of New Zealand's cabbage tree, tī kōuka*.

324 pp. P/back. Canterbury University Press, Christchurch.

The year 2000 brought forth a goodly number of excellent natural history books and my choice for the year was heading towards the Malcolms' *Mosses and other bryophytes – an illustrated glossary*. However, a couple of days after Christmas I was given a copy of this excellent gem. The humble cabbage tree may lack the status and grandeur of the kauri and the podocarps but nevertheless, has a special place in the New Zealand psyche. Its significance to all in New Zealand is amply dealt with here.

This would have to be one of the best books written about one group of plants. The cover photograph of a large group of mature cabbage trees, standing in a field of exotic grasses and bracing themselves against the wind, evokes feelings of the struggle of the