

Before Gondwanaland broke up into its parts there grew in temperate regions of the southern land mass, both gymnosperms which had arisen and developed some millions of years before, and angiosperms which were appearing and developing at that time. Among them were members of over sixteen families of larger plants including the Podocarpaceae, Araucariaceae and, of special interest to New Zealand, the Nothofagus genus of the Fagaceae. This then would account for the appearance of these families in almost all southern continents - e.g. Podocarpus species in Chile, Brazil, East Africa, Australia and N.Z.; or Araucaria relatives in Chile (monkey puzzle), Brazil (Paraná Pine), Queensland (Agathis spp.), Norfolk Is. (N.I. Pine), New Caledonia (a similar pine), N.Z. and Fiji (Agathis spp.). Nothofagus and Proteaceae also have a distribution which is easier to explain with this background although there are still problems.

What about New Zealand itself? Well the study is so new that details are still being worked out and will be for years to come. Most workers seem to think that New Zealand in its movements travelled as part of Australia for a great part of the time, but finally in the Oligocene, say 30 - 40 million years ago, separated from the south-east part accompanied by other pieces of continent some of which, the Lord Howe Rise, the Norfolk Ridge and the Campbell Plateau are now almost submerged, though not very deeply. New Caledonia was also part of this group. The link with Australia still shows today in the small areas of ancient rocks in Fiordland and Nelson which are much older than the rest of New Zealand.

Why did our land not bring with it marsupials, acacias and eucalypts; why did no tuataras remain in Australia and why are there no dinosaur fossils in New Zealand rocks such as are found in Australia? There is an enormous amount still to be worked out but it is most interesting and botanists can now try a different approach to their problems.

SOME RECENT NAME CHANGES IN N.Z. FLORA

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PSEUDOPANAX (ARALIACEAE)

In the New Zealand Journal of Botany Vol. 11 No. 1 pages 171-172, March 1973, Dr. E. Edgar discusses names in the N.Z. species of Pseudopanax. Apparently Panax and its compounds have been treated as neuter (neither masculine or feminine) in N.Z., but according to the International Code of Botanical Nomenclature and to Dr. W.T. Stearn of the British Museum, the masculine gender should be applied to names in Panax.

Accordingly Dr. Edgar has recommended the following spellings for New Zealand species of Pseudopanax (the names listed here

are only those that have 'suffered' change).

	<u>New Name</u>	<u>Old Name</u>
<u>Pseudopanax</u>	anomalous	anomalous
	arboreus	arboreum
	chathamicus	chathamium
	crassifolius	crassifolium
	lactus	lactum
	linearis	lineare
	colensoi var. fiordensis	var. fiordense
	" var. ternatus	var. ternatum

In most cases the change is simple and it is only a matter of learning to 'us' rather than 'um' !

FREYCIINETIA (PANDANACEAE)

Dr. B.C. Stone writing in the latest issue of the New Zealand Journal of Botany Vol. 11, No. 2, June 1973, pages 241-246, points out that the sole New Zealand species of Freycinetia (F. banksii) is shown to be the same as the only Freycinetia on Norfolk Is. (F. baueriana).

The species on Norfolk Island has an earlier published name which takes precedence over the New Zealand name - Cunningham named the New Zealand species, but Endlicher named and published the Norfolk Island species four years before in 1833.

Because some small differences are apparent between plants from New Zealand and Norfolk Island, the New Zealand name banksii has been retained at subspecific rank. The new name is Freycinetia baueriana subsp. banksii.

This is one name change which New Zealand botanists would hardly have expected, the name having remained unchanged since 1837, 136 years ago. However, it appears that changes will be inevitable within plant groups as botanists examine more critically sections of the world's flora.

For further information on name changes, members are referred to Dr. L.B. Moore's article 'New Plant Names' in the Botanical Society Newsletter of March, 1972.