"PROBLEMS AND QUERIES IN N.Z. BOTANY."

Mr A. Farnell gave a varied talk to the Society on May 4th; mainly the subject of nomenclature, and the constant changes which take place. He started by giving an historical outline. Linnaeus pioneered the system of Latin binomial nomenclature, with species arranged in genera and families. Some of the old botanists divided some genera into numerous species. Colenso, an extremely observant botanist, was one of these "splitters" of what are regarded by the "lumpers" as one species. In Britain, the Rubus fruticosus complex (regarded by Bentham as one species) has been split by some botanists into dozens of species (Watson lists 300!) all "blackberries" to the uninitiated (though perhaps of varying tastes!). Our own composite genera often present similar problems with "micro-species." Environmental varieties result in many headaches over identification.

Changes in the generic names are not uncommon, and this has often been the case with our genera, where changes have been made following the world revision of a genus, entailing grouping or splitting of genera. A new genus may be raised - as Neopanax was by Allan, only to be relegated now to Pseudopanax - once also known as Panax and Nothopanax! (see N.Z. Journal of Botany, December 1965). Myrsine was Rapanea, then Suttonia, and is now back to Myrsine. Olea became Gymnelaea, and Mr P.S. Green in our forthcoming booklet puts our "maires" in Nestegis. We must abide by the International Rules and accept these changes.

A genus elsewhere in the world frequently shows different chromosome counts among its species, but in New Zealand this may not be the case - as in Pittosporum, all species listed in Allan were found by Dr Rattenbury to have the same chromosome count. It should be noted that P. buchananii, P. intermedium and P. fasciculatum no longer occur. P. obcordatum was not found for 60 years and then re-discovered near Kaitaia by Matthews, and also in swampy ground by the Wairoa River by Sainsbury - are these two the same species, or different? As for P. anomalum - perhaps it won't be a Pittosporum much longer!

One can sometimes be led far astray by similarities - even Bidwill named Exocarpus as a Dacrydium when he first found it. Mr Farnell considers kahikatea (Podocarpus dacrydioides) is nearer Dacrydium than true Podocarpus, and may be moved to that genus with an overall revision of the podocarps - it was once in that genus.

Of our alpines, numbering around 600 species, and of which about 90% are white-flowered, the greatest part is endemic. The "forget-me-nots" (Myosotis) are particularly well represented with 34 species out of 50 or so world species. It is interesting to note that the Chathams, Campbell Island and the Antipodes were part of New Zealand in Triassic times, but most the plants now have coloured flowers - a curious difference.

The talk was well illustrated by slides, and it is to be hoped Mr Farnell will permanently record his wide experience with the culture of our native Pittosporums.

D. Mason.