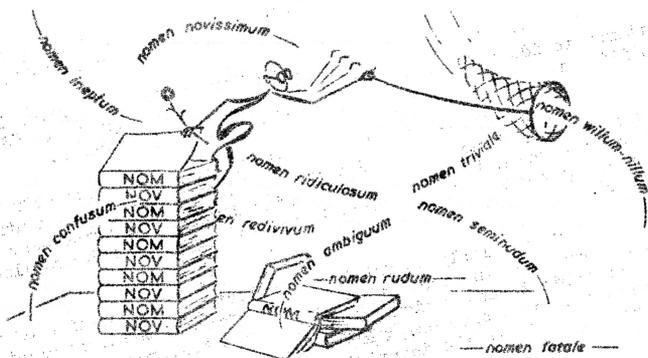


NEW PLANT NAMES

Dr. L.B. MOORE.

Like the old naturalist Henry Ryecroft, we all like to be able to greet a plant by name when it shines beside our path. But which name? The so-called common or popular names are a matter of whim or history and no one can say which is right or wrong. But if you want to be understood you must conform to local custom, however foreign it may be to you. Botanical names on the other hand, aim at scientific precision and they are governed by an international Code of botanical nomenclature which is the result of gradual evolution over the last 80 years or so.



This Code is a legalistic document, and it is a very technical business to understand and apply it correctly; names are altogether ignored if they are not properly published, old names have priority over newer ones, and any name may only be used once. It is essential therefore that botanists concerned with this technical business should have access to a complete list of botanical names, with references to the place where each one, accompanied by a certain minimum diagnosis, was published. This list, known as Index Kewensis, is always being added to as new names need to be coined in view of "more profound knowledge of the facts."

The Index Kewensis is a mighty work; the twelve volumes held at Botany Division weigh together 50lb 10oz. i.e. just over 23 kilograms. The first volume, dated 1895, announces itself on the title page as "An enumeration of the Genera and Species of Flowering Plants from the time of Linnaeus to the year 1885 inclusive, together with their author's names, the works in which they were first published, their native countries and their synonyms. Compiled at the expense of the late Charles

Robert Darwin under the direction of Joseph D. Hooker by B. Daydon Jackson." The latest Supplement, the fourteenth (1961-1965), appeared in 1970. Mr R.D. Meikle has recently told the story of the Index from its conception by Darwin and its difficult birth (the preliminary boxes of names weighed rather more than a ton) through to its prospects of mechanization in the nineteen seventies. (Biol. J. Linn. Soc., Lond. 3(3) Sept. 1971: 295-299).

The Index is prepared at the Herbarium of the Royal Botanic Gardens, Kew, Surrey, England, where the botanical literature of the world is scanned for new plant names. When each Supplement arrives at Botany Division someone has to go carefully through it to ensure that we are aware of all new names that might affect New Zealand. Apart from this we have two principal reasons for consulting the Index frequently. One is to find a reference to the original place of publication of the name of any flowering plant, so that we can go back to that first description. Another use arises whenever a new name is to be proposed, to ascertain that it has not already been taken up. As the Kew Index covers only flowering plants, other books must be consulted if it a question of a new generic or family name, since either of these could be preoccupied in conifers, ferns, mosses, fungi, seaweeds, etc.

By the time a Supplement reaches us it is five or more years out of date and some of the names have already been widely used and sometimes misinterpreted because few people have access to the technical papers where the reasons for the new names are set out. To close the time gap to some extent, and to give interested botanists precise references while saving them the task of checking individually, Dr. Elizabeth Edgar decided that " it should be useful to collect all new names referable to New Zealand plants together and to publish at intervals a list of them." The first such list (Nomina Nova Plantarum Novae Zelandiae N.Z.J. Bot. 9, 1971 ; 322-330) covers the years 1960-1969 and comprises about 160 items for flowering plants and one conifer name.

Dr. Edgar's introduction states clearly, with examples, which types of name changes she includes and which she omits. As her title accurately indicates, this is a catalogue of new names; it does not concern itself with resurrected old names. The list is set out in the manner of Index Kewensis, which is " a straightforward index, giving names and references ... without passing taxonomic judgements or attempting to tell us which name is to be maintained, and which discarded " (Meikle, p. 297). This " non-committal objectivity " has been consistently adhered to since 1913 in the Kew Index, which is therefore a well-tryed model to follow. Dr. Edgar also stresses that newly available names need not necessarily be adopted - a point neatly summed up in a quotation from Dandy (1969) who says that because many taxonomic rearrangements merely reflect idiosyncratic views it would be " unwise to accept all proposed changes willy-nilly."

In spite of this clear warning some authors have already followed this 1971 list as if it were automatically correct to prefer every new name to every old one, with some results that make little sense taxonomically, and in no way reflect the intentions of those who set up the new names.

If you do not understand the background of a change, then

it is much safer to keep to the familiar name which you yourself can verify by reference to a reliable description. But when you hear an unfamiliar name it is very satisfying to be able to go to the list of *Nomina Nova* and (provided it falls within the period 1960-1969) to find where and when the name arose, and some indication of the relationships of the plants concerned. This is where Dr. Edgar's list can help everyone, though it was prepared primarily for practising taxonomists. If you have a copy read the introduction carefully and don't be a willy-nilly!

A BOTANICAL CURIOSITY ?

In a booklet printed in 1881 and entitled " A Little History of New Zealand " I have found the following :

" A great curiosity is sometimes found at the foot of the rata, it looks like a caterpillar with a sort of fungus, like a bullrush, growing out of its head, and for a long time people were puzzled to decide whether it was a vegetable or animal. It is however supposed that the caterpillar burrowed in the sand beneath the rata, and in so doing, the seed of the bullrush adhered to the soft nape of its neck and, becoming embedded there, the roots struck down into the animal, which in time it killed - the roots filling its skin with vegetable substance. The maoris burn these wooden caterpillars and use the charcoal for tattooing."

The curiosity is without doubt Cordyceps robertsii, known to most of us to-day as the "vegetable caterpillar". Why it should be associated with the rata I do not know, as we find most on the edge of tracks through tea-tree. I can only conclude that, as the original discovery was under a rata, it was wrongly assumed by the old-timers that there was some connection between it and the rata.

W.

BOOK REVIEWS

WHEAT GRASS IS THAT? or A Guide to the identification of some introduced grasses in New Zealand, by vegetative characters.

by N.C.Lambrechtsen (N.Z. D.S.I.R. Information Series
82. Govt. Printer, Wellington.
\$1.25. 1972. 136 pages.)

This book provides keys, descriptions and illustrations for most of the major grasses (both pasture and weedy) in New Zealand. Most of the book is based on Dr. E.C. Hubbard's "Grasses" but deals with those found in New Zealand and particularly with their vegetative features as they are often without flowering or fruiting parts. Where possible the illustrations are taken from Hubbard (38) but 45 are new, provided by