

REVIEW

L. B. MOORE & E. EDGAR, *Flora of New Zealand*. Volume 2. — A. R. Shearer, Government Printer, Wellington, 1970, i—xl + 1—354 pp., 43 fig. — Clothbound, \$ 4.50.

This book is the long awaited continuation of Allan's well-known 'Flora of New Zealand 1' (1961), which treated the indigenous vascular plants minus the Monocotyledons. The present volume contains the Monocots except the largest family of the New Zealand flora, the *Gramineae*.

The authors are staff members of the Botany Division of the Department of Scientific and Industrial Research; Miss Moore also saw the manuscript of the first volume through the press after Dr. Allan's death in 1957.

The high scientific standard of volume 1 which elicited praising reviews from Jacobs (*Fl. Mal. Bull.* no. 16, 1961, 830), Skottsberg (*Svensk Bot. Tidskr.* 56, 1962, 479—483), and van Steenis (*Blumea* 11, 1961, 230—231), is fully maintained. Even more than in volume 1 the descriptions, which are again concise and accurate, are based on extensive knowledge and study of both living and herbarium material. Numerous notes on taxonomic problems, variability, hybridization, and other subjects greatly enhance the scientific value of the work.

A striking difference with the first volume is the thickness of the paper. Volume 1 had paper so thin that handling the book asked for special care. In it 1479 species, 289 genera, and 117 families were dealt with on 1139 pages. The present volume with exactly the same size and lettertype contains 339 species, 76 genera and 22 families on only 394 pages!

The latest *Flora of New Zealand* was the second edition of Cheeseman's 'Manual' (1925). In this work the Monocots exclusive of the *Gramineae* comprised 15 families, 68 genera and 277 species. Taking into account the fact that some species taken up by Cheeseman are considered introductions and are hence left out by the present authors this means an increase in the number of species of *c.* 25 %. The most spectacular increment is among *Cyperaceae* of which *Uncinia* has soared from 15 to 32 species, and *Carex* from 55 to 73. *Pterostylis* (*Orchidaceae*) has increased from 13 to 19 species. This increase is in part due to the extensive collecting made after Cheeseman's time, but in no mean degree also to the fact that several varieties have been raised to species rank. The propensity to accept small taxonomic units is also apparent at family level where Hutchinson's divisions and sequence are followed. Thus the genera placed in *Liliaceae* by Cheeseman are now to be found among *Agavaceae*, *Liliaceae*, *Philesiaceae* and *Smilacaceae*.

A valuable chapter is the chronological survey of taxonomic papers on New Zealand vascular plants which supplements the enumeration published in volume 1 and brings it up to date to the end of 1968. A survey of chromosome numbers of New Zealand Tracheophytes and corrections (but no additions) to volume 1 complete the work.

The illustrations are from the able hands of Mr. J. B. Irwin (Orchids) and Miss N. M. Adams, who also designed the attractive cover.

I have hardly been able to detect any printing errors or omissions and these were mostly unimportant. Danser's works on the *Loranthaceae*, also overlooked in volume 1, are again curiously omitted from the present supplement; Tengner is misspelt Tengener (p. xxvi and xxxii); Kükenthal's record of *Cyathochaete* (*Cyperaceae*) for New Zealand is not accounted for.

The authors are to be congratulated with the production of this magnificent work, a truly indispensable book, not only for those interested in the fascinating flora of New Zealand, but to anybody studying the botany of the Pacific or the southern hemisphere generally. May volume 3 soon follow!

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