Notes R.B.G. Edinb. 38(2):344 (1980)

Book Review

An Adventive Flora of New Zealand.* This delightful little book is to be warmly welcomed as a most useful addition to the Flora of New Zealand series. It is effectively an adventive or weed flora of Monocotyledons excluding grasses, and the omission of this group is unfortunate when so many people bracket grasses, sedges and rushes together as the "non flowering plants of the flowering plant world". No doubt practical considerations led to the present arrangement and we hope we will not have to wait too long for the next volume with the grasses.

This is not merely an appendix volume of adventive flora quite separate from the endemics of New Zealand but, as the authors say, "it is a transitional stage" to the production of a Flora dealing fully with both natives and adventives together. This long term aim of the authors must be warmly applauded. It is so logical and practical as to make it surprising that there has been so much historical opposition to dealing with both groups together. The volume keys all the adventives and native taxa together, referring genera without adventive species to the earlier volumes of the Flora of New Zealand, but describing both adventive and native species together, with good brief descriptions in the text. Notes on distribution within and beyond New Zealand, first record and first collection complete the standard accounts, but for many species there are extremely useful general notes to help separate plants from similar taxa, or practical comments on toxicity or weedy propensities. The layout is clear and concise throughout. The keys are excellent, and particularly good are the two keys to all the genera in this section of the flora: one for use with fairly complete flowering or fruiting material; the other based mainly on vegetative characters for poorer specimens. A key to the families as well may seem superfluous, but it will no doubt prove very useful for students trying to learn something of flowering plant taxonomy and understanding the families in addition to just identifying plants.

The illustrations are a fairly good balance between the strictly useful and the artistically attractive. Figures such as those of *Juncus* (Figs 16–18) are marvellously clear aids to identification, while illustrations like those of *Hedychium* (Fig. 7) and *Iris* (Fig. 21) will be appreciated by students wishing to understand the morphological structures they are looking at. *Carex* perhaps could have been more fully illustrated; only five out of the ninety-five species treated are shown with drawings of their utricles. It would not have required much more space to have increased the number substantially, and thus providing a quick check of determinations made in the keys for good material with mature fruit. The drawing of *Carex* infloresence types in the different sub-genera (Fig. 29) could also with advantage have had male, female and hermaphrodite parts labelled, clarifying the differences for elementary students. These are much more subtle and less well understood than the differences between bulb and corm (Fig. 9) which are probably still taught to most people at school. Colour illustrations are always nice to see and the four pages devoted to this would have been a luxury if better results had been obtained. Surely better backgrounds could have been chosen. To those who only know bluebells (Fig. 23H) in Europe, the New Zealand adventive does not look too happy with its two-flowered raceme, and suggests the colour pictures were put together in great haste.

This third volume of the Flora of New Zealand will possibly have wider usage than the first two, as it will be a great aid to agriculturists and people concerned with plants as problems. It is very suitable for use by people with very different abilities and background knowledge who will demand information of very different types. It is to be highly commended as a scholarly treatment and trustworthy tool.

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* *Flora Of New Zealand*, Vol. III. Adventive Cyperaceous, Petalous & Spathaceous Monocotyledons by A. J. Healy & Elizabeth Edgar. 220 pp. incl. 31 figs. 1980. P. D. Hasselberg, Government Printer, Wellington, New Zealand. [ISBN 0-477-01041-5]. £18.50.