

There are some alterations in format since Volume II, notably larger pages with wider margins for annotation, and stiffer, more opaque paper. A centrepiece of colour photographs is an attractive feature, as is the bold paper cover by Keith West showing representatives of four common families of adventive monocotyledons. Service sections include a bibliography of first records and a welcome continuation of the *Annals of Taxonomic Research* on native vascular plants.

This volume continues the consistently high standard of the series, and is a "must" for anyone seriously interested in the New Zealand flora as it exists today.

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Book Review

Flowering Plants of the World by V. H. Heywood, Consultant Editor, Oxford University Press, Oxford, 1978, 355 pp. Price \$21.55 N.Z.

This large beautifully illustrated book gives the general reader a thorough introduction to the diversity of form and structure to be found among the world's quarter-million species of flowering plants. Forty-four authors, most of whom are well-known British botanists, contribute concise taxonomic descriptions of the flowering plant families and their more prominent genera together with information on distribution, ecology and economic uses. The illustrations were specially commissioned so that the variation within each family could be properly displayed; many tropical plants are shown and will be new and interesting to most readers.

In an introductory chapter V. H. Heywood outlines flowering plant morphology and classification and presents the Cronquist-Stebbins grouping of 306 families in ten evolutionary alliances, which gives the family arrangement used in the main text. He states that this grouping is used for convenience and not because of any general belief that it might best represent the course of flowering plant evolution. This agnostic attitude towards evolutionary relationships prevails throughout the book and vague or unsupported claims concerning such matters (e.g. "primitiveness" and "advancement") are refreshingly rare.

A glossary follows, and fails to include only a few chemical, genetical and palynological terms used in the text.

Three Kew-associated artists contributed the illustrations, which are superb. The sepia tone of this watercolour work is restful and appropriate, and together with colour highlighting of a single plant or structure in each plate prevents the illustrations from appearing excessively formal or detailed. A half-page plate heads the account of most families, showing flowering or fruiting shoots, usually of several species, and numerous smaller paintings of taxonomic detail. Floral dissections are most prominent; apparently because of the limited space other diagnostic features, e.g.

hairs, glands, nature of the seed, are not often figured.

Some large families are each allotted one or two full-page colour plates. These are very attractive but contain relatively less taxonomic information, and sometimes more illustration of detail might have been better, e.g. for Compositae and Gramineae there are too few dissections to show the range of floral structure described in the text. One definitely can criticise, though, an encyclopaedic book such as this for not having any illustration for 98 of the 306 families. Admittedly many of these are small, seldom-encountered families but several are quite large or economically important, e.g. Agavaceae, Dioscoraceae, Ebenaceae and Piperaceae.

Thirteen New Zealand plants are illustrated, including *Centella uniflora* misidentified as *Pratia arenaria*.

The half-page or so of text for each family (exceptionally 1-3 pages) is arranged under the headings Distribution, Diagnostic Features, Classification [i.e. constituent tribes and genera; similarities with other families], Economic Uses. For a fair number of families, especially the smaller ones, sufficient morphological detail is given to enable an unknown plant to be placed in its tribe or genus. However, in keeping with the philosophy expressed in the introduction this detail is seldom accompanied by any evolutionary or biogeographical explanation, and of the many fascinating ways in which a plant can be adapted to its environment only pollination and dispersal mechanisms receive much comment. Even the botanically-minded reader may prefer to leave this part of the text for later reference.

Within the account of each family a 'quick reference' figure shows the family distribution on a world map, and a caption gives the number of genera and species, distribution of the family [habitat would have been more useful here] and economic uses. The maps contain no distribution information for the smaller islands of the Pacific, including Fiji, Hawaii and sometimes (because of a printing fault) New Caledonia. One also wonders about their general reliability when for New Zealand there are a surprising number of errors, both of inclusion (Alismataceae, Araceae, Asclepiadaceae, Celastraceae, Ceratophyllaceae, Frankeniaceae, Lythraceae, Najadaceae, Plumbaginaceae, Vitaceae, Xanthorrhoeaceae) and exclusion (Bignoniaceae, Burmanniaceae, Chenopodiaceae, Crassulaceae, Icacinaceae, Primulaceae, Sapotaceae, Typhaceae).

Because this book contains no keys, nor references to more information on the families and genera, it will be of only limited value to students and those wishing to identify plants, while the necessary but rather forbidding use of technical terms, and the considerable amount of taxonomic detail, probably detract from the general interest of the book. The beauty of the illustrations, however, and the very reasonable price should ensure it a good sale.

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