

The rationale for the order of families is presented very clearly on page 10. However, using the groups rather than formal taxa to arrange plants means that genera of *Euphorbiaceae* are split into two different sections. In the second paragraph of the introduction the authors suggest that using this book with plants is a good way to learn tropical botany. This is certainly true. I have already learnt a lot from this book in the few months I have had it. However, I would argue that the authors probably underestimate how important this book is going to be for the next generation of botanists working in the region. I consider this book to be much more than a field guide and I think this will be the main reference in west Africa for many years to come. For that reason alone, I would argue that the genera of *Euphorbiaceae* should be placed together and the families placed within orders. I think it is fine to place *Dioncophyllaceae* (*Caryophyllales*) with *Combretaceae* (*Myrtales*) together in a field guide, but I wonder about placing those families under the heading ‘Malpighiales 2 (glandular)’ when they actually belong in *Caryophyllales* and *Myrtales*.

The book has been very well put together and the proof reading and indexing must have been an enormous task. There are still inconsistencies which could have been removed. For example, group 16b is called ‘*Strephonema* gp.’ in the key on page 124 and ‘*Napoleonaeae-Scytopetalum*’ on page 196. These are minor inconsistencies but they did slow down my understanding of the groups when I was trying to identify specimens.

My only real complaint is that there are no families in the index of scientific names. If I have a plant in front of me and I know the genus the fastest way to find it is to go to the index and find a page number. If I only know the family, I have to go to another index and there I am given a group number, not a page number. These group numbers are an integral part of the book, and very useful, but they are not the fastest way to find a family you want to check. That is what page numbers are for.

But such concerns are minor and petty. What is important is that this is a fantastic contribution to botany and a pleasure to use. I doubt I will ever review a better book on plants.

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Flowering Plant Families of the World (2nd edition). V. H. Heywood, R. K. Brummitt, A. Culham & O. Sedberg. Kew Publishing. 2007. 424 pp, over 1000 colour and sepia illustrations. ISBN 978 1 84246 165 5. £27.95 (hardback).
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Larger in size and content than the first edition, this attractive book will have wide appeal not only to those interested in plant systematics but also to those interested in gardening and natural history and plants in general. Its appeal lies in its worldwide approach, attractive illustrations and authoritative and lucid text, and – new for this edition – the evaluation of new family concepts. As Heywood notes in the introduction, ‘our knowledge of plants has been dramatically changed as a result of a flood of publications on morphology, anatomy, distribution and molecular phylogeny’. This is

in part reflected by the number of families in this volume increasing from 306 in the 1978 edition to 506.

In this last respect, the appearance of this book is very timely because, over the last 10 years or more, the new findings from DNA sequencing have redefined many family concepts, some of which were expected, others welcome and yet others seeming to raise more problems than they solve. Many of these studies are published in new, very expensive, specialized journals that are not available to the general reader nor indeed to taxonomists outside the 'developed' world. This book provides a very accessible and, more importantly, authoritative balanced view of these new family concepts.

As in the last edition, for each family the common and scientific name, number of species and genera, distribution, description, classification, economic uses and, new to this edition, a short list of salient references are given. Continuing from the previous edition, the botanical information is concise, comprehensive and clearly presented (not an easy thing to do!). Also new to this edition, it begins with a double-spread illustrating the arrangement of the mega-groups and orders as currently accepted. This is followed by an illustrated glossary for morphological terms. It would have been helpful here to explain terms such as clade, monophyletic, paraphyletic and polyphyletic, which are used frequently in the text, but which may not be familiar to the general reader. The book ends with an index to scientific and common names.

The layout follows that of the previous edition with, in addition to the text, illustrations for many families, and, in a box, a world map showing distribution, the number of genera and species, and economic uses. The authors note in the foreword that the inclusion of maps is an unusual feature and they are indeed useful to take in family distribution at a glance. However, care should have been taken, especially where family concepts have changed since the last edition, to check their accuracy. For example, a quick scan for families for Peninsular Malaysia shows that several families not known from Peninsular Malaysia (*Berberidaceae*, *Callitrichaceae*, *Carlemanniaceae*, *Centrolepidaceae*, *Chenopodiaceae*, *Elatinaceae*, *Gisekiaceae*, *Gelsemiaceae*, *Laxamanniaceae*, *Hyacinthaceae*, *Valerianaceae*) are illustrated as present, while some that are indigenous (*Alismataceae*, *Joinvilliaceae*, *Petrosaviaceae*, *Potamogetonaceae* and *Rhamnaceae*) are omitted.

The standard of illustration, as expected from a Kew publication, is excellent – beautiful watercolours shine from the page. Some families are lavishly illustrated in colour; many others in the brown sepia so characteristic of the last edition. Most welcome is the good representation of tropical plants, which are often not illustrated elsewhere. But why do illustrations fizzle out in the monocots where many families are not illustrated at all, including several with horticultural importance, such as *Agapanthaceae*, *Heliconiaceae* and *Hyacinthaceae*, or with commercial value, such as *Agavaceae* and *Dioscoreaceae*?

Under the heading 'classification', an up-to-date assessment of the subfamily divisions is provided together with a balanced evaluation of DNA sequencing in

elucidating family relationships. The new addition of a short list of pertinent references is particularly useful.

Two of the most common questions the layman asks about plants is 'Can you eat it?' and 'Does it have any value?' (The third question is 'Is it poisonous?') The section on economic uses provides the answers and will be of great interest to the general reader, besides being a ready reference for the correct names of useful plants.

My one serious criticism is the strange use of 'Malaysia' for 'Malesia', which results in totally misleading distributions, as for example 'East Malaysia' (which is Sabah and Sarawak in Borneo) for East Malesia (New Guinea region) and 'West Malaysia' (Peninsular Malaysia) for West Malesia (Peninsular Malaysia, Sumatra, Java, Borneo and the Philippines). Was this caused by a hiccup in 'spellcheck'? I cannot believe it was intended by the authors. At least an erratum slip should have been included in each book before distribution.

In conclusion, this volume is outstanding for its worldwide coverage, its authoritative text, and excellent illustrations and layout at a very affordable price. In addition, it is the first publication that describes modern family concepts in a balanced and accessible way. For all these reasons, not least because it presents flowering plants as attractive and interesting, it should be essential reading for students and teachers, gardeners and those interested in plants, natural history and biodiversity in general. I read this volume with great pleasure and interest as will many others. The four authors deserve congratulations for its timely publication.

R. KIEW