BOOK REVIEWS

A Checklist of the Trees, Shrubs, Herbs, and Climbers of Myanmar. W. John Kress, Robert A. DeFilipps, Ellen Farr & Daw Yin Yin Kyi. Washington, DC: Smithsonian Institution. Contributions from the United States National Herbarium, Vol. 45. 2003. 590pp. ISSN 0097 1618. Available free of charge while supplies last.
doi:10.10M/S0960428605270270

As a result of its varied geography and climate as well as its relative isolation, Myanmar (formerly Burma) is exceedingly biodiverse. It boasts mainland southeast Asia's most intact forest tracts, which cover half the country's land area. From the tropical Bago Yoma in the south to the alpine regions of northern Kachin state and the coastal areas of Rakhine and Tanintharyi, Myanmar is one of the few remaining places in the world where the entire spectrum from primary tropical forest to pristine high alpine meadows can be found in a contiguous transect. Very little of this biodiverse country has been explored botanically and much of it remains little or poorly known: of all tropical Asia, it has the smallest proportion of its flora collected. This checklist is thus a valuable contribution towards a comprehensive knowledge of the Myanmar flora.

This checklist is built primarily upon the foundations laid by J.H. Lace, A. Roger, H.G. Hundley and U Chit Ko Ko in four previous editions, originally published in 1912 and last revised in 1987. The latest edition is extensively revised and expanded, incorporating much new information. It includes 273 families, 2371 genera and over 11,800 species, increasing the known flora by approximately 6%. Herbarium specimens were inventoried as part of the compilation process, primarily at the US National Herbarium at the Smithsonian Institution (US) and at the Forest Research Institute in Yezin, Myanmar (RAF). Additionally, taxonomists from various herbaria contributed accounts in their areas of specialization. Records of taxa occurring in Myanmar have been extracted from *Index Kewensis* and from regional floras of neighbouring countries. Taxa are listed alphabetically, each entry containing the accepted name (Latin binomial), author, the name cited by Hundley in the previous edition, habit, distribution within Myanmar, and common names. Family designations and circumscriptions follow Brummitt (1992). Admittedly problematic are accurate determinations of the geographical distribution of taxa due to the lack of comprehensive herbarium collections. These, however, will become clearer over time as more collections are made and further detailed research is carried out.

The checklist also incorporates a brief review of Myanmar's geology, climate and vegetation types as well as colour photographs of some representative species and forest types. Maps illustrating Myanmar's protected area system and the distribution of vegetation types as well as indexes to scientific and common names are also provided.

Having limited distribution, previous editions of this checklist are somewhat rare. In particular, the 4th edition, published by the Forest Department in Yangon, was not widely available outside Myanmar. It is now out of print and especially difficult to obtain. In light of this scarcity, the new edition is an exceptionally important contribution, making floristic information widely accessible. As such, it is an excellent stepping stone to Flora writing and should stimulate more research interest in this botanically rich country.

This publication began as an attempt to create a checklist of the monocotyledons of Myanmar. It was later expanded to include dicotyledons and gymnosperms. Having been the original focus of the project, monocotyledons have been most thoroughly covered. Other dicotyledonous families which have been formally reviewed are well revised; however, those not taken on by a specialist are of inconsistent quality. Unfortunately, the scope of the project did not allow for a more complete revision of many of the groups included, and this publication thus suffers from taxonomic inaccuracies. Additionally, citation of specimens in the text would have added significant value to this checklist and a list of references would also have been useful. Despite these criticisms, this checklist has laid a solid foundation for future work. As such it is a major contribution to Myanmar botany, having reinvigorated research in the country. In this edition alone, the number of species recorded for Myanmar has more than doubled, and the overall species count is expected to grow further with future comprehensive research.

Reference

BRUMMITT, R. K. (1992). *Vascular Plant Families and Genera*. Kew: Royal Botanic Gardens, Kew.

K. ARMSTRONG

Cacti of Eastern Brazil. N. Taylor & D. Zappi. Kew: Royal Botanic Gardens, Kew. 2004. 499pp. ISBN 1 84246 056 0. £49.95 (hardback).
doi:10.10M/S0960428605280277

This book is the first account of the cacti of Eastern Brazil since Schumann's treatment over 100 years ago (Schumann, 1890). Schumann's account was based on limited collections which, alongside considerable changes in cactus classification and newly discovered species, have rendered it completely out of date. In this sense Taylor and Zappi present the first comprehensive taxonomic account of the cacti of Eastern Brazil, a recognized hotspot of cactus diversity. It took 15 years to compile this book which covers all 162 taxa currently known (of which 76% are endemic!) and the result is truly impressive.

The first chapter introduces us to the taxonomic concepts of the authors, illustrating classic examples of 'splitting' and 'lumping' in the classification of the *Cactaceae*. The lack of molecular data and the highly specialized and reduced nature of cactus

morphology make it difficult to conduct 'sound' phylogenetic analyses. Thus a mainly phenetic approach to classification is adopted, recognizing genera and species on the basis of obvious morphological characters. Other sources of information such as breeding systems, reproductive strategy and molecular data are taken into account wherever available.

The second chapter gives an overview of the history of cactus collecting and research in Eastern Brazil. The authors point to the significant contributions in this area by German botanists and plant hunters, but also point out that some individuals, for example C. Backeberg, brought more confusion and nomenclatural chaos than stability. Backeberg's poorly researched innovations and his disregard for taxonomic convention resulted in a more than 10-fold increase in genera over Schumann's treatment (from 21 to 220 genera), frightening away most professional botanists from cactus systematics until the mid-1960s. This section is followed by a very useful summary of the status of *Cactaceae* genera found in Eastern Brazil according to the International Organization for Succulent Plant Study (IOS), a table of characters defining the subfamilies of *Cactaceae* in the area of study and a table of the tribal arrangement in the *Cactoideae*.

Chapter 3 on phytogeography points to the distribution patterns into which the majority of the taxa in Eastern Brazil can be classified. These patterns correspond with geographical, climatic and ecological factors thus defining phytogeographical regions, which give clues about the vegetational history of this area. A detailed description and analysis of the four identified distribution patterns follows, and phytogeographical links and possible historical plant migration routes, which are supported by cactus distribution patterns, are highlighted. This information is also neatly presented in two tables summarizing the principal links between the Eastern Brazilian Highlands and other areas and the historical migration routes supported by the cactus family. The chapter finishes with a section on cactus dispersal and reproductive strategies, again summarizing the information given for each taxon in a very useful table.

From my point of view, Chapter 4 on conservation is the most important chapter in the book as it bridges the gap between the cactus specialists and taxonomists and the wider scientific community. The information presented in this chapter is extremely valuable for ecologists and conservationists, who might otherwise ignore this book as being too specialized. It is rare that detailed information on the conservation status of the taxa under study is available in taxonomic accounts thus limiting their usefulness to a mostly taxonomic audience. The chapter starts with a section on why it is important to conserve the cacti of Eastern Brazil, highlighting their important role as food providers for a wide range of animals such as bats, lizards, insects and mammals but also pointing to their role in medicine, in a sustainable economy and in eco-tourism. This introduction is followed by an overview of the status of the environment and the conservation of cacti in Eastern Brazil. Fortunately, no taxa are yet extinct or extinct in the wild but the threats to cacti in this area are various, ranging from agriculture, forest clearance and quarrying to

over-collecting for seeds. The core section of this chapter outlines the criteria used for the identification of priority taxa, which are IUCN criteria refined by Farjon and Page, taking phylogenetic distinction, ecological importance and genetic diversity into account. A 'league table' of prioritized Red List categories for all taxa assessed as critically endangered, endangered or vulnerable is then presented and used to pinpoint principal conservation area hotspots. Recommendations are made for actions to preserve threatened species, such as establishing protected areas and *ex situ* gene banks to enable future re-introduction, and monitoring wild populations.

The last chapter comprises the taxonomic account of the cacti of Eastern Brazil and constitutes a significant part of the book. A key to all genera in the area is presented at the beginning of the chapter and keys to species can be found under the genera. This chapter is a thorough taxonomic treatment, including everything a taxonomist expects in such an account (location of published names, type citations, synonyms, detailed species descriptions, habitat, geographic range, comprehensive specimen citations). Yet again the authors have made an effort to bridge the gap between pure taxonomists and the wider biological scientific community by including a detailed conservation assessment, where available, for each species, full-colour distribution plates, high quality photographs of most species, and vernacular names. A glossary of specialized botanical terms used in *Cactaceae* classification is also a very welcome addition which makes the keys more accessible.

The book has a few shortcomings which are purely practical in nature; it is disappointing that these issues were not given more thought as this book could have been considerably more user-friendly and efficient to use. First, the index to botanical names and epithets is not complemented by a page number but by a more or less obscure genus and species number. There is no quick reference to these numbers in the running heads of the taxonomic chapter, which means you have to leaf through most of the book until you find the desired taxon. Unless you have used the book a good deal and know the sequence of genera by heart, you will waste time finding species which could easily have been pinpointed by page numbers. A similar issue arises with respect to photographs. I suppose most of us would go to the specific taxon description for a photo reference but, for some incomprehensible reason, the authors decided to put these references at the genus description. If you are looking for a photo of *Melocactus glaucescens*, for example, you have to consult the genus description of *Melocactus* where a reference to all the plates depicting this genus is given (Plates 56.1–64.4). With this information you then have to leaf through all the plates between 56.1 and 64.4 keeping an eye on the captions until you find the desired photo. Surely there is a more efficient way of referring to photos than that! By contrast, the references to the distribution maps are included under the species descriptions. In some tables (for example Table 3.6: Seed dispersal vectors of species and subspecies) an alphabetical arrangement of taxa would have been preferable, as it would have saved the reader time locating the desired taxon in the taxonomic order. Another point of criticism is the format of the book. A major part of this book is dedicated to taxonomic descriptions and keys, which arguably make it a

very useful companion in the field. Unfortunately the book format does not support this idea as it feels more suited to having on one's shelf than in one's rucksack.

Despite these practical shortcomings this is a very valuable contribution to cactus taxonomy, and especially cactus conservation, in Eastern Brazil and will prove indispensable for scientists and keen amateurs working in this field.

Reference

SCHUMANN, K. M. (1890). Cactaceae. In: MARTIUS, C. P. F. VON, *Flora Brasiliensis* 4(2).

M. RUHSAM

Coryphantha. R.F. Dicht & A.D. Lüthy. Berlin, Heidelberg: Springer-Verlag. 2005. 200pp, colour plates, drawings, maps. ISBN 3 540 22306 1. £61.50 (hardback).
doi:10.10M/S0960428605290273

The authors have undertaken the mammoth task of writing a comprehensive monograph of a genus that has been a taxonomic nightmare from the beginning. It took them 15 years to complete this task and the result is impressive. The book provides excellent colour photographs and distribution maps for all 54 taxa (43 species and 11 subspecies) and in Chapter 3, on the morphology of *Coryphantha*, most technical terms used in the book are also depicted by detailed drawings or photographs. This is an important addition to the descriptions of the species given in the taxonomic treatment, as there is then no doubt regarding what is meant by the various terms used to describe the form and shape of the taxon under discussion.

In Chapters 1 (Introduction) and 2 (Ecology) the authors provide the generic delimitation of *Coryphantha* and give an overview of the climate and geology of the distribution area of this genus, as well as the habitats in which it occurs. There is also a short section on conservation issues in which the most threatened species are highlighted, together with a brief discussion of the threats they face in their natural environment. I feel that this section could have been further expanded as conservation is a very important interdisciplinary topic. Nevertheless, the conservation status of each species is given in the taxonomic treatment (Chapter 7), thus providing valuable data for taxonomists, ecologists and conservationists alike.

In Chapter 4 (History) the authors discuss the complex taxonomic history of *Coryphantha* which started with De Candolle and his scanty descriptions of various cacti species. Multiple descriptions of the same species under different names by later workers, lack of voucher specimens, 'splitters' and 'lumpers' have led to further confusion and contributed to the taxonomic nightmare.

Chapter 5 (Position and delimitation of the genus) introduces the reader to old and new interpretations of *Coryphantha*. It focuses on various theories of areole development, highlighting their shortcomings in satisfactorily explaining the pronounced areole development in this genus. The authors then provide a new,

extended theory of areole development. They also stress that the production of extrafloral nectaries in *Coryphantha* is a phylogenetically important character, and conclude the chapter with new phylogenetic interpretations and cladograms.

Chapters 6 (Key to the genus) and 7 (Description of species) form the main taxonomic part of the book, providing a key and detailed descriptions of all *Coryphantha* species including information on type specimens, basionym and synonyms, distribution, habitat and conservation status. Whenever appropriate, a section on previous taxonomic problems in the species under discussion is also presented. However, as a taxonomist I was disappointed that a list of specimens seen by the authors, an integral part of any taxonomic treatment, is missing.

Chapter 8 (*Coryphantha* in cultivation) deals with the horticultural side of this genus and gives advice on how to grow and look after these attractive plants.

This book is an important contribution to cactus taxonomy and, though slightly overpriced, will be an indispensable reference source for taxonomists and keen amateurs alike.

M. RUHSAM

Flora Roślin Naczyniowych Lubelszczyzny (Flora of the vascular plants of Lublin province). Dominik Fijałkowski. Lublin: Lubelskie Towarzystwo Naukowe. 2004. Vol. 1: 389pp, ISBN 83 85491 45 7. Vol. 2: 868pp, ISBN 83 85491 48 1. Paperback.
doi:10.10M/S0960428605300278

This regional Flora of Lublin province (southeast Poland) is written in Polish for local use, but it does contain much information which could be of interest to readers of other languages. It is the result of 50 years of painstaking botanical recording by Professor Dominik Fijałkowski and associates from the University of Marie Curie-Skłodowska in Lublin. The first volume contains phytogeographical and ecological background to the area and information about the 1611 species found there, and the second is an atlas containing distribution maps of each of the species.

Since our own *Plant Life of Edinburgh and the Lothians* (Smith *et al.*, 2002) was published only two years earlier and contains a 'Flora of the Lothians', it is interesting to compare the different treatments in these two regional floras. The Lublin flora covers an area about one third that of Scotland and about 10 times that of the Lothians. Species number comparisons are probably not very meaningful, but the methods of data collection and presentation are. The Lublin data were based on records compiled from field work radiating from 3000 localities within the province. The Lothians survey used a grid-based sampling system in which one out of four 1km squares in each 2 × 2km tetrad was surveyed. The published maps record the data collected in the survey but the 'Flora of the Lothians' also includes those rarities which were missed out owing to the randomness of the survey system. In the Lublin Flora the habitat of each species is described using the Braun–Blanquet system, whereas the 'Flora of the Lothians' used a system of habitat names which would be understood by non-professional recorders and readers. The Lothians

survey, being a community-based project, used the combined efforts of over 300 amateur and professional botanists, whereas the Lublin Flora was based on the work of a smaller number of experts. One negative aspect of the Lublin Flora is that it is difficult to find out whether the plant is native or introduced, whereas this is clearly stated in the Lothians Flora list. Since in our own flora at least a third of the plants are introduced, it would have been interesting to make a comparison. A less significant difference is that the Lublin Flora list does not appear to include subspecies, whereas the Lothians Flora does.

The strength of the Lublin Flora lies in the analysis of its data. Table 7 towards the end of Volume 1 is very informative indeed and can be used by readers of any language as long as the table legend is translated. It serves as an index to the species, but also contains information in the form of number ratings (using a system devised by the author) on life form, number of localities in which the species can be found, abundance, conservation status, microclimate, and light, and also soils information such as humidity, pH and organic matter. A chapter towards the end of Volume 1 carries extremely useful information about abundance decreases and species and habitat losses between 1947 and 1993.

There are one or two minor reservations. The main index of plants comes at the beginning of Volume 2, which is somewhat disconcerting to those who expect to find an index at the end of a book. Table 7, with all its valuable information, can also be used as an index to plant species, but it comes towards the end of Volume 1, though not quite at the end. This means that you have to flick through lots of pages in order to find it. Both these alphabetical lists are presented in a single un-indented column, with the first species of each genus written out in full and the ones below it abbreviated to the first letter of the genus only. This makes it unnecessarily difficult to pick up the alphabetical thread visually.

Reference

SMITH, P. M., DIXON, R. O. D. & COCHRANE, M. P. (2002). *Plant Life of Edinburgh and the Lothians.* Edinburgh: Edinburgh University Press.

M. CHAMBERLAIN

Flora Malesiana: Leguminosae. Mimosoideae of SE Asia. Edited by I. de Kort & J.W.A. Ridder-Numan. World Biodiversity Database CD-ROM series. Amsterdam: Expert Center for Taxonomic Identification. 2000. ISBN 3 540 14705 5. £35.
doi:10.10M/S0960428605310274

This is not just an electronic version of the treatment of *Mimosoideae* in Volume 11 of *Flora Malesiana*. The aim here has been to produce a more versatile publication which, as well as providing the information you would expect to see in a Flora, e.g. descriptions, distributions and nomenclature, also provides a range of identification tools and an illustrated glossary. The structure is modular, with 12 modules in all.

The first five are reference modules providing an introduction and summary of the morphology, distribution, habitat and ecology for the subfamily with an index of species and higher taxa as well as common names from an impressive 33 languages. Literature and sources of multimedia material are indexed but are also searchable by species name. The fairly comprehensive glossary includes definitions, synonyms and multimedia, although as yet only about a quarter of the entries have associated images and synonyms and viewing the larger images is awkward. Links to the glossary in the text of many of the other modules, however, make good use of the CD format, allowing quick access to terminology.

The Higher Taxa, Species and Lower Taxa modules all include descriptions, synonyms, taxonomy, literature and multimedia. The description comprises morphology, distribution, habitat and ecology, field notes and uses for each species and the information given is clear, concise and useful with plenty in-text links to the glossary and multimedia. The inclusion of type specimen images where possible is a very useful addition. The classification within the taxonomy section includes supra- and infrageneric ranks but, unfortunately, no indication of phylogenetic relationships. I feel that this is a missed opportunity to link classification, morphological descriptions and identification tools to the existing phylogenetic knowledge of the *Mimosoideae*.

There are three key modules. The first two, a Text key and a Picture key, are essentially traditional dichotomous keys, both of which work well. The Text key is based on the keys to genera and species in the *Flora Malesiana* account of the *Mimosoideae* but also includes a key to the genera of the *Caesalpinioideae*. It allows the user to choose between vegetative or flowering and fruiting characters, which is very welcome with limited material. The third key module is a series of multi-access keys which allows the user to choose the characters for which they have information with the additional option of arranging them by a separation coefficient showing the next most useful character to select. The provision of separate keys to the species of *Acacia*, *Acacia* subgen. *Phyllodineae*, *Archidendron* and *Adenanthera* gives increased support for the identification of species in these genera.

The final module, MapIt, allows a comparison of ranges between any two species and shows species diversity on a series of maps including Malesia, Borneo, Sulawesi, the Philippines and New Guinea. The module also allows the user to search by grid squares for species presence. Unfortunately, this aspect of the CD was let down slightly by the quality of the maps which included no country or region names and were at too low a resolution for the zoom tool to be effective.

In summary, the CD provides an ambitious range of information, although arguably the most useful modules are those for identification. The keys all work fairly well independently, but the benefits of the CD format are really to be found in using the multi-access keys, the dichotomous keys and the MapIt module concurrently to narrow down the number of possible species, particularly when working with limited material. As work in progress, as the editors refer to this CD, the amount of

information presented is impressive, and as an identification tool it will be a very useful addition to any library.

E. HASTON

Plants of Central Asia: Plant Collections from China and Mongolia. Vol. 8c. *Astragalus* L. Edited by V.I. Grubov. Vol. 8c by N. Ulzijchutag. Translated from *Rasteniya Tsentral'noi Asii*, vol. 8c, 2000. Mir i Sem'ya, St.-Petersburg. Enfield (NH, USA) and Plymouth (UK): Science Publishers, Inc. 2004. 262pp, 8 plates and 9 distribution maps. ISBN 1 57808 341 9. €81.70 (hardback).
doi:10.10M/S0960428605320270

Plants of Central Asia is a very valuable series giving taxonomic accounts of the plants distributed in the Central Asian floristic region including large parts of Mongolia and China. Volume 8c covers the largest and one of the most complex plant genera, namely *Astragalus*, and is an exact translation of the earlier Russian edition published in 2000. Diagnostic keys to 348 species distributed in Central Asia and adjacent areas are presented, along with distribution maps of 48 species and fine illustrations of 41 species.

The diagnostic keys are too long and mostly comprise short descriptions of the species. The main keys are presented under subgenera which again makes them long. Providing keys for diagnosing the sections or artificial groups, then, under them, diagnostic keys to the species would be a more useful and reader-friendly solution. For example, the key to subgenus *Cercidothrix* is 26 pages long and includes about 120 species. Probably owing to the descriptive nature of the key, no more detail is provided under each species, although a complete bibliography, based mainly on Russian references and the original publication data, and a list of herbarium material are given. This book provides a very useful reference for decisive determination of the many species in the area, and can also be used as a field book. The data on type specimens are not complete, following the *Flora SSSR* (Komarov, 1946).

Ulzijchutag presents a satisfactory species-level taxonomy, although the subgeneric division of the genus is not in accordance with the current systematic classification of the genus. The most important problem in the book is that it ignores recently published references on the correct nomenclature of certain species and sections. The following two important mistakes are given as examples.

– *Astragalus laxmanni* Jacq., which is medifixed hairy and cannot therefore belong to sect. *Hypoglottis*, is the accepted name for *A. adsurgens* Pall. of sect. *Onobrychioidei* DC. (Podlech, 1993).
– Some sectional names given in the book cannot be used for nomenclatural reasons, for example sect. *Xiphidium* Bunge which is correctly sect. *Dissitiflori* DC. (Podlech, 1990).

There are very few typographical mistakes in the work (but see *Carcidothrix* for *Cercidothrix* on p. 6 subgenus 8 and in the index at p. 256), though there is some

irregular punctuation in the keys. For example, the full stops at the end of each lead should be removed, except when used for abbreviated author names.

Finally, we want to emphasize that this book provides a great deal of useful data on *Astragalus* in the Flora of Central Asia. It is a very valuable textbook for determination of the species in this area. We hope that our comments help the editor and the publisher to increase the quality of the data to be presented in forthcoming volumes of the series and translations of them.

References

KOMAROV, V. L. (1946). *Flora SSSR*, vol. 12: *Astragalus* L. Moskva.
PODLECH, D. (1990). Die Typifizierung der altweltlichen Sektionen der Gattung *Astragalus* L. (Leguminosae). *Mitt. Bot. Staatssaml. München* 29: 461–493.
PODLECH, D. (1993). Beiträge zur Kenntnis der Gattung *Astragalus* L. (Leguminosae). III–VI. *Sendtnera* 1: 267–272.

S. ZARRE & D. PODLECH

The Names of Plants, edition III. David Gledhill. Cambridge: Cambridge University Press. 2002. x + 326pp, 7 figs. ISBN 0521 52340 0. £19.99 (paperback).
doi:10.10M/S0960428605330277

Plant names are a source of both fascination and irritation to botanists and gardeners, so it is good to see a new edition of this useful little volume which was last updated in 1989.

The book retains the two-part structure of earlier editions, with a comprehensive introduction to the field followed by the glossary of terms. In the first part are chapters covering the need for scientific names, the history of nomenclature going back as far as Theophrastus, a discussion of classification beginning with Brunfels' work of 1530, and the laws of botanical nomenclature, including a discussion of the rules of botanical Latin and the rules of nomenclature for cultivated plants. These sections, which are clear and well written and easily accessible to professionals and amateurs alike, are essentially the same as in earlier editions, but with reference to recent developments such as the splitting of the *Liliaceae* and the 2000 publication of the most recent International Code of Botanical Nomenclature (St Louis Code). However, there have been far more dramatic events than these since the book was first published in 1985, and I searched in vain for references to the advances made by molecular biology, the synthesis of the Angiosperm Phylogeny Group and the threat to nomenclatural stability posed by the Phylocode.

The bulk of the book is made up of the glossary, and I calculated that it contains roughly 7000 generic names, specific epithets or the elements which make them up. The explanations of the names are brief but comprehensive, and where the word is derived from Greek the original word is spelled out in Greek script, a new addition from previous editions. Where the derivation is obscure or there are conflicting explanations this is noted. The glossary itself is larger than before, with at least 1000

new terms (according to my rapid estimates), and there is now a much greater range of names commemorating people. Given this expansion of the text of the glossary I was confused by the inclusion of an appendix which contains a further 10 pages of specific epithets. Their separation is not explained and appears to serve no particular purpose, and makes it likely that they will be missed by the casual user.

The book is clearly aimed at the British market since the extent of coverage is not uniform at the global level. Out of 20 randomly selected generic names from the British flora, all were either included or their constituent elements included, but a similar search in Mabberley's *Plant Book* produced only eight matches. In a search of specific epithets, 19 out of 20 British names were explained (*hermaphroditum* isn't included) while only 15 names in a Latin American genus of trees were included (however, four of the Latin American names commemorated collectors, and since the creation of such names is explained in the opening chapters they are not really missing). There is thus scope for a still larger work on the origins of plant names, and although this won't be a popular suggestion with Dr Gledhill or his publisher, I can't help wondering if this might be a more suitable project for the web. Perhaps the International Plant Names Index might like to consider adding this function.

Piqued by a discussion of the Victorian mission to clean up the common names of British plants, I checked to see how risqué scientific names had been dealt with in this book. *Orchis* (from testicle) is there, but I was not convinced by *Amorphophallus* (deformed-mace), and some old favourites like *Clitoria* and *Cynometra* (dog's penis) are nowhere to be found.

In summary, this is a handy reference guide for the British botanist or gardener with any interest in etymology or the history of nomenclature and classification. I do have minor reservations about some information which is lacking, but have no real hesitation in recommending it.

C. PENDRY

Orchids: The Complete Grower's Guide. Wilma & Brian Rittershausen with special photography by Derek Cranch. Woodbridge: Garden Art Press. 2001. 222pp + colour photographs. ISBN 1 870673 34 4. £25 (hardback).
doi:10.10M/S0960428605340273

Orchids: The Complete Grower's Guide is another wonderfully vibrant publication in a succession of similar works by Brian and Wilma Rittershausen. These internationally respected growers have been pivotal figures in the orchid world for over 50 years and have published such works as *The Practical Encyclopaedia of Orchids* and *Orchid Growing Illustrated*.

The present work aims to be an in-depth guide to all aspects of orchid cultivation, covering the most popular and easily grown orchid genera through to the more unusual ones, and provides valuable information for the beginner and the more advanced enthusiast alike. The practicality of this book is enhanced by covering only taxa available in cultivation, allowing readers the chance to obtain plants they read about in it.

The guide is split into six chapters. The first three cover getting to know orchids, a history of orchid cultivation and hybridization and conservation. From the outset the book is packed full of beautifully colourful photographs which break up the text and enhance the reader's enjoyment of what could otherwise have been indigestible chunks of text. The photographs included in this section, however, do not correspond to any of the orchid examples given in the text – demonstrating some of the massive diversity within the orchid family, but leaving readers hungry for a visual representation of what they have read. Since the authors intend this guide to be aimed at the beginner as well as the more experienced enthusiast, the opening chapters would have benefited from a labelled illustration or photograph to familiarize the uninitiated with orchid terminology. An illustrated glossary, especially of the more technical terms, would have served the same purpose.

The later chapters deal with the practicalities of growing orchids: from watering, feeding, pests and disease in Chapter Four to repotting and propagating in Chapter Five. The illustrations here are excellent and give the reader clear step by step guidance through the various procedures. The sixth and final chapter, which is by far the largest, deals with particular orchid genera from the popular and widely available *Cymbidium* and *Phalaenopsis* to less frequently cultivated taxa such as *Masdevallia* and related genera. The book gives advice on where to buy, conditions required for successful growth and, usefully, how labour intensive it is likely to be to care for each one. A major strength of this section is the provision of information allowing readers to select those taxa best matched to their specific requirements, such as aesthetics, scent or size. This section provides more than enough information to hold the interest of even the more advanced amateur orchid enthusiast.

Although the beginner may require an accompanying guide to explain orchid terminology in more detail, the beautiful photographs, information content and easy writing style combine to make this an extremely useful and eminently readable guide to orchid growing.

M. BRIGGS

Thomas Blaikie 1751–1838, The 'Capability' Brown of France. Patricia Taylor. Tuckwell Press. 2001. ISBN 1 86232 110 8. £20 (paperback).
doi:10.10M/S096042860535027X

This biography of the Scottish gardener and botanist Thomas Blaikie provides, at last, a narrative that goes a long way to redressing the lack of recognition that has beset him. Blaikie's life spans one of the most turbulent periods in French history, but until his diaries were published in 1931 he was virtually unknown and the importance of his work was little appreciated. Patricia Taylor has made full use of these diaries and, coupled with considerable further research, has produced a flowing account that draws full attention to the significance of his achievements.

Thomas Blaikie was born in 1751 and had a harsh upbringing in Corstorphine that prepared him well for the hardships and trials he was to face throughout his life.

He was fascinated in the natural world from an early age and soon focused on plants. He was first employed at the Royal Botanic Garden Edinburgh and later moved on to Kew. Taylor well describes the power of the Scottish 'mafia' regarding gardening posts at this time.

Blaikie was interested equally in botany and horticulture and it was the timing of opportunities that dictated his direction in the early stages of his career. Having received botanical training from John Fothergill, in 1775 Blaikie had the chance to collect plants in the Swiss Alps under the patronage of Fothergill and William Pitcairn; the terms of the contract were drawn up by Sir Joseph Banks.

The account of his pioneering botanical collecting in the Alps makes it clear that Blaikie was a person of most extraordinary physical energy. Guides were regularly dismissed as they could not stand Blaikie's pace. Even Michel-Gabriel Paccard, subsequently the first to conquer Mont Blanc, was exhausted by Blaikie. His training in gardening was never far beneath the surface and especially interesting was the description of the alpine scenery in terms of *Sublime Landscape* design.

As offers of further botanical expeditions were not forthcoming, Blaikie took the opportunity to work for the Compte de Lauraguais as his garden designer at Mont Canisy in Normandy. This marked a very significant change in Blaikie's career. From this point on he rose steadily, working for various members of the French nobility, to become one of the most influential landscape designers of the late 18th century in France. Taylor provides a succinct historical background to the events taking place in France; this gives added coherence and significance to Blaikie's diary entries.

Blaikie was schooled in the English Landscape style of design and was clearly Brownian in approach. One of the most interesting aspects is the accounts and first-hand comments of how the French reacted to the concept of the English Landscape garden. After the control of nature demonstrated by the great formal gardens such as Versailles, the *Jardin Anglais* was bound to provoke reaction. The apparent difference between the attitude of French and English landowners is amusing and enlightening. Not surprisingly, not all French landowners were Anglophiles. The expanse of grass conjured up visions of the prairie for some, while Louis Carmontelle, one of the severest critics, described the English style as austere, sombre and savage. He accused the English of loving the countryside as a place where they can feed their melancholy! Blaikie, in turn, confined his criticisms to more technical aspects such as the lack of understanding of scale by the French and their inability to produce high quality turf. He charged them with being more concerned with getting a return of hay from their parks than with the quality of the turf.

The tragic years of the French Revolution saw Blaikie in several dangerous situations. As he moved in noble and royal circles he was seen by the revolutionaries as being in a favoured position. The narrative makes it quite clear that Blaikie's strongest survival quality was his courage and cool-headed determination. In the most depressing circumstances he was able to maintain the presence of mind to continue working energetically in the face of hardship, worry and danger. He was

sufficiently focused to carry on with new projects whilst his previous work was being vandalized around him. Blaikie's strength of character carried him through the depths of the Revolution and the Napoleonic era to the restoration of the monarchy. He was still designing gardens at the age of 85.

The text needs to be closely read as it is quite easy to become confused by the name changes of the French dukes that Blaikie worked for but it is a most fascinating story. The author admirably achieves her main purpose of bringing the significance of Thomas Blaikie to a far wider audience. This biography will especially appeal to those interested in history, botanical exploration and the history of gardening.

The book carries well-reproduced monochrome plates and represents reasonable value at £20. It is highly recommended.

P. LUSBY