

will be needed to resolve species relationships. Only then will Pennington be in a position to state that 'it has to be accepted that *Inga* is not like some other large woody tropical genera in which certain key characters become fixed at an early stage in generic evolution', and only through such an analysis can hypotheses of species relationships be put forward as a more reliable basis for an infrageneric classification that will hopefully be amenable to constructing a sectional key. Perhaps this lack of systematic analysis is the price that has to be paid for speed. With a five-year deadline for a work of this size, some short cuts and compromises are inevitable.

Despite these reservations, much will flow from this revision of *Inga*. New collections of incompletely known species will be assembled and the species inventory of the additional 40–50 putative species will be completed. This book is a brimming reservoir that can be readily tapped to produce a steady stream of flora accounts and regional or national field guides, two of which have already been published in Spanish in association with this book (Pennington & Revelo, 1997, for Ecuador; Reynel & Pennington, 1997, for Peru). It will also provide important foundations for the rational utilization, possible domestication and conservation of *Inga* as an economically important genetic resource. Again, a companion volume on the utilization of *Inga* is already in production (Pennington & Fernandes, in press). Finally, this revision opens the way for much needed systematic analysis of species relationships using data presented here alongside new data from other sources as it becomes available.

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**The Ferns of Britain and Ireland.** 2nd edition. C. N. Page. Cambridge: Cambridge University Press. 540pp. ISBN 0 521 58658 5. £45 (paperback). ISBN 0521 58380 2. £95 (hardback).

This book is a welcome new edition of Chris Page's 1982 publication. It is based on the format and style of the first edition and all the species, subspecies and hybrids

of ferns, clubmosses, quillworts and horsetails that occur in the British Isles are included. The book also introduces general ecological information on pteridophytes and discusses the environmental factors that affect the range of individual taxa. Many of these factors are presented on a series of maps which feature geology, glaciations, standing water, climate and pollution in the British Isles.

The book is purportedly a field identification guide although it notably lacks an effective key. There is a chart key to the major pteridophyte divisions and a rather rudimentary multiaccess key which, despite its terseness, should help to narrow down plants in the field. But the most important and comprehensive information is provided under individual taxa.

The individual accounts consist of detailed descriptions with distribution maps and photocopied silhouettes showing the range of variation to be found in each taxon. The distribution maps are rather rough and ready and show little improvement from the first edition although approximate distributions outside the British Isles have been added for some species. The quality of reproduction of the illustrations is improved compared with the first edition. The inclusion of photographs in the new edition also allows further depiction of habitat, habit and detailed parts of the plants. As well as illustrations and detailed descriptions there are valuable brief synopses which pick out the key characters to aid identification. It should therefore be possible to identify more or less any pteridophyte you are likely to come across in the British Isles by combining the illustrations with the description in the *Preliminary recognition* section. More confirmatory details can then be gleaned from the detailed description and, if you have the facilities and expertise, you can bolster this from the *Technical confirmation* section. This latter section contains information on chromosome number and spore characteristics which help to indicate whether the plant is a hybrid or not. Each taxon account also includes extensive *Field notes* which largely consist of a discussion of ecology, distribution and conservation status based on the individual experience of the author. This section and the technical confirmation section would be more useful if references to other authors had been included. The bibliography is extensive and includes many recent references although these do not always seem to be referred to in the text.

One of the largest taxonomic sections, and the one which shows some of the biggest differences with the first edition, is concerned with bracken. Chris Page has devoted much attention to bracken in the British Isles and it is his work that has led to the recognition of three subspecies within *Pteridium aquilinum* and a new species, *P. pinetorum*. All of this bracken diversity is largely confined to Scotland. Bracken dominates large tracts of the British uplands and impoverishes the species richness of many areas. It is also increasingly being seen as a health risk as it has been linked to cancer and harbours disease-carrying ticks. A better taxonomic understanding is essential to understand the distribution and ecology of bracken, and ultimately its management. However, Chris Page's bracken taxonomy is not universally accepted and further discussion of bracken variation outside of the British Isles would have been useful in this context. Other taxonomic changes in pteridophytes

which have occurred since the first edition are not treated in the same detail and there is little justification given for the taxonomy used in the book.

Despite the missed opportunity to make some significant improvements from the first edition *The Ferns of Britain and Ireland* maintains its place as the best book on ferns in Britain. One hopes that the price and the lack of easy identification aids will not detract from its continuing usefulness.

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**Anatomie der Hymenomyceten. Eine Einführung in die Cytologie und Plectologie der Krustenpilze, Porlinge, Keulenpilz, Leistlinge, Blätterpilze und Rohrlinge.**

H. Cléménçon. Teufen: Flück-Wirth. 1997. xi+966pp. ISBN 3 7150 0040 6. £56.

*The Anatomy of Hymenomycetes* is a lavishly illustrated book with 842 figures supporting the well-organized dialogue found between the covers. The illustrations are from the author's own laboratory or have been obtained from a wide range of publications, old and new, the source of which many readers will immediately recognize! The figures, which include many high quality electron micrographs, are well chosen and make it easier to come to grips with the characters of the agarics, boletes and their allies, the old Aphyllophorales.

Those mycologists unfamiliar with German can sigh with relief as all the illustrations have legends both in English and in German and there is an extensive English summary (26pp). A very helpful list of contents, also in English, plays a supporting role. However, if one wishes to become more familiar with the terms used in developmental basidiomycetology, then I fear a little polishing up in German will be required.

The book is a pilgrimage through many areas which have not been brought together before (e.g. cytology and lichenized hymenomycetes) and all are cleverly interwoven. The organizational element, plectology, which draws all the topics together, will be a term which will surely be a part of every basidiomycetologist's culture. There are ten chapters with expansive ones dealing with the hymenomycetous hypha (Chapter 2); meiospores, basidia and basidiospores (Chapter 6); basidiomata (Chapter 8) and carpogenesis and primordial development (Chapter 9). In contrast, the chapter on lichenized and algal parasitic hymenomycetes is only 20 pages. The other chapters cover the mycelium (Chapter 3); bulbils, sclerotia and pseudosclerotia (Chapter 4); mitospores (Chapter 5) and cystidia, pseudocystidia and hyphidia (Chapter 7). All the chapters are introduced by a short ten page account of the general biology of the basidiomycetes. Each chapter is logically and clearly divided for ease of reference.

The whole work of nearly 1000 pages is encyclopaedic in its contents and is a mine of information. It will be seen whether in future publications the plethora of