Undoubtedly some errors will have crept into the text, but these are very few indeed, for example *Lepidozia ceratophylla* is mis-spelled '*certophylla*', the name *Martinellia gracilis* is treated as a new species but in fact is a new combination based on *Scapania gracilis* published the year previously, and the type locality of *Martinellia microdonta,* Plover Bay, is in E Siberia not in Canada as stated.

The only major criticism which could be levelled at the work is the lack of indication of the correct taxonomic placement of a name. Unfortunately this must be left for the future, when generic limits are more precisely defined and the many obscure binomials transferred to their correct genera or reduced to synonymy. However a useful first step in this direction would be to indicate the different genera into which an epithet has been combined, in chronological order. For the example *Jungermannia setacea* G. Web. 1778 the list would be (*Blepharostoma* 1835, *Lepidozia* 1860, *Microlepidozia* 1934, *Telaranea* 1957, *Kurzia* 1963). This would direct the user to *Kurzia* for the most up-to-date placement without giving any definitive taxonomic opinion.

The many contributors, the editors and the International Association of Bryologists are to be congratulated on undertaking this challenging task and producing such a fine work; hepaticologists can only look forward to completion of the series.

D. G. LONG

Alive at Kew. This paperback* lists, in alphabetical order, the species of flowerless plants currently in cultivation at Kew. The greater part of the book is occupied by the ferns and fern-allies (47 pages) and the plants better known to most as the conifers (38 pages). For these groups in particular, the book looks potentially useful.

Entries are given, in alphabetical order of families, genera and species, in four columns: the genus and species name, the country of origin of specimens when from 'natural sources', the donor/collector (with collector's number where available), and a column cryptically headed 'CR', which is mostly blank. This latter refers to a 'conservation rating', although fairly constant reference to the introductory text is necessary to find what the far-from-obvious letters mean, and spelling them out in full would seem to have occupied little additional space and been much clearer.

Whilst first impressions are that it is useful to have such a list of pteridophytes and conifers in particular, a little use shows certain shortcomings, which might perhaps be rectified in future editions. Firstly I found it difficult to start with, to know if the plants listed were those grown strictly at Kew, or if in the case of conifers, the species at Wakehurst and possibly any of the National Trust conifers that have been surveyed, or the Westonburt and Bedgebury ones might be included. Having browsed through it, I am still not sure which are and which are not. Secondly, and largely stemming from this, is what I find to be an infuriating omission of any reference against each entry of where it is being grown, or the date on which that plant was introduced. The former (by garden location) would give some idea of where the plant might be seen, and the latter (by accession year) whether to expect to see a seedling or a mature tree there.

I fear that without such information, the book is bound to remain somewhat academic for most potential users, and that the compilers should now be encouraged to further clarify and develop it.

C. N. PAGE

British Smuts. The Smut Fungi (Ustilaginales) are a well-defined group of parasites of angiosperms, although their precise position within the fungal kingdom is still a matter of conjecture. Several smut fungi are economically important pathogens of crop plants (e.g. *Ustilago segetum* on cereals) and others can be troublesome in horticulture (e.g. *Urocystis gladiolicola* on *Gladiolus*). However, most of them occur on native plants, usually having little, overall deleterious effect on the host's populations. A familiar example is *Ustilago violacea* whose spores develop in the anthers of many species in the Caryophyllaceae, but

*Catalogue of Living Plant Collections. Part I. Charophyta. Bryophyta. Pteridophyta. Pinophyta. 94 pp. Royal Botanic Gardens, Kew.

less conspicuous are *Entyloma* spp. producing whitish to brownish blotches on leaves (several families) and *Entorrhiza* spp. that sporulate in swollen roots of species in the Cyperaceae and Juncaceae.

Since 1950 the standard manual for this group has been Ainsworth & Sampson's *The British Smut Fungi*; the present volume* is a replacement to this and includes an additional 16 species. The intervening 34 years has seen several refinements in the approach to fungal taxonomy, many arising from the use of the scanning electron microscope. The nature of spore-wall ornamentation is a major character in the Ustilaginales. Consequently, the new volume includes many more illustrations than its predecessor: most are LM and SEM photographs of spores (ustilospores) but there is also a selection of habit shots.

Each accepted taxon is provided with a concise description, synonymy, reference to other taxonomic treatments, host (British) list, notes on incidence and distribution, and where pertinent a list of published exsiccati and additional comments. Keys are given to the two families and 13 genera, and those for the 88 accepted species are arranged according to host families. There are additional keys to species of the larger genera, as well as one for the 'microspecies' of the *Anthracoidea caricis* group. The keys mainly employ mycological characters but, because all smut fungi are to some degree host-specific, the non-specialist can obtain additional help via the host-parasite index provided. Indeed, as with the rust fungi and powdery mildews, the smut fungi offer a rewarding avenue of study to the phanerogamist.

The authors and the CMI are to be congratulated on their production of this authoritative and practical manual which will undoubtedly be a standard work, not only in the British Isles, for many years to come.

B. J. COPPINS

Much more than a revision. Several times over the last fifteen years I've turned to this book† as a source of information when compiling material on Augustine Henry for exhibitions or for lectures on plant collectors. I never found it wanting though I confess I never managed to read the book in its entirety.

We now have a new edition with many more useful illustrations (mostly of the high-contrast 'archival' type) and with the Chinese names modernized to conform with the Pin-Yin transliteration system. There is, however, much more to this volume than simple revision: new sources are tapped, especially some of Henry's early diaries discovered at Glasnevin and Dr Charles Nelson, well known as a tireless and persistent researcher into Irish botanical and horticultural history, seems to have been involved at every stage of the revision. Dr Nelson also contributes a most useful appendix on the introduction of Henry's plants into cultivation and a list of his plants suitable for Irish Gardens.

Not having time to read the whole book from cover to cover I selected the chapters relating to Henry's life in China to see if the changes had made the book more, or less, readable and useful than the first edition. On readability I feel there is no change: I don't find Sheila Pim's short-sentence style particularly easy but on utility it remains first-rate. This revised and enlarged biography of a fascinating man who turned to plant collecting to alleviate boredom is an indispensible source-book.

R. B. BURBIDGE

*Mordue, J. E. M. & Ainsworth, G. C. *Ustilaginales of the British Isles* (*Mycological Paper* No. 154). Pp. 96 with 172 figs, soft covers. Kew: Commonwealth Mycological Institute. ISSN 27-5522. £14.

†Pim, Shiela. *The Wood and the Trees: A biography of Augustine Henry*. 2nd ed. Pp. 252, 57 illustrations. Hard covers. Boethius Press (Ireland). 1984. £16.80, IR £18.85, US $22. ISBN 0 86314 097 1.