

selection in some genera is limited. In addition, the nomenclature seems to follow Scandinavian practice and no authorities are included. There are many cases where the names differ from those in both the Flora of the British Isles (Clapham, Tutin and Warburg) and the List of British Vascular Plants (Dandy); if indeed the book is intended for the amateur this can but lead to confusion. Dr. Hutchinson also has provided longer descriptions, which are placed at the end of the book; interleaving of the descriptions with the illustrations would have been more convenient, but the clear numbering to a great extent compensates for their separation. The descriptions unfortunately frequently lack habitat notes.

On the whole the illustrations are of a reasonably high standard, but in some the artist has missed the characteristic habit or only drawn a small unrepresentative portion of a large plant. Their value is somewhat lowered by the complete absence of a scale, again a point of some importance to the amateur. The body of the book is printed on high-quality paper, but the cover could well have been stronger to resist the inevitable wear of a book of this type. The price, is rather high, and though the book is undoubtedly of a higher standard than several others intended for the interested layman, a little more care and thought expended on its production would have greatly extended its utility.

D. RATCLIFFE.

Pollen and Hay Fever (review)*—Mr. Hyde, the senior author of this book, has for many years been interested in the study of pollen, and more particularly in relation to inhalant allergy. This Atlas is a result of his work and forms part of a programme of research on airborne pollen begun in 1941. From 15 different collecting stations pollen from the atmosphere has been trapped and over 900,000 pollen grains counted, representing some 90 different types. These types are illustrated and described from preparations of fresh pollen, with the intention of affording help to beginners in the field of pollen analysis and in the identification of material. As a further aid to identification the authors have provided a key to the airborne pollen grains with which the book deals.

The main feature of the book, however, is the series of photographs, and for most of the species these show both optical section and surface view. While the photographs are good and useful in giving a general impression of the appearance of the grains at a magnification of 800, the detail shown is not sufficiently sharp to allow similar types to be distinguished from one another, e.g. *Betula* and *Corylus*. For these a small drawing of the pores and other diagnostic features would be an advantage.

The descriptions are concise, but the replacement of actual measurements of thickness of exine, or size of mesh or appendages by words is an unnecessary inconvenience when the significance of the word has to be discovered by reference to the tables at the end of the book, and such critical distinction as thin, rather thin or medium are not apparent from the photographs.

The book is well printed and pleasingly produced and should be of value to students confining their attention to allergy research, but for those

* An Atlas of Airborne Pollen Grains, by H. A. Hyde & K. F. Adams. London, MacMillan & Co. 1958. Pp. xvi+111, illustrations. Price thirty-six shillings.

working in a wider field and seeking more extensive knowledge of pollen analysis it is unfortunately too restricted in scope. The price also is high for a slight volume of limited usefulness.

E. M. KNOX.

A New German Colour Chart (review)*—At present, the only reasonably accurate way of designating a particular colour is to refer it to the most similar part of a standard colour chart. In at least the botanical sphere, however, there are different standards of colour in different countries. Thus, in Britain that most widely used is the Royal Horticultural Society's colour chart; in America, it is still Ridgeway's Colour Standard; and, in France it is the Couleur Repertoire. Now, with the latest German entry into the field, we have yet another standard of colour which, presumably, will become the normal reference work in German-speaking lands.

Considerable labour and thought combined with practical experience has gone into both the basic lay-out of this work and the reproduction and presentation of the colour. The visible spectrum is represented as a circle divided into 24 basic colour segments. Each of these (together with six other commonly occurring colours) is further divided into 15 or 16 subsidiary colours. These are based on tone and intensity variations, dependent on the amount of black, grey or white present. Each of the colour blocks, which are mounted on a black background, has a small perforation in its centre through which the sample can be viewed.

Measuring $8\frac{1}{2} \times 5 \times 1\frac{1}{2}$ inches, stiffly bound and with sturdy colour cards, it is a most practical and convenient colour atlas which is just as easy to use out of doors as indoors. Although matching colours is normally not an easy or completely satisfactory process, it was found using this chart that flower samples could be colour-named quite easily, accurately and quickly. In at least this respect, the other colour charts mentioned above compare badly with the German work. When the necessity of international standardisation of colour nomenclature is finally recognised, it is to be hoped that special cognizance will be taken of Professor Biesalski's work.

I. C. HEDGE.

A Toadstool Handbook (review)†—This volume continues the lineage of justifiably esteemed Handbuchs für Pilzfreunde of which the first appeared in 1895. In this new series we are promised four volumes with illustrations in colour of one thousand species. The first volume, now under review, includes the most common macrofungi and the succeeding three to appear within the next three years will deal with the non-gilled, the light and the dark-gilled fungi respectively.

An introduction of twenty-two short chapters supplies the would-be

* Pflanzenfarben-Atlas mit Farbzeichen nach DIN 6164, by E. Biesalski. Göttingen, Musterschmidt-Verlag. 1957. Part 1: loose leaf file of 13 colour cards and booklet of 21 pages of text. Price: DM 35.

† Handbuch für Pilzfreunde, Band, I, by E. Michael edited and revised by B. Hennig. Gustav Fischer, Jena. 1958. Pp. viii+260, 17 text figures and 120 colour plates. Price: DM 36.50.