Introductory Horticulture (review)*—Professor Christopher has attempted to provide a satisfactory text not only for a beginner's course in horticulture but also for gardeners who are curious to know something of the scientific background for various horticultural practices. For American students and gardeners no doubt he has been successful. His book is in no sense a practical handbook. Throughout the emphasis is on principles rather than on practice although certain crops are sufficiently broadly treated to permit the book being used to some extent as a cultural guide.

Roughly the book can be divided into two parts, the first providing a general scientific background to soils and soil management, plant propagation and various types of plant growing structures, and the second treating of specific crops—vegetables, flowers and fruit. But not all the scientific bases for horticultural practices are contained in the first part; much of it finds a place in part two, where, dealing with a particular crop the author finds it convenient to supply the scientific background for some well known practices. Thus respiration is briefly touched on early in the chapter devoted to classification, growth and structure, and is discussed again in connection with the storage of horticultural crops; photoperiodism is not mentioned until the timing of the blooms of Chrysanthemums is discussed.

Even an introductory book on horticulture must necessarily have a very wide coverage with the result, as here, that many sections must receive very superficial treatment. In spite of this, American students will no doubt greatly appreciate Professor Christopher's book—British students less so even though much of the contents is of general interest.

H. R. FLETCHER.

Wild Flowers in Colour (review)†—Penguin books have added yet another volume to the succession of British Plant Illustrations which have appeared in the last few years. In this case the original drawings were made by a Swedish artist, E. Hahnewald, and have been published in Sweden and Denmark with brief descriptions. In their present form they have been rearranged by Dr. J. Hutchinson according to his own system of classification. A number of Scandinavian plants not occurring in Britain have been omitted and several British species added, also drawn by E. Hahnewald. The choice of species does, however, reflect the origin of the drawings, for many of the rarest British species are illustrated, e.g. *Diapensia lapponica*, *Saxifraga cernua* and *Arabis alpina*, whereas *Primula vulgaris*, *Eriophorum vaginatum* and other common species are absent, and the

* Introductory Horticulture, by E. P. Christopher. New York, McGraw-Hill Book Co. Inc. 1958. Pp. viii+482. Illustrations. Price fifty-eight shillings.

† Wild Flowers in Colour, illustrations by E. Hahnewald, descriptions by J. Hutchinson. London, Penguin Books Ltd. 1958. Pp. 127 and 128 coloured plates. Price seventeen shillings and sixpence.

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.