

BOOK REVIEW

Plant Anatomy: A. FAHNE, translated by S. BROIDO-ALTMAN. Pergamon Press, Oxford, 1967. pp. viii, 1-534, figs. 220. 75s.

THIS book aims to be a general text in plant anatomy for University courses and, at the same time, a reference book. To a large extent both these aims are satisfied. The first part of the book consists of three chapters which are presented as an introduction to the general structure of higher plants, the cell and meristems. The rest of the book is divided into four major sections: mature tissues, primary vegetative body of the plant, secondary body of the plant and reproductive organs. At the beginning of the section on tissues it is pointed out that with the accumulation of knowledge it becomes increasingly difficult to give exact definitions of tissues, but in spite of this clear and concise descriptions of the major tissues are given.

The sections on the primary and secondary vegetative body of the plant take up about a third of the book. These sections are far from being dry factual accounts, because the structure and development of specialized and unspecialized organs are described and, where possible, phylogenetic relationships are discussed. Throughout these sections attempts are made to relate structures with their functions. In the chapter on secondary xylem it is explained how one identifies plants according to the structure of their wood; the specimen key is designed for use in Israel but other keys are cited in the bibliography.

The final section deals with reproductive organs and is divided into three chapters: the flower, the fruit and the seed. The chapter on the flower not only describes the structure and ontogeny of floral organs but also gives an account of gametogenesis and sporogenesis. One can hardly expect a full comprehensive account of the flower in a single chapter of 78 pages but the material presented is well chosen so that one is not left with the feeling that the flower is simple but, at the same time, one is not confused by complexities. The part on nectaries is particularly well presented. The chapters on the fruit and the seed are somewhat terse but an attempt is made to point out the diversity in form and structure of these reproductive parts.

References are presented at the end of each chapter and as there are twenty-three chapters this can lead to difficulties in spite of a general author index at the end. The line drawings are good but many photographs are not as clear as they could be. An annoying feature is that the figures are often separated from the text by as much as six pages. The glossary of terms is useful but not entirely comprehensive. The production of this book is good and it is not too expensive. This book can be recommended to those without specialized knowledge of plant anatomy.

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