

sorts of intriguing but unanswered queries. Are there any grounds, for example, for supposing that *D. stramonium* is indigenous in Europe, Asia or Africa? Is *D. leichardtii*, which is seemingly so nearly related to the Mexican *D. pruinosa*, really a native of Australia? Had a qualified taxonomist been privileged to work with Dr. Blakeslee's team, one feels that these questions and many others might have been answered. Deficiencies are almost certain to be found in such 'occasional' literature; but at least it can be said that "The Genus *Datura*" will be a most valuable help in the preparation of future monographs of this very interesting genus.

R. D. MEIKLE

A Book of Ferns

By Greta Stevenson. Second edition, revised and enlarged. Pp. iv+168. (Hamilton, New Zealand: Paul's Book Arcade, 1959.) 13s. 6d.

GRETA STEVENSON'S "A Book of Ferns", a revised edition of an earlier work, deals exclusively with the ferns of New Zealand. Although not so comprehensive as Crooke's edition of Dobbie's classic, it is, nevertheless, a well-prepared little guide and it is well illustrated with simple line drawings. Primarily intended for the novice, two-thirds of the recorded species are described. The nomenclature throughout is good, if conservative, although authorities for names are unfortunately omitted. Keys based on position of sorus and on habit of growth should enable the reader to determine his plant with comparative ease. One may question the statement that the "best size for a herbarium sheet is 17 in. by 11 in." since the Kew-size sheet, adopted in many herbaria, is 16½ in. by 10½ in. The use of naphthalene, recommended as an insect deterrent, has lost favour these days, being largely superseded by the more effective *paradichlorobenzene*. Nevertheless, Greta Stevenson's book can be thoroughly recommended as a competent introduction to New Zealand ferns. A good glossary, a list of Maori vernacular names and notes on cultivation complete a work which admirably fulfils its purpose.

F. BALLARD

Trees and Bushes in Wood and Hedgerow

By Helge Vedel and Johan Lange. Translated by C. H. R. Hillman. Adapted by H. L. Edlin. Pp. 224. (London: Methuen and Co., Ltd., 1960.) 16s. net.

THE similarity between the flora of the two countries has made it possible to adapt this book, compiled by a team of Danish foresters and artists, to suit British forest flora. Its aim is to provide a practical reference book to the character and appearance of all trees and shrubs to be found in the open countryside. Specimens grown only in botanical collections have not been included. Each species has a reference number, which simplifies the linking of the various sections.

The book begins with an introduction to five keys. These keys are for the identification of branches with: (1) needle-like or scale-like leaves; (2) opposite compound leaves; (3) opposite simple leaves; (4) alternate compound leaves; and (5) alternate simple leaves.

Next there is a section of excellent coloured plates of 120 different trees and shrubs, with many subsidiary sketches to assist identification. Then follows the section describing each of the 127 species, with small diagrams to explain botanical

details and places of origin. Each is very clearly written.

There are four interesting short sections, namely: "The Tree's Wood"; "The Development of British Forests"; "Forest Tree Breeding"; and "Great Trees".

There are a Latin-English glossary, followed by a glossary of botanical terms and, lastly, an index.

B. J. G. MITTLAND

Taxonomy of Flowering Plants

By C. L. Porter. (Series of Biology Texts.) Pp. xii+452 (600 illustrations). (San Francisco and London: W. H. Freeman and Company, 1959.) 44s.

THIS is an excellently produced and efficiently written handbook of the taxonomy of flowering plants for North American students. It is not easy to explain in a clear and interesting way the complex matters involved in the principles of taxonomy and nomenclature, but this book comes close to doing so. Within its limitations—it does not pretend to be an advanced text-book, and the plants mentioned as examples or figured are mostly North American—it is hard to find any important fault. The numbers of species assigned to various families and genera seem not infrequently to be on the low side—there are surely more than 5,000 species of Gramineae, but otherwise the text seems excellent. The text-figures and photographs, 600 in all, are unusually numerous and clear and do much in helping to give this book the attractive appearance it has.

J. P. M. BRENNAN

Die Cactaceae

Handbuch der Kakteenkunde. Von Curt Backeberg. Band 4: Cereoideae (Boreocereae). Pp. xxxi+xxxviii+1927-2630. (Jena: Gustav Fischer Verlag, 1960.) 91 D.M.

HERR BACKEBERG'S fourth volume is devoted to the sub-tribe Boreocereinae of the semi-tribe Boreocereae of the tribe Cereae of the sub-family Cereoideae. It thus includes the treatments of such larger genera as *Echinocereus* (73 species), *Pilosocereus* (60), *Cereus* (36) and *Melocactus* (36). Many of the numerous smaller genera have been proposed by the author himself, who defends the recognition of small genera in his foreword. The high standard of the numerous illustrations is maintained. Philatelists will notice (Fig. 2450) the portrayal of *Melocactus communis* on the farthing postage stamp of the Turks and Caicos Islands.

Plant Pathology

An Advanced Treatise. Edited by J. G. Horsfall and A. E. Dimond. Vol. 2: The Pathogen. Pp. xiv+715. (New York: Academic Press, Inc.; London: Academic Press, Inc. (London), Ltd., 1960.) 22 dollars.

THIS is the second of three volumes intended to provide an advanced treatise on plant pathology. The first dealt with the diseased plant, and this one is concerned with what causes disease. In their prologue the editors indulge in words and definitions, and distinguish between three kinds of pathogen—animate, inanimate and viruses. They are in no doubt that insects are animate pathogens and are under the mistaken impression that insects are