

pathological studies made since 1930, the book is essentially personal.

There is an opening general section dealing with the applied anatomy and physiology of the nervous system, with accounts of clinical problems at appropriate points. This is followed by sections on cerebral tumours, circulatory disorders, inflammatory, toxic and deficiency disease states, degenerative diseases and trauma. The strongest parts are the general chapters and those on cerebral tumours. Anatomical descriptions are illustrated by excellent diagrams and, altogether, the opening general part forms a sound guide for neurological tyros and an interesting refresher course for the more experienced. There is a useful chapter on neuroradiology.

Biamond has not attempted to provide a comprehensive guide to brain diseases, but has concentrated on those topics where he has special experience. Nobody would cavil at the emphasis placed on tumours, circulatory problems and trauma, but metabolic disorders are given brief treatment. For example, hypoglycaemia is only mentioned as a cause of epilepsy, and there is no account of the cerebral effects of hypercalcaemia. Hereditary metabolic disorders, such as phenylketonuria, are described in a few paragraphs; yet the subject of metabolic brain disease has been an area of rapid advance in the past decade. By limiting his work to the brain, Diamond has denied himself the opportunity of dealing with the intracranial effects of such rare but important conditions as Refsum's disease, and conversely he omits the clinical manifestations of peripheral nerve involvement in metachromatic leucodystrophy. Doubtless multiple sclerosis receives scant mention for similar reasons of policy.

The sections on treatment reveal divergence from standard British practice. For example, potassium bromide is still used in the management of vertigo, while daily lumbar punctures are advised for patients with pyogenic meningitis. In tuberculous meningitis, daily intrathecal administration of streptomycin for four to six weeks is advocated, and thereafter thrice weekly. No mention is made of the second line anti-tuberculous drugs required in streptomycin resistant forms of the disease.

While the book has been recently revised, the section on circulatory disorders is traditional in form and takes insufficient account of recent studies on the epidemiology and pathology of strokes.

Some of the criticisms contained in this review are met by the author's preface which states that "the basic principle of this book is the composition of a clinical symptomatology on the basis of personal observations verified anatomically, preferably by post-mortem". The limitations of Diamond's book are largely imposed by this approach, but he has certainly succeeded in producing an interesting and readable work within his terms of reference.

There is a comprehensive, reliable index, and some fifteen pages of references. The book is lavishly produced and a pleasure to handle. Standards of photographic reproduction and diagrammatic representation are high. The price reflects all these qualities. R. A. HENSON

## GRAIN IMPROVEMENT

### Sorghum

By H. Doggett. (Tropical Agricultural Series.) Pp. xvi + 403. (Longman: London, April 1970.) 130s.

Of the world's cereals, sorghum is fourth in importance, coming after wheat, rice and maize, and a comprehensive handbook on the crop has long been needed. Moreover, the crop is of especial importance to the developing Third World, particularly in Africa and the Far East, so that the choice of the author, Hugh Doggett, sorghum breeder to the East Africa Community, is most appropriate.

Sorghum is diverse in form and habit and Dr Doggett gives a reasoned and intriguing account of its probable

evolution in this handbook. Being concerned with sorghum as a world crop, the aspects of most wide applicability are the plant's morphology, physiology and genetics. These are excellently presented by the author, being based on a thorough understanding of the literature and a widespread knowledge of the sorghum plant. Improvement by plant breeding is well covered, but possibly too little is devoted to problems of seed production and distribution in view of the great difficulties experienced in the rapid dissemination of improved varieties in under-developed countries, the countries where improved sorghum varieties may well play a most vital part in agricultural development. On the other hand, the elucidation of the problems of the agronomy of sorghum presents difficulties because crop husbandry is often of almost local interest, but the devotion of only a fifth of the handbook to the growing and to the very diverse uses of the crop makes these sections less satisfactory.

The author gives due attention to the phenomenal attacks from birds which the sorghum crop suffers in Africa, where the annual loss of grain may be more than a million tons. Likewise the depredations by the parasitic *Striga* are well covered.

Both the problems of insect pests and of diseases receive adequate attention. There is a natural tendency by the author, a plant breeder, to see the salvation from pest and disease attack being achieved by the plant breeder. Thus there is some emphasis on the breeding of resistance to covered smut, of which there are a number of physiological races, while simple dressing with 'Thiram' is very effective.

These criticisms are of minor consequence when considered against the general excellence of the handbook, which is so obviously the result of a very widespread and diligent study of the literature, combined with a deep insight into the nature of the sorghum plant. I am fascinated by the biblical quotations that preface each chapter; maybe these give some insight into Dr Doggett's faith that by the continued improvement of the sorghum crop, a target of 20 tons of grain per hectare will be achieved—so that "the threshing floor shall be full of grain". L. A. WILLEY

## TURKISH DELIGHTS

### Flora of Turkey and the East Aegean Islands

Edited by P. H. Davis. Vol. 3. Pp. xvii + 628. (Edinburgh University Press: Edinburgh, April 1970.) 189s.

A VISIT to the eastern Mediterranean or western Asia leaves a lasting, and sometimes painful, impression of creeping, climbing, colourful and often pungent Leguminosae. Small wonder, then, that a whole volume of the *Flora of Turkey* has had to be devoted to this enterprising family. The Middle Eastern view of the Leguminosae is, however, a very lopsided one: Papilionoideae there are in excess, but the other two subfamilies, which loom so large and grand in the tropics, are barely to be seen. Mimosoideae, apart from introduced Australian and African acacias, can show only the weedy *Prosopis farcta* and the mysteriously distributed *Albizia julibrissin*, here somewhat boldly described as an "Hyrcanian element" in the Turkish flora. Caesalpinoideae is represented by two indigenous species only; one, *Ceratonia siliqua*—the Carob—a weird survival from some remote past; the other, *Cercis siliquastrum*, so papilionoid in flower that, were it not for the arrangement of the petals and the *Bauhinia*-like outline of the leaves, one would be tempted to remove it elsewhere. *Gleditsia* is solely represented by the introduced American *G. triacanthos* (not "triancanthos"), though one might have hoped that *G. caspica*, native nearby in the Caspian forests, would have penetrated westwards into Turkey.

These two subfamilies are dismissed in four pages; the