2858 Book Reviews

Teeanalyse: L. HÖRHAMMER, Springer-Verlag, Berlin, 1970. 556 pp. \$13.20.

ONE RESULT of Britain joining the Common Market may be a greater awareness of the larger amount of herbal remedies used in Europe than in England. In fact, the European Pharmacopoeia is already including several vegetable drugs which were removed from the British Pharmacopoeia a few Editions ago. A popular form of this type of treatment are 'teas' consisting of mixtures of chopped dried herbs; these are normally brewed with hot water before use. The main constituents are frequently flavonoids, tannins, mucilage or volatile oils, although more active substances are present in others. The book under review is virtually a guide to the identification of the ingredients found in various teas. Instructions are given how to separate individual drugs from the mixture and then compare their characters (as seen by a pocket lens) with the series of excellent photographs supplied. There are 60 loose sheets of black and white photographs on art paper so that any individual sheet can readily be placed on the bench to compare with the specimen being examined. Altogether 275 drugs have been photographed, at least twice, to show the important diagnostic features, and this information is supplemented by about 70 pages of text giving verbal descriptions, reference to microscopical characters, simple chemical tests, constituents and uses of the drugs. A very high standard has been achieved as would be expected from the Director of the well-known Institute of Pharmacognosy in Munich, from which phytochemical research papers have often been published in Phytochemistry.

School of Pharmacy	J. W. Fairbairn
London	

Fungal Metabolites: W. B. TURNER, Academic Press, London 1971. 446 pp. £9.

THE FUNGI produce a fascinating range of secondary constituents, many of which are as complex in structure as those found in higher plants and a fair number of which (e.g. the tetracycline antibiotics) have been or are of practical value to Man. Many classes of secondary metabolite occur both in fungi and higher plants but because of the ease of cultivation and of feeding labelled precursors to fungi, biosynthetic studies have most often been carried out with fungi rather than with seed-bearing plants. This is clearly reflected in the present book, which although primarily intended as an up-to-date catalogue of fungal products, also covers in some detail the results of feeding experiments devised to elucidate the pathways of secondary metabolism.

As a catalogue, the book up-dates the earlier listings of M. W. Miller (the *Pfizer Hand-book* of 1961), of R. Hegnauer (*Chemotaxonomie der Pflanzen*, Vol. 1, 1961) and of Shibata *et al.* (*Fungal Products*, 1964). It is not completely comprehensive since the author has deliberately not reviewed in detail several groups which have been well described elsewhere, e.g. the fungal polyacetylenes, the ergot alkaloids and the *Amanita* toxins. It nevertheless includes the formulae and sources of over 800 compounds and covers the literature up to and including August, 1970. Two specially useful features are the classification of the compounds on the basis of biosynthetic origin and the special listing of all those compounds which have been studied biosynthetically.

BOOK REVIEWS 2859

The book is divided into nine chapters, the first two being introductory accounts of metabolic pathways and of the procedures required for cultivating fungi for their secondary products. The next six chapters discuss in turn metabolites produced from: sugars and shikimate, fatty acids, acetate-malonate, mevalonate, tricarboxylic acid intermediates and amino acids. A final chapter covers the cytochalasins and other miscellaneous constituents.

Purely regarded as a catalogue, the book is not entirely satisfactory from the point of view of ease of reference, since the formulae are numbered separately from the beginning to the end of each chapter and not continuously throughout, which would have been preferable. However to compensate for this, the author has provided formulae and organism indexes as well as author and general indexes. It is extremely valuable to have this accurate and modern account of fungal products and the author is to be congratulated on producing a volume which will be appreciated not only by fungal specialists but also by phytochemists generally.

University of Reading

J. B. HARBORNE