

SHORT REVIEWS

Phytochrome and Plant Growth: by R E KENDRICK and B FRANKLAND *Studies in Biology* No 68, Edward Arnold, 2nd edn, 1983 pp 76 £2.95

The rapid progress that has taken place in the understanding of phytochrome, the light receptor pigment of green plants, has necessitated the production of a second edition of this useful student textbook within five years of the first. This new edition contains, for example, details of the newly pioneered radioimmunoassay for phytochrome, a technique which provides for the first time a means of detecting the pigment in nanogram amounts in crude plant extracts. The text in fact has been extensively rewritten, new diagrams added and a new reading list provided.

Undoubtedly, the success of the first edition was due not only to the excellence of the writing but also to the fact that many plant physiology textbooks available in 1976 dealt inadequately, if at all, with this most important topic. The situation has been improved since then and most modern texts have at least a chapter on phytochrome. Even so, it is unlikely that it will be quite as authoritative and up-to-date as this excellent little monograph. It can be warmly recommended.

Medicinal Plants and their Traditional Uses in Mozambique, Volume I: by P C M JANSEN and O MENDES. Ministry of Health, Mozambique Republic, 1983 216 pp. No price stated.

This first volume is devoted to plants of the Acanthaceae, Alismataceae, Amaranthaceae, Anacardiaceae and Annonaceae. Clearly, the authors have a long way to go before they will have covered the whole angiosperm flora of Mozambique. For each plant, there is a drawing, a botanical description, a distribution map, details of the various localities and an account of medicinal uses in various tropical countries as well as Mozambique, with references. This book should be useful to anyone interested in the medicinal flora of East Africa and especially valuable to anyone contemplating collecting these plants in Mozambique.

Flash Photolysis and Pulse Radiation: by R V BENSASSON, E J LAND and T G TRUSCOTT. Pergamon Press, Oxford, 1983 236 pp £27.

This book, subtitled 'Contributions to the Chemistry of Biology and Medicine', may be of more than marginal interest to phytochemical readers, since the interaction of radiation with plant constituents is essential to our understanding of both primary and secondary metabolism. These two techniques have been used, of course, in the study of photosynthesis and one of the nine chapters is devoted to this very topic. Other chapters are headed tetrapyrrolic pigments, polyenes, proteins, nucleic acids, electron transport chain components, vision and drugs. There seems to be little on the photoactivation of such plant compounds as polyacetylenes and thiophenes [but see G H N Towers (1980) *Prog Phytochem* 6, 183], the better known furocoumarin work is described in some detail. This is overall a well produced volume and should be a useful reference to anyone wishing to extend their knowledge into these areas of photochemistry and photobiology.

Plant Poisoning in Animals. A Bibliography From the World Literature, 1960-1979, compiled by M R HAILS and T D CRANE. Commonwealth Agricultural Bureaux, Farnham Royal, Slough, 1983 158 pp £12.

This bibliography of some 3200 references, compiled mainly from the veterinary literature, lists poisonous plants and those which have an adverse effect on animal health or fertility. The references are arranged taxonomically by plant family and there are also several excellent indexes. This will be extremely useful to those phytochemists interested in the effects of alkaloids, cyanogens, glucosinolates and other plant toxins on animal herbivores.

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