

facilitating the identification of the subject-matter and title of the many reports such as the Platt Report, the Hankey Report, the Barlow Report, which in common parlance go by the name of their chairman. Nor is the section on "Books, Periodicals and Films" adequate. In the nature of things, a book list in such a volume must be selective, but it could at least be authoritative and the basis of selection made plain. The present list displays all the worst faults of the whole volume, and the inclusion of so much triviality inevitably robs it of any pretensions to serve the one purpose that justifies the inclusion of such a list in a reference book on industrial research: a guide to sources of reliable and authoritative information which those concerned with the conduct or direction of research whether at the policy-making or executive level might be expected to need.

R. BRIGHTMAN

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A NEW FLORA OF GUATEMALA

Flora of Guatemala (Part IV)

By Paul C. Standley and Julian A. Steyermark. (*Fieldiana: Botany*, Vol. 24, Part 4.) Pp. v+493. (Chicago: Chicago Natural History Museum, 1946.) 3.50 dollars.

THIS is the first part to be published of a "Flora of Guatemala" which has been in preparation for the past six years at the Herbarium of the Chicago Natural History Museum. The Flora is based upon published records and earlier collections; in particular, it records new information obtained by the authors during four botanical expeditions of the Chicago Museum which extended to all the twenty-two departments of Guatemala. The authors state in their introduction that the flora of Guatemala, as considered in their work, includes that of British Honduras, which is continuous with that of the departments of Petén and Izabal: "There is no reason to suppose that in British Honduras there exists more than a handful of species that will not be found eventually in Guatemala". The work is thus of great importance for forest officers and students of the vegetation of the British Central American Colony. The only survey hitherto of the flora of British Honduras was Standley and Record's "Forests and Flora of British Honduras" (*Pub. Field Museum, Bot. Series, 12; 1936*) in which the systematic list was little more than a 'prodromus'; while there has been no previous flora of Guatemala.

The authors state in the introduction to this volume, which is Part IV of the Flora, that although almost all the manuscript has been written it has been found impractical to publish it in systematic order because of conditions imposed by the War. "Part I will include an account of the general features of Guatemala vegetation, a résumé of the history of its exploration, and other pertinent matter." Presumably, there will be a key to the plant families.

Part IV contains the accounts of a large number of families, including the important and difficult Moraceæ, Annonaceæ and Lauraceæ. The format follows the usual lines: there are keys (with macroscopic or field characters) to genera and species, ample generic and specific descriptions, relevant synonymy and citations of references, definitions of habitat and altitude, distribution by departments of Guatemala. The distribution of individual species outside the Republic is carefully defined, but only rarely are details given of distribution in British

Honduras, except in instances where the species does not occur in Guatemala. Collectors' numbers, with the exception of those of recent type collections, are scarcely ever cited.

Of particular value and interest are the notes on properties, economic uses and vernacular names which follow the descriptions of many of the species. Many common Old World vegetables, fruits and garden favourites are wisely included.

The authors are enthusiasts and keen observers, who have acquired a very wide knowledge of the inhabitants and their customs in relation to the vegetation. The reduction of many species into synonymy and their frequent comments on variability show that they take a broad view of species. For the purposes of a flora of a tropical country this is probably more satisfactory than the provision of unworkable keys which maintain doubtful and critical species by selecting characters from descriptions or single collections.

The "Flora of Guatemala" promises to be the best of the numerous works of this kind with which Dr. Standley's name is associated. Clearly, then, the appearance of the all-important Part I should not be delayed.

N. Y. SANDWITH

SCIENCE AND ADULT EDUCATION

Progress in Science

By W. L. Sumner. Pp. viii+176+14 plates. (Oxford: Basil Blackwell.) 8s. 6d. net.

IF it be true that the ability to think effectively on literary, economic, political and philosophical affairs does not take place until individuals have had experience of life, it is equally certain that there can be no real conception of the function of science in modern life before maturity. Belief in these ideas has, during the last decade, led to an awakened interest in the general education of adults and culminated in that section of the Education Act of 1944 which transformed a hitherto permissive right of local education authorities to provide facilities for adults to educate themselves in their off-duty hours into a mandate.

Among the extended facilities will be the provision of books and, as the Act becomes translated into practice, there will inevitably be a steady and rising demand for texts from the variety of study groups which spring up. If these classes develop as educationists envisage, it is hoped to draw in students from that section of the community which has previously been unattracted by any activity which could be put even under the broad heading of education. One of the obstacles which hinders the formation of such classes to-day is that there are few books suitable enough to be used as texts. The books provided for university extra-mural groups would be beyond most students and the books written for school-children would alienate and be repugnant to them. In this field a rich harvest awaits the enterprising publisher who is sufficiently discriminating to obtain discerning and skilful authors who can fashion their pens to suit their readers. In the realm of science discrimination will be particularly necessary both because of its changeful nature and because the paucity of suitable contemporary books for the untutored offers little guide to would-be authors.

Which brings us to Mr. Sumner's book. During the First World War and since, almost unique oppor-