

Our Bookshelf.

Australian Rain-Forest Trees: excluding the Species confined to the Tropics. By W. D. Francis. Pp. xii+347. (Melbourne: Council for Scientific and Industrial Research, 1929.) 10s.

ALTHOUGH this book is primarily intended for the Australian forester and botanist, it provides a wealth of information about the trees of the rain-forest of eastern Australia which renders it a useful work of reference. The outstanding feature is that the descriptions are drawn up by a botanist who is equally familiar with his specimens as trees in the forest and as herbarium material.

The practical side of the work is further enhanced by an artificial key to the trees described, which has been worked out and drawn up by the author in the field. Keys of this nature are difficult to make as a rule, but undoubtedly they are appreciated more by the forester, who often finds difficulties in working in the field with keys prepared from herbarium material only and worked out on a phylogenetic basis. As the systematic enumeration of the species is according to Engler and Prantl, it would have been helpful had page references been inserted against the names of the species where they occur in this artificial key. The book itself is not a convenient size for field work (9 in. x 6 in.) and it would be advisable to issue the artificial key in pamphlet form so that its usefulness can be extended.

The book is profusely illustrated by plates which are given generally in pairs—one plate showing the lower part of the bole of each trunk, the nature of the bark, the base of the tree, and the character of the surroundings; the other, a more detailed view of leaves, flowers, and fruit.

This is a very good example of a work which cannot have more than a local—though a very wide local—interest and application. So much work of this nature is never able to be published because it cannot be considered to be an economic proposition. It is very gratifying, therefore, to note that Mr. Francis was able to secure official publication through the recommendation of Mr. Lane-Poole, Inspector-General of Forests. This is the second publication by the Commonwealth Government under the scheme for assisting the publication of work carried out by Australian scientific workers which is not likely to prove financially remunerative and therefore is unattractive to commercial publishing houses.

Marriage, Past, Present and Future: an Outline of the History and Development of Human Sexual Relationships. By Ralph de Pomerai. Pp. xvii+370. (London: Constable and Co., Ltd., 1930.) 15s. net.

MR. DE POMERAI'S book is a welcome and opportune addition to the literature on marriage, even though Prof. Westermarck has published within the last few years a revised and enlarged edition as well as an abridgment of his classical work on the subject. The author of the present book holds that both Westermarck and Letourneau, having written

exclusively from the viewpoint of the family and regarded procreation as the sole or highest function served by matrimony, have paid insufficient attention to the urge of the gregarious. In other words, he suggests that they have fallen out of date owing to the institution and spread of 'companionate' unions and the changed ideals and ideas which they imply. Further, there has to be taken into account the effect of current psychological theory in relation to sexual activity and repression.

The reader will here find the evidence to be collected from primitive peoples reviewed from a new point of view; the practices of the present day, both orthodox and those regarded by some as unorthodox, are analysed; and the probable course of future development is sketched in the light of tendencies here revealed. Much of the book is naturally of a highly controversial character. The validity of the argument, in fact, depends upon whether its viewpoint rests upon what is merely a passing phase or on a development which is to be a permanent directional factor in the future evolution of society. This is too large a subject for discussion here, much as Mr. de Pomerai invites it. It may be pointed out, however, that the modern attitude towards marriage and sex appears to give too great weight to factors which are secondary to the main biological purpose of society and of sexual relations.

Gnetales. By the late Prof. H. H. W. Pearson. (Cambridge Botanical Handbooks.) Pp. vii+194+4 plates. (Cambridge: At the University Press, 1929.) 18s. net.

THE class Gnetales is unique among seed-bearing plants in the habit and habitat diversity of its members and in the use made of it by those interested in phylogenetic hypothesis. The appearance of a monograph by the late Prof. H. H. W. Pearson is, therefore, a matter of considerable importance. The manuscript was completed and prepared for printing by Mrs. Thoday, who has added valuable notes and is largely responsible for the final theoretical chapter.

The first chapter summarises the habit, distribution, ecology, and taxonomy of the three genera *Ephedra*, *Gnetum*, and *Welwitschia*; the second gives details of their vegetative morphology and anatomy; the third considers their inflorescence and flower structure; and the fourth deals very fully with their reproduction. A frontispiece of the author, three plates, and 89 figures illustrate the book.

The interrelationships of the three genera remain obscure, and proof that they are of near affinity is lacking. The somewhat diverse views held as to the natural position of the Gnetales most often agree in placing the group in the vicinity of the top of the Gymnosperms and the bottom of the Angiosperms. The Angiosperm characters have been emphasised by recent writers, and Pearson agreed "that there must be a Gnetalean-Angiosperm alliance" but probably not a direct one. A hypothesis is outlined which derives the