

species which are commendably clear and unambiguous, the problem of whether or how to cite their external distribution is overcome by giving it in terms, not of countries, but of broad phytogeographic regions. This appears to be a fairly satisfactory solution assuming, of course, that one accepts Zohary's terms and their circumscription; a map of these areas being given at the end of the volume. Information and comments on taxonomy, biology and biblical plants are given after the species and add to the value (and readability) of the work. In general, these remarks are sparser than one would expect and although it is debatable how much of this kind of information should be presented in a Flora, so much of it must be readily available to the authors that one would welcome more comments in the forthcoming volumes.

Although the taxonomic treatment at specific level is fairly conservative, a surprising number of varieties is given recognition. *Erucaria boveana* Coss., itself a rather doubtful species, has nine varieties; *Quercus* has three species in Palestine with a total of fourteen varieties. It is very doubtful in these cases if they merit formal description, especially if extra-Palestinian material is taken into consideration.

Prof. Zohary has continued to use the name *Quercus calliprinos* Webb for what he maintains is the east Mediterranean species of Hermes oak in contrast to the west Mediterranean *Q. coccifera* L. These two species are surely conspecific. One suspects that, in this case, Zohary's phytogeographical beliefs have, without sufficient morphological evidence to back the separation, influenced his taxonomy. Even if the east Mediterranean plant should be given taxonomic status the name "*calliprinos*" could scarcely be used since this species was originally described on material of Spanish origin.

Throughout the text, the terminology used is precise, most of the terms being clearly explained in the glossary. But to understand the definition of "Incumbent (cotyledons)" as "lying face to face and with the back of one against the axis" requires some imagination.

The black and white drawings are a useful adjunct to the text, most of them giving a good impression of the plant but in general they suffer from the two common defects of illustrations—lack of scale and wastage of space.

The presentation, typography and binding of this important Flora are all excellent.

I. C. HEDGE

FLORA OF LEBANON AND SYRIA****

Most Floras currently being written are an amalgam, with varying degrees of success, of the work of several taxonomists. Father Mousterde's work is an exception to this in that not only has he prepared all the accounts himself but also drawn all the illustrations. So at least in this respect, there is more uniformity of treatment than in many other recent Floras. But for one man, even though he has been living and working in the area for almost forty

**** Nouvelle Flore du Liban et de la Syrie. Volume 1 (text and plates) by P. Mousterde, S.J., Beyrouth, Editions de l'Imprimerie Catholique. 1966. lxxix, 563 pp. 186 plates. Price: £20.2.6.

years, it is an overwhelming task to maintain botanical accuracy throughout.

Before the main part of the first volume, there are very useful and informative accounts of the geography, geology and plant associations of the area, a short history of botanical exploration and a comprehensive list of localities. In the latter respect, one wishes that there were a few maps to make clear the internal geographical areas he uses in the text. The main groups covered in the Flora itself are the monocotyledons and a few of the polypetalous dicotyledons such as the Centrospermae; one particularly welcomes accounts of such families as the Liliaceae and Gramineae when in many Floras these difficult groups come in the last volume.

Although the keys and the species descriptions are, in contrast to many French taxonomic works, short and pertinent, there are several irritating features of bad presentation. For example, the absence of numbers against species makes it very difficult to find a species that one has run down in a key. This is particularly annoying in such a large genus as *Allium* with fifty-five species. Spacing and typography are also not ideal. Species names stand out clearly in bold print but the generic names in ordinary capitals tend to get lost.

Several new species are described throughout the text and although their descriptions are clear enough, the absence of differential diagnoses is a serious omission. For instance, a new species of *Iris* subg. *Oncocyclus* is described but no related species is mentioned; the species in this group are difficult enough to cope with without the added burden of a new species in which neither allies nor characteristic features are mentioned. A desirable addition to subsequent parts would be a list of the new taxa described in the Flora; with the present volume, the abstractor of such information has to work through 500 pages.

The same criticism as was mentioned in the Flora Palaestina review with regard to citing types is also applicable to this Flora. But in Mouterde's work it is more serious in that not only are types not cited but the place of original descriptions, and in some cases basionyms, are left out. This has resulted in not a few cases of wrongly applied names and in some cases, study of type material would have shown that only one species was tenable where two are recognised in the Flora: for example, *Saponaria pulvinaris* Boiss. should be called *S. pumilio* Boiss.; *Gypsophila anatolica* Boiss. cannot be maintained as a species separate from *G. perfoliata* L.

The separate volume of black and white illustrations covers almost all the species dealt with in the text. Many are quite inadequate for identification, as in *Allium*, and one wishes that Father Mouterde had waited till a competent artist was available to produce botanically accurate and aesthetically pleasing drawings.

Although there are many criticisms in general and in particular that can justifiably be levelled against this Flora, it is a substantial contribution towards botanical knowledge in south-west Asia. One must congratulate Father Mouterde on his courage and determination in producing it. It is not too difficult for a large institute with a large staff to produce a Flora but for one man with limited herbarium and library resources, it must be a daunting task. One wishes Father Mouterde every success in completing it.

I. C. HEDGE