Notes R.B.G. Edinb. 38(1):22 (1980).

BOOK REVIEW

Flora Palaestina Part 3. These twin volumes* contain the rest of the Dicotyledons (Engler's Sympetalae) not covered in Parts 1 & 2. Professor Naomi Feinbrun-Dothan is to be congratulated on her achievement—it has been well worth waiting for. In Part 1 (1966) the whole Palestinian flora was estimated at c. 2400 species—i.e. it is one quarter to one third the size of the Turkish flora—with which I compare it in this review due to my preoccupation with the latter subject. Jordan, of course, remains botanically far less explored than Israel, which must be the best botanised country in the East Mediterranean. Due to the strong development of the Saharan (and to a lesser extent the Sudanian) element, several groups are more richly, or very differently, represented in Palestine than in Near East countries further north. Of the groups covered in Part 3 this applies particularly to *Asclepiadaceae, Kickxia, Plantago* and *Launaea*. Mercifully, *Taraxacum* can raise only one species in Palestine, and *Hieracium* (as in Cyprus) none (Turkey suffers from 99).

Generic concepts in *Flora Palaestina* tend to be broader than those used in *Flora of Turkey*. For example, *Filago* includes *Evax* and *Logfia*, and *Lactuca* includes *Scariola* and *Steptorhamphus*. *Antirrhinum* includes *Misopates orontium* although the generic description given only covers the seed type of *A. majus* and *A. siculum*—very different from the bizarre seed of *Misopates* which, though it resembles an Unidentified Flying Object, hardly deserves to remain on the Secret List. There are, however, places where a narrower generic concept has been adopted than in *Flora of Turkey*—e.g. *Thrincia* separated from *Leontodon,* and *Podonosma* from *Onosma*. And why not? Differences of opinion on such borderline cases often stimulate further research that may (hopefully) lead to more taxonomic stability.

Turning to species limits and nomenclature, it is not difficult to spot some differences between our treatments. *Parentucellia flaviflora* is treated as a subspecies of *P. latifolia*, differing from it only in flower colour and distribution. *Ajuga chia* is, to my mind, part of *A. chamaepitys* and can be divided into a number of subspecies in the Near East (Davis in *Notes R.B.G. Edinb.* 38:23–32). *Chaenorhinum rytidospermum* (Fisch. & Mey) Kuprian. should be *C. calycinum* (Banks & Sol.) Davis. But I stand corrected on *Anarrhinum orientale* Bentham: *Flora Palaestina* shows that it should be called *A. forskahlii* (J. E. Gmel.) Cuf. In *Flora of Turkey Rhagadiolus edulis* Gaertner was treated as a variety of *R. stellatus* (L.) Gaertner, but in the *Flora Palaestina* account they are separate species—a conclusion confirmed by Meikle in his detailed paper in *Taxon* 28 (1, 2/3):133 (1979).

The impressive format of Part 3 is consistent with that of Part 1 and the bracket keys are exemplary. However, one might quibble about the nomenclature and limits of the phytogeographical areas recognised by M. Zohary; some of these territories are so vast one often has little idea how far a species extends outside Palestine.

However, *Flora Palaestina* is going to be used as much for its illustrations as its text. To have whole-page line illustrations for every Palestine species is riches indeed. The majority of illustrations in the new volume are by Ruth Koppel (who has since died and to whom the volume is dedicated) and Esther Huber, but five artists' names appear on the title page—an enviable supply of talent. Inevitably the standard varies—influenced, presumably, by relative skills, the material available (living or pressed), and time. Some drawings are splendidly three-dimensional (e.g. *Salvia spinosa* and *Cistanche*), others flat or fuzzy—sometimes both (e.g. *Campanula damascena*). Enlarged flowers or fruits often accompany habit drawings, so that there can seldom be much excuse for misidentification. Where appropriate, floral dissections have been provided—e.g. for *Heliotropium* and *Cuscuta*—both excellently done. The Rubiaceae have been attractively and intelligently drawn by L. Benyamini and I. Ferber. The plates of *Anthemis* will be of great help in identifying Palestine's 25 species of this genus, of which five are endemic.

An appendix contains a new *Caralluma*, and there are five pages of Addenda and Corrigenda, including three new species recently described by L. Boulos *et al.*

Thirty-five years ago Professor Feinbrun-Dothan and I, perched on grumbling camels, wound our way through Gebel Galala, near the Gulf of Suez. When the bedouin drank all our drinking water the first night, the following days demonstrated her capability, endurance and tenacity—qualities which I am sure will lead to a speedy completion of the final part of the work: the Monocotyledons.

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* Flora Palaestina Part 3, Ericaceae to Compositae, by Naomi Feinbrun-Dothan. Plates: 757 pl. + xxxiii. Text: vi + 481 pages + 2 maps. Plates, 1977; Text, 1978—neither offered for sale until March 1979. The Israel Academy of Sciences and Humanities. Price US $55.00.