A good year for umbels. Exactly a century after Boissier's treatment of the family in Flora Orientalis, 1972 has seen the publication of three important floristic accounts of SW Asiatic Umbelliferae. No. 20 of the Flora of West Pakistan*, by far the largest part of the Flora so far published, is entirely devoted to the family, while it is included among other families in vol. 2 of Flora Palaestina † and vol. 4 of the Flora of Turkey ‡ (reviewed by Prof. Tutin on page 246).

The account of the family for the Flora of West Pakistan by Professor Nasir covers 154 species in 56 genera. Professor Zohary recognizes 104 species in 52 genera in Flora Palaestina while the several contributors to the Flora of Turkey include c. 410 species in 97 genera. All three accounts have accompanying plates: 103 taxa from West Pakistan are illustrated, 106 are figured in the separate part of Flora Palaestina devoted to illustrations. The Flora of Turkey contains 107 drawings of fruit types, 1 plate of petal form in *Bupleurum*, 1 of leaf dissection in *Ferula* and 29 distribution maps.

One new genus, *Stewartiella*, is described by Professor Nasir from Pakistan and the Flora also contains 7 new species. 2 new species and 4 new varieties appear in Flora Palaestina and recently about 18 new species and one subspecies have been described for the Flora of Turkey. In comparison with many other families recently dealt with in SW Asiatic Floras it is remarkable how relatively few new species have been described for the Umbelliferae.

The arrangement of the genera in Flora Palaestina and Flora of Turkey basically follows the treatment by Drude in the Pflanzenfamilien of 1897. However, the Flora of Pakistan, although more or less keeping the same groups of genera together, has these groups, at least within the Apioideae, in a different sequence, the genera usually included in the Scandicinae, Caucalinae and Smyrnieae following those that normally constitute the Ammineae. Within this group itself lie several genera, e.g. *Foeniculum* and *Conium*, which are generally placed elsewhere. Flora Palaestina incorporates Drude's subfamily and tribal divisions; the other two make no attempt to subdivide the family. Comparable dichotomising keys, making use wherever possible of macroscopic characters, are employed in all three Floras.

It is interesting to compare some of the representatives of the family in the three areas. Genera present in all three have very few common species which are not widespread annuals or commonly cultivated plants. *Zosima absinthifolia* appears to be the only species whose limits scarcely extend beyond the Mediterranean coast of Turkey and Palestine in the west and the Pakistan highlands in the east. Either the species lie more or less on the periphery of a genus centred in Central Asia, e.g. *Ferula* with 17 species in Turkey, 8 in Palestine and 11 in Pakistan in contrast to the c. 100 species recorded from the C Asiatic-Afghan area, or else as in *Chaerophyllum* they are mostly eastern extensions of a European group of species and western extensions of a Himalayan group. The Himalayan influence is also seen by the presence in West Pakistan of such genera as *Cortia* and *Vicatia*.

Apart from the newly described *Stewartiella* there are no genera endemic to West Pakistan; there are several endemic species, especially in the Quetta area and in Swat and Chitral. Flora Palaestina has only three endemic species, 2 of them Ferulas, but contains 2 genera, *Chaetosciadium* and *Synelcosciadium*, restricted to the East Mediterranean area from Palestine to Syria. It is not unexpected in Turkey to find the regions around the central salt lake, the serpentine of the southwest and the high alpine areas of the Taurus and the southeast harbouring distinctive endemic species, but only three monotypic endemic genera are found in the country; *Olymposciadium*, an alpine species of limestone cliffs in the north and west, *Microsciadium* from limestone and serpentine slopes on the west coast and islands, and *Crenosciadium*, a rare and little known plant of moist inland areas of W Inner Anatolia.

Many common plants of the temperate zones such as *Coriandrum sativum*, *Foeniculum*

* Flora of West Pakistan, No. 20 Umbelliferae by E. Nasir. Ed. E. Nasir & S. I. Ali. 1972. 169 pp., 50 figs. Stewart Herbarium, Gordon College, Rawalpindi.

† Flora Palaestina, Vol. 2 (text and plates) by M. Zohary, Umbelliferae pp. 378-453, plates 552–656, Jerusalem. Israel Academy of Sciences and Humanities, 1972. 489 pp. 656 plates.

‡ Flora of Turkey and East Aegean Islands. Vol. 4, edited by P. H. Davis assisted by V. A. Matthews & D. F. Chamberlain. Umbelliferae pp. 265-538. Edinburgh University Press, 1972. xviii, 657 pp., 19 figs., 92 maps. Price £12.00.

vulgare, *Scandix pecten-veneris* and *Turgenia latifolia* occur in the areas of all three Floras but it is interesting to note the absence of *Carum carvi* and *Petroselinum crispum* from Palestine and *Cuminum cyminum* from Palestine and Turkey. Also noteworthy is the extension of the Caucasian and NW Iranian genus *Froriepia* into Turkey in the presence of *F. gracillima* Leute and of the Central Asiatic *Ormopterum* into Pakistan with *O. tuberosum* Nasir described from Baluchistan. Not unexpectedly the Afghan *Echinophora scabra* and *Peucedanum ferulaefolium* are now recorded from the Quetta area in West Pakistan while *Scaligeria scariosobracteata* from Nuristan is now known also from Chitral.

The completion of the Umbelliferae accounts in the three Floras should stimulate further work and interest in the family in the areas concerned. With the family already published in Flora Europaea, Flora Kavkaza and Flore du Liban et Syrie we can look forward to the appearance of the Umbelliferae in Flora Iranica and Flora of Iraq with renewed interest.

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