BOTANICAL LITERATURE OF AFGHANISTAN: SUPPLEMENT I

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ABSTRACT. A supplement to an earlier botanical bibliography of Afghanistan deals, for the most part, with the years 1969 to the present. In the introduction attention is drawn to a selection of some of the most important references within different branches of botany in this region.

INTRODUCTION

Since we published a botanical bibliography of Afghanistan in 1969 (*Notes R.B.G. Edinb.* 29:357–371), a considerable number of new works have appeared and it is now an appropriate time to bring the original list up to date. Although most of the references given here are recent, we have also included several older ones which were either previously overlooked or else deliberately excluded because their Afghan content was limited. We have not attempted to include *all* the papers in which a reference to an Afghan plant occurs; to do so would make the bibliography much too bulky and defeat the main aim of the paper, which is to provide a general and reasonably comprehensive list of useful references.

As in the previous paper, the titles are given under three headings: I, references to Afghanistan; II, some references to adjacent countries; III, some useful maps, gazetteers, etc.

Inevitably, any bibliography which does not give some idea of the contents of the cited works is of limited value to the reader in that all entries appear to be of equal value; that is, it is difficult for someone not conversant with the literature of the area to recognise which are the important references and which are not. Although we have not tried to categorise the entries here, we thought that it would be useful for the general reader to draw attention to some of the titles that, within different branches of botany, are of special value for their content and as a source, from their own bibliographies, of further information; this both for Afghanistan and adjacent countries.

To the taxonomist and phytogeographer the modern Floras are, of course, of prime importance both for their own content and as a means of tracing pertinent earlier literature. *Flora Iranica*, under the active leadership of K. H. Rechinger, is the main source of taxonomic information about Afghan plants and, in addition, those of N Iraq, Iran and highland Pakistan. Of great value for other adjacent regions, and often for Afghanistan as well, are the following Floras: *Flora of W Pakistan* (ed. Nasir & Ali); *Flora Uzbek* SSR (ed. Vvedensky, 6 vols.)†; *Flora Kirghiz SSR* (ed. Nikitina, 11 vols.); *Flora Turkmen SSR* (ed. Schischkin, 7 vols.)†; *Flora Tadzhik SSR* (ed. Ovchinnikov); *Plantae Asiae Centralis* (ed. Grubov); *Conspectus Florae Asiae Mediae* (ed. Vvedensky). Of these Floras only those of the Kirghiz, Uzbek and Turkmen SSR are complete.

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† Listed in our first paper (*Notes R.B.G. Edinb.* 29:357–371).

Useful accounts of the natural vegetation of Afghanistan are given by Volk (1954)* and, in more detail, by Freitag (1971a,b). Zohary's major work on geobotany (1973), although dealing but little with Afghanistan itself, gives a most valuable account of SW Asia as a whole. Of the many ecological papers, mention should be made of those by Gilli*, Pelt & Hayon et al. and Neubauer (1954)*. Some eco-physiological aspects are touched on in several papers by Breckle; climatic data can be found in Humlum et al. (1959)* and Kraus (1972). Flohn (1969) discusses the relationship between water-balance and climate in mountainous regions.

Although we are aware of little that has been written about Afghanistan's geological past, Kaever (1969, 1972) is worth consulting. Wirtz et al. (1964) deal with the geology, and palaeontology, of NE and C Afghanistan; the geological maps of Wittekindt & Weippert (1973) cover central and southern Afghanistan.

Plants and drugs of pharmaceutical importance in Afghanistan are dealt with by Volk (1955)* and Pelt et al. (1965)*; Parsa (1959–61) and Hocking (1958–62) are useful references for Iran and Pakistan respectively.

Botanical travelogues and some of the garden-worthy plants that are, or should be, grown in western Europe are the main themes of articles by Furse and Hewer.

Cryptogamic research in Afghanistan is still in its infancy and only a few groups have been studied, none in detail: Kitagawa (1964)*, Frey (1969–74), Froehlich (1955–64)* and Kilbertus & Bizot (1971) on bryophytes; Poelt & Wirth (1968)* and Poelt & Steiner (1971) on lichens [Steiner is currently working on a preliminary account of the lichen flora of the country]; Petrak (1953, 62, 66)*, Henderson (1970), Brandenburger & Steiner (1972) and Durrieu (1973) on fungi, mainly parasitic ones; Foged (1959)* on diatoms. These papers cover most of the available Afghan cryptogamic references. In Soviet Central Asia, however, there are some more substantial references: there is the Cryptogamic Flora of Kazakhstan (Nevodovsky et al., 1956–), a handbook of rust fungi of middle Asia (Korbonskaja, 1969), and the first volume of a lichen Flora covering all of the USSR (Abramov, 1971).

The contributions to botanical knowledge that local botanists in SW Asia can make are discussed by Davis & Hedge (1975). Although written primarily from a Turkish viewpoint, many of the points dealt with are equally valid for Afghanistan.

Two recent botanical bibliographies deal with Afghanistan's neighbours to the south and west: Kazmi (1970–71a) for Pakistan and Frey & Meyer (1971) for Iran. To the north, in the USSR, botanical literature extends, unlike Afghanistan, over a long period, and is extensive for almost all aspects of botany. Some of it, at least in western Europe, is difficult to trace and, one may add, to cite. Three references, cited in section II, those of Grubov et al. (1963, vol. 1 and 1971, vol. 6), Musaev (1968) and Kamelin (1973) contain large and useful bibliographies of Central Asia. Agakhanyantz & Sinkovskaya (1972) give numerous older natural history references to the Pamir region.

No doubt this supplement is not as fault-free and comprehensive as we would have wished. We would therefore welcome notice of our errors and omissions. We would also be pleased to receive reprints of all pertinent papers, especially those published in less well-known periodicals, in order to keep this botanical bibliography as up-to-date as possible.

Many colleagues—too many to list individually—have contributed towards this bibliography. We wish to acknowledge their help. One of us (W.F.) is grateful for financial assistance provided by the Sonderforschungsbereich 19 (Orientalistik) at the University of Tübingen.

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III. SOME USEFUL MAPS, GAZETTEERS, ETC.

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Errata to Botanical Literature of Afghanistan

(*Notes R.B.G. Edinb.* 29:357–371, 1969).

p. 357—Agachanjac, O. E. (1958); add p. 125–131.
p. 358—Agachanjac, O. E. (1960); add p. 29–33.
p. 358—Agachanjac, O. E. (1961); add p. 47–67.
p. 358—Aitchison, J. E. T.; for "(1881–82)" read "(1880–82)".
p. 359—Frey, W. (1968); for "Op. cit. I: 17–46. 51–56" read "Op. cit. II: 24–35".
p. 361—For "Hermann, N. M." read "Herman, N. M.".
p. 363—Leutelt, R. (1935)—delete the entry.
p. 364—Petrak, F. (1953), for "Beiträge" read "Beitrag".
——(1963), for "Ein Beitrage" read "Ein Beitrag".
——(1966), for "Kleine Beiträg" read "Kleine Beiträge".