

1. BOTANICAL SURVEY WORK

1.1 *Diary of Main Events*

- 16 April Arrival in Amman
- 17 Meeting at Higher Council
- 18 Work in the herbarium at Jordan University*
- 19 Work in the herbarium at Jordan University*
- 20 Travel to Safawi; beginning of survey work*
- 21 Survey*
- 22 Survey
- 23 Survey
- 24 Survey
- 25 Survey
- 26 Survey*
- 27 Survey*
- 28 Survey*
- 29 Survey*; return to Amman
- 30 Transcription of field notes
- 1 May Work in the herbarium*
- 2 Work in the herbarium*
- 3 Visit to Petra
- 4 Work in the herbarium*
- 5 Work in the herbarium*
- 6 Return to UK

* In collaboration with Dr Dawud Al-Eisawi, Jordan University

1.2 *Summary of Results*

1.2.1 *The species list*

Ten days were spent at Safawi during which botanical collecting and vegetation survey work were undertaken. The total number of new collections is not yet known since much of what was taken was for reference purposes only. The total number of species new to the Badia list is not yet known either since much taxonomic work will be necessary to assess what we have, but it is a reasonable guess that we have added at least 80 species to the list, and possibly closer to 100.

1.2.2 The Vegetation Survey

This year saw the beginning of a systematic approach to the vegetation survey. Last year's results have largely to be disregarded due to uncertainties as to where the specimens were located in the field. Some attempt was made this year to 'rediscover' sites visited, but with limited success. The temporary acquisition of a GPS survey receiver meant that an element of precision could now be built into the survey, and a total of 63 sites were sampled for their vegetation in an area stretching from Sabha in the west to the eastern limit of the survey area towards Ruwaishid; all sites were, as requested, north of the Ruwaishid-Mafraq road. Details of all sites visited are given in Appendix 1.

1.2.3 The Grid System

In the previous report it was proposed that the vegetation might be mapped on a grid system based on a square of dimensions 15 x 15 minutes. In practice this was found, as expected, to be far too large, and with the precision allowed by the Magellan was reduced to 5 x 5 minutes. The procedure we followed was to stop the vehicle at regular intervals where there was sufficient vegetation (approx. every 5km), or wherever vegetation was seen in areas of sparser cover; a reading was taken from the Magellan; and a list of species within a fifty metre radius compiled. Surveying stopped only when the supply of specially prepared work sheets was exhausted. The distribution of sites visited is shown in Map 1 and the grid squares visited are shown in Map 2. Coverage was inevitably uneven because of limited access for vehicles, and the problem in the eastern part of the region was exacerbated by heavy and prolonged rain which made many of the roads impassable.

1.2.4 Timing of the Visit

The dates selected for my visit to Jordan this year were based on those of last year. After adequate winter rains during 1991/2 there was a good Spring producing reasonable vegetation cover in the desert. In the hope that conditions would be similar this year, the same period was chosen. Unfortunately, though the winter rain had been adequate and the following Spring reasonably good, just before my arrival in Safawi temperatures in the area rose to 37°C and most of the vegetation in the desert was burnt off at an early stage of development and in many areas hardly any plants were to be seen. The best vegetation cover was found along the Syrian frontier in the cultivated areas, but the relevance of this vegetation to the survey in general is open to question. It was from this area that the vast majority of new records were made.