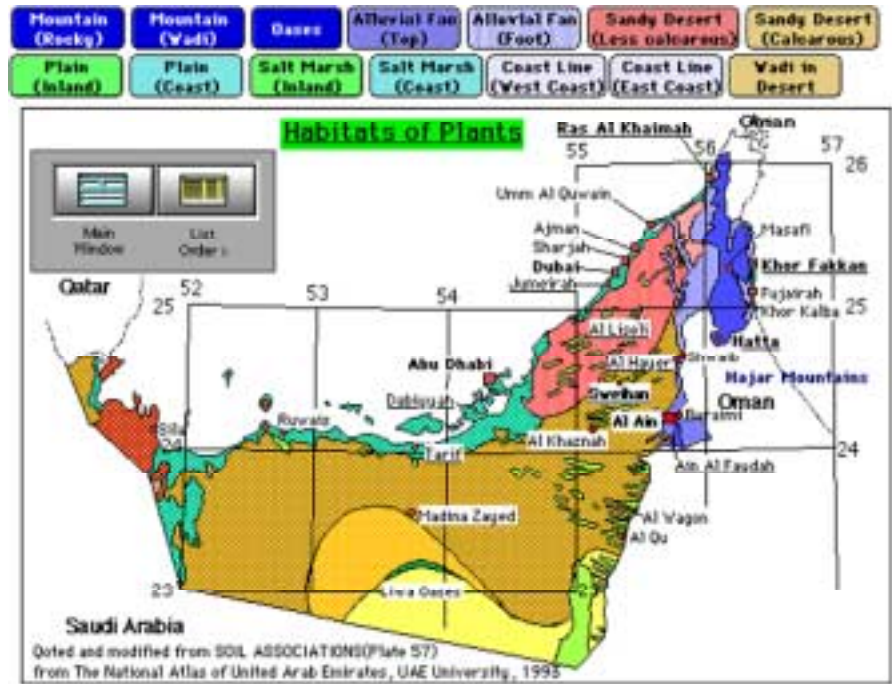


Miscellaneous notes upon the compilation of "Plants in UAE"

In the past there have been few facilities enabling one to conduct computer search for the plants that grow in the UAE. It is only recently that an encyclopaedia of plants in the UAE has been commissioned by the botanical garden of the University of UAE's Marine and Desert Environment Research Institute. Fortunately our task entailed working on the big theme of the introduction of salt resistant and arid climate resistant plants and facilitating computer search systems for such plants. We commenced field investigations from the end of 1994 in order to list plants in the UAE. At the same time, as we compiled the results of the investigation, we decided to construct a computer data base which can be used as a plant encyclopaedia by a wide range of people. The data base programme uses software called "FileMaker pro" (although it may have been more desirable to use "stand alone"), so that end users can easily add data whenever necessary.



We commenced field investigations from the end of 1994 in order to list plants in the UAE. At the same time, as we compiled the results of the investigation, we decided to construct a computer data base which can be used as a plant encyclopaedia by a wide range of people. The data base programme uses software called "FileMaker pro" (although it may have been more desirable to use "stand alone"), so that end users can easily add data whenever necessary.

As you may know, the UAE is extremely arid with an annual rainfall of 100-150 mm. Unless a certain level of rain falls during the cold season (between November and February), it is almost impossible to take reasonable photographs of plants, in particular grass species. However, we were extremely lucky, because from the beginning of 1996 to mid-March in the same year, the UAE had record amounts of rain, which enabled us to take pictures of grass samples in mountain areas, as well as in rocky and sandy desert areas. At this stage, the data base includes 158 species of plants (2 phylum, 3 classes, 25 orders and 39 families), and the end product is expected to detail around 180 species. During this work, it became apparent that photographs of particular plant habitats, satellite images of the area and rough vegetation maps were necessary. These images were therefore included in the data base so that people can browse through them.

To input images of plants in the data base, we used Nikon's film scanner. For photo retouch, Photoshop Ver.3 was used. Moreover, by adjusting resolution to 180dpi, one image takes up only a little over 400KB. Even so, the end product seems likely to become a data base of around 200MB. MO (Magnet-Optical) discs are used for storing the data, and a 230MB disc should be sufficient for the data base. We are planning to improve the contents and ease of utilisation of the data base, as and when we have critical input from people concerned. We are also considering the compilation of another data base containing the results of investigation into the growth of trees planted in the UAE's large scale afforestation project. In this data base we are hoping to include visual relativity between tree ages, variables regarding root diameters, canopy and height of trees, and various environmental factors, such as the characteristics of each afforestation area (which match plant habitat classifications in the aforementioned data base), water quality of irrigated water and salinity of soil. The provisionally titled "Plants in UAE" project is still in its infancy, however, please contact AAI if you are interested.