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BOOK REVIEW

Plant life of Sinai. In recently past years a team from the Hebrew University in Jerusalem carried out extensive field studies on the vegetation of Sinai. One of its members was Dr Avinoam Danin who has now blended his own extensive knowledge of the Negev and Judean deserts with that of the Sinai group. The result is a comprehensive, richly illustrated account* of this varied and surprisingly rich desert area.

After an extended introduction dealing with the climate, soils, rocks, man's influence and the protean adaptations shown by plants living in deserts, there are two main sections. The first deals with the vegetation and plant communities of the 19 somewhat arbitrary geomorphological districts into which Sinai is here divided. These range from the coastal plains of the Negev and the Mediterranean salt marshes to the Upper Sinai massif (up to 2640 m) and the small islands off the Gulf of Aqaba. Within each district, synoptic data on its extent, climate, and the number of included species precede the text, nicely complemented by a mixture of photographs (some in colour, and pasted down, some aerial, some satellite-linked), diagrams, maps and drawings. The second main section deals with a selection of interesting or important species and discusses their biological characteristics, local distribution (all mapped), chorotype, growth patterns, local names and uses. This contains much fascinating and often taxonomically relevant information, based on detailed and perceptive field work throughout the seasons. The species are here arranged in groups according to habitat or life-pattern, e.g. 'plants of loess soils', 'colonizing species', 'Sudanian trees', etc; for the general user, however, this means it is necessary to use the index to find your plant. Among the many interesting facets of this section, the longevity of some of these woody desert species is remarkable: a trunk of *Pistacia atlantica* 2–3 m in diameter; 200–300 year old shrubs of *Zygophyllum dumosum*; *Juniperus phoenicea* with 860 annual rings. There are 46 species covered in this section out of an estimated total of about 1300 species of phanerogams. Sadly, there is not a check-list of the Sinai flora, an addition which all SW Asiatic botanists would particularly have welcomed. The final chapter deals with useful plants and covers such topics as indicators of potable water, edible, medicinal and poisonous plants; also how to locate wells, ignite a fire with desert plants, make ropes, and good plants for mattresses.

As must already be evident there is a great mass of good information and interpretation in this highly readable book. Yet it is not one that is easy to categorize: parts read like a text-book, others have a popular slant, others are aimed at the specialist. There are also various peccadillos that should have been spotted and dealt with before publication. Where for instance is the 'illustrated key to the 200 most common trees, shrubs and semishrubs' mentioned on p. 9? Quite a number of typographical errors have slipped through the proof reading stage. Despite these criticisms this is a book that should be referred to often, not just by local botanists or specialists in this general area but by anyone with an interest in plants which thrive or survive under extreme conditions of heat and aridity.

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* Danin, Avinoam. *Desert vegetation of Israel and Sinai.* 148 pp, 28 × 22 cm, with 170 illustrations, diagrams, monochrome and colour photographs. 1983. Cana Publishing House, Jerusalem. [Partially based on Danin, A. 1977. The vegetation of the Negev. Sifriat Poalim & Yahdav—in Hebrew.] $28.75.