Fahn, A., Cutler, D.F.: **Xerophytes**. (Handbuch der Pflanzenanatomie, Spezieller Teil, Band XIII, Teil 3). - Gebrüder Borntraeger, Berlin-Stuttgart 1992. 176 pp. DEM 124.00.

"This book surveys current knowledge on the morphological and anatomical adaptations and survival strategies enabling plants to grow and complete their life cycles in arid, semi-arid and saline regions" - that is the first sentence of the preface to this volume and as to me, it defines very well the aim of the book. It appeared as the 13th volume, part 3, of the Handbook of Plant Anatomy, Special Part and was written by Prof. Abraham Fahn (Hebrew University, Jerusalem) and Dr. David F. Cutler (Royal Botanic Gardens, Kew, U.K.). Extensive literature data and plenty of own research of the authors are presented in the book.

First the concept of adaptation to environment is explained and the terms used are defined. Arid regions and their floras are characterized in short as well as various survival strategies of xerophytes (drought escaping; drought resisting: avoiding or tolerating plants). Anatomical xeromorphic characteristics in photosynthetizing organs (leaves), in stems and roots are described. Selected examples of *e.g.* grass leaves, succulent plants, cacti, CAM plants, C_4 plants, resurrection plants are shown. A special chapter of the book is devoted to adaptations to salinity. In the concluding remarks, xerophytes are divided into two main categories: *1*) leaf-xeromorphic xerophytes and *2*) axis-xeromorphic xerophytes. At the end of the book a list of more than 400 references and author, subject and plant indexes are added.

The book is well presented and well written. The frequent use of precise illustrations and micrographs from the light microscope and scanning electron microscope (90 figures) are important factors determining the value of the book. It appears to be aimed primarily at more established research workers or postgradual students in the field of plant anatomy and morphology as well as ecology and physiology.

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