

Pazourek, J., Votrubová, O.: **Atlas of Plant Anatomy**. (Series in Natural History, 3.) - PERES Publishers, Prague 1997. 447 pp. CZK 1925.00. ISBN 80-901691-2-0.

This book is written by two co-workers from the Department of Plant Physiology of Charles University, Faculty of Science in Prague, Prof. J. Pazourek and Dr. O. Votrubová. It contains a short text part (85 pp.) and 304 plates showing different plant structures on microphotographs.

The text part is a brief introduction to plant cytology, histology and organology including the primary and secondary structure of plant body and the structure of reproductive organs. The book is focused on the structure of higher seed plants. The text is illustrated by 81 very instructive drawings and is finished by a selection of important textbooks and a subject index which is also crosslinked with the following plates of microphotographs.

Much more voluminous and very valuable are the 304 plates of perfect black-and-white microphotographs showing the individual plant structures: the phases of cell division, plastids, starch grains, cell inclusions, details of cell wall thickening, meristematic and mature tissues, examples of tissue systems as epidermes with stomata and trichomes, vascular tissues, *etc.* It follows the structure of the main plant organs: the stem with leaves, the root and the reproductive organs including the structure of the embryo. For better orientation some of the most important microphotographs are confronted with simply drawings. Classical anatomical methods using fixation of plant material, embedding in paraffin and sectioning and staining, and also microrelief replicas of plant surfaces, and light microscopy were used as the source for getting the microphotographs.

The collection of the 304 plates of microphotographs is a unique atlas of plant structure fully able to compete with the books where new techniques as scanning electron microscopy, image analysis, immunofluorescence or confocal laser microscopy are used. There is only one important omission on the plates: bars as an indicators of magnification. Furthermore, on the drawing to P 6 the description of the "intercellular spaces" points to cells but not to intercellular spaces. The whole textbook is well-printed on glossy paper. This atlas appeared to be aimed primarily to pregraduate and postgraduate students and to all botanists who wanted to see the plants not only from "outside" but also from "inside".

I. TICHÁ (Prahá)