Dashek, W.V. (ed.): **Methods in Plant Electron Microscopy and Cytochemistry.** - Humana Press Inc., Totowa - New Jersey 2000. 300 pp. USD 89.50. ISNB 0-89603-589-1.

This book was designed for plant scientists as a collection of readily reproducible light and electron microscopical methods. The editor has brought together variety of contributing authors to cover the powerful techniques range from light microscope cytochemistry, auto-radiography, and immunocytochemistry, to recent developments in fluorescence, confocal, and dark-field microscopies. Highly contemporary ancillary techniques such as high-resolution radioautography, immunoelectron microscopy, X-ray analysis, as well as atomic force and scanning tunneling microscopies are included. The contributions come from active investigators who present methods and procedures within the framework of their own research projects. Unfortunately, the result is a rather unbalanced mixture with significant differences in the quality of the chapters.

The book is divided into 21 chapters. The first part of the book (*i.e.* from Chapter 1 to 8) covers light microscopic techniques that are currently available. The Chapters 9 to 12 are more focused on methods for isolation and characterization of plant cell organelles and proteins and one can wonder why they were included. The rest of the book (Chapter 13 to 20) is devoted to electron microscopic methods.

Each contribution contains introduction and list of references and most of them also detailed protocols and step by step procedures, which can be very useful. However, some of them are not easy to follow, because of chaotic arrangement into tables and typographical errors (*e.g.* Chapter 2). Those are typical particularly for contributions written by the editor himself (9 from 21 chapters).

One of the best chapters was written by March-Amegadzie (Chapter 20, The Use of Electron Microscopy in Molecular Biology). It includes useful, well-arranged protocols for DNA and chromatin visualization and immunoelectron microscopy.

The majority of chapters written by active researchers present a relatively up-to-date summary of methods used for investigation of their particular research tasks, and in some cases point out directions for future. In summary, it will be of most interest to researchers, from post-graduate students upwards, who have interest in study of plant cell biology. They can find here useful protocols for their own research.

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