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BOOK REVIEW

HALL, J. L. (ed.): *ELECTRON MICROSCOPY AND CYTOCHEMISTRY OF PLANT CELLS*. — Elsevier/North-Holland, Amsterdam 1978. 444 pp., US \$ 93.00, Dfl. 209.00, paperback Dfl. 95.00.

The editor of this book, Dr. Hall, is known to people interested in plant cell biology not only from his original papers but also as the co-author of an excellent book on biochemical plant cytology. If we now encounter a methodical manual which was initiated by Dr. Hall, we open it with certain demands. I can state with pleasure that the book fully satisfied my expectations. The intention of the editor is quite clear: to publish selected topics from EM cytochemistry with regard to the specificity of plant material. The materialization of the design depended on the work of the authors of particular chapters. I suppose that the editor was right in choosing J. C. Roland to deal with the problematics of selective demonstration of polysaccharides, R. B. Knox and A. E. Clarke to write the chapter on immunochemistry, R. F. M. van Stevenick and M. E. van Stevenick that on ion localization, L. V. Evans and M. E. Calow on autoradiography, B. A. Fineran on freeze-etching and A. W. Robards on EM scanning. The editor together with R. Sexton dealt with enzyme cytochemistry. As far as the scheme of the book is concerned, the principles of EM techniques could perhaps be described, with emphasis on new and less common procedures, or the necessary knowledge could simply be supposed. The authors of some chapters, especially Dr. Roland, would then have an easier position. Different readers will be interested in different topics. For my part, I always highly appreciate the figures reproduced here from the paper by Hall and Sexton (1972), in which the penetration of DAB into sections of different thickness is illustrated in the course of peroxidase and/or catalase demonstration. Perhaps some different details could be supplemented. The question of the effect of DMSO on the penetration of incubation medium components was also dealt with in other papers (*Histochemistry* **42** : 103, 1974). The method using thioacetic acid for esterase demonstration is simple but very capricious. More attention could be devoted to indigogenic methods (e.g. *Histochemistry* **53** : 79, 1977), etc. Thus, I can conclude my information by stating that owing to the work of both the editor and individual authors a really useful book is now available which should not be lacking at any laboratory interested in plant cell biology and in its applications.

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