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BOOK REVIEW

MOORE, T. C.: RESEARCH EXPERIENCES IN PLANT PHYSIOLOGY. A Laboratory Manual. Second Ed — Springer Verlag, New York—Heidelberg—Berlin 1981. 348 pp. Soft cover DM 45,—; approx. US $ 20.50.

Following the recent edition of Biochemistry and Physiology of Plant Hormones, which has proved to be a very successful textbook, prof. Thomas Moore, Oregon, is publishing this second updated edition of laboratory manual for students of plant physiology. Corresponding to the author's own interest the main emphasis is placed on growth and development of plants, but 28 presented exercises also cover water relations in plants, photosynthesis and photorespiration, plant membranes and mineral nutrition. Compared to the first edition, this manual also contains experiments on phytochrome, the Hill reaction of photosynthesis, leaf movements and measurement of leaf water potential.

Individual exercises contain introductory description of investigated problems, material and methods, list of references, list of required reagents and equipments, recommendation for scheduling, headings of laboratory protocols and finally a list of questions to be answered after finishing the experiment. The introduction contains a brief description of the chronology of major discoveries, the present state of knowledge and problems to be solved. The main part, Materials and Methods, is written in the manner used in research papers. This approach shifts the routine student experiments towards the research laboratory work and in many cases gives the student the feeling of a scientific adventure. The book is carefully edited, it contains necessary formulas, schemes of experiments, apparatus and plant material. Its size corresponds to the usual laboratory notebook and is arranged in such a way that the protocol pages can be separated and passed to the teacher for correction. What can be recommended for the next edition is the consistent use of SI units. The book is a great help for both the students and teachers of plant physiology. One can hope that a new supplemented edition will follow with the progress of plant science.

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