MERCY, S. T., KAKAR, S. N., VARGHESE, T. M.: Studies on nutritive requirements and preservation of pollen in *Cicer arietinum* and *C. soongaricum*. — In: MALIK, C. P. (ed.): Physiology of Sexual Reproduction in Flowering Plants. Pp. 21—26. Kalyani Publishers, New Delhi 1976.

MURASHIGE, T., SKOOG, F.: A revised medium for rapid growth and bio-assays with tobacco tissue culture. — Physiol. Plant. **15** : 473—497, 1962.

NITSCH, C., NORREEL, B.: Factors favouring the formation of androgenic embryos in anther culture. — In: SRB, A. M. (ed.): Gene, Enzymes and Populations. Vol. 2. Pp. 129—144. Plenum Press, New York 1972.

NITSCH, C., NORREEL, B.: Effet d'un choc thermique sur le pouvoir embryogène du pollen de *Datura innoxia* cultivé dans l'anthère ou isle de l'anthère. — Compt. rend. Acad. Sci. Paris Ser. D **276** : 303—306, 1973.

RAGHAVAN, V.: Role of generative cell in androgenesis in *Henbane*. — Science **191** : 388—389, 1976.

SANGWAN, R. S., NORREEL, B. S.: Induction of plants from pollen grains of *Petunia* cultured *in vitro*. — Nature **257** : 222—223, 1975.

SANGWAN, R. S., NORREEL, B. S.: Androgenic stimulatory factors in the isolated pollen grains culture of *Datura innoxia* MILL. — J. exp. Bot. **28** : 843—852, 1977.

SHARP, W. R., RASKIN, R. S., SOMMER, H. E.: The use of nurse culture in the development of haploid clones in tomato. — Planta **104** : 357—361, 1972.

SOPORY, S.: Development of embryoids in isolated pollen culture of dihaploid *Solanum tuberosum*. — Z. Pflanzenphysiol. **84** : 453—458, 1977.

SUNDERLAND, N.: Anther culture as a means of haploid induction. — In: KASHA, K. J. (ed.): Haploids in Higher Plants: Advances and Potential. Pp. 91—122. Guelph Univ., Guelph 1974.

SUNDERLAND, N., WICKS, F. M.: Cultivars of haploid plants from tobacco pollen. — J. exp. Bot. **22** : 213—226, 1971.

Figures are at the end of the issue.

BOOK REVIEW

BUSCHMANN, C., GRUMBACH, K.: PHYSIOLOGIE DER PHOTOSYNTHESE. — Springer-Verlag, Berlin—Heidelberg—New York—Tokyo 1985. Pp. 245. DM 34.—.

The book is surely one of the most remarkable textbooks devoted to the photosynthesis and it will be doubtless found useful not only by the students and their teachers but also by the experimental workers. It is introduced by three chapters: the first of them summarizes the basic laws of physical chemistry applied in this textbook, the second deals with the evolution, the cycles of carbon, oxygen, water and energy, the production of biomass *etc.*, and the third chapter describes the history of significant discoveries in photosynthetic research. The fourth chapter deals with the structure of cells of various plant types and especially with the ultrastructure of chloroplasts. The fifth chapter bringing a very informative overwiev of photosynthesis mechanisms, from the absorption of light to the production of photosynthates is very extensive and occupies almost half of the book. The photorespiration is evaluated in the sixth chapter. The following two chapters are devoted to the bacterial photosynthesis. The development of the photosynthetic apparatus is discussed in the ninth chapter. Chapter ten illustrates a close relationship between the photosynthesis and the environmental factors. It is followed by the evaluation of the effect of anthropogenic factors. Chapter twelve shows the possibilities of utilizing photosynthesis for the production of biomass and energy, and the last small chapter deals with the symbiosis.

From this brief survey it is evident that in this textbook there is a very good equilibrium between the biophysical and biochemical principles and the physiological and ecological aspects. Only the introductory part seems to be rather simplified. It is also to be appreciate that each chapter contains the manual of methods. The book has many instructived figures (106) which facilitates the orientation and understanding of the text.

As the book reflects the present state of research in this important field it will find place among the good textbooks of biology.

JANA POSPÍŠILOVÁ (*Praha*)