

integrated correlative relations that exist when a seed germinates to a seedling and the lack of such integrated correlative steps in embryoid to plantlet transition.

Acknowledgements

The financial support in the form of Junior Research Fellowship to one of us (A.K.K.) by the UGC-Centre of Advanced Study in Botany is gratefully acknowledged.

References

- ABOU-ZEID, A., NEUMANN, K. H.: Preliminary investigations on the influence of cotyledons on the development of cherry embryos (*Prunus avium* L.). — *Z. Pflanzenphysiol.* **69** : 299—305, 1973.
- AMMIRATO, P. V.: Some effects of abscisic acid on the development of embryos from caraway cells in suspension cultures. — *Amer. J. Bot.* **60** : 22—23, 1973.
- AUNG, L. H.: The nature of root-promoting substance in *Lycopersicon esculentum* seedlings. — *Physiol. Plant.* **26** : 306—309, 1972.
- International Seed Testing Association: International rules of seed testing. *Proc. Int. Seed Test. Ass.* **31** : 1—152, 1966.
- JENSEN, W. A.: *Botanical Histochemistry*. — W. H. Freeman and Co., San Francisco—London 1962.
- KAMIASKA, S.: Requirement of cotyledons for gibberellic acid induced hypocotyl elongation in lettuce seedlings. Isolation of the cotyledon factor active in enhancing the effect of gibberellic acid. — *Plant Cell Physiol.* **14** : 747—755, 1973.
- KAVATHEKAR, A. K.: Studies on Origin, Development and Dormancy of Embryoids in *Eschscholzia californica*. — Ph. D. Thesis, Univ. Delhi, 1974.
- KAVATHEKAR, A. K., GANAPATHY, P. S.: Embryoid differentiation in *Eschscholzia californica*. — *Curr. Sci.* **42** : 671—673, 1973.
- KAVATHEKAR, A. K., GANAPATHY, P. S., JOHRI, B. M.: Chilling induces development of embryoids into plantlets in *Eschscholzia*. — *Z. Pflanzenphysiol.* **81** : 358—363, 1977.
- KHAN, A. A.: Primary, preventive and permissive roles of hormones in plant systems. — *Bot. Rev.* **41** : 391—420, 1975.
- KONAR, R. N., NATARAJA, K.: Morphogenesis of isolated floral buds of *Ranunculus sceleratus* L. *in vitro*. — *Acta bot. neerl.* **18** : 680—699, 1969.
- NITSCH J. P., NITSCH, C.: Haploid plants from pollen grains. — *Science* **163** : 85—87, 1969.
- STEWART, F. C.: The Croonian Lecture, 1969. From cultured cells to whole plants: the induction and control of their growth and morphogenesis. — *Proc. roy. Soc. London Ser. B* **175** : 1—31, 1970.
- THEVENOT, C., COME, D.: Germination des embryons de pommier (*Pyrus malus*) dormants amputés d'une partie plus ou moins importante de leurs cotyledons. — *Compt. rend. Acad. Sci. (Paris) Sér. D* **272** : 1240—1243, 1973.

BOOK REVIEW

FORD, E. B.: *Genetics and Adaptation*. — Studies in Biology No. 69, Edward Arnold (Publishers) Ltd., London 1977. 58 pp. £ 1.30.

This new book in the popular series is characterized by two very valuable approaches. First, it is the selection of themes usually omitted from the textbooks of basic genetics (*e.g.* principles of polymorphism and super-genes, mutation rate and the factors influencing it). Second, a large amount of facts and data, from both plant and animal kingdom, with which the content of some chapters is documented (Isolation and Adaptation, Selection). If it was the author's intention to evoke in the reader admiration of the dynamics, continuity and multiplicity of evolution processes, then he was successful. The chapters demonstrating the active contribution of mankind and of his activity (industrialization, exploitation of minerals) in producing selection pressures against plant species in nature (Pollution, Melanism, Genetic isolation and the flora of mine tips) belong among the most interesting. The only drawback of the book from the point of view of popularization is its assignment to readers acquainted with the principles of genetics; inclusion of a brief terminological vocabulary would be a positive contribution in this respect.

Z. OPATRŇÝ (*Praha*)