Osborne, D. J., Jackson, M. B. (ed.): Cell Separation in Plants. Physiology, Biochemistry and Molecular Biology. NATO ASI Series, Ser. H: Cell Biology, Vol. 35. Springer Verlag, Berlin-Heidelberg-New York-London-Paris-Tokyo-Hong Kong 1989. 449 pp., Hardcover DM 248.

The book contains the proceedings of the NATO Advanced Research Workshop held within the activities of the NATO Special Programme on Cell to Cell Signals in Plants and Animals. It is already the 23rd volume dealing with this broad topic. Although the title sounds relatively specialized, the book covers a wide area of plant physiology and molecular biology. It is divided into 7 chapters: Gene Regulation and Gene Expression, Cell Wall and Enzyme Changes, Pathogenic Cell Separation, Signal Specificity and Target Cell Status, Cell Separation in Development, Crop Production and Harvesting, Additional Contributions. The most discussed problems are regulation of ripening, senescence and abscission, covering all the aspects of these problems: biochemistry of these processes (role of polygalacturonase, changes in cell wall structure), role and mode of action of plant hormones (in the centre of attention is ethylene, of course), changes in gene expression and also some practical aspects (fruit drop, post-harvest physiology). Several papers deal with special signals as signals in trafficking of lysosomal and extracellular hydrolases, short-chain fatty acids in pollination-induced corolle abscission, signals between plant and bacterial cells. The individual chapters are written mostly by prominent scientists in the field, as e.g. editors themselves, D. Grierson, R. E. Christoffersen, A. K. Mattoo, H. Imaseki, J. A. Roberts, D. J. Morré, D. T. A. Lamport, J. Bruinsma, Y. Masuda, M. T. Esquerré-Tugayé, R. Goren, A. H. Halevy, E. C. Cocking, to name several of them.
The book covers all aspects of the problems of cell separation in plants studied at all levels with the use of the most modern and reliable techniques. It is an excellent book which can be recommended to all workers in the respective fields, to all plant hormonologists and physiologists.

                                                                                      Ivana Macháčková (Praha)

Ming, D. W., Henniger, D. L.: Lunar Base Agriculture: Soils for Plant Growth. American Society of Agronomy, Crop Science Society of America, Soil Society of America. Madison, Wisconsin 1989. 255 pp., U.S. $ 24.−.

This publication represents a collection of papers by soil and plant scientists, along with experts in planetary sciences, concerned with the future role of agriculture at a lunar base. More than 70 scientists representing more than 15 universities, 6 federal agencies and 8 industries were invited to a NASA-sponsored workshop held 1 to 2 June 1987 in Houston.
    The goal was to identify a course of research dealing with the interaction of lunar resources and agricultural systems. This publication contains section (18 chapters) on (i) lunar base scenarios, (ii) the lunar environment, (iii) chemical and physical considerations for a lunar-derived soil, (iv) biological considerations for a lunar-derived soil, (v) current research in Controlled Ecological Life Support Systems (CELSS), and (vi) future research needs for plant growth in CELSS, Central to the CELSS concept is the Plant Growth Unit. The CELSS Plant Growth Chamber constructions is described in Chapters 11 and 12.
    Whether or not plants will be grown on the Moon has not been answered: however, it is a possible scenario that will continue to be discussed by the planetary community. Consequently this book will be a major source of information for many years to those seeking ways to produce food in space, particularly if the Moon serves as an out post to launch human exploration to our inner solar system.

                                                                                      L. Fojtík (Praha)

Erratum
Evans, J. R., von Caemmerer, S., Adams, W. W., III (ed.): Ecology of Photosynthesis in Sun and Shade. − CSIRO Editorial Services Unit, Melbourne 1988. − Biol. Plant. 32 (6): 474, 1990.
The correct price of the book is US $ 50.−
We apologize to the readers for this inconvenience.