SCHAPER, U., SEEMÜLLER, E.: Condition of the phloem and the persistence of mycoplasma-like organisms associated with apple proliferation and pear decline. — Phytopathology **72** : 736—742, 1982.

SLOGTEREN, D. H. M. VAN: Mycoplasmas in bulb crops, particularly in gladiolus and hyacinth. — Antonie van Leeuwenhoek **40** : 314, 1974.

SMITH, F. F., BRIERLEY, P.: Grassy-top symptoms in gladiolus reproduced by experimental inoculation with western aster yellows virus. — Plant Dis. Rep. **37** : 547—551, 1953.

ULRYCHOVÁ, M.: The effect of mycoplasma infection on the content of the steroid alkaloid tomatine in tomato plants. — Plant Virology. Proc. 8th Conf. Czech. Plant Virologists (Bratislava) **1976** : 469—473, 1980.

ULRYCHOVÁ, M.: [Changes in solanin distribution in the potato plant infected with a mycoplasmal disease — potato witches' broom:] In Czech. — In: PAULECH, C., ZÁLETOVÁ, E. (ed.): Patofyziológia Rastlin. Pp. 261—268. Bratislava 1985.

ULRYCHOVÁ, M., JOKEŠ, M., KYNČLOVÁ, J.: Mycoplasma-like organisms in *Lupinus* hybrids showing witches' broom symptoms. — Biol. Plant. **22** : 363—365, 1980.

Figures are at the end of the issue.

BOOK REVIEW

LOBBAN, C. S., HARRISON, P. J., DUNCAN, M. J.: THE PHYSIOLOGICAL ECOLOGY OF SEAWEEDS. — Cambridge University Press, Cambridge—London—New York—New Rochelle—Melbourne—Sydney 1985. 242 pp. £ 30.00, US $ 44.00.

The monograph written by three marine botanists from Canadian universities deals with all aspects of the life of aquatic macroalgae. The monograph consists of eleven chapters. Following a brief introduction, Chapter 2 deals with photosynthetic processes, mainly electron transport, photophosphorylation, and gas exchange, and their relation to respiration. The composition of the photosynthetic apparatus and adaptation to irradiance and chromatic adaptation are included. Attention is also given to the methods of measuring radiation (including conversion factors for illuminance in lux and quantum irradiance) as well as gas exchange. Carbon fixation and catabolic pathways are dealt with in Chapter 7 together with storage of polysaccharides and formation of secondary metabolites. The requirements for, and effects of temperature, salinity and mineral nutrition are explained in Chapters 3, 4 and 6, respectively. Chapter 5 is on water motion in the seas (waves, currents) and its effects on macroalgae translocation, gas exchange, nutrient uptake, spore settling, *etc.* The very important problem of contemporary ecology — pollution — is analyzed in Chapter 8 (thermal pollution, heavy metals, oil, herbicides, insecticides and industrial chemicals, wastes, *etc.*). Cell and thalus morphogenesis, reproduction, and wound healing are the topics of Chapter 10. Two special problems of community biology — seashore communities and maricultures — are evaluated in Chapters 9 and 11, respectively. They explain the questions of zonation, diurnal and seasonal cycles, submergence and emergence, dehydration and rehydration, grazing, competition, mass cultivation of *Porphyra* and other seaweeds as sources of food, fodder, fertilizer, and chemicals, *etc.*

The text is based on a very comprehensive review of the recent literature (*ca.* 1100 references, mostly to papers not older than 15 years). There is also a good index with subject and plant genera items.

The reviewed monograph will certainly be popular as a textbook among students and young researchers in marine biology. From this point of view, unification of dimensions (rates per s, not per minute or hour), units (do not use Einstein, litre, specially when abbreviated as L), and terms (why "compensation point", *etc.*) would be desirable.

Z. ŠESTÁK (*Praha*)