

- ULRICH, B., OBERLÄNDER, H. E.: Theoretische Betrachtung über die enzymkinetische Interpretation der Ionenaufnahme durch Pflanzen. — *Plant Soil* 21 : 26—36, 1964.
- VOSE, P. B.: Varietal differences in plant nutrition. — *Herbage Abstr.* 33 : 1—13, 1963.
- WIERSUM, L. K.: IV. Soil water content in relation to nutrient uptake by the plant. — *Onderzoek TNO Verlag Meded.* 15 : 74—89, 1969.

EVA PALÁTOVÁ, Z. LAŠTŮVKA, Katedra biologie rostlin, přírodovědecká fakulta, Universita J. E. Purkyně, Brno: Růst kukuřice v proudícím mediu s různými dávkami železa. — *Biol. Plant.* 16 : 241—249, 1974.

Průtok živného roztoku průkazně stimuluje růst rostlin kukuřice a pozitivně ovlivňuje absorpci dusíku, draslíku a fosforu. Zvláště průkazně se zvyšuje obsah fosforu v nadzemních částech a v kořenech rostlin, jeho zapojení do organických sloučenin je však značně sníženo. V rostlinách z průtoku je ovlivněna distribuce železa; větší část zůstává v kořenech. V nadzemních částech značně stoupá poměr P/Fe, v celé rostlině se mění poměr iontů v neprospěch dusíku, draslíku a železa a je při intenzivnější produkci sušiny inhibována syntéza chlorofylu.

BOOK REVIEWS

PRÁT, S., DVOŘÁKOVÁ, J., BASLEROVÁ, M.: *Culture of Algae in Various Media*. — Academia, Publishing House of the Czechoslovak Academy of Sciences, Prague 1972. 119 pp.

This monograph is devoted to the peculiarities of autotrophic algae growth physiology in axenic culture. The diversity of species (120) from 44 genera are considered including such popular objects as *Chlorella*, *Chlamydomonas*, *Coccomyxa* and others. Growing algae on six media permitted to demonstrate the stimulation and inhibition of cell multiplications after the addition of microelements, soil decoct (1 %), humic acids (0.02 %), yeast decoct (8 %) and glucose (1 %). It was expected to find the stimulation effect of all complex organic supplements because they are natural components of habitats of the algae and of glucose (as an intermediate of photosynthesis). The data on the inhibitory effects of these organic matter yield a very valuable information to those who are concerned with the metabolism of carbon, nitrogen and other organogenic elements. The algal strains sensitive to various organic substance are good models for physiological studies. The book contains very valuable data about condition of culturing algae in laboratory and they are very useful not only for plant physiology workers, but also for botanists and microbiologists interested in plant biochemistry (especially in photosynthesis).

K. KVITKO (*Leningrad*)

NILSSON, S. (Chief ed.): *World Pollen and Spore Flora*. — The Almquist & Wiksell Periodical Company, Stockholm. 2 issues per year, each of approximately 16 pages; one year subscription price: Sw. kr. 50.

The initiation of this series of spore and pollen monographs was stimulated by a great need of having comprehensive palynological descriptions of plant families, expressed on several international sessions of palynologists. It is published under the auspices of The Collegium Palynologicum Scandinavicum as the continuation of the *World Pollen Flora*, edited by Professor G. ERDTMAN.

The two issues which appeared in 1973 deal with families *Fouquieriaceae* (HENRICKSON) and *Menyanthaceae* (NILSSON). The morphology of pollen is described in detail and is illustrated with excellent photon and electron micrographs. The descriptions are commented from phylogenetical and taxonomical point of view.

The *World Pollen and Spore Flora* will certainly be welcomed by scientists of various areas of research, especially by investigators concerned with plant taxonomy, paleobotany, geology, ecology, melittopalynology, and aerobiology.

J. TUPÝ (*Praha*)