Book Reviews

Folia Dendrologica. Vol. 6
Bratislava, Vydavatelstvo Slovenskej Akadémie Vied 1979. 180 pp. soft bound Kcs 20.00.
The volume opens with an Address honoring František Benčat on the occasion of his 50th birthday, in Slovakian, Russian, German and English. The papers included are appropriate to his interests as one of Czechoslovakia's leading dendrologists. One discusses the observed and theoretical adaptation of *Paulownia tomentosa* to Slovakia, and a second describes native populations of *Betula pubescens*. Two papers describe morphological studies: one is general and methodological; the other is specific to stem-bark of *Quercus cerris*. Physiological studies of *Pinus sylvestris* pollen extracts, of endogenous gibberellins in seeds of *Prunus laurocerasus* and of leaf moisture-content in a *Quercus-Carpinus-Acer* stand are the topics of three papers. The eighth paper explores inter-specific compatibility in *Salix*. All except one of these have summaries in Russian, German and English and all except one is in Slovakian. The volume concludes with four honorific articles, plus seven book reviews. M. Vidakovic; W.J. Libby, Zagreb

Gunther, F.A., Gunther, J. (eds.): Residue Reviews. Residues of Pesticides and Other Contaminants in the Total Environment, Vol. 72.
Berlin-Heidelberg-New York: Springer 1979. 154 pp., many figs., 22 tabs. Hard bound DM 39,50.
The paper 'Influence of pesticides on the soil algal flora' deals mainly with herbicides as inhibitors of photosynthesis or as inhibitors not primarily involved with photosynthesis. In vitro studies have also shown that other pesticides influence soil algae, e.g. fungicides and insecticides. The use of algae in pesticide bioassays is also reviewed. In the second part, 'Recent state of lindane metabolism' by R. Engst, R.M. Macholz and M. Kujawa, the metabolism as well as the oxidative transformation and conjugation of lindane and its metabolites is discussed. Further metabolic degradation schemes of such potential lindane metabolites as polychlorophenols, polychlorobenzenes and polychlorocyclohexenes and the significance of gamma-pentachlorocyclohexene as a lindane metabolite are given.

Two papers of Vol. 72 are dedicated to the environmental aspects of mercury and lead. D. Taylor comprises in his paper 'A review of the lethal and sublethal effects of mercury on aquatic life' the extensive literature of 100 papers published between 1937 and 1976. Biological effects of solutions of Hg compounds on marine and freshwater animals and factors affecting the toxicity of Hg in natural waters, both organic Hg and organic Hg compounds, are discussed (2 tables contain animal species and Hg concentration). Health effects caused by exposure to Hg via ingestion are given: lethal effects on aquatic life appear at concentrations of > 10, sublethal at > 3 for inorganic and > 0,1 μg/liter for organic Hg.

The review 'Organolead compounds: environmental health aspects' by P. Grandjean and T. Nielsen is dedicated to the problem of organolead compound production and to pollution by these compounds. There have been no adequate regulations eliminating environmental health hazards from these compounds. Environmental exposure to organolead is currently under debate, and the authors were asked by the Swedish EPA to prepare this review, updated to 1977. The compounds included in the survey were di- and trimethyl and -ethyl lead chlorides and tetramethyl- and ethyllead. The following parameters were studied: sources and measurement of pollution, fate of R_4Pb in the atmosphere, toxicokinetics, toxic effects and mechanisms (acute, neurological and neuropathological, mutagenic, cancerogenic and teratogenic effects).
W. Dedek, Leipzig

Harris, H.; Hirschhorn, K. (eds.): Advances in Human Genetics. Vol. 9.
New York, London: Plenum Press 1979. 379 pp., 34 figs., 22 tabs. Hard bound £ 35.00.
This volume contains five articles of high quality. The chapter by Harnden and Taylor on 'Chromosomes and Neoplasia' (and addenda) reviews in a clear arrangement 369 articles and brings the reader up to date on diagnostic, prognostic and etiologic aspects of cytogenetics in cancer. The second chapter contains three articles: one by Opitz on 'Terminological and Epistemological Considerations of Human Malformations'; one by Herrmann on 'Patient Evaluation, Delineation and Nosology of Developmental Defects: an overview', and one by Pettersen et al. on 'Anatomical Phenotypes in Human Aneuploidy'. These three articles are no critical reviews, but a theoretical discussion, a methodological evaluation and an example study, respectively. In chapter three Adinolfi presents the many and exciting aspects of 'Human Alphafetoprotein 1956-1978' research. Hanash and Rucknagel review in chapter four (and addenda) 'Genetic Mechanisms contributing to the Expression of the Human Hemoglobin loci'. This article clearly exemplifies the hemoglobin studies as a paradigm in genetics. Erbe's review on 'Genetic Aspects of Folate Metabolism' (chapter 5 and addenda) illustrates the expansion of these studies from hematology into neurology and basic cell metabolism.

The editors of these series are advised to speed up the publication so that no addenda are needed and to bring the references of the different articles into line. S.J. Geerts, Nijmegen