

in plant tissue cultures is discussed by F. DiCasmio and G. H. M. Towers. Manipulation with and easy control of chemical composition of the nutrient media and of other conditions of cultivation are unique advantages of tissue cultures. Secondary metabolites produced *in vitro* include some compounds which have not been found in respective intact plants. Temperature stress and its relation to the membrane lipid modification which involves accumulation of unsaturated lipid fraction is described by M. N. Christiansen, and the adaptation of *Gossypium* to pests by A. A. Bell. Slightly out of scope of this volume is the chapter on bioregulation of synthesis of plant constituents, isoprenoid compounds in particular. Production of resins by arid-adapted plants is one of many mechanisms of plant adaptation to heat and water-deficiency stresses. J. Hofman *et al.* discuss this problem using the tribe of *Asteraceae* as example, having in mind that resins represent a potential intermediates for chemical industry. A similar point of view presents J. Gershonzon in the closing chapter dealing with changes in the levels of plant secondary metabolites under water and nutrient stress.

Most of the chapters of this interesting book deal with very specialized topics. This makes the book interesting especially to advanced students and researchers in plant physiology, biochemistry, genetics and ecology. They will find there up-to-date information and original ideas which can be used in plant biotechnology, especially in tissue cultures. For easy orientation the book contains species and subject indexes and full text references.

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WALTER, H., BRECKLE, S.-W.: ÖKOLOGIE DER ERDE, BAND 2. SPEZIELLE ÖKOLOGIE DER TROPISCHEN UND SUBTROPISCHEN ZONEN. — Gustav Fischer Verlag, Stuttgart 1984. 461 pp., 330 figs. DM 48,—.

The second of the three volumes of the book *Ökologie der Erde* is devoted to the terrestrial ecosystems in the tropical and subtropical zones of the Earth.

The conception of the work issues from modern ecosystem analyses of biomes of the individual zones (incl. the altitude zonation and azonal biomes) and from the interrelations between the system components (producers, consumers, destroyers) documented by a number of new interesting data. The biome environments are characterized mainly by macro- (or micro-) climatic and soil conditions. Attention is naturally centred on the vegetation, with emphasis on its functional, morphologic-anatomical adaptations to the environment. Information on the water relations, transpiration, photosynthesis and production of plants is included. Within each climatic zone an area is chosen, which is analysed in detail and serves as an example of the ecological pattern of the whole zone.

Although some data and figures are known from the earlier books of prof. Walter, their use and presentation of the matter is new and enriched by numerous valuable results of field measurements. The individual chapters will be appreciated for assembled quantitative data, *e.g.* concerning transpiration or production of tropical and subtropical plants, which characterize the biome types most adequately. Although there is a conversion table of old to SI units in the Appendix, the SI units are not used consistently in the text.

The book is again written with clarity and pedagogical explicitness, so characteristic of the first author, and an abundance of thought-provoking ideas, as well. In the period of "ecological biome" the book, in presenting serious information and considerations, will successfully outweigh the heaps of publications that deal with ecological problems on a superficial and often utilitarian level.

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ERRATA

to the paper by S. STROTHER, R. VATTA, *Biol. Plant.* **28** (3) : 211–218, 1986; p. 212. — Paragraph Catalase Activity: For (2000–4000 mg) read (200–400 mg), and

to the paper by K. AULIO, *Biol. Plant.* **28** (3) : 234–236, 1986; p. 235. — Caption to Table 1 : For X.E. read S. E.

We apologize to our authors and readers for this inconvenience.