

Walker, D.: **Energy, Plants and Man.** - Packard Publishing/Oxygraphics, Brighton, 1992. 277 pp., Softcover £ 15.95. ISBN 1 870232 05 4

The author of the book is a former director of the Robert Hill Institute and professor at the University of Sheffield. Since both the institutions are worldwide famous for the research of photosynthesis the book reviewed deals mostly with this fascinating process. The book is designed as a textbook. The introductory part (Chapters 1, 2) gives some basic information on solar energy incident on the Earths' vegetation and the mechanism of the fixation of atmospheric carbon into organic compounds is discussed in details. Following book part (Chapters 3, 4) focuses on the energy capture of photons by the light-harvesting complexes of photosystem 2 and the following processes of electron transport *via* the electron carriers in the thylakoid membrane of the chloroplasts. Structure and function of the carriers is described and well documented by numerous schemes and figures. Chapters 5 and 6 are devoted to the biochemical part of photosynthesis and photosynthetic efficiency at the level of single plant and a stand. Last but not least (Chapters 7 - 9) the attention is focused to the most important aspects of global changes, *i.e.* atmosphere warming, elevated atmospheric CO₂ concentration, increased portion of UV-B radiation incident on the Earth surface, toxic pollutants in the air, ozone layer depletion, and their observed or predicted interactions with plants. Finally, some predictions of the Earths' natural resources utilization and world energy requirements in future are given.

Formal design of the book is, in a positive sense of the word, far from that of textbooks as we know them. A readers attention would probably be caught by numerous handdrawings giving the analogies of productional processes and natural phenomenons to technical world and daily life. They make the understanding of some terms and complex processes extremely easy. The handdrawings sometimes have a satiric background or simply make jokes but always hit the most substance of the item being explained. The text is written in very simple but precise language, free of scientific jargon. Thus, the book can be followed by non-professionals in photosynthesis and appeals to any biologist. There are also numerous crossreferences in the text and a proportional subject index is provided. The book can be recommended to students and specialists in the fields of photosynthesis and plant production.

M. BARTÁK (*Brno*)