
Book reviews

Brücher, H.: Die sieben Säulen der Welternährung. Herkunft, Nutzung und Zukunft unserer wichtigsten Nährpflanzen. Herausgegeben von der Senckenbergischen Naturforschenden Gesellschaft zu Frankfurt. Senckenberg-Buch 59. Frankfurt/Main: W. Kramer 1983. 208 pp., 38 figs. Hard bound DM 28,-.

More and more scientists are becoming involved in the problem of providing food for the world's population. Geneticists and plant breeders knew earlier than most others that only a limited number of species contribute to the increasing need of food. There are 7 basic worldwide food producers: wheat, rice, corn, potato, manioke, sugar-cane and -beet, and soja. This means that man's food base is very small, and, more important, sensitive to such environmental interferences as weather, pests and plagues. This results in permanent chemical warfare in order to prevent setbacks in man's food provision. All these aspects, with special emphasis directed towards the "7 columns of world nourishment", are described by Heinz Brücher. He knows what he is talking about, being in charge of a breeding institute in Argentina. In a way this book is a supplement to his earlier one on tropical crops. This time, however, his line is more clear: future prospects of various crops are treated in a fascinating way. He also points out the disproportionate distribution of food in the world. This final chapter is especially worth reading. Herein he discusses positive and negative factors in world food production, the "green revolution", as well as world population growth as a factor, which is up to now out of control. In a way it is a book directed not only to specialists but also to interested laymen. Breeders will also be able to see their daily work placed in a broader context.

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Tsukada, Y. (ed.): Genetic Approaches to Developmental Neurobiology. Berlin Heidelberg New York: Springer; Tokyo: University of Tokyo Press 1982. XIII + 269 pp., 118 figs., 38 tabs. Hard bound \$ 38.40.

This book is a collection of nineteen research papers, most of which are concluded by a discussion among the contributors, presented at a symposium held in Tokyo in 1981. Japanese investigators formed a large majority among the participants. The book deals with developmental processes pertaining to the nervous system and with the influences of genes on its differentiation in mammals, with a heavy emphasis on mice as models for human pathological conditions. Practically all chapters are good reading. Part I is concerned with embryonic cell proliferation and lineage and with in vitro fertilization and culture of oocytes. Part II concentrates on mechanisms of early morphogenesis, cell adhesion, teratocarcinogenesis, and chimerism. Part III consists largely of analyses of numerous neuromuscular mutants, mainly in mice, and studies of earliest gene action. The publisher did a fine job. A very weak point of the book is that a subject index is lacking.

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