

Book Reviews

Lamy, M.: *Génétique Médicale*, 2. Ed.
Paris: Masson 1975. 280 pp., 129 figs., 32 tabs.
Bound 98 frs.

This is a comprehensive textbook covering and partially exceeding all topics in the field of medical genetics. The scope reaches from the molecular biology of genetic information and the pathology of inheritance to population genetics, genetic counselling and therapy of genetic defects. The book is completed by an appendix on statistics and a glossary of genetic terms. It is intended to provide the theoretical background of each of the various types of genetically determined disease. To realize these aims within a rather small volume implies that this textbook must remain fairly elementary. Only a selection of standard examples is treated.

In a historical retrospect first descriptions and the older literature are carefully reviewed. In this rapidly expanding field, however, a book will already be out of date at its publication. This is true also with the present work, though many of the paradigmatic models maintain their value. But even with regard to these inherent difficulties, more recent knowledge is not adequately included, e.g., within the cytogenetics chapters, the differential banding patterns of chromosomes and the current nomenclature are hardly used. Trisomy 13 and the Ph¹-chromosome are not yet identified. Among the chromosomal disorders, only the longer established and more frequent ones are mentioned, the great number of in the meantime well-defined syndromes based on structural aberrations is not even mentioned. Gene mapping is only briefly touched on, the human gene map presented is rather obsolete. In various of the genetically determined errors of metabolism, the basic defect, though already known at that time, is not marked. Corresponding to this, a list of the prenatally detectable metabolic errors is rather incomplete.

In spite of these restrictions, the book presents a lucid survey on all relevant special branches of medical genetics and allows for a comprehensive orientation in a field which gains increasing significance within clinical medicine. Orientation is facilitated by a great number of tables, graphs and figures. Particular mention should be given to a tabular synopsis of practically the entire pathology of inheritance of man which, however, again can not be completely up to date. The book is handy and easily accessible for quick orientation. It is to be hoped that it sees another edition which covers the recent state of knowledge more extensively.

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Die Kulturpflanze. Mitteilungen aus dem Zentralinstitut für Genetik und Kulturpflanzenforschung Gatersleben der Akademie der Wissenschaften der DDR, Vol. XXIV.
Berlin: Akademie-Verlag 1976. 392 pp., 87 figs., 38 tabs. Bound DM 70,--

The new volume of the famous annual offers again the splendid spectrum of applied biological research carried out at the Institute of Genetics and Crop Research of the Academy of the DDR at Gatersleben. Even though all the original papers are written in German (each provided with a summary in English and Russian), they give informative insight into the all-round research activities, completed by short lists of publications, seminars of the collaborators elsewhere and conferences held at the institute. All this demonstrates the world scope of an institution, which was founded shortly after the world war starting from nothing. Except for two papers on algae from the meritorious managing editor, all the contributions are devoted to applied biology, that is, fundamental aspects of productivity (three articles on rice, others on *Sorghum*, rye, wheat, forage grasses, squash). A broad report on a botanical expedition through Czechoslovakia for the collection of indigenous land races of cultivated plants should be mentioned, because during this trip primitive types or relict cultigens from *Triticum dicocco*, *Avena nuda*, *Hordeum vulgare* with naked grains, *Secale cereale* var. 'multicaule', *Papaver somniferum* with small shattering capsules, *Cicer arietinum*, *Lythyrus sativus* and *Carthamus tinctorius* could be collected. The conclusion of this collection trip is that the mountainous areas of Slovakia can be considered an important refugial region for indigenous taxa of many cultivated plants which are interesting for breeding purposes. Two technical papers refer to the stomatal aperture and to the electrical conductivity test for the measuring of seed viability. The diversity of the volume can also be demonstrated by pointing out a paper which presents a model of the oxygen dependence of photosynthetic gas exchange in C₃-plants. A bit out of scope is the interesting list of 55 cultivated cacti with detailed description and key of determination, as well as notes on cultivation and utilization as medical plants.

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