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**Book Reviews**


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**Green, M.C.: Genetic Variants and Strains of the Laboratory Mouse.** Stuttgart, New York: G. Fischer Verlag 1981. 476 pp., 7 figs. Hard bound DM 240.-.

This book provides the reader with an up-to-date catalog of genetic material of the laboratory mouse available at the main breeding centers to researchers in the biological and medical sciences. It is sponsored by the International Committee on Standardized Genetic Nomenclature for Mice.

The material is presented in three sections: The first one deals with mutant genes and polymorphic loci, including chapters on rules and guidelines for gene nomenclature, a catalog of mutant genes and polymorphic loci, a linkage map, and a table of published recombination percentages. Some 850 genes and loci are listed in a table according to their phenotypic effects. This is followed by an alphabetical catalog of the genes giving information about the function of each of the known alleles. A list of relevant references follows the description of each gene.

A second section of the book deals with chromosomal variants, including chapters on rules for nomenclature of chromosome anomalies, standard normal chromosomes as defined by standard idiogram, as well as the standard Q-banded, G-banded, and pachytene karyotype. The chapter on chromosomal variants contains an exhaustive list and description of reciprocal translocations, Robertsonian translocations, insertions, and inversions. These same chromosome rearrangements are also shown in well-illustrated chromosome maps.

The third section of the book is devoted to inbred strains and includes chapters on rules of nomenclature, a listing of inbred strains, as well as a catalog of the distribution of 150 polymorphic variants in 80 inbred strains. This section also has chapters on recombinant inbred lines and congenic lines.

Finally, a chapter on sources of information gives an excellent summary of relevant texts.

This valuable book is mostly aimed at scientists who need access to available animal resources, primarily for biomedical and biological research.

H. Abplanalp, Davis

**Die Kulturpflanze**, Band 29. Mitteilungen aus dem Zentralinstitut für Genetik und Kulturpflanzenforschung Gatersleben der Akademie der Wissenschaften der DDR. Berlin: Akademie-Verlag 1981. 534 pp., 83 figs., 61 tabs. Hard bound DM 98.-.

The 1981 volume of this well-edited journal, published by the Institute of Genetics and Crop Plant Research of the Academy of Sciences of the German Democratic Republic, contains the proceedings of the Symposium on the 'Collection of European Land-Races of Cultivated Plants and their Evaluation'. This international meeting took place in July 1980 with 73 participants from 17 countries. In a series of 37 lectures, interesting information was presented concerning the basic problems of taxonomy of cultivated plants in general, and the species concept and principles of infraspecific classification as an aid to breeding research in particular. Lectures and posters were classified into the following: Taxonomy, history, collection, maintenance and breeding value of European land-races; problems of the taxonomy of cultivated plants; biosystematics of cultivated plants, and breeding research. Great emphasis was placed on preserving land-races as genetic resources as well as on problems of genetic erosion. European efforts for gene banks were also discussed. This volume brings together actual information of the problems of evaluating European land-races, and contributes to a less controversial taxonomic treatment of the difficulty to survey enormous variability.

The remainder of this volume is completed with the yearly report (1980) of this active institute which functions in the field of applied genetics, and which is very much engaged in molecular biological fundamentals of breeding research. It should be mentioned that the gene bank of the Institute contains about 50,000 strains, more than 25,000 of which are grains. One can only admire for the effort it requires to maintain all this lines! Some of the report by the institute's staff should be mentioned. These include a report of travels in South Italy for the collection of indigenous material, a bibliography of the Swedish ethnobotanist H. Helbaeks, annotated literature reviews (1979/80) on archaeological remains of cultivated plants and on the taxonomy and evolution.

Most of the papers are in English, with summaries in German and Russian.

H. F. Linskens, Nijmegen