

Book reviews

Burnet L.: Exercises in Applied Genetics. London: Cambridge University Press 1988. £ 4.95.

In general, the exercises found in this book could be used very nicely in the genetics courses of the "Oberstufe" of the German Sekundarstufe II (Kollegstufe) if they would be translated into German. The curriculum outline is clear, and there is a good introduction to each exercise.

Figure 6.7.2 on page 99 doesn't provide any clear answer to the inheritance of diseases. This reviewer is familiar with such figures from German biology schoolbooks (1933–1945), and because they demonstrate principles schematically, he feels they are ideologically ill-used.

G. Trommer, Braunschweig

Erhardt, W.: Hemerocallis – Taglilien. Stuttgart: Ulmer 1988. 169 pp.; 39 colour photographs; 40 drawings. Soft bound DM 38.–

The botanical name of the day-lily means "beauty for one day" and so describes the ephemeric character of the flowers of the helicoid cyme. Despite this property, the *Hemerocallis* plants, which originate from China and Japan and were named by Linnaeus (1753–1762), are very popular among horticulturists because of their resistance to pests and insects. The easy propagation of this "perennial supreme" by root cuttings, its fragrance, the fact that it grows easily in containers, and the aesthetic value of the various flower colours have all contributed to the day-lily's popularity in America, Britain, Switzerland, Belgium, and Germany. The nickname alone of this perennial—"flower of the intelligent lazy-bone" – expresses popularity. Apparently the day-lily is also a favourite plant of amateur breeders and attempts at hybridization, even tri- and tetraploidization, can lead to wonderful worlds of colour. The American *Hemerocallis* Society plays a central role in continuing the breeding work started by Arlow B. Stout in the first decades of this century (see monography by A. B. Stout, 1934). *Hemerocallis* is now recognized to be a one-genus family of the *Hemerocallidaceae* within the *Liliiflorae*. The author distinguishes five groups within the genus: *fulva*, *citrina*, *Middendorffii*, *nana*, and *multiflora*. He describes 31 species in detail and lists hundreds of hybrids and cultivars, all arranged according to flower colour and favourite growth conditions. Breeding procedures, including tissue culture and the selection of hybrids, are described in more detail. This monograph also includes lists of day-lily societies (including their publications), specialized gardeners, the names of the first descriptions of *Hemerocallis* species and of no longer valuable species names, and an extensive literature list. The book will contribute to further promotion of the day-lily, their application in landscaping, more hybridization attempts to obtain a blue variety, and, possibly, to the use of day-lily flowerbuds in the menu (recipes are included).

H. F. Linskens, Nijmegen

Dulbecco, R.: The Design of Life. New Haven, London: Yale University Press 1987.

In this book, the Nobel Prize winner in 1975, Renato Dulbecco, presents his view on the current state of biological sciences. This survey of our present knowledge of life processes ranges from the activity of DNA to cells and their differentiation, the immune system, communication among cells, sex,

defence mechanisms, the machinery of the brain, and drugs. The underlying concept is the expression of coded instructions contained in DNA and the subsequent manufacturing of other chemicals that make cells grow and function. While all aspects of life processes are seen via the fundamental role of DNA, DNA and proteins alone are not sufficient for producing and maintaining organisms. Energy requirements are also crucial, and the author demonstrates how the sun's energy is utilized. Evolution is seen as a life odyssey, with viruses providing the driving force necessary for the rapid appearance of new species.

Renato Dulbecco's book makes fascinating reading while also being easy to read. It presents an immense body of information, and demonstrates the author's ability to synthesize facts – even those from psychology and ethics. This can only be done in a one-man book – and only if the author has the capabilities of Dulbecco.

H. F. Linskens, Nijmegen

Klein, D.: Genetik in der medizinischen Praxis. 1st edn. Stuttgart New York: Thieme 1988. 229 pp., 130 figs.

This book is divided into two parts. In the first, the author describes the elements of general and clinical genetics, in the second, 220 inborn errors of metabolism and diseases of immunodeficiency are summarized in a table together with their enzyme defect, biochemical and clinical symptoms, mode of inheritance and the possibilities of prenatal diagnosis. The book is written at a level that is easy to grasp and comprehensively reviews the problems of medical genetics. Many excellent illustrations and tables support the text.

However, some things are unclear: For instance, that amniocentesis is done at the 18th and 20th week of pregnancy and that the Guthrie test for phenylketonuria is usually done on urine samples. Furthermore, the basis defect of tyrosinemia type I is a lack of hepatic fumarylacetoacetate hydrolase and not of 4-hydroxyphenylpyruvate dioxygenase. In the classification of mucopolysaccharidoses, MPS type III D is missing, and type VIII (DiFerrante-Syndrome) is not accepted as mucopolysaccharidosis. Nevertheless, this little book will be very useful for medical students and all specialists who are interested in medical genetics.

G. Seidlitz, Greifswald

Glicenstein, J.; Ohana, J.; Ledercq, C.: Tumours of the Hand (in English). 1st edn. Berlin Heidelberg New York: Springer. 412 pp., 82 figs., 94 tabs. Soft bound DM 42.–

This book is a successful English translation of the original French edition entitled *Tumeurs de la Main*. It is a very useful and most complete documentation of the benign and malignant tumours of the hand. The authors present an excellent review of clinical and radiological features, histology, differential diagnosis, treatment and prognosis, and they analyse all these aspects of the tumours. In four chapters the skin tumours, tumours of the soft parts, tumours of the bone and ungual tumours are described. An extensive bibliography completes this enormous work. One hundred and thirty figures, mostly in colour, demonstrate the clinical picture and the radiological findings of the tumours, and support the excellently written text. This book will be very useful to surgeons working in the field of plastic surgery, dermatologists, orthopaedists, oncologists as well as general practitioners.

G. Seidlitz, Greifswald