
 Book Reviews

Tizard, I.R.: Einführung in die veterinärmedizinische Immunologie für Tiermediziner, Biologen und Agrarwissenschaftler. Hamburg-Berlin: Parey 1981. 363 pp., 161 figs., 52 tabs. Hard bound DM 48.80.

Although practicing veterinarians make substantial use of an animal's immune system, it was only recently that veterinary immunology developed as a separate discipline. Ian Tizard's book, first published in 1977, is a result of this development. The present German edition is based upon the revised English edition and is re-edited by Hans Buschmann.

The book is divided into three parts: immunobiology, immunology of infectious diseases, and immunopathology. In the first part differences between the immune systems of species is indicated but the most clearcut demonstration of veterinary immunology is given in the two other sections. Considerable information is given about the body's defense mechanisms against the various infectious agents and it is made clear that this knowledge can be used better in practice than often is the case. Therefore all those that are working with animals, should take notice of this part of the book. In this respect the German edition was adapted to the European situation. In the last part, it is shown that mechanisms of tissue damage are the same in all species, but that they may result in different clinical features.

One field of immunology received too little attention. Recent immunogenetic studies have shown linkage between the major histocompatibility complex and genes that control the immune response of the individual animals (Ir-genes). Apart from being of interest for the readers of TAG, it may also be of interest for breeders and practicing veterinarians as a marker system for immune hyper- or hypofunction. In general, however, this book is highly recommended for all those that are working with animals or are going to do so.

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Brickell, C.D., Cutler, D.F., Gregory, M. (eds.): Petaloid monocotyledons. Horticultural and Botanical Research. Linnean Society Symposium Series No. 8. London, New York: Academic Press 1980. 222 p., 43 figs., 16 tabs. Hard bound \$ 62.00.

This volume includes seventeen of the papers presented at the symposium, Research into Monocotyledons of Horticultural Importance, sponsored by the Linnean Society of London and the Royal Horticultural Society, held in London in April 1979. One purpose of the conference, to bring horticulturists and botanists together so as to expose each to the others practical and pure research, must have been a success for this selection of the topics

discussed is an eyeopener, with its juxtaposition of practical and basic research. The diversity is amazing. Two introductory articles thoroughly present the special problem that are the monocotyledons: Lack of a cambium, absence of secondary thickening, restriction of adventitious buds to nodes and adventitious roots to basal stem nodes, support of the plant by adventitious roots, replacement by basal adventitious buds, and limited branching. The second paper reviews anatomical studies and points up areas that need research, especially with an eye to helping horticulturists.

The second part dealing with problems of floriculture and ornamental horticulture, includes two articles on propagation. The first is a report on a long-term use of hormones on palms and the second, a thorough review and summary of tissue culturing recipes for many bulb crops, presented clearly and concisely. The excellent pictures of successful tissue cultures point up the fact that horticulturists would rather have propagules than massive calli. An excellent paper on Narcissus diseases, full of practical advice, is doubly revealing to the reader who remembers from the introductory chapters the special character of monocot diseases. The final paper in this section, from one of the most productive floriculture physiology laboratories in the world, compares and contrasts a great mass of data on three important floriculture 'bulb' crops. The third section of five articles covers taxonomic problems. The first uses vegetative characters in numerical analysis, and the next two apply leaf anatomy to the analysis of taxonomic difficulties. A fourth is a preliminary study of Araceae stem vasculature using motion picture analysis of serial sections. The final paper, an excellent one, uses androecial characters especially to present an evolutionary scheme of the Velloziaceae. The fourth section covers cytology and plant breeding in important horticulture ornamentals, and includes Crocus cytology, the history of the development of Freesia into a florist crop, and the state of current breeding efforts in Pleione and Lilium.

The last section, on conservation of petaloid monocotyledons of horticultural importance, covers, first, the research on the remarkable concentration of such plants in South Africa and, secondly, the current state of the efforts in Europe to list and conserve rare and threatened European species.

The book, as is apparent, brings together in one volume articles that normally would only be found in such a diverse array of botanical and horticultural journals and magazines that no specialist in monocots could reasonably be expected to find them all in his normal reading. Therein lies the value of this volume. I recommend it to botanists and horticulturists, whether they be professional or amateur.

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