

Book Review

The biology of mosquitoes. vol. 1 Development, nutrition and reproduction. A. N. Clements. Chapman & Hall. 1992. 509 pp. \$89.95.

This is a rewriting and expansion of *The Physiology of Mosquitoes*, published in 1963. The expansion of the work into two volumes reflects the extent and diversity of mosquito research.

The introduction lightly covers mosquito life cycles, biology and disease transmission. The text starts out discussing the aspects of genetics, then leads into embryology, and the egg. This is followed by 7 chapters on larvae, including larval feeding and nutrition, excretion and respiration, osmotic and ionic regulation, growth and development, metamorphosis, the circulatory system, the endocrine system and hormones. The remaining 13 chapters concern the adult, including adult food and feeding mechanisms, salivary glands and their secretions, the alimentary canal, digestion, energy metabolism, diuresis, excretion and defaecation, structure of the gonads and gonoducts, spermatogenesis and the structure of spermatozoa, oogenesis, vitellogenesis, hormone regulation of ovarian development in anautogenous mosquitoes, nutrition and fertility of anautogenous mosquitoes, and autogeny. The book is well illustrated and has an extensive bibliography. For researchers involved in the physiology of mosquitoes, this book should be on the required reading list. - **Eugene J. Gerberg, University of Florida, Institute of Food and Agricultural Sciences, Entomology and Nematology Department, Gainesville, Florida 32611.**