

Preface

"The standard histological procedures of the zoologist do not as a rule give very successful results when applied to insects..." (Van Heerden, 1945). If one adds to this statement that histological methods, entomological or otherwise, are a frustrating balance between science and art, one can understand the reluctance of entomologists to utilize histological techniques. The situation is additionally complicated by the fact that the techniques that have been formulated are scattered throughout various scientific journals and in general textbooks.

This book is designed to bring the procedures of insect histology to entomologists and others who utilize insects as experimental animals. Since no technique can be applicable to all insects, the techniques in this book are presented as guidelines. These basic methods can be easily modified to suit the characteristics of a particular insect or specific research problems.

It would be useless to present another book on the theory and use of histological methods, particularly since success in applying procedures is in part contingent upon practice and experience. In addition, there are already numerous sources of generalized information on the theoretical aspects of histological techniques. Instead, in this book the reader will find fixatives, stains, procedures, and so on, which have been reported to be specifically applicable to insects. The book also presents information useful in dealing with histological problems encountered in insect tissues such as sclerotized chitin, yolk-laden eggs, chromosomes, genitalia, and so on.

* Van Heerden, H.P. 1945. Some histological methods of interest to entomologists. *Journal of the Entomological Society of South Africa* 8:157-161.