Insect Histology. Practical Laboratory Techniques

Description: This helpful guide is self-contained, holding all of the information you will need for the preparation of histological slides of all types of insect tissues. It explains the essential procedures for their preparation, providing step-by-step information on each phase, for example, on fixation, dehydrating, clearing, embedding, and staining.

The laboratory manual explains the cutting-edge methodology carried out today, and provides a thorough collection of both historically established and modern insect histology techniques side-by-side. It is the first book to present these various techniques appropriate to insects.

Key issues covered include:

- the use of genetic markers in insect histology;
- important approaches for the preparation of tissues and organs for SEM and TEM Fluorescence;
- new immunohistochemical techniques;
- histological problems encountered in insect tissues such as sclerotized chitin, yolk-laden eggs, chromosomes, genitalia, etc., and how to deal with them.

Photographs show the likely results of procedures, components of the process, and advantages of the use of particular approaches or compounds. As a comprehensive resource, this book is for students and researchers in entomology, systematics, developmental biology, insect cell biology, and morphology, wanting a clear introduction to the procedures for the histological display of insect tissues.

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