

Molecular Mechanisms of Immune Responses in Insects

Edited by

Paul T. Brey

*Laboratoire de Biochimie et
Biologie Moléculaire des Insectes
Institut Pasteur
Paris
France*

and

Dan Hultmark

*Department of Developmental Biology
Wenner-Gren Institute
Stockholm University
Stockholm
Sweden*



CHAPMAN & HALL

London · Weinheim · New York · Tokyo · Melbourne · Madras

Contents

List of contributors	vii
Preface	xi
1 The contributions of the Pasteur school of insect immunity <i>Paul T. Brey</i>	1
2 Antimicrobial peptides from insects <i>Charles Hetru, Danièle Hoffmann and Philippe Bulet</i>	40
3 Antibacterial peptides of the insect reproductive tract <i>Andrea G.O. Manetti, Marco Rosetto and Daniela Marchini</i>	67
4 Immune response in Hymenoptera <i>Peter Casteels</i>	92
5 Mode of action of antibacterial peptides <i>Yechiel Shai</i>	111
6 Recent advances in research on the insect prophenoloxidase cascade <i>Masaaki Ashida and Paul T. Brey</i>	135
7 Function and regulation of hemolin <i>Ingrid Faye and Michael Kanost</i>	173
8 The <i>Drosophila melanogaster</i> immunoresponsive tumorous blood cell line <i>mbn-2</i> <i>Elisabeth Gateff</i>	189
9 Insect immune gene regulation <i>Ylva Engström</i>	211
10 Relation between insect defense proteins and development of the flesh fly, <i>Sarcophaga peregrina</i> <i>Shunji Natori</i>	245

11 Mechanisms of immunity and refractoriness in insect vectors of eukaryotic parasites <i>Kenneth D. Vernick</i>	261
Index	310