

1. Record Nr.	UNINA9910952315503321
Titolo	Insect viruses : detection, characterization and roles // Christopher J. Connell and Dominick P. Ralston, editors
Pubbl/distr/stampa	Hauppauge, N.Y., : Nova Biomedical Books, c2009
ISBN	1-61470-097-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (200 p.)
Collana	Virology research progress series
Altri autori (Persone)	ConnellChristopher J RalstonDominick P
Disciplina	616.9/101
Soggetti	Insects - Viruses Medical virology Viral pesticides
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- INSECT VIRUSES: DETECTION, CHARACTERIZATION AND ROLES -- INSECT VIRUSES: DETECTION, CHARACTERIZATION AND ROLES -- Contents -- Preface -- Chapter 1 Insect Virus Proteins Involved in the Peroral Infectivity of the Viruses and Their Potential Practical Application in Pest Control -- Abstract -- 1. Introduction -- 2. Spindles (Fusolin) -- 2.1. Properties of EPVs -- 2.2. Enhancement of Virus Infection -- 2.3. Mode of Action of Infectivity-Enhancement -- 3. Enhancin (Granules) -- 3.1. Properties of GVs -- 3.2. Enhancement of Baculovirus Infectivity -- 3.3. Mode of Action of Infectivity-Enhancement -- 4. Other Proteins -- 5. Application of Viral Proteins in Pest Control -- 5.1. Viral Insecticides and Improvement of Their Infectivity -- 5.2. Developing Efficient Mass Production of the Proteins -- 6. Conclusion -- References -- Chapter 2 RNAi and the Study of Insect Immunity -- Abstract -- Introduction -- RNA Interference -- Insect Immunity -- RNAi and Insect Immunity -- Antimicrobial Peptides (AMPs) -- Melanization and Clotting -- Pattern Recognition Proteins -- Phagocytosis -- Parasitoids and Viruses -- Refractoriness -- Conclusion -- References -- Chapter 3 Epidemiology of Kakugo Virus, An Insect Picorna-like Virus Identified in Aggressive Honeybee Workers - A Study of Virus-Host Interactions in the Honeybee Society -- Abstract -- Introduction -- Kakugo Virus Identified from Aggressive

Worker Bees -- Prevalence of KV and Route of Infection in a Colony --
 Phylogeny of Kakugo Virus and Close Relationship with Deformed Wing
 Virus -- Interactions between the Honeybee and the Viruses --
 Perspectives -- Conclusion -- Acknowledgments -- References --
 Chapter 4 Honeybee Viruses in Uruguay: First Detection of Honeybee
 Viruses in South America and Their Potential Role in Mortality of
 Honeybees -- Abstract -- Introduction.
 Materials and Methods -- Samples -- RNA Extraction -- RT-PCR --
 Data Analysis -- Results -- Survey 2004 -- Survey 2005 -- Winter
 Samples -- Summer Samples -- Nosema Spp. and V. destructor in
 Winter -- Nosema Spp. and V. destructor in Summer -- Discussion --
 Conclusion -- References -- Chapter 5 Encephalitic Arboviruses:
 Emerging and Re-Emerging Problem -- Abstract -- Introduction --
 American Epidemiology of Arboviral Encephalitides -- African
 Epidemiology of Arboviral Encephalitides -- Euro-Asiatic Epidemiology
 of Arboviral Encephalitides -- Main Encephalitic Arboviruses of Far East
 Group -- Clinical Manifestations -- Diagnosis -- Personal Contribution
 -- Seroprevalence Study of Tick Borne Encephalitis, Dengue and
 Toscana Virus in Turin Province -- References -- Chapter 6
 Neurologic Manifestations of West Nile Virus Infection -- Abstract --
 West Nile Virus (WNV) -- Transmission and Replication -- Clinical
 Features of the Non-Neurological West Nile Fever -- Neurologic
 Manifestations -- Encephalitis -- Aseptic Meningitis -- Acute Myelitis
 -- Rare Neurological Manifestations -- Pathogenesis of WNV Neural
 Damage -- Treatment of Neural WN Infection -- References -- Chapter
 7 Effects of Coinfection with Borrelia Burgdorferi and Anaplasma
 Phagocytophilum in Vector Ticks and Vertebrate Hosts -- Abstract --
 Introduction -- 1. Coinfection with Borrelia Burgdorferi and Anaplasma
 Phagocytophilum in Vector Ticks -- 1.A. Acquisition Experiment -- 1.B.
 Transmission Experiment -- 2. Interaction Between Borrelia Burgdorferi
 and Anaplasma Phagocytophilum in Sequential Infection in a Reservoir
 Host -- Primary Infection -- Challenge and Xenodiagnosis -- PCR --
 IFA -- Borrelia Only (Group I) -- Anaplasma + Borrelia (Group II) --
 Anaplasma Only (Group III) -- Borrelia + Anaplasma (Group IV) --
 Discussion -- Conclusion -- References.
 Short Communication A Early Detection of Baculovirus Expression and
 Infection in Lepidopteran Larvae Fed Occlusion Bodies of an AcMNPV
 Recombinant Carrying a Red Fluorescent Protein Gene* -- Abstract --
 Introduction -- Materials and Methods -- Conclusion --
 Acknowledgment -- References -- Short Communication B Reovirus-
 like Double Stranded RNA Fractions in a Drosophila Melanogaster Line
 Containing Individual Second Chromosome from Natural Population --
 Abstract -- Introduction -- The Nature of the Additional Nucleic Acids
 Material -- Putative Virus-host Genome Interactions -- Conclusion --
 Acknowledgments -- References -- Short Communication C Cellular
 Secretion of Sf21 Cells upon Baculovirus Infection --
 Acknowledgments -- References -- Index -- Blank Page.

Sommario/riassunto

Insects are a major group of arthropods and the most diverse group of
 animals on the earth, with over a million described species. In common
 with all other life forms, insects suffer from viruses that cripple and kill.
 Admittedly, insects transmit viruses that cause illness in humans, but
 the insect in such cases is usually unaffected. This book includes
 research on such viruses affecting humans. Also included in this book
 are the ways to recognize insect viruses and their use in pest control.
 Basic and applied research on insect virus proteins associated with the
 peroral infectivity is reviewed as well. Furthermore, RNAi has been
 applied to a number of studies involved in insect immunity. Thus, the
 effect of RNA interference on viral infections is also studied.

