

TABLE OF CONTENTS

Crustaceans Endocrinology, Biology and Aquaculture

PHYSIOLOGY ISSUES

Crustacean Endocrinology: Fascinating Topic for Biologists or a Peculiar Opportunity for Biotechnologies? A Historical View with Functional Perspectives

Valerio Zupo and Penny M. Hopkins

Sexual Biology and Reproduction

Valerio Zupo and Alan N. Hodgson

Crustacean Yolk Proteins: Structure, Function and Diversity

Ulrich Hoeger and Sven Schenk

Infochemicals Recognized by Crustaceans

Joerg D. Hardege, Nicky Fletcher and Thomas Breithaupt

Crustaceans as Good Marine Model Organisms to Study Stress Responses by –Omics Approaches

Maria Costantini, Roberta Esposito and Nadia Ruocco

ECOLOGY AND TAXONOMY

Crustacean Decapods are Models to Describe the General Trends of Biodiversity According to Ocean Acidification

Valerio Zupo and Emanuele Somma

Isopod Crustaceans as Seagrass Consumers: A Mediterranean Perspective

Maurizio Lorenti

Ecology and Ethology of Littoral Amphipods

Felicita Scapini

Ethology of Crustaceans Influencing their Ecology

Giuseppe Mazza and Elena Tricarico

Crustacean Ecology in a Changing Climate

Jörg D. Hardege and Nicky Fletcher

The Biodiversity of Freshwater Crustaceans Revealed by Taxonomy and Mitochondrial DNA Barcodes

Adrian A. Vasquez, Brittany L. Bonnici, Donna R. Kashian, Jorge Trejo-Martinez, Carol J. Miller and Jeffrey L. Ram

AQUACULTURE AND BIOTECH

Crustaceans as Pathogens and Most Common Pathogens of Crustaceans

Francesca Carella

Biotechnologies Linked to Crustaceans

Antonietta Siciliano, Giovanni Libralato and Marco Guida

Copepods vs. Salmons: Environmental Treats for Crustaceans or Possible Eco-Sustainable Solutions?

Valerio Zupo, Valerio Mazzella, Patrick Fink, Mahasweta Saha, Ylenia Carotenuto and Mirko Mutalipassi

Automatic Culture of Crustaceans as Models for Science

Francesca Glaviano and Mirko Mutalipassi

Current Issues on Freshwater Crayfish Aquaculture with a Focus on Crustacean Welfare

Marina Paolucci, Elena Coccia, Gianluca Polese and Anna Di Cosmo

Advanced Molecular Biology Techniques Applied to Crustacean Aquaculture

Maria Costantini, Roberta Esposito, Serena Federico and Valerio Zupo.