
CONTENTS

<i>Preface</i>	Raymond T. Bauer and Joel W. Martin	vii
ONE	Bioluminescent Displays, Courtship, and Reproduction in Ostracodes <i>James G. Morin and Anne C. Cohen</i>	1
TWO	Intrinsic Factors Mediating Pheromone Communication in the Blue Crab, <i>Callinectes sapidus</i> <i>Richard A. Gleeson</i>	17
THREE	Patterns of Reproduction of Some Amphipod Crustaceans and Insights into the Nature of Their Stimuli <i>Betty Borowsky</i>	33
FOUR	Precopulatory Mate Guarding in Aquatic Crustacea: <i>Gammarus lawrencianus</i> as a Model System <i>Philip J. Dunham and Alan M. Hurshman</i>	50
FIVE	Variation in Reproductive Behavior in Stomatopod Crustacea <i>Roy L. Caldwell</i>	67

vi Contents

SIX	The Ecology of Breeding Females and the Evolution of Polygyny in <i>Paracerceis sculpta</i> , a Marine Isopod Crustacean <i>Stephen M. Shuster</i>	91
SEVEN	Anostracan Mating Behavior: A Case of Scramble-Competition Polygyny <i>Denton Belk</i>	111
EIGHT	Mating and Insemination in the American Lobster, <i>Homarus americanus</i> <i>S. L. Waddy and D. E. Aiken</i>	126
NINE	Sperm Competition and the Evolution of Mating Behavior in Brachyura, with Special Reference to Spider Crabs (Decapoda, Majidae) <i>Rudolf Diesel</i>	145
TEN	Sex Change, Mating, and Sperm Transfer in <i>Crangon crangon</i> (L.) <i>R. Boddeke, J. R. Bosschieter, and P. C. Goudswaard</i>	164
ELEVEN	Sperm Transfer and Storage Structures in Penaeoid Shrimps: A Functional and Phylogenetic Perspective <i>Raymond T. Bauer</i>	183
TWELVE	Functional and Evolutionary Aspects of the Sexual System in the Rhizocephala (Thecostraca: Cirrepedia) <i>Jens T. Høeg</i>	208
THIRTEEN	Functional Morphology and Evolution of Isopod Genitalia <i>George D. F. Wilson</i>	228
FOURTEEN	Functional Morphology of Spermatophores and Sperm Transfer in Calanoid Copepods <i>Pamela I. Blades-Eckelbarger</i>	246
FIFTEEN	The Reproductive Biology of Two Species of Remipedes <i>Jill Yager</i>	271
SIXTEEN	Structure and Chemical Content of the Spermatophores and Seminal Fluid of Reptantian Decapods <i>Gertrude W. Hinsch</i>	290
SEVENTEEN	Chemical Composition of Spermatophores in Decapod Crustaceans <i>T. Subramoniam</i>	308
EIGHTEEN	Morphological Diversity of Decapod Spermatozoa <i>Bruce E. Felgenhauer and Lawrence G. Abele</i>	322
	Contributors	343
	Systematic Index	347
	Subject Index	353