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Titolo	Reproduction in Aquatic Animals : From Basic Biology to Aquaculture Technology / / edited by Manabu Yoshida, Juan F. Asturiano
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Descrizione fisica	1 online resource (VIII, 379 p. 63 illus., 34 illus. in color.)
Disciplina	591.92
Soggetti	Developmental biology Zoology Cytology Developmental Biology Cell Biology Fauna marina Reproducció Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	Foreword - A brief history of Spermatology -- Part I: Overview -- Chapter 1: Overview of reproduction systems in aquatic animals -- Part II: Basic knowledge of male gametes in aquatic animals -- Chapter 2: Introduction to sperm motility of aquatic animals -- Chapter 3: Sperm activation and chemotaxis of invertebrates -- Chapter 4: Fish sperm activation -- Chapter 5: Sperm guidance in Teleosts -- Part III: Basic knowledge of female gametes and sperm-egg interaction in aquatic animals -- Chapter 6: Structure of mature oocytes -- Chapter 7: Oocyte maturation and fertilization in Mollusks and other Protostomes -- Chapter 8: Reproduction of the corals Acropora -- Chapter 9: Self- and nonself-recognition of gametes in Ascidians -- Chapter 10: Reproduction of Elasmobranchs -- Chapter 11: Fertilization in Amphibians -- Part IV: Behavior, ecology and reproductive strategies -- Chapter 12: Sperm motility and fertilization of sea urchins -- Chapter 13: Behavior and fertilization of Squids -- Part V: Biotechnology in aquatic species -- Chapter 14: Improvements on the reproductive

control of the European eel -- Chapter 15: Sperm cryopreservation of aquatic species -- Chapter 16: Germ cells transplantation in Sturgeon -- Chapter 17: Germ cell transplantation in tuna.

Sommario/riassunto

This book provides an up-to-date overview of the various reproductive systems of a variety of aquatic animals, from invertebrates to fishes. While all terrestrial animals use internal fertilization, aquatic animals have diverse reproductive systems. Some are internal fertilizers with or without mating, but many perform external fertilization. Because of this diversity, the reproductive systems of aquatic animals represent excellent models for the study of adaptive evolution and the species specificity of fertilization. In addition, many aquatic animals, including fish, crustaceans, and mollusks, are important as fishery and aquaculture resources. In this book, up-and-coming researchers examine reproductive systems in representative aquatic animals, covering both the basic knowledge and late-breaking results. *Reproduction in Aquatic Animals: From Basic Biology to Aquaculture Technology* will be of interest to graduate and postgraduate students in biology and agricultural sciences, as well as to researchers and technicians in the fields of reproductive biology and fishery science and to non-academics.
