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Titolo	Microbial Communities in Aquaculture Ecosystems : Improving Productivity and Sustainability / / edited by Nicolas Derome
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ISBN	3-030-16190-0
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Descrizione fisica	1 online resource (168 pages)
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Livello bibliografico	Monografia
Nota di contenuto	The Rise and Fall of Antibiotics in Aquaculture -- Host-Microbiota Interactions and Their Importance in Promoting Growth and Resistance to Opportunistic Diseases in Salmonids -- Would Bacteriophages Be a New Old Complement to Antibiotics in Aquaculture? -- Controlling Factors for Community Assembly in Developing Cod Larvae (Gadus Morhua) -- Insights into Mussel Microbiome -- Feed Additives, Gut Microbiota and Health in Finfish Aquaculture -- Feed Additives Impacts on Shellfish Microbiota, Health And Development.
Sommario/riassunto	This book sheds light on the major functions of microbial communities in aquaculture ecosystems, showing that by recycling nutrients, degrading organic matter and preventing disease outbreaks, a variety

of microbes are truly beneficial to a wide range of aquaculture industries. It discusses how deteriorating environmental quality enables some microbial strains to trigger disease, describes the development of highly sustainable tools to improve water quality, and identifies crucial factors that endanger microbial homeostasis in aquaculture ecosystems. The book also covers post-antibiotic approaches for preventing and treating opportunistic microbial infections based on harnessing environmental and fish-associated microbial communities. Furthermore, it explores how manipulating and engineering these complex microbial communities using bio-agents such as probiotics, phages, natural nutritional additives, or with fine-tuned biofilters will open the door for new ways to develop a more sustainable and cost-effective aquaculture industry. Including an accessible presentation of modern high-throughput sequencing technology to identify host-microbial interactions in aquaculture ecosystems, this book is a valuable resource for scientists, aquaculture and fishery experts, sustainability enthusiasts and scholars in the areas of biology and marine agriculture.