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Nota di contenuto	Live Feeds in Marine Aquaculture; Contents; Foreword; Preface; Contributors; Abbreviations; 1 Status of Marine Aquaculture in Relation to Live Prey: Past, Present and Future; 1.1 A Historical Perspective; 1.2 Marine Aquaculture Today and in the Future; 1.3 The Status of Larviculture and Live Feed Usage; 1.3.1 Africa; 1.3.2 Asia; 1.3.3 Europe; 1.3.4 North America; 1.3.5 Oceania; 1.3.6 South America, including Central America and the Caribbean; 1.4 Why is Live Feed Necessary?; 1.5 Problems and Prospects with Alternatives to Live Feed; 1.6 Conclusions; 1.7 References 2 Production and Nutritional Value of Rotifers2.1 Introduction; 2.2

Biology and Morphological Characteristics of Rotifers; 2.2.1 General biology; 2.2.2 Taxonomy; 2.2.2.1 The genus *Brachionus*; 2.2.3 Morphology and physiology; 2.2.3.1 Feeding; 2.2.3.2 Digestion; 2.2.3.3 Body fluids and excretion; 2.2.3.4 Movement; 2.2.3.5 Nervous system and sensory organs; 2.2.4 Reproduction; 2.2.4.1 Asexual and sexual reproduction; 2.2.4.2 Reproductive rates; 2.2.4.3 Sexual reproduction and resting egg formation; 2.3 Culturing Rotifers; 2.3.1 Selection of species and/or strain  
 2.3.2 Maintaining water quality in culture tanks  
 2.3.2.1 Organic particles; 2.3.2.2 Bacteria and other organisms in the culture tanks; 2.3.3 Choosing the most appropriate culture techniques; 2.3.3.1 Small-scale laboratory cultures; 2.3.3.2 Mass cultures; 2.4 Advanced Warning on State of Cultures; 2.4.1 Egg ratio; 2.4.2 Swimming velocity; 2.4.3 Ingestion rate; 2.4.4 Viscosity; 2.4.5 Enzyme activity; 2.4.6 Diseases; 2.5 Nutritional Quality of Rotifers; 2.5.1 Number of rotifers consumed by larvae; 2.5.2 Dry weight and caloric value; 2.5.3 Biochemical composition  
 2.5.3.1 Protein and carbohydrate content  
 2.5.3.2 Lipid composition; 2.5.3.3 Vitamin enrichments; 2.5.4 Effects of starvation; 2.6 Preserved Rotifers; 2.6.1 Preservation at low temperatures; 2.6.2 Cryopreservation; 2.6.3 Resting eggs; 2.7 Future Directions; 2.8 References; 3 Biology, Tank Production and Nutritional Value of *Artemia*; 3.1 Introduction; 3.2 Biology of *Artemia*; 3.2.1 Morphology and life cycle; 3.2.2 Ecology and natural distribution; 3.2.3 Taxonomy; 3.2.4 Strain-specific characteristics; 3.2.4.1 Size and energy content; 3.2.4.2 Hatching quality; 3.2.4.3 Diapause characteristics  
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 3.2.4.5 Temperature and salinity tolerance; 3.2.4.6 Life-history traits and reproductive capacity; 3.2.4.7 Nutritional value; 3.2.5 Cyst biology and diapause; 3.2.5.1 Cyst morphology and physiology; 3.2.5.2 Cyst metabolism and hatching; 3.2.5.3 Diapause; 3.3 Production Methods: Tank Production of *Artemia* Biomass; 3.3.1 Advantages of tank production and tank-produced biomass; 3.3.2 Physicochemical conditions; 3.3.3 *Artemia* strain selection and culture density; 3.3.4 Feeding; 3.3.5 Infrastructure; 3.3.6 Culture techniques; 3.3.7 Control of infections  
 3.3.8 Harvest and processing of cultured *Artemia*

## Sommario/riassunto

As the expansion in world aquaculture continues at a very high rate, so does the need for information on feeding of cultivated fish and shellfish. In the larval and juvenile phases of many species, the use of manufactured feed is not possible. This important book covers in detail the biology and culture of the main live prey and microalgae used as feeds in the aquaculture of major commercial species including shrimps, sea bass, halibut, cod and bivalves. Contents include comprehensive details of the status of marine aquaculture in relation to live prey, and chapters covering the biology, pro