

Black Tiger Shrimp

(Penaeus monodon)

HATCHERY OPERATIONS USING ENHANCED BIOSECURITY MEASURES

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Foreword

When SEAFDEC/AQD was established in 1973, its primary research focus was on shrimp culture, specifically the breeding of the black tiger shrimp, *Penaeus monodon*, and the production and securing of quality seedlings. Not long after, in 1975, the research center successfully completed the life cycle of the shrimp in captivity, using eyestalk ablation for inducing maturation. In the following years, the mass production of spawners in marine pens and fry in small scale barangay hatcheries were achieved, along with regular training courses done beginning 1977.

These, and other milestones by SEAFDEC/AQD in the areas of shrimp nutrition, contributed to a burgeoning shrimp industry in the Philippines that peaked at over 90 thousand metric tons in 1994. However, unrestrained intensification triggered the worldwide spread of shrimp diseases in the 1990s that plague the industry to this day.

With renewed vigor, SEAFDEC/AQD launched the “Oplan Balik Sugpo” program in 2018 to push for the revival of the black tiger shrimp industry in the Philippines which is now only a fraction of its size when it peaked. The program aims to exclude shrimp pathogens to produce high-quality postlarvae in the hatchery phase, and to use environment-friendly approaches in the grow-out phase.

This manual is a welcome summary of the best practices that have been developed at SEAFDEC/AQD’s biosecure shrimp hatchery complex. We hope other hatchery operators adopt these protocols, along with good aquaculture practices, for them to produce quality shrimp seeds and contribute to the responsible re-expansion of the shrimp industry.



Dr. Sayaka Ito
Deputy Chief, SEAFDEC/AQD

About the Manual

This manual, titled “Black Tiger Shrimp (*Penaeus monodon*) Hatchery Operations Using Enhanced Biosecurity Measures,” includes modifications on shrimp hatchery operations done by the Aquaculture Department of the Southeast Asian Fisheries Development Center to provide high-quality postlarvae for shrimp farming. Discussed also in this manual are the necessary protocols and biosecurity measures that shrimp hatchery operators can use as their guide.

Main sections included in this manual: 1. Site Selection, 2. Biology, 3. Hatchery Layout, 4. Facilities and Equipment, 5. Biosecurity Standard Operating Procedures, 6. Hatchery Operations, 7. Diseases of Shrimps, and 8. Economic Analysis.

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