

SSNS Training Course 1: Advanced Technology in Shrimp Farming

Background

Marine shrimps have been considered as one of the best seafood items. Black tiger shrimp (*Penaeus monodon*) and white leg shrimp (*Penaeus vannamei*) are worldwide products and have been farmed in many countries, especially in Asia. Vietnam is one of top countries in marine shrimp farming, its shrimp export shares about 45% of global shrimp production. The production of marine farmed shrimp in Vietnam reached over 650,000 tons in 2018. The intensive shrimp farming has been developed in Vietnam since



1985 with the black tiger shrimp (*Penaeus monodon*), and since 2000s with the white leg shrimp (*Penaeus vannamei*). The farming technology has been improved significantly in recent years, for example super-intensive of white leg shrimp in green house. Researches on seed production and farming technology have been continuously conducted by research institutions in Vietnam, especially in Can Tho University. Advanced technologies for intensive and super-intensive such as bio floc technology, 2-phase farming, *etc.* have been developed and ready to transfer to the shrimp operators. This training course has been designed to provide up-to-date or advanced knowledge about white leg shrimp farming and skills in larval rearing, nursery, grow-out, and pond water quality management.

Learning outcome

- Enhanced knowledge on white leg shrimp seed production and culture
- Acquired skills of larval rearing, post larvae nursing and grow-out
- Ability to develop a shrimp farm or hatchery plan and operation

Training duration: 10 days, including:

Lectures – 2 days – Classroom

- Current trends in white leg shrimp farming in the world and Vietnam
- Breeding, larval rearing, post larvae nursing and grow-out techniques (bloodstock selection and spawning, water quality treatment for hatchery, feed and feeding, water quality management, *etc.*)

Practical – 8 days – Lab and field visit

- Bloodstock selection and spawning (2 pairs per group of 2-3 person)
- Larval rearing (1 tank of 2-4 m³ per group of 2-3)
- Post larval rearing (2-3 tank of 20 m³ per)
- Visiting grow-out farms (2-3 farms with different culture techniques) (collecting information on stocking, feed and feeding, growth, water treatment and management, *etc.*)

Final report including business plan: by each participant – max. 5 pages

Presentation of results by the group of students (Seminar Room)

- Knowledge, technique and lesson learned
- Wrap-up by Instructor (1 hour)

Feedback and evaluation by students/participants

Resource persons: Prof.Dr. Tran Ngoc Hai and & A/Prof. Dr. Chau Tai Tao