Marine Fish Farming Course
Course Contents:

1. Biology and ecology of fishes
   b. Sexual reversal in fish and gonad development in fish

2. Farm design and floating cage design
   a. Pond tank and Hapa net
   b. Bio-filter design
   c. Floating cage
   d. Green House HDPE Liner Pond

3. Nursery for fish fries.

4. Pond and ecosystem
   a. Balanced ecosystem and pond dynamics
      • Chemical factors
      • Biological factors, and
      • Physical factors.
   b. Water sources and treatment

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5. Chemicals used in fish farming and dosage of application
   a. ppm, mg/l, ppt and etc.
   b. Lime and liming, insecticide application, and etc
   c. Fertilizers: organic and inorganic

6. Water test kits, microscope and instrument application
   a. pH meter, pH universal solution, pH soil tester.
   b. Alkalinity tester, iron tester, chlorine tester, Ammonia tester and dissolved oxygen

7. Feed and feeding
   a. Live feed culture – rotifer (L-rotifer, S-rotifer, SS-rotifer - 
      sample_video_clip01, sample_video_clip02)*, copepod culture and algae culture, artemia and Chironomid larvae

8. Harvest and packing for sale.

9. Production cost and analysis

10. Disease, pests and control
   • Virus, bacteria, fungus, protozoa flate - worm lice and anchor worn and etc.

11. Assessment test and Q&A

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12. Practical works at farm for water analysis

- pH, D.O, iron test and etc.
- Use of microscope for plankton identification - red tide dinoflagellate
- Anatomical study for marine fish: red snapper or grouper or sea bass
- Hatchery breeding and induced spawning of marine fish.

Cage culture at Pulau Ketam – Malaysia biggest marine cage culture area
Sea bass larva during transferring from indoor tank

Harvesting of tiger grouper for packing and delivery
Brooder stock of sea bass

5 day old tiger grouper larvae under microscope
5 day old tiger grouper under microscope – Feeding with SS-rotifer

Tiger Grouper - A high valued species very popular in Malaysia
Tiger grouper - A high valued marine fish

Marine floating cage farming – A good investment in Malaysia

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