



STAC

SEPANG TODAY AQUACULTURE CENTRE

(0031400-X)

Marine Fish Farming Course



Marine Fish **Farming**

And **Hatchery Operation** Course

Course Contents:

1. Biology and ecology of fishes
 - a. Reproduction of fishes (Sea-Bass, Tiger Grouper [[sample video clip](#)]* , Red Snapper)
 - 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

*Right click on link; select "Open Weblink in Browser"

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



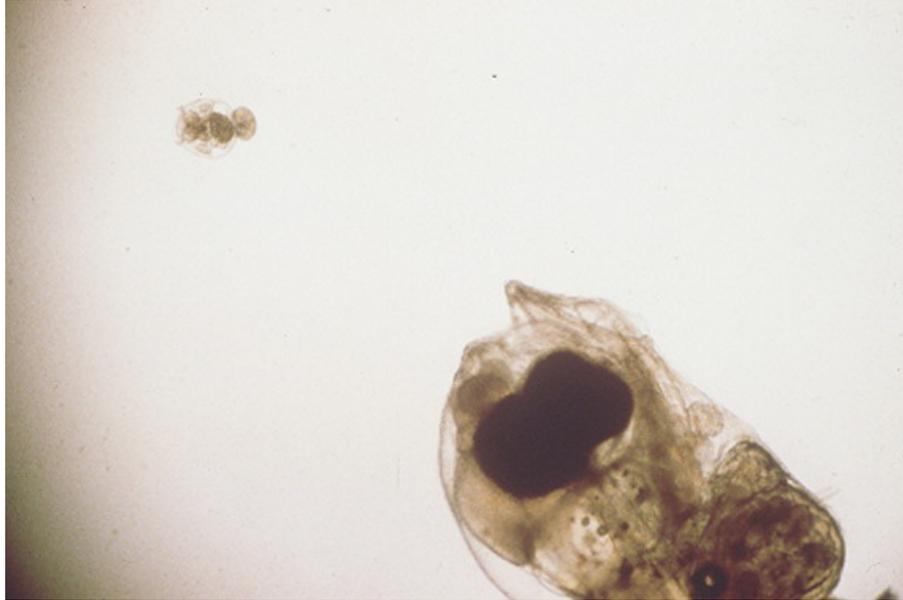
Harvesting of tiger grouper for packing and delivery



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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