

SPAWNING AND LARVA REARING OF SPINY LOBSTER (*Panulirus humorus*) AT MAIN CENTER FOR MARINE AQUACULTURE, LAMPUNG

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Spiny lobster (*Panulirus humorus*) is one of the leading commodities that is currently being developed in Indonesia. The abundant availability of seeds in nature encourages excessive exploitation of seeds. Technology for spawning and rearing spiny lobster (*Panulirus humorus*) can be supported the availability of seeds for aquaculture businesses in the community. Main Center for Marine Aquaculture Lampung has succeeded in breeding spiny lobsters whose broodstock from aquaculture from natural puerulus which have been reared for two years.

1 Spawning of Broodstock



- Spawning tanks 1.5 x 1.5 x 3 m³
- The broodstock measures 400 – 900 grams
- male and female ratio of 3 : 2
- Reared until it lays its eggs and hatches

2 Feeding of broodstock



- Feed : green mussel meat, fresh fish and squid
- Doses for green mussel and fresh feed : 5 – 7 % / biomass / day, two times /day.
- Doses for squid : 200 – 300 G /tank , twice a week
- Green mussel given in the morning
- Fresh fish given in the afternoon and night
- Green mussel meat is given whole while fresh fish and squid are cut into small pieces.

3 Hatching Eggs



Lobster Eggs Ready to hatch Larvae (phylosoma)

- The eggs produced in average diameter of 478.54 µm.
- The eggs are incubated for four weeks
- Egg development : visible by changes in color from red-orange to dark or black
- After the egg color is dark red or black, the egg hatches into larvae.
- Larvae in the form of phylosoma

5 Feed and feeding of larvae



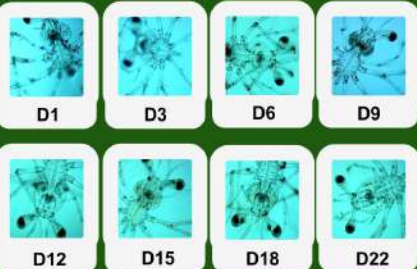
- Feed : Plankton Phorphyridium and Thalassiosira
- Cultivated in the natural food laboratory.
- Technical Fertilizer for plankton: Conway 1 mL/ L
- Plankton are given in the amount of 1 liter per aquarium once a day.

4 Larva Rearing



- Rearing in 100 liters aquarium with a recirculation system with filter :
- Dacron, bioball, ginger coral, raw water with added oksigen
- Rearing in a closed room (indoors) with air conditioning.
- Room temperature is maintained between 20 – 24 oC.
- Water temperature is 20 oC
- Water Quality : DO > 5 ppm
- Density : 3000 – 9000 larvae /100 L aquarium volume

6 Stage of larvae



7 Result

- During 2023 the broodstock have spawned 51 times, but the number was not too many.
- Larvae from broodstock measuring 500 – 600 G survived up 36 days
- Larvae from broodstock measuring < 500 G survived from 5 – 22 days
- Larvae only reach three stages (seven days in every stage)

