

Mangrove crab success for the UMS

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KOTA KINABALU: Three years of trial and error finally bore fruits for the Universiti Malaysia Sabah (UMS) Borneo Marine Research Institute (BMRI) Shrimp Hatchery as they successfully produced crablets of mangrove crab species in captivity here recently.

BMRI Director Prof Dr Rossita Shapawi said the species, *Scylla tranquebarica*, is the dominant species in Sabah and commonly sold at local markets and seafood restaurants.

"This discovery is very significant in helping our aquaculture industry to grow. As we all know, the institute had, in the past, found success with the breeding of hybrid grouper. This time, our shrimp hatchery made history with this breakthrough," she said here, Friday.

Rossita said the institute undertook the research following a study conducted at local mangrove crab habitats that showed a decreasing trend in the species' population.

The finding, she said, worried the scientists and they decided that it is high time for them to intensify the research on crab aquaculture.

Unlike fish and shrimp which can also be obtained through aquaculture, crab supply had always depended solely on its wild habitat.

"So far, the crabs sold in the market were caught from the mangrove areas, in their natural habitat. The success in producing crablets through aquaculture is considered a significant milestone in the industry in order to supply the seed for commercial

crab farming and to restore the natural resources through stock enhancement programme," she said.

The efforts to produce the crablets started with the captive breeding of the mangrove crabs in 2013.

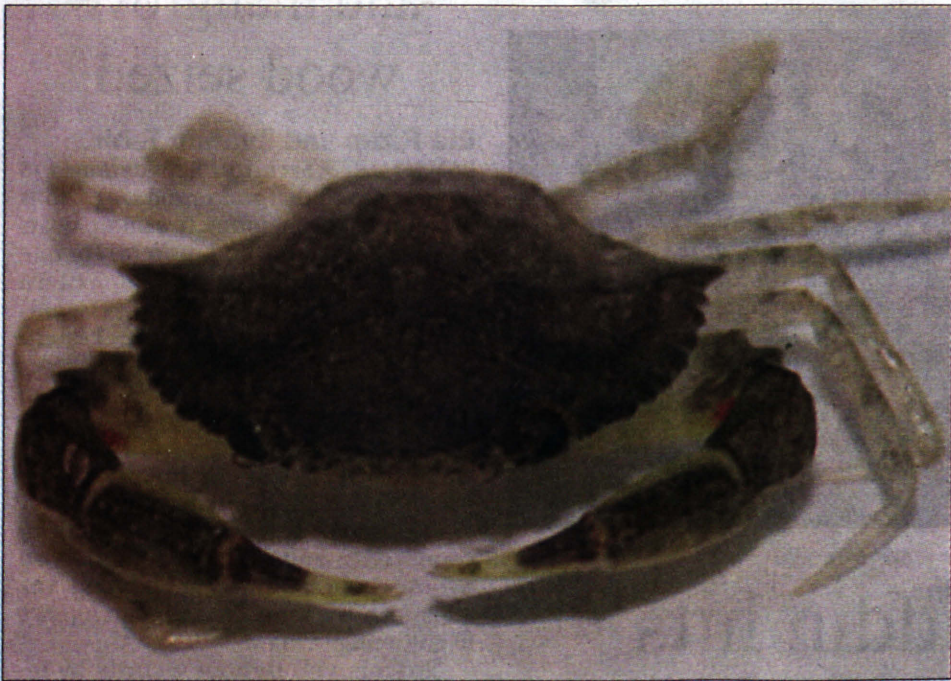
At the initial stage of culture, Rossita said they faced several problems including disease infection and cannibalism that caused mass mortality of the brood stock.

"Similarly in the larval rearing, mass mortality also occurred within a week after hatching due to disease infection. With the research conducted by our team of experts in BMRI, the pathogens that caused the infection has been identified and preventive measures were established to improve the brood stock and larval management," she said.

Since then, they have successfully improved the maturity of the brood stock in captivity through various efforts such as the enhancement of brood stock nutrition, simulation of tidal activity and habitat creation that mimic their natural habitat in the mangrove areas.

Although the production scale in the hatchery is considered small at this stage, the hatchery had successfully produced millions of larvae with average survival of five per cent of crab instar.

"Various researches and efforts will be continued in UMS and with the research collaboration with Tokyo University of Marine Science and Technology on mangrove crab larval production, we hope to achieve better results and contribute to the local aquaculture industry and fishery resources," she said.



Mangrove crablet (33 days old) produced in UMS.