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Mud crab grow-out in ponds and pens

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Monoculture, or polyculture with milkfish, requires investment of about P119,500 for a half-hectare brackishwater pond.

In monoculture, return on investment (ROI) is 46% after two croppings; thus, payback period is 2 years. In polyculture, ROI is 52%; payback, 2 years. In pen culture, investment required for 0.4 ha is P51,000.

ROI after two croppings is 60%; payback, 1.5 years

Small-scale farming of mud crab has been progressing rapidly because of its promising profitability. Thus, with the increasing market demand, commercial-scale production could be a lucrative industry. The three species of mud crab that are commonly cultured in the Philippines are *Scylla serrata*, *S. olivacea*, and *tranquebarica*. They can be distinguished from each other based on characteristics of frontal spine and cheliped, color and marking, ecology, and distribution. Mud crab is commonly called "alimango" in the Philippines.

Mud crab juveniles (10 to 40 g) are caught in marshlands and estuarine areas. Juveniles are available throughout the year, peaking during the months of May to September in the Philippines. In addition, there are also juveniles produced in the hatchery that are available for mud crab farming.

Mud crab can be cultured in mangrove pen, and can be mono- or polycultured with milkfish in brackishwater pond. About 5,000 to 10,000 juveniles can be stocked in a pond or pen. Salinity could be from 10 to 30 ppt. Stocking may be done in early morning or late afternoon, but preferably at night when the temperature is cool. Juveniles are fed with trash fish, and there is limited quantity of commercial feed already available. There could be at least two croppings per year. Culture period is about 150 days until mud crab reaches marketable size that is at least 200 g. Survival is from 50 to 80%.

Mud crab has high value in the market, but low volume can only be sold. Thus, selective harvesting is practical. In partial harvesting in pond, mud crab is caught using baited traps or hand lines with scoop nets, or caught using scoop net by allowing fat crabs to swim along the currents during re-stocking of water to a partially drained pond. In total harvesting, pond is drained and mud crab is collected manually or by hand.

In a pen, partial harvesting is done on the third month of culture. Mud crab is caught manually or by hand during low tide, and/or trapped with baits. Total harvest is done on the fifth month of culture.

Technology presenter and contact person

Dan Baliao (see page 19)



Crab juveniles can be transported with moist newspaper inside paperbox-lined styrofoam (top); one of the berried females held in a tank at AQD (above)



From top left: culture in mangrove pens, brackishwater ponds, and harvest scenes