

Promising results for sandfish and white shrimp farming in Fiji

A number of positive developments have taken place in the marine hatchery at Galoa Fisheries Station (part of Fiji's Ministry of Fisheries and Forests) during the past few weeks.

The Galoa hatchery has been intermittently involved in giant tiger prawn (*Penaeus monodon*) for the last five years, but with limited results due to the average quality of available brooders, microalgae production difficulties, and poor adaptability of the species to fluctuations in salinity and commercial feeding regimes.

Given these limitations and the high demand for shrimp products in Fiji from farmers and retailers (for domestic consumption and the tourism industry), the hatchery decided to import a high-performing strain of a new species of shrimp (*P. vannamei*) from Thailand to carry out some breeding and farming trials. White shrimp is relatively hardier, less demanding in terms of nutrition and management, easy to breed, and better adapted to salinity fluctuations.

In August 2013, the first run of white shrimp (*P. vannamei*) broodstock has produced about 150,000 post-larvae, of which, 77,500 have been distributed to small- and medium-scale farmers on Viti Levu, while the hatchery has kept the remainder as future broodstock and for performing some grow-out trials and research activities.

The hatchery has also managed to produce 2,558 juveniles of sandfish (*Holothuria scabra*, locally known as *dairo*) of around 6 mm in size, which have been transferred to 1-m² "hapas" located in earthen ponds at the same hatchery.

The hatchery manager is planning to keep these juveniles until they reach 5–10 g in weight, at which time they will be transferred to coastal communities for grow-out and restocking, using sea ranching techniques. The Galoa hatchery has also been involved in sandfish breeding and larvae rearing, with limited results due major technical and financial constraints. The situation has changed in the past few months, however, and the hatchery is now fully operational with new highly motivated skilled staff, a microalgae laboratory that has been upgraded, properly maintained grow-out ponds, and a set of tanks and raceways that have been reconstructed.

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Hatchery-produced sandfish juveniles (insert) are placed in hapa nets for further grow-out (images: Teari Kaure).