# SPC and Fiji Fisheries organise practical training on microalgae production for mariculture species

Microalgae are microscopic plants inhabiting the world's oceans and other aquatic environments. They are the world's fastest-growing plants: they can double their biomass daily, providing essential nutrition for aquatic animals, including omega-3 oils and other lipids, proteins and carbohydrates. Most marine hatcheries grow a variety of microalgae species that serve different needs throughout the production cycle.

Microalgae culture is the most expensive and technically challenging aspect of all hatchery operations. It is estimated that the cost of producing microalgae feed ranges from USD 100 to USD 400 per dry kilogram of microalgae.

The microalgae training workshop was conducted 26–29 November 2013 at the Galoa Fisheries Station in Fiji. As part of the training, practical sessions were held regarding species selection, stock maintenance, culture strategies, culture media preparation, hygiene protocols and feeding regimes. A total of 14 Fisheries Officers from different Stations in Fiji (e.g. Savusavu, Lami, Kadavu, etc.) participated in the practical seminar.

Regarding Fiji-specific needs for aquaculture feeds, efficient microalgae production is required as it is a key component of the larval diet of shrimps, of which there are currently two species being produced in Fiji, *Penaeus monodon* and *P. vannamei*. Microalgae are also crucial for the Fiji sandfish (*Holothuria scabra*) breeding programme, which was started in 2013 at the Galoa Station, with the aim of producing sandfish juveniles for reef restocking.



Ruth Garcia Gomez (centre), Shalendra Singh (right) and some of the 14 Fiji Fisheries Officers who participated in the seminar (image: SPC).



A sample of microalgae diversity (image: © Microphyt).

At the end of the training, Shalendra Signh, current manager of the aquaculture programme at the Fiji Fisheries Department, declared, "Overall the training proved to be very useful as we will soon embark on a crucial year, 2014, with a lot of activities planned for our shrimp and sandfish hatcheries in which microalgae will be playing an important part. We also hope that, in the future, similar trainings will be offered to our staff, both locally and overseas, to further build their capacity."

## For more information:

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