

AQUA Dept NEWS

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Biotech laboratory turn over to AQD

The much anticipated turn over ceremonies of the laboratory for advanced aquaculture technologies, also known as Biotech Lab, happened last February 27 at TMS.

The ceremonial turn over rites was done by Mr. Eigi Ueno, First Secretary, Embassy of Japan to the Philippines, in behalf of the Govt of Japan, while Secretary Luis Lorenzo, Jr of the Department of Agriculture (DA) accepted the laboratory in behalf of the Philippines.

Japanese dignitaries who witnessed the ceremonies were: Honorable Osamu Nagaki, JICA Resident Representative in the Philippines; rep-



DA Secretary Luis Lorenzo (left) accepts the Biotech Lab documents from First Secretary Eigi Ueno (right) during the turn over ceremony.

representatives from CRC Overseas Cooperative, Inc., Taisei Corp., and Maruberi Corp.

On hand to assist Sec Lorenzo

were DA Undersecretary Cesar Drilon, Jr., and AQD Chief Dr. Rolando Platon.

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AQD lectures on top shell resource enhancement

Fisheries Resources Management Project (FRMP) of DA-BFAR conducted a training on fish sanctuaries and top shell (*Trochus niloticus*) resource management in Puerto Princesa City, Palawan from February 18 to 20. AQD researchers Dr. Wenresti Gallardo and Mr. Rolando Gapsin lectured on resource enhancement strategies and principles of stock enhancement, and top shell seed production, respectively.

The three-day training course was participated in by representatives of four coastal barangays at Honda Bay, Puerto Princesa namely San Rafael, Babuyan, Tanabag, and Binduyan. The

course focused on the community's crucial involvement in fish sanctuaries' establishment and management. In addition, the participants learned to formulate management plans as well as to utilize designed protocols on monitoring and evaluating released stocks. The training was highlighted by the actual release of hatchery-produced top shell juveniles in a sanctuary in Binduyan.

AQD, as a co-sponsor of the training, provided 3,100 top shell juveniles produced by spawners ob-

tained from Palawan.

The training was made possible thru the efforts of FRMP in coop-

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Seed production and tagging of abalone and top shell techniques refined

Refinement of breeding and seed production techniques for abalone (*Haliotis asinina*) and top shell (*Trochus niloticus*) has been carried out to mass-produce juveniles for release into natural habitats, and for stock enhancement.

Increasing the number of abalone spawners from 50 to 100 individuals (1:4 male to female ratio) per 1-ton or 600-liter tanks doubled egg production, thus, optimizing tank capacity. Abalone broodstock (1 male and 1 female per 60-liter tanks) fed artificial diet or a combination of artificial diet and seaweeds produced more eggs and larvae than those fed seaweeds only. The use of ultraviolet-treated (UV-treated) seawater in incubating free-swimming (trochophore) larvae doubled or even tripled production of more developed larvae (veliger) than using sand-fil-

tered seawater only. The optimum stocking density of abalone ranges from 200 to 250 larvae/liter. The use of grazed diatom plates and UV-treated seawater resulted in significantly higher larval settlement rate than un-grazed diatom plates and sand-filtered seawater only. To produce abalones with clear and distinct bluish-green shell band, 10 to 12 mm abalone juveniles are stocked at 200 juveniles per 50-liter tank, and fed artificial diet for three to four weeks. Due to improved seed production techniques, abalone juvenile production was more than doubled from the 21,446 juveniles in 2001 to 47,600 juveniles in 2002.

Top shell seed production techniques developed in other countries were adopted and refined. Four induced spawnings produced 9,215 juveniles from 1,750,333 larvae, which

developed from 14 million eggs produced by spawners. Some of the juveniles are now being fed artificial diet to produce the reddish-pink shell band that can be used as identifying mark when released for stock enhancement.

– *W Gallardo*



Diet-tagged abalone



Diet-tagged top shell

Biotech laboratory...from page 1

In his message, Mr. Ueno said that the biotech laboratory is a concrete manifestation of the cooperation between the governments of Japan and the Philippines in addressing the challenges of the aquaculture industry. In his acceptance speech, Sec Lorenzo recognized the significant contribution of AQD in aquaculture development. He added that with this new research facility, research output should result in increased productivity, lower production cost, and increased employment among the small fisherfolk. "All these should be done notwithstanding budgetary constraints", he further elaborated. He also clarified that since AQD is in the Philippines, Filipinos should first benefit from its technologies. He then

encouraged AQD to continue extending technology to fishfarmers to heighten production.

The establishment of the Biotech Lab at AQD was formalized on December 12, 2001 when the memorandum of agreement between the two governments was signed. After the cornerstone laying on February 23, 2002 construction of the Enclosed Wet Lab immediately started.

Simultaneously, improvement of the second floor of the existing Nutrition building was undertaken for the other Biotech component laboratories of, such as: Endocrinology and Genetic, Feed Technology, and Microbiology.

The Taisei Corporation of Japan constructed the Biotech Lab. CRC Overseas Cooperation Inc. was the project consultant. – *AP Surtida*

AQD lectures...from page 1

eration with the Regional Fisheries Training Center (RFTC) of DA-BFAR, the Provincial and City Agriculture Offices of Puerto Princesa City, State Polytechnic College of Palawan, and the Iris Marine Development Corporation which has a top shell hatchery in Puerto Princesa. – *B Polohan*



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