

SEAFDEC AQD Matters

Newsletter of the SEAFDEC Aquaculture Department (AQD), Tigbauan, Iloilo, Philippines

AQD and DENR organize training on biodiversity

The last of a series of three courses on *Biodiversity conservation projects for locally managed protected areas and principles of stock enhancement & habitat rehabilitation* drew to a close on 4 September at SEAFDEC/AQD's main station in Tigbauan, Iloilo, Philippines. The training was organized by AQD in collaboration with DENR (Department of Environment and Natural Resources).

Twenty-nine participants from DENR, Bureau of Fisheries and Aquatic Resources, local government units and the academe attended the lectures and practicals on stock enhancement release strategies, tagging & monitoring of releases; grow-out culture of abalone and sandfish; resource assessment on giant clams and introduction to monitoring & evaluation. All the practicals were done at AQD's Igang Marine Station in Guimaras and in Concepcion, Iloilo.



(Clockwise) AQD scientist Dr. Ma. Junemie Lebata-Ramos orients the trainees on what to do for their practical activity on abalone stock enhancement. Mayor Milliard Villanueva of Concepcion orients the participants about the municipality's stock enhancement program. Participants measure sandfish for monitoring of releases. (inset) Sandfish

HELLO, CONCEPCION!



Photos by R Subaido

Concepcion is known for its white sand beaches and clear waters and the towering Mt. Pan de Azucar that dominates the seascape and provides a magnificent landmark. The area is rich in marine resources which is the reason why many AQD activities and trainings are held in Concepcion. The coral gardens and unique land formation also attract local and foreign tourists. Concepcion - a new place for tourism, a majestic gift from nature.

AQD holds mid-year review of GOJ-TF programs

Twenty one AQD scientists and researchers presented to their colleagues, including AQD Deputy Chief Dr. Teruo Azuma who manages the regional programs funded by the Government of Japan Trust Fund (GOJ-TF), the progress and some constraints in the implementation of their studies. GOJ-TF programs include: (1) promotion for sustainable and region-oriented aquaculture practices; (2) safety of aquaculture products in Southeast Asia; (3) accelerating awareness, capacity building & fish health management in Southeast Asia; and (4) resource enhancement of internationally threatened and over-exploited species in Southeast Asia through stock release. The mid-year review was conducted 8-9 August at AQD's main station in Iloilo.



Researchers present updates of GOJ funded studies

Third training on freshwater prawn concludes

Three educators and an accountant completed the special training on *Freshwater prawn hatchery and grow-out operations* in AQD's Binangonan Freshwater Station from 20 to 24 August. This five-day course is the third one offered since the beginning of the year. It consists of lectures and practical sessions on topics related to breeding & larval rearing, grow-out culture, feeding, and economics.

Mr. Mario Valdez of Quirino State College of Fisheries together with his assistant, Mr. Julis Gamagaygay, praised AQD's lecturers and training coordinators. "We are confident that we can apply what we learned and we could duplicate AQD's prawn hatchery facility in the university to assist farmers in their livelihood," Mr. Valdez said. On the other hand, Mr. Chee Leong Kong of Malaysia compared the training in AQD

to the practices of his country: "Malaysia is very advanced in raising freshwater prawn but here in AQD, I learned the techniques on broodstock selection and larval rearing." Also, accountant Mr. Alfredo David had this to say: "I hope to establish a fishery cooperative in Pampanga that will engage in freshwater prawn grow-out business". He plans to introduce this species to his neighbors in Pampanga and bring some post larvae and distribute to tilapia farmers.

-- Photos & story by FA Aya



(L-R) AQD's Ursan dela Paz helps distinguish female from male prawn broodstock. BFS staff supervise the trainees during larval rearing of freshwater prawn. Trainees together with the BFS staff during the closing ceremony

Five finish tilapia course

Five business-minded Filipinos from Quezon City, Taguig and Cebu joined the training on *Tilapia hatchery and grow-out operations* conducted by SEAFDEC/AQD at its Binangonan Freshwater Station

from 30 July until 3 August. The five trainees are either engaged in tilapia or yet to establish hatchery / grow-out operations. They were given lectures, including genetics & sustainable management of farmed tilapia and aquaculture

economics, and hands-on practical sessions in actual tilapia operations. At the closing program, they thanked their AQD mentors, calling the course a *vigorous one* as well as a *refreshing vacation* by the Philippines' largest lake.

-- Photos & story by JA Valera



(L-R) AQD's Engr. Emiliano Aralar teaches how-to-measure water quality parameters. AQD's Mr. Mark Nell Corpuz explains algae culture. The five participants upon completing the tilapia course



Health-related activities conducted in AQD



AQD offered its employees and their qualified dependents a series of medical services on 9 and 28 August. With the help of Caduceus Clinical Laboratory and Services, a free Doppler study, bone densitometry and discounted vaccination were given.

Doppler study is an ultrasound procedure that measures the blood flow and pressure in blood vessels to check the presence of blockage in the circulation (availed of by 70 employees). Bone densitometry scans for

osteoporosis risk (availed of by 79 employees). The vaccines that were availed of during the medical service were for flu (availed of by 25 employees and 8 dependents), pneumonia (availed of by 27 employees and 6 dependents) and cervical cancer (availed of by 6 employees).

Dr. Sonia Galleon of Caduceus Clinic and AQD resident physician Dr. Jocelyn Magsico assisted in giving medical advice and necessary prescriptions. This activity is part of the drive to maintain the health and wellness of its employees.

AQD employees and qualified dependents queue up for medical check up and vaccination

(Inset - clockwise) Bone densitometry procedure. Doppler ultrasound procedure. Results analysis and medical advice. Pneumonia vaccination

AQD extends help to flood victims

On 8 August, residents of Pipindan (26 families composed of 117 persons including children), the host barangay of AQD's Binangonan Freshwater Station (BFS) in Rizal evacuated to the BFS dormitory. They occupied 10 rooms and the lobby. The water of Laguna de Bay had risen because

of the strong southwest monsoon and flooded their houses. Meanwhile, the local government unit of Binangonan gave the evacuees relief goods on 10 August.

The evacuees expressed their gratitude to AQD for giving them temporary shelter. BFS last hosted evacuees in 2009 during typhoon Ondoy.

-- Photos & story by MLC Aralar



Evacuees occupy rooms at the BFS dormitory and cook their food outside



A team from the Office of the Mayor of Binangonan and staff from DSWD, Coast guard and PNP distribute relief goods to the evacuees

New faces @ SEAFDEC/AQD



BAES, Charis J.

She is the new Technical Assistant in the Fish Health Section at RD under Dr. EC Amar. She graduated *cum laude* in University of the Philippines Diliman with the degree of BS in Biology in 2011.



STINSON, Ma. Haydee S.

She is assigned in Binangonan Freshwater Station's RD as Administrative Assistant 1. She finished her degree in BS Biology in the University of Rizal System in 2008.



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Research seminars on sponge and abalone

AQD hosted a group from DOST including two Balik Scientist program awardees Dr. Mercy Laurino of University of the Philippines-Manila and Dr. Ma. Cecilia Conaco of UP-Marine Science Institute and program coordinator Ms. Theresa Domine. The group toured Igang Marine Station in Guimaras, after which, Dr. Conaco shared with AQD her study entitled *A sponge life story: Genomic events accompanying the pelagobenthic transition in a marine sponge* on 28 August at AQD's Tigbauan Main Station in Iloilo.

Dr. Conaco, using the demosponge *Amphimedon queenslandica*, characterized the sponge's metamorphosis from a free-swimming larva into a sessile adult. To identify genome-wide events that accompany the pelagobenthic

transition in *A. queenslandica*, she compared global gene expression profiles during four key developmental stages: pre-competent, competent, post-larvae and adult. Dramatic changes in transcription were observed in sponge larvae as they developed more functions (e.g. cellular respiration) needed for settlement. The sponge turns on or off some of its genes during its metamorphosis from a pelagic larva to a benthic adult, depending on environmental demands.

Another seminar was held earlier on 23 August. Ms. Milagros de la Peña, AQD researcher, presented her paper on the *Effect of using thraustochytrid Schizochytrium sp. OT1 as source of lipid and fatty acids for abalone Haliotis asinina Linne juvenile practical diet*.

The push for alternative sources of lipids and fatty acids was due to the dwindling supply and increasing price of the two common sources of lipids and fatty acids (cod liver and soy bean oil) in abalone diet. Thraustochytrids are common marine microheterotrophs akin to algae which contain high protein and DHA content that makes them the perfect substitute to imported oil. It turns out that the modified diet containing thraustochytrid is more effective than the original

diet in promoting growth measured in terms of weight gain, daily increment in shell length, survival rate and fatty acid composition in abalone tissues. The modified diet is also more cost-efficient and practical compared with the original diet.



DOST Balik Scientist Program awardee Dr. Ma. Cecilia Conaco and AQD researcher Ms. Milagros de la Peña during their presentations; the audience at AQD's Tigbauan Main Station

New @ AQD!



FishWorld has a new attraction that will delight visitors. A vibrant fish fountain was built near the entrance of FishWorld and will be functioning soon. The fountain was designed by FishWorld curator, Dr. Teodora Bagarinao.



What's next for AQD?

Date (2012)	Activity
24-26 September	Strategic Planning Meeting
28 September	Submission of necessary data for the Year 2013 Internal Budget Proposal
on or before 5 October	Submission of Program Reports
	Submission of Accomplishment Report on Training and Information
	Submission of Accomplishment Report on Administration and Finance
8-18 October	Preparation of consolidated AQD Report for PTAC Meeting
8-18 October	Submission of consolidated AQD Report and Plans to Philippine Government (PTAC Members)
25 October	PTAC Meeting
30 October	Submission of detailed Proposals for 2013 (new and continuing)
	Submission of consolidated AQD Program Documents to SEAFDEC Secretariat (Bangkok) for Program Committee Meeting and ASEAN/SEAFDEC FCG/ASSP Meeting
26-30 November	35th SEAFDEC Program Committee Meeting and 15th Meeting of Fisheries Consultative Group of the ASEAN-SEAFDEC
25 November	Submission of Annual Study/Project Reports to Program Leaders
10 December	Submission of Annual Program Reports
December	Preparation of consolidated and revised AQD Reports for submission to the Secretariat in January 2013
	Preparation of AQD Budget Proposal for submission to DFA/DBM in January 2013