

# SEAFDEC AQD Matters

In-house newsletter of the SEAFDEC Aquaculture Department, Tigbauan, Iloilo

## Department Chiefs meet in Bangkok

B ACOSTA

**A**QD Chief Dr. JD Toledo, Deputy Chief, Dr. H Ogata and Ms. B Acosta attended the *Department Chiefs' meeting* held last 9 February 2009 in Bangkok. SEAFDEC activities that require collaboration among the Secretariat and the different Departments were discussed in the meeting.

These include the preparations for the 41<sup>st</sup>

*meeting of the SEAFDEC council* which is scheduled to be held in Fukuoka, Japan this April and the final revisions for the Concept Proposal on the *ASEAN-SEAFDEC conference on sustainable fisheries development towards 2020*.

The meeting participants also discussed the new program framework and guidelines on SEAFDEC Intellectual Property Rights

which will be proposed and endorsed for approval by the SEAFDEC Council.

Other issues discussed were information related matters and follow-up actions from the 31<sup>st</sup> Program committee meeting and the 11<sup>th</sup> Fisheries consultative group Meeting of SEAFDEC.

AQD Chief Dr. JD Toledo and B Acosta with participants from the Philippines (BFAR), Mr. Severino Escobar, Jr (left) and Mr. Edwyn Alerna (right)



Participants of the ASEAN-SEAFDEC Regional Technical Consultation on International Fisheries Related Issues

## RTC on International Fisheries Related Issues

B ACOSTA

**B**ack to back with the *Department Chiefs' meeting*, the *ASEAN-SEAFDEC regional technical consultation on international fisheries related issues* was held last February 10 to 12 in the same venue.

The participants were national delegates from the ASEAN and SEAFDEC member countries, representatives of SEAFDEC Secretariat and Departments and the ASEAN Secretariat, and resource persons from the European Commission, Faculty of Economics of Kasetsart University and Department of

Marine and Coastal Resources (Thailand). AQD Chief Dr. JD Toledo and Ms. B Acosta also attended the meeting.

The attendees were briefed on development initiatives to improve food security in the ASEAN region and possible contribution from the fisheries sector in realizing the food security objectives.

Regional issues such as EC regulation to prevent, deter, eliminate illegal, unreported and unregulated (IUU) fishing; FAO legally-binding instruments on port state measures for combating IUU fishing; small-scale fisheries;

refinements of the required adaptive measures and proposed activities to mitigate impacts of climate change; aquaculture certification; and fisheries subsidies, were reviewed and discussed in the meeting.

Other matters taken up were the resolution issued at the 61<sup>st</sup> Session of the UN General Assembly on high sea bottom fisheries and the global economic situation and its impact on the fisheries sector.

## Law creating Department of Fisheries discussed

**A** technical working group met to discuss and refine House Bills 227, 3184, 3739, and 3178 which provide for the creation of a Department of Fisheries and Aquatic Resources, last February 9 in Quezon City.

AQD was represented in the meeting by Dr. CL Marte, Mr. RF Agbayani, Dr. MRR Eguia, and Ms. GVH Garcia.

The meeting was organized upon the motion of the Committee on Government Reorganization and the Committee on Aquaculture

and Fisheries Resources of the Philippine House of Representatives.

Aside from the technical/scientific community representatives, fisherfolk, NGOs, and government agency representatives also shared their perspectives and impressions as each section of the draft bill was reviewed.

The outcome of the meeting, which is a dwhich is a consolidated draft bill, will be presented in another TWG meeting to be attended by the same sectoral representatives

but this time with the house bill proponents.

Until then, additional comments and suggestions still need to be raised.

For one, Dr. CL Marte believes that section 4 of the draft house bill defining the jurisdiction of DFAR should be expanded to include municipal waters since local governments are not as capable in aquatic resource management as the proposed national government agency.

## Some AQD guests

**Dr. John Skerritt**, Regional Coordinator of ACIAR visited TMS last 15-16 January. The main purpose of his visit to Iloilo was to follow up on the plans for ACIAR's new mariculture initiative covering seaweeds, mudcrabs, molluscs

and marine fish. He also visited Igang Marine Station to learn of AQD researches on marine species. Mr. Skerritt met with the Chief, RD Head and AQD experts on seaweeds, mudcrabs, mollusks and marine fish.

**Philippine Ambassador to Switzerland** HE Minerva Jean Falcon, DFA-UNIO Executive Director Grace Princesa and staff namely, Ms. Saula Cruz and Ms. Lilian Navalta and AQD Budget Consultant Ms. Antonina Duremdes visited AQD last 23-25 January. The Chief presented an overview of AQD activities, research works and collaborative projects. There was a brief discussion on the future plans of AQD, especially those which concerns the country. Special emphasis on projects which concern OFWs were also raised by Dir. Princesa and Ambassador Falcon. The team also visited AQD facilities and laboratories as part of their familiarization tour.

in Catarman, Northern Samar. The Chief, TVDD Head, TID Head, Dr. Anicia Hurtado and Dr. Emilia Quintio participated in the meeting.

**Ms. Shioh Chin**, visited AQD 5-6 February as part of her Science Journalism Internship Programme under the International Development Research Center and the Science and Development Network (SciDev.Net). In her email, Ms Chin says she is "interested in getting an overview of what the Aquaculture Department does and finding out what the latest research developments are, as well as understanding how the department communicates with the public, the media and policymakers." She was briefed and toured by KG Corre and MT Castaños around TMS, IMS, and DBS.

**Mr. Barney Smith and Prof. Alistair McIlgorm**, ACIAR Program Manager for Fisheries, National Maritime Science Centre Director respectively, visited AQD 2-3 February. The purpose of their visit was to discuss the plan for a proposed collaborative mariculture project with AQD and mudcrab project



**Top:** Ms Shioh Chin (rightmost) with A Gaitan, KG Corre, and MT Castaños at IMS. **Above:** DFA officials with the AQD Chief JD Toledo discussing the future plans of AQD

## Black-eyed peas eaten by grouper

Some AQD-reared grouper stocks have reportedly been eating black-eyed peas, also known as cowpeas or *Vigna unguiculata*, as part of their diet.

This is the subject of a study under the Marine Fish Program entitled “White

cowpea meal as alternative source of protein for grouper *Epinephelus fuscoguttatus*”, by PS Eusebio with RM Coloso, PJ Biñas, and M Tesorero.

The study aims to promote sustainable aquaculture through the use of alternative plant protein sources that can partially replace fishmeal in the diet.

The RD conference room was filled with AQD staff last 24 February for a sensory-evaluation activity that aimed to test if meat from grouper fed the

regular fish meal-based diet is any different from those fed the cowpea-based diet.

Cowpea is a cheaper source of protein for feeds than fish meal.

Sensory-evaluators were asked to rate the two kinds of grouper meat, labeled A and B, on a hedonic scale based on odor, flavor, and texture. Each kind of meat was prepared two different ways, steamed and sinigang (sour broth).

Should there be no noticeable difference between the two kinds of grouper meat, then cowpea-fed grouper will have no trouble with market acceptance.



**Top:** Sensory-evaluators being oriented by Ms. PS Eusebio (standing). **Above:** Two types of grouper meat, steamed and in sinigang

## 1<sup>st</sup> Ulang Summit

Three scientists from AQD delivered papers during the 1<sup>st</sup> National summit on the hatchery and culture of freshwater prawn which was held in the BFAR NIFTDC Asian Fisheries Academy in Dagupan City last December 11, 2008.

Giant freshwater prawn is locally known as “ulang” in the Philippines.

Dr. MLC Aralar presented a paper on “Culture of the giant freshwater prawn

*Macrobrachium rosenbergii* in lake based cages”, Dr. MRR Eguia delivered a paper on “Research Initiatives on the Giant Freshwater Prawn”, and Dr. LD de la Peña’s paper was on “Common diseases of *Macrobrachium rosenbergii*”.

In the summit’s draft resolution, AQD was included as one of the leading agencies in local prawn research.

One of the summit’s presentors, Ms. Cora Ryan from Kalinga, also

acknowledged the skills she learned from an AQD on-site training to have helped in her ulang production.

The summit aimed to (1) gather information on available technologies, (2) identify gaps and market for the development of the industry, (3) identify strategies for the formulation of a 5-year road map, and (4) prepare a resolution for the promotion of freshwater prawn as an aquaculture commodity.

## PhP10 M research fund offered to Ronpaku Fellows

Dr. Graciano Yumul Jr, DOST Undersecretary for R&D, announced a P10 million research fund for a two-year multi-disciplinary project which will address the negative effects of climate change in the Philippines.

Dr. Yumul offered the fund to the DOST-JSPS Philippine Society of Ronpaku Fellows (PRF) during its meeting at the University of Santo Tomas last

February 13.

Dr. MRR Eguia who represented AQD-based PRF fellows in the meeting, encourages AQD-based PRF to provide inputs to the umbrella proposal for presentation in a Focus Group Discussion which will be held on March 7, 2009 at the De La Salle University.

In the same meeting, Dr. Eguia was inducted as secretary of the society.

The Philippine Society of JSPS RONPAKU Fellows is comprised of researchers, scientists and academicians in the agricultural sciences, fisheries, health, engineering, and political science etc, who were grantees of the JSPS PhD dissertation scholarship.

## Lambunao sites assessed for fish culture

Upon the invitation of LGU officials, AQD visited the town of Lambunao, Iloilo last January 15 to assess potential demonstration sites for tilapia culture.

Lambunao Mayor Raynor Gonzales is interested in providing aquaculture livelihood to local farmers whose fields were wiped-out by Typhoon Frank last June 2008.

AQD's Dr. EG Ayson, Dr. MJHL Ramos, Ms. KG Corre, and Ms. RF Bombeo visited three sites in Brgy. Masisi

and Brgy. Tampicao and found two of the sites suitable for the pilot-demonstration of tilapia pond and cage culture.

The two sites, with a combined area of over 600m<sup>2</sup> have existing pond compartments, are flood-free, and can tap the adjacent river as a water source.

The owners of the sites are all enthusiastic to collaborate with the LGU and AQD for the establishment of pilot-demo sites in their areas.

Town officials hope to establish five demo sites in all through local funding and AQD's technical assistance.

AQD is currently preparing a project proposal and budget estimates for the livelihood program.



**Top:** Dr. MJHL Ramos and Dr. EG Ayson get their feet wet when their dump truck got stuck in the middle of the river. **Above:** One of the assessed sites with an existing concrete compartment

Once approved, a season-long training course will be conducted to prepare the beneficiaries.

-FROM THE REPORT OF  
RF BOMBEO

### Pawikan at Parara



**F**ishWorld tagged a female green turtle (pawikan; *Chelonia mydas*) at Brgy. Parara, Tigbauan, morning of February 19 after receiving a call from the locals.

It was reportedly found by local fishers in their *punot* (fish trap) before dawn the previous day.

The sea turtle, which now bears the tag PH-8508, measured 81 cm curved carapace length x 76.5 cm width.

The turtle was released back to the sea on February 23 at around 5 PM.

## Tell us your story!

We'd love to hear of stories from your labs, offices, activities, and official travels!

Call us at **420** for news tips or email us at **devcom@seafdec.org.ph**.

You can also give us your own write-ups, reports, and photos. We will credit them to you of course.

Please send text separately from your photos. Devcom also uses these materials to update the AQD website and SEAFDEC Newsletter articles.

## PCAMRD Zonal R&D workshop

**D**r. MLC Aralar presented a paper “Comparison of performance of two populations of the giant freshwater prawn *Macrobrachium rosenbergii* cultured in lake-based cages” at the 12<sup>th</sup> Southern Luzon zonal R&D review and planning workshop at the Southern Luzon State

University in Lucban, Quezon which was held last December 3 to 4, 2008.

The workshop is an annual event of the PCAMRD Southern Luzon Zonal Center for Aquatic and Marine R&D.

Noteworthy are the paper presentations of Ms. Weeny Escobar of the Cavite State University (CavSU) entitled

“Pathogenicity of bacteria from fish and shrimp to high saline red tilapia *Oreochromis* sp.” which was done under Dr. GL Po’s guidance, and Ms. Leah Lacson (also from CavSU) “Artemia consumption of mud crab *Scylla serrata* larvae under the supervision of Dr. ET Quintinio.

## UST listens to ulang lecture

**T**he Department of Biological Science of the University of Santo Tomas (UST) listened to a lecture by AQD’s Dr. MLC Aralar on ulang culture last February 3.

The lecture “Biology and culture of the giant freshwater prawn

*Macrobrachium rosenbergii*” was the university’s Biology Departmental Lecture for their Science Week Celebration and was attended by 3<sup>rd</sup> and 4<sup>th</sup> year BS Biology students, graduate students, and faculty.

The Biological Science Department of UST is

interested in conducting their students’ thesis research at AQD.

One of their graduate students, Ms. A Herrera, already plans to conduct her thesis on freshwater prawn at BFS.

## Dr. Aralar nominated as NRCP division chair

**I**n a meeting of the Biological Science Division (Division V) of the National Research Council of the Philippines (NRCP) last February 16 in Bicutan, Taguig City, Dr. MLC Aralar was nominated to replace outgoing chairperson Dr. Priscilla Sanchez.

Dr. MLC Aralar, who was nominated along with Dr. Marites Yee from the

University of the Philippines Los Baños, is currently a scientist at AQD and is a member of the NRCP Division V executive committee, representing aquatic sciences.

It is hoped that if Dr. Aralar wins the chairmanship, AQD will have a chance to have firsthand information on research collaboration and funding opportunities under the NRCP.

In the same meeting, Dr. Sanchez encouraged members to submit proposals for funding in the current year under research grant opportunities amounting to as much as 500 thousand pesos a year.

Also in the meeting were AQD’s Dr. MRR Eguia and Mr. RV Eguia who are regular and associate members respectively.

## National wetlands conference

**T**he *National Conference on Wetlands, Climate Change Adaptation and Biodiversity Conservation* was held 12-14 January at Silliman University in Dumaguete City.

Dr. MLC Aralar of AQD attended the conference as a member of the Technical working group for the Freshwater wetlands committee of the

conference.

Among the primary objectives of the conference was to revise the National wetlands action plan for the Philippines.

On the second day of the conference,

Dr. MLC Aralar joined a field trip to the twin lakes Balinasayao and Danao. Both are lakes are protected areas

where locals have stopped their *kaingin* (slash and burn) activities and turned to ecotourism.



## February fish harvests

A series of bountiful harvests this month had AQD employees tugging home over 1.8 tons of grouper, milkfish, and sea bass from IMS and DBS. Meanwhile, over 4.6 tons of AQD milkfish were traded at the Iloilo Fishing Port. The table below details the direct and immediate contributions of AQD to food security this February.

| Station | Commodity | Date Sold | Kilograms sold |            |
|---------|-----------|-----------|----------------|------------|
|         |           |           | to AQD staff   | to Brokers |
| IMS     | Grouper   | Feb 05    | 52.4           |            |
|         |           | Feb 12,13 | 775.82         | 2 700      |
|         |           | Feb 17    | 447.15         | 150        |
| DBS     | Milkfish  | Feb 19    | 1 500          |            |
|         |           | Feb 20    | 294.10         | 300        |
|         |           | Feb 24    | 118.50         |            |
|         |           | Feb 27    | 150.55         |            |
|         |           | Feb 27    | 150.55         |            |
|         | Sea bass  | Feb 27    | 150.55         |            |

Data from Materials Control Unit



Night-time harvest of milkfish at the DBS last February 19. Looking on are some trainees from the Northern Mariana Islands and OJTs from Maejo University (see related stories on opposite page)

### Welcome our new hires!

**T**wo scientists, two associate researchers, one technical assistant, and one admin assistant left the department since December last year after the expiration of their contracts. Another three retired from years of dedicated service: an information specialist, financial assistant, and technician.

On the other hand, expect to bump into two new faces here in AQD. That is if you haven't yet!



**Iris Ann Borlongan** joins the Farming systems and ecology section as technical assistant. She is a BS major in Biology from the Central Philippine University.



**Redford Lee Tiapson** joins the performance management group of the Internal audit as financial assistant 2. He is a BS Accountancy graduate of the University of San Agustin.

### Farewell, Nilo

**T**he AQD family was in grief over the sudden demise of Mr. Nilo Franco, Senior Technical Assistant assigned at the Dumangas Brackishwater Station, who passed away February 26 due to cardiac arrest. Nilo has been with AQD since 1978 when he joined the Auxilliary Services Division as Planning Officer. Since then, he has served various positions in different offices in the Department. He is survived today by his wife, Annie Franco who is a Senior Technical Assistant at the Breeding and Seed Production Section of AQD.

*Nilo Maravilla Franco, is a humble pragmatic economist from UP Diliman who would have reached his luster more brightly had he taken worldly pleasures with more restraint. We will miss his unassuming intelligence and common touch and he will be remembered forever as a friend, a brother and a co-worker.*  
- D Baliao



*Although Nilo was a man of few words, you could get him to speak if the topic was of his interest. In the two years that he was with the crab project, he never failed to accomplish whatever job I requested him to do.*

- ET Quintitio

*He was an ultimate optimist. For him, no problem was insurmountable and without a solution. I will always remember Nilo as a smiling, amiable and intelligent but unassuming colleague.*  
- GL Po

## Abalone and seaweed trainees from N. Marianas

**E**ight fellows from the Northern Mariana Islands participated in a *Specialized Training on Abalone (H. asinina) Nursery & Grow-out Culture and Seaweed (Gracilaria) Farming* last February 16 to 21.

Aside from the lectures and practicals at TMS, the trainees also visited DBS to witness a milkfish harvest, and IMS for practicals on abalone cage-culture operations

The trainees were composed of Hon. Jose San Nicolas, Mayor of the Municipality of Tinian; Mr. Ross Hugh Manglona, Northern Marianas

College (NMC) Cooperative Research Education & Extension Services Director; Michael Ogo, NMC Grouper Project Principal Investigator; and five other staff from the

Municipality of Tinian.

The training was initiated when Mr. Manglona of NMC visited AQD last year to survey technologies in preparation for their collaborative project with the LGU of Tinian.

Mayor San Nicolas will return to AQD in March and plans to bring more of his staff in June for training on tissue culture.

### A special training on fish/shrimp parasites

Another special training was held last month: *Training course on fish/shrimp parasite detection and identification* for Mr. John Nealega of Santeh Feeds Corporation.

Mr. Nealega trained with GE Pagador from January 27 to 30 at the Fish Health Section.

Identification of fish and crustacean parasites were taken up as well as histology preparation and analysis.



CV Genzola



**Top left:** Trainees with MRJ Luhan at the algal laboratory. **Top right:** Measuring shell length of abalone at IMS. **Above:** The trainees with the AQD Chief JD Toledo and KG Corre during the closing ceremony.

## Sasapim, Nilobon, and Suwaree

**O**n February 26, AQD bade farewell to three on-the-job trainees from Thailand, Ms. Suwaree Kitikiew, Ms. Nilobon Janwong, and Ms. Sasapim Namwongprom who have been training in the department for four months since November 3 last year.

These three undergraduate students were studying Fisheries Technology and Aquatic Resources at the Maejo University in Chiangmai before their training in AQD.

In four months, they had internship training at the Natural Food Laboratory, Fish Hatchery, Abalone and Seaweed Hatchery, Fish Health Section, Feed Mill Plant, Central Analytical Laboratory, the IMS Mariculture Park, Crustacean Hatchery, DBS, and also attended the Training of Trainers on Rural Aquaculture last November 2008.

**Left-right:** Sasapim, Nilobon, and Suwaree



IT Tendencia

## Double victory at 12<sup>th</sup> Intel Philippine Science Fair

**T**wo first place winners of the recent 12<sup>th</sup> Intel Philippine Science Fair (IPSF) conducted their research with the assistance of AQD experts and using AQD facilities.

Angeli Joyce Yap Dy of Capiz National High School (CNHS) won 1<sup>st</sup> place in the Cluster 2 Life Science Individual Category with her study “In vitro cytotoxicity MTT assay against human lung carcinoma (A549) and human colon carcinoma (HCT116), free radical DPPH scavenging assay and

antibacterial assay of milkfish (*Chanos chanos* Forsskal) bile: a physicochemical defense system”.

In AQD, she conducted her cytotoxicity and antimicrobial assays under the supervision of Dr. RV Pakingking Jr and BCA protein assay with the assistance of F Legario. She also went to UP Diliman for the other components of her study.

Angeli, bested 16 other regional winners in her category and will be going to Reno, Nevada in the United States to represent the Philippines in the Intel International Science Fair (ISEF) 2009 on May 10 to 16.

Another winning entry by Toribio Ramon Hechanova III, Jonathan Quiogue, and Janvin Jessel Cariscal from the Philippine Science High School Western Visayas (PSHSWV) was entitled “Urea enrichment in marine waters lowers the egg viability

and inhibits early embryonic development of the sea urchin *Tripneustes gratilla* L.”

Their study, which won 1<sup>st</sup> place in the Cluster 2 Physical Science Group Category and a special award from the Congressional Commission on Science & Technology and Engineering, aims to provide evidence to support the continuation of the ban on Sulu Sea urea dumping.

These three senior high school students conducted their research under the supervision of Dr. MJH Leбата-Ramos who helped them with their paper and in using facilities at the stock-enhancement laboratory.

The same students garnered the top prize in their category during the PSHSWV Science Research Congress last February 16 where AQD’s NB Bautista, D Catedral, and RD Dianala were among the invited judges.



Angeli Joyce Yap Dy holding her trophy (center) with the Chief, Dr. RV Pakingking Jr, parents (left), and research adviser Mr. Ronilo Aponte (right)

When asked for a message to young researchers like her, Angeli can only say, “Don’t limit yourself. Expand your horizon, and, during the process, enjoy in order to succeed.”

It will surprise many that this winner in the Intel Philippine Science Fair is only in her second year high school, but note that she conducted her study during school break – before she entered second year.

Indeed, Angeli did not limit herself to her age and to what she knows. She sought the help of many research consultants whom she acknowledged to have contributed to her success. Among her primary consultants was AQD’s Dr. RV Pakingking who helped in her paper and cytotoxicity and antimicrobial assays.

Angeli’s research adviser, Mr Ronilo Aponte, says their school, Capiz National High School, has been a long time partner of AQD for their students’ science researches. “We have trust and confidence in SEAFDEC, 100 percent”, says Mr. Aponte who recalls his former student who already won in the Intel International Science Fair in 2007. “He also did his research here in SEAFDEC.”



The 12<sup>th</sup> IPSF awardees from the Philippine Science High School Western Visayas with their research adviser, Dr. Josette Biyo

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