

SEAFDEC AQD Matters

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



Photo by JE RADA

AQD Information Specialist Mr. Stephen Alayon receiving his plaque. SEAFDEC/AQD Institutional repository page (at left)

AQD library bags awards

AQD Institutional Repository (SAIR) was given the 2012 Outstanding Library Program award by the Philippine Association of Academic and Research Librarians Inc (PAARL). SAIR is the official digital repository of scholarly and research information of the department; this is to enable the effective dissemination of AQD publications for its stakeholders. View SAIR here <http://repository.seafdec.org.ph/>.

Meanwhile, Mr. Stephen Alayon, Information Specialist of AQD Library and Data Banking Services Section, was recognized by the PAARL and was awarded as Outstanding Academic/Research Librarian for 2012 on 25 January at the Technological Institute of the Philippines, Quezon City.

PAARL is an organization that represents the librarians of institutions supporting scholarly research and/or formal education on the collegiate level and above.

AQD signs new pact with UPV & Kiko Technology

AQD renewed its agreement with the University of the Philippines Visayas (UPV) on 28 January at its main station in Tigbauan, Iloilo. The agreement aims to strengthen the capabilities of AQD and UPV in the fields of aquaculture, fisheries, aquatic sciences and related fields through the cooperative use of materials and facilities. AQD Chief Dr. Felix Ayson and Research head Dr. Relicardo Coloso signed for AQD; while Chancellor Dr. Rommel Espinosa and Vice Chancellor for Research and Extension Dr. Ricardo Babaran signed for UPV.

On 16 January, AQD signed another agreement with Hong Kong-based Kiko Technology for a test trial of their new product called Tritan (designed to improve water quality). The objective of this trial is to demonstrate how Tritan (18 pieces were given to AQD) can decrease mortality rates, improve water clarity in tanks/ponds, improve product taste, reduce tank/pond odors, impact rates of feed conversion, increase size/weight of the subject, and/or promote uniformity of size, weight, color, etc. The test trial will be conducted on grouper, shrimp, mud crab, abalone, microalgae and seaweeds.



(Seated, L-R) Research head Dr. Relicardo Coloso, AQD Chief Dr. Felix Ayson, UPV Chancellor Dr. Rommel Espinosa and Vice Chancellor for Research and Extension Dr. Ricardo Babaran. Standing as witnesses are AQD researchers and UPV officials (L-R) College of Fisheries and Ocean Sciences Dean Dr. Carlos Baylon, Technology Verification and Demonstration head Dr. Emilia Quinitio, College of Arts and Sciences Dean Dr. Ma. Luisa Mabunay and Training and Information head Dr. Evelyn Grace Ayson



(L-R) Mr. Butch Caromina, Dr. James Osugi and Mr. Jonathan Nacario (standing) of Kiko Technology; AQD Chief Dr. Felix Ayson and AQD's verification & demonstration head Dr. Emilia Quinitio

Consultation on commercially-exploited aquatic species

On 22 January, AQD Chief Dr. Felix Ayson together with other representatives from SEAFDEC and ASEAN reviewed the proposed listing of commercially-exploited aquatic species during a regional consultation in Bangkok, Thailand. Other CITES-related issues were also discussed during the meeting.

The output of the consultation particularly the views and positions of ASEAN-SEAFDEC on commercially-exploited aquatic species will then be submitted to the SEAFDEC Council for discussion at their meeting on 1-5 April in Cebu City. SEAFDEC and the ASEAN Sectoral Working Group on Fisheries will later make a common, coordinated position on behalf of ASEAN-SEAFDEC member countries and present this to the *16th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species (CITES-CoP16)*.

AQD gives update on freshwater prawn

AQD scientist Dr. Ma. Lourdes Aralar was invited by the Southern Leyte State University (SLSU) - Bontoc Campus to be a plenary speaker in the *First international giant freshwater prawn congress* held 9-11 January in Southern Leyte.

Dr. Aralar presented her two papers on *Freshwater prawn industry in Asia* and *Recent developments in the*

cage culture of the giant freshwater prawn. She also served as judge during the research paper competition.

At the congress, she met several alumni of AQD's training course on giant freshwater prawn. One of them was SLSU's Mr. Oligario Adesna who said that based on his AQD training, he was able to successfully rehabilitate and upgrade the university's



AQD scientist Dr. Ma. Lourdes Aralar gives two plenary talks on the giant freshwater prawn (left). Dr. ML Aralar (sitting, right) with participants from Tra Vinh University in Vietnam and Bicol University

ulung hatchery. SLSU is now producing PL (post larvae) for

its own needs and for grow-out clients.

At the fair: AQD serves stakeholders



Ms. Haydee Stinson and Ms. Vivian Jatulan take charge of AQD's booth

AQD's research-and-development work was promoted during the *5th Aquatic fair and bazaar* held 7-9 December 2012 in Quezon City. AQD provided free technical consultation and sold its publications. Flyers and institutional reports were also given out.

The activity which highlighted the organic fish farming was organized by Agri-Aqua Network Inc. and Department of Agriculture – Bureau of Fisheries and Aquatic Resources.

AQD runs training on grouper hatchery



Mr. Edgar Deloso takes a sample of grouper eggs during his hatchery work (left). Ms. Grace Abdala during her practicals on natural food

A hatchery manager and a seaman completed the two-week course on grouper hatchery which started on 14 January at AQD's main station in Tigbauan, Iloilo. The participants, Ms. Grace Abdala from Nueva Ecija and Mr. Edgar Deloso from Bohol attended lectures and

practicals on biology of grouper, broodstock sampling and induced spawning, culture of live food organisms, egg sampling, larval counting & stocking, feed preparation and cage culture. They also went to AQD's Igang Marine Station to observe mariculture practices.

AQD welcomes intern and student vets

The new year brings new learners to AQD. The first is Mr. Benny Lim, a college student from Brunei Darussalam studying in Winchester, United Kingdom who has enrolled in AQD's internship program for a month starting 7 January. His internship covers natural food culture, culture of various fish species, mud crab and abalone and fish health management.

Meanwhile, 12 graduating students from the School of Veterinary Medicine of Aklan State University (ASU) started their two-week *Hands-on training in fish diseases* on 7 January. Their internship is being conducted at AQD's Fish Health Section. Training topics include bacterial, viral, parasitic, and fungal diseases; and hands-on practicals on PCR diagnostic methods, processing of samples for histology and slide preparation, larval monitoring, fungal isolation and bacterial media preparation. This clinical experience is part of their requirements to obtain the degree of Doctor of Veterinary Medicine.

In addition, 11 fisheries students from Sultan Kudarat State University - College of Fisheries began their internship training on 21 January. They will be working at AQD's various hatcheries and laboratories.

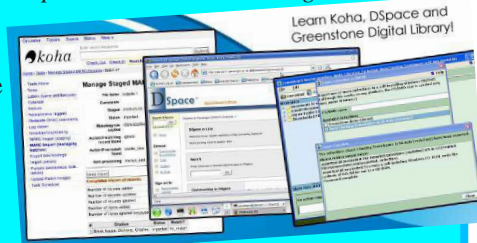


(L-R) Mr. Benny Lim (with AQD senior technical assistant Ms. Annie Franco) prepares media for natural food culture. Two vet med students from Aklan State University embed a specimen in paraffin wax for histology. AQD researcher Ms. Ofelia Reyes (in blue) shows the students pompano juveniles reared at AQD's marine fish hatchery

AQD and ASLP to organize library workshop

The Association of Special Libraries of the Philippines (ASLP) in partnership with AQD will hold a seminar/training-workshop on 15 to 17 May 2013 entitled *Organize IT Digitally, Open-Source Tools for your Library (Training on the use of Koha, DSpace and Greenstone Digital Library)*.

For more information, please email aslpboard@yahoo.com and library@seafdec.org.ph



Tilapia Harvest at AFD



The concrete pond at AQD's administration & finance building is not only decorative. Some 89 kg of red tilapia was harvested on 24 January, an over-all worth of Php5, 747; these were sold to AQD employees. Thirty spawners were stocked in two (7x7m and 7x10m) concrete ponds last July 2012.

AQD joins Dinagyang festival



This year 2013, AQD celebrates 40 years of research and development. As part of its anniversary celebration AQD joined the DA (Department of Agriculture) Region VI group which paraded at the 2013 Dinagyang Festival in Iloilo City on 26 January.

Malacology is for everyone, and training helps

By T. Bagarinao

The Philippines has about 30,000 species of mollusks, but less than 30 malacologists. We hear in the news about discoveries of new species of mollusks in Panglao and the Verde Passage, but the discoverers are French and American. In my 12 years at FishWorld, I have been visited by only three persons with enduring interest in mollusks, and all three were American men (a high school teacher, a petroleum engineer, and a museum curator). Where are the young Filipinos who collect shells, enjoy their

beauty, and want to know their names? Where are the students who wonder about the workings of those soft bodies encased in architectural calcium carbonate?

We need to train more researchers, teachers, students, collectors, fishers, and farmers to work on mollusks, those amazing creatures that provide not only intellectual stimulation and aesthetic enchantment, but also food, pearls, income, and employment for millions of people. On 15-19 December 2012, SEAFDEC FishWorld hosted the *Malacology*

Society of the Philippines' 6th Conference and Training in the collection and identification of coastal mollusks. FishWorld seeks to inform the general public of the wonders of marine biodiversity and has an extensive mollusk reference collection for students and teachers to use in research and for all to enjoy. The MSP-FishWorld training included early-morning trips to the mangroves and mudflats in Dumangas, Iloilo and the seagrass beds, rocky islets, and sandflats in Igang, Guimaras. There were several scheduled lectures by Dr. Gary

Rosenberg, Curator of Mollusks at the Academy of Natural Sciences Philadelphia. Dr. Rosenberg caught a bad flu just as he was about to leave for the Philippines and had to cancel the trip. MSP President Dr. Ian Fontanilla of the University of the Philippines Diliman and myself presented the Rosenberg lectures. There were lab sessions in bivalve and gastropod anatomy (thanks to Shelah Buen-Ursua and Nestor Bayona for *Haliotis asinina*), and in the removal of meat

Dumangas, Iloilo



Igang, Guimaras



Ken Riley's shell collection



from shells by the niku nuki technique (by Ryan Chavez). I was mostly concerned with teaching about the diagnostic characters of mollusk families to facilitate identification to species. The trainees were supposed to clean, dry, identify, label, and package the shells they collected into a 50-species mollusk reference collection for their own schools. They learned to identify mollusk species, but did not have enough time in two days to process the collections all the way through.

Twenty-three teachers and students signed up

for the training from the Polytechnic University of the Philippines; Aurora State College of Technology; Western Philippine University Palawan; UP Visayas; Central Philippine University; Saint Paul University Iloilo, Western Institute of Technology; West Visayas State University; West Visayas College of Science and Technology; Cebu Technological University, Central Mindanao University; Zamboanga State College of Marine Science and Technology; and Caraga State University. SEAFDEC/AQD's Gregoria Pagador joined the training.

Most of the trainees also presented papers and posters during the MSP 6th Conference on 19 Dec. More participants joined the conference including Dr. Satoshi Chiba of Tohoku University and Dr. Ayolani de Lara of UP Los Banos. AQD's Milagros de la Pena presented her research on hybridization of *Haliotis* species. I presented an abstract on mollusk biodiversity at AQD's Dumangas Brackishwater Station and Igang Marine Station.

As a gift from SEAFDEC FishWorld, a 50-species mollusk reference collection

(Dumangas and Igang specimens) will be made available to each of the 13 schools that sent trainees, as soon as they signify interest in using the collection for research and instruction and after they accept the courier charges, where necessary. Contact me at dorishb@seafdec.org.ph or 0921-559-0824.

Some photos of the training are here included (thanks to the AQD DevCom staff). *Mga anak kong* trainees, please share some of your own photos with me.

Lectures at AQD FishWorld



Cleaning of mollusk specimens from Dumangas and Igang



Annual sampling on milkfish broodstock at AQD

Does milkfish broodstock need an annual check-up? According to AQD researcher Ms. Ofelia Reyes, annual sampling on milkfish broodstock is needed before the spawning period (February - November) starts to monitor the maturity of the fish. Not only that, this is also the time to check the sex ratio

and to totally clean the tank in preparation for the whole spawning season.

On 17 January, 71 milkfish broodstock were sampled at AQD's Integrated Fish Broodstock Hatchery Complex in Tigbauan, Iloilo, Philippines. The 30-year old broodstock have an average length of 100 cm and

weight 11 kg. These have been producing good quality eggs since the start of the broodstock hatchery complex in 1999. In 2012, AQD milkfish hatchery produced about 66 million eggs, 48 million newly-hatched larvae and 8 million fry.

Meanwhile, the crew of PTV-4 *Mag-agri Tayo* filmed

AQD's facilities and activities at the marine fish hatchery on 17 January. The video on nursery culture of high value marine fish was featured on 26 January and can be viewed at <http://www.youtube.com/user/magagritayo>. School children from the Kinaadman Elementary School Inc. came as witnesses to the milkfish sampling.



Collection of milkfish broodstock



2-phenoxyethanol (100-200 ppm) is used to sedate the milkfish broodstock



Measurement of the total length



Cannulation of eggs from the milkfish broodstock



Collection of egg sample



Collection of fin clip for DNA fingerprinting



Weighing the fish



Transfer of broodstock to another tank using a transport bag



Stocking the milkfish in a new clean tank



Mr. Phillip Daffon Jr. takes footages in the grouper broodstock hatchery



School children from Kinaadman Elementary School Inc. witness the stocking of milkfish in a new clean tank



The crew of Mag-agri Tayo prepares to take footages inside the grouper tank



AQD Matters

is published monthly by the Development Communication Section SEAFDEC Aquaculture Department Tigbauan, Iloilo, Philippines

Editor this issue: **GK Faigani**

Contributing writer-photographers: JM dela Cruz, RH Ledesma, GK Faigani

Editorial consultants:

MT Castaños, EG de Jesus-Ayson, 2010 Publications Review Committee [Dr. RM Coloso, Dr. EG de Jesus-Ayson, Dr. MRR Eguia, Dr. LMB Garcia, Dr. MLC Aralar, Dr. RV Pakingking Jr, Dr. ND Salayo]

Circulation to friends of AQD: SB Alayon

For contributions and feedback, kindly email: devcom@seafdec.org.ph