A 10-kg green sea turtle found trapped in a fish corral along Nanga coast in Guimbal, Iloilo that was rescued and released by SEAFDEC/AQD. Story on page 10

aqdmatters

January-February 2018 Newsletter of the SEAFDEC Aquaculture Department, Tigbauan, Iloilo, Philippines

Matters inside

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Evaluators commend AQD's Japan-funded studies

The evaluators of the "2017 Annual Progress and Planning Meeting on the Promotion of Sustainable Aquaculture and Resource Enhancement in Southeast Asia" from left: Dr. Satoshi Miwa, Dr. Tetsuo Fujii, Dr. Crispino Saclauso, and Dr. Simeona Regidor [PHOTOS BY RH LEDESMA]

MANDAUE CITY, Cebu – External evaluators commended the Japan-funded studies of SEAFDEC/AQD presented during the "2017 Annual Progress and Planning Meeting on the Promotion of Sustainable Aquaculture and Resource Enhancement in Southeast Asia," held here on 9 February 2018.

Dr. Tetsuo Fujii, JIRCAS Fisheries Division director, urged SEAFDEC/AQD to continue striving to be a leader in aquaculture of ASEAN countries. In addition, Dr. Satoshi Miwa, head of Diagnosis and Training Center for Fish Diseases of the National Research Institute of Aquaculture in Japan, said that he was impressed with SEAFDEC/AQD's work having a vast knowledge on basic research and extension of technology.

The studies, funded by the Government of Japan Trust Fund, also got positive feedback from Filipino evaluators. Dr. Simeona Regidor, officer-in-charge of the National Fisheries Laboratory Division of the Bureau of Fisheries and Aquatic Resources, said that she appreciated the studies conducted by SEAFDEC/AQD since these studies are relevant and have significantly added to the existing wealth of knowledge. She also recommended that the Community-Based Resource Enhancement project in Molocaboc Island, Sagay City, Negros Occidental should be

Continued on next page...

replicated in other areas since this supports the Philippine government's program on food security.

Moreover, Dr. Crispino Saclauso, professor at the College of Fisheries and Ocean Sciences, University of the Philippines Visayas, mentioned that the research activities undertaken were responding to the needs of time, especially the establishment of environment-friendly, sustainable utilization and management of fisheries and aquaculture resources vis-a-vis the ever increasing demand for animal protein of the burgeoning world population. He also added that the research activities are also in line with the blue growth paradigm of FAO, that is, completely integrating fisheries and aquaculture as interdependent sectors in food production and livelihood generation.

SEAFDEC/AQD studies that were reviewed were under the regional program "Promotion of sustainable aquaculture and resource enhancement in Southeast Asia" that is under the ASEAN-SEAFDEC Fisheries Consultative Group Program.

One of the projects of this regional program is the "Environment-friendly, sustainable utilization and management of fisheries and aquaculture resources" that deals with the establishment of environment-friendly and responsible aquaculture technology, the promotion of community-based production and resource enhancement of high-value aquatic resources, and the dissemination and demonstration of resource enhancement practices.

Participants of the annual progress and planning meeting of SEAFDEC/AQD studies with funding support from the Government of Japan Trust Fund [PHOTO BY RH LEDESMA]

Another project is the "Reinforcement and optimization of fish health management and the effective dissemination" that is involved in the development and acceleration of rapid and effective fish and shrimp health management, the enhancement of the efficacy of vaccine treatment in tropical cultured species, the establishment of protective measures against persistent and emerging parasitic diseases of tropical fish, the identification of risk factors and development of protective measures against Early Mortality Syndrome (EMS)/ the acute hepatopancreatic necrosis disease (AHPND) in *Penaeus monodon*, and the extension and demonstration of technology to practitioners, officers, etc. of member countries. a

- RH LEDESMA

DOST Sec. Fortunato de la Peña visits Igang Marine Station

DOST Secretary Fortunato de la Peña visited SEAFDEC/AQD's Igang Marine Station in Guimaras last 22 January 2018.

[PHOTOS BY IT TENDENCIA]

P10-M agreement sealed for planning of 15 hatcheries

To step-up fisheries production in the country, the Bureau of Fisheries and Aquatic Resources (BFAR) tapped the Southeast Asian Fisheries Development Center (SEAFDEC) in a P10 million project to conduct surveys and prepare development plans for the establishment of 15 multi-species fish hatcheries in 7 provinces around the Philippines.

Under an agreement signed in 8 February by BFAR national director Eduardo Gongona and SEAFDEC Aquaculture Department chief Dan Baliao, SEAFDEC will assess pre-identified project sites, recommend hatchery technologies to be deployed, outline production cycles, produce site development plans as well as detailed blueprints for facility design.

The hatcheries to be built in the provinces of Agusan del Norte, Albay, Cebu, Lanao del Norte, Surigao del Norte, Surigao del Sur, Quezon and Zamboanga del Norte, are seen to shore up the supply of fingerlings for fish farmers.

Site surveys to be conducted by SEAFDEC/AQD will include the conduct of water and soil analyses and stakeholder interviews. Environmental parameters in the respective areas will be considered as well as the current fingerling requirements and the potential market for other aquaculture commodities.

While BFAR is mandated to supervise the establishment of these legislated multi-species hatcheries before turning them over to the local government after a training and phasing-in program, the agreement recognized the "necessity to pool resources, activities and technical expertise" of BFAR and SEAFDEC/AQD to "attain the vision of developing sustainable aquaculture and revitalize the fishery and aquatic resources in the country."

The surveys and project planning are scheduled to be completed this year. **- RD DIANALA**

Legal Basis	Hatchery Type	Location
RA 10856	Marine	Bantayan, Cebu
RA 10859	Marine	Jose Dalman, Zamboanga del Norte
RA 10860	Marine	Sultan Naga Dimaporo, Lanao del Norte
RA 10945	Marine	Perez, Quezon
RA 10942	Marine	Hinatuan, Surigao del Sur
RA 10858	Marine	Ata-atahon, Nasipit, Agusan del Norte
RA 10825	Freshwater	Surigao City, Surigao del Norte
RA 10813	Marine	Jabonga, Agusan del Norte
RA 10787	Marine	Lingig, Surigao del Sur
RA 10938	Marine	Lopez, Quezon
RA 10939	Marine	Atimonan, Quezon
RA 10940	Marine	Gumaca, Quezon
RA 10947	Marine	Plaridel, Quezon
RA 10948	Marine	Guinayangan, Quezon
RA 10950	Marine	Ligao, Albay

Agreement inked to boost Catanduanes crab industry

The crab industry in Catanduanes is set to get a boost after the Bureau of Fisheries and Aquatic Resources (BFAR) inked an agreement with the Southeast Asian Fisheries Development Center Aquaculture Department (SEAFDEC/AQD) to conduct surveys and trainings this year towards establishing mangrove crab seed banks, nurseries and grow-out production farms in the province.

Aside from conducting surveys, SEAFDEC/AQD is also tasked to train staff of BFAR Region 5, Catanduanes Provincial Agriculture Office, Catanduanes State University, and local government units, on scientific protocols and analytical methods to determine and monitor status of wild mangrove crab population in Catanduanes.

This undertaking, which is under the implementation of RA 10857, will be done in the municipalities of Virac, Bato, Baras, Gigmoto, Viga, Panganiban, Bagamanoc, San Andres, Caramoran and Pandan. BFAR Central Office allotted PhP 500,000 for the conduct of site assessment and trainings by SEAFDEC/AQD in these areas.

RA 10857 cites that abandoned, undeveloped or underutilized fishponds covered by fishpond lease agreements will be prioritized for site assessment of potential mangrove crab seed banks, nurseries, and grow-out.

Having the technical expertise in mangrove crab culture, SEAFDEC/AQD is also tasked to determine the technology package to be deployed in the identified mangrove crab seed banks, nurseries, and grow-out sites.

- RH LEDESMA/ RD DIANALA

MOA between SEAFDEC and St. Paul U signed

The Southeast Asian Fisheries Development Center/ Aquaculture Department (SEAFDEC/AQD) with its Chief Dan Baliao signed a Memorandum of Agreement (MOA) with St. Paul University Iloilo (SPUI) represented by its President, Sr. Mila Grace Silab, SPC on 6 February 2018. The MOA stipulates that SEAFDEC/AQD will be the work immersion venue of Grade 12 students of SPUI where they will undergo practical training and work exposure for 10 days (80 hours) as a requirement for graduation.

Photo taken after the MOA signing. Seated from L-R: Dr. Leobert de la Peña, Head of Research Division; Sr. Mila Grace Silab, SPC; Chief Dan Baliao; Ms. Marlene Hervias, Coordinator of HS Department ; and Dr. Flor Agnes Sy.

Standing from L-R: Caryl Genzola, Head of Training Section; David Villaluz, Executive Officer; Alyssa Garido, University ABM Coordinator; and Eva Aldon, University Immersion Supervisor [PHOTO COURTESY OF MET ALDON]

The work immersion program for senior high school is an important component of the grade 12 curriculum where the students will undergo appropriate exposure to the world of work in offices, business establishments, or corporations, activity or operations related to the students' field of interest. The environment will enable the students to gain relevant experiences under the guidance of experts.

SEAFDEC/AQD as a host in this work immersion program will deploy SPUI students to the different working areas to help the students develop their knowledge and work ethics. The students will be assigned to different offices under the Administration and Finance Division and the Training and Information Division. Students under the Science, Technology, Engineering, and Mathematics (STEM) track will be assigned to different research units and laboratories such as natural food and seaweeds laboratories, big hatchery, and sandfish/tilapia hatcheries.

Witnesses to the MOA signing were Dr. Leobert de la Peña, Head of Research Division for SEAFDEC/AQD and Dr. Flor Agnes Sy, VP for Academic Affairs, SPUI. a

- MET ALDON

AQD imparts basic research writing techniques

Searching proper information sources, writing correct citations and classifying data are a few basic skills conveyed by the SEAFDEC/AQD Library to 31 senior high school students of Colegio de las Hijas de Jesus during a lecture last 26 January 2018 at SEAFDEC/ AQD's Tigbauan Main Station.

Mr. Stephen Alayon, acting head of SEAFDEC/AQD Library and Data Banking Services Section, presented the basic techniques in writing for scientific publications. Topics included the APA citation style, various types of citation databases, how to distinguish legitimate scientific journal from predatory journals, and how to cite sources without committing plagiarism.

At the end of the lecture, Mr. Alayon demonstrated the use of a reference management tool called Zotero. According to its website, Zotero is the only research tool that automatically senses the content in a web browser, thus allowing researchers to add it to a reference library with a single click.

These topics are seen to be useful for senior high school students under the K-12 Science-Technology, Engineering and Mathematics strand to prepare them on writing for scientific journals. a

- JM DELA CRUZ

Mr. Stephen Alayon of SEAFDEC/AQD Library and Data Banking Services teach basic techniques in writing for scientific publications [PHOTO BY EV ANTOLINO]

Forty-seven new Fisheries Technologists take their oaths in a ceremony in Iloilo City. Five of them are from SEAFDEC/AQD including [second from right, seated] Ms. CS Dionela, Mr. JI Aquino, Ms. JS Lames, [fourth from left, seated] Ms. JC Virgula and Ms. JJ Huervana [PHOTO COURTESY OF JI AQUINO]

Five SEAFDEC/AQD staff pledge as professional Fisheries Technologists

ILOILO City – For the very first time, the Fisheries Technologist Oath-taking Ceremony was held outside Metro Manila with 47 oath-takers last 20 February 2018 at Iloilo Grand Hotel.

Five out of 47 oath-takers were SEAFDEC/AQD staff: Associate Researchers Mr. Jon Irish Aquino and Ms. Joana Joy Huervana, Technical Assistant Ms. Cleresa Dionela, Research Assistant Ms. Juliette Virgula, and TVDD Administrative Assistant Ms. Jenalyn Lames. All are graduates of the University of the Philippines Visayas (UPV), the top performing school in the October 2017 Fisheries Technologist Board Examination.

"We see ourselves as catalysts for improvement in the field of fisheries," said Mr. Aquino, one of SEAFDEC/AQD's new Fisheries Technologists.

"As newly registered Fisheries Technologists, we intend to develop responsible and sustainable aquaculture technologies that could benefit both local and foreign farmers. We will continue to explore aquaculture in its safest form and mitigate the problems of climate change and poverty," he added.

National Inland Fisheries Technology Center Chief Dr. Westly Rosario, who led the oath-taking ceremony, graced the event together with UPV-College of Fisheries and Ocean Sciences Dean Prof. Encarnacion Emilia Yap and Associate Professor Dr. Gerald Quinitio.

- JM DELA CRUZ

MIS leads improvement of SEAFDEC websites

PALEMBANG, Indonesia – To improve and unify all SEAFDEC department websites, AQD's Management Information Systems staff Mr. Julius Manuel de Pili and Mr. Ronilo Subaldo led the training on website improvement last 18 to 22 December 2017.

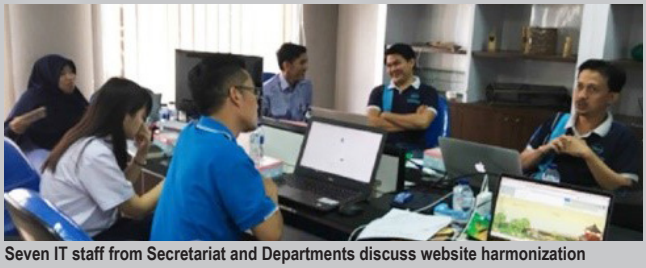
The five-day training aims to harmonize website layout of each department and improve the website of Inland Fishery Resources Development and Management Department (IFRDMD), SEAFDEC's newest department.

Mr. Subaldo presented a collaborative way of updating SEAFDEC's website by using Content Management System, an application that supports creation and modification of digital content. Mr. de Pili on the other hand, presented proper domain registering and website hosting as part of the unified web address format. Network storage and proper backup to secure all data and content uploaded in website and servers were also discussed.

Tools and techniques in website management, analytics, and network structure were presented with actual demo using an in-house server.

IFRDMD Chief Dr. Arif Wibowo expressed his appreciation to the efforts of all participants at the end of the training. SEAFDEC Secretariat organized the training through the suggestions made during the 18th Meeting of SEAFDEC Information Staff Program last October 2017.

- JM DELA CRUZ



Seven IT staff from Secretariat and Departments discuss website harmonization and improvement [PHOTO BY SEAFDEC SECRETARIAT]

SEAFDEC to shrimp farmers – Don't stock during cold months

Shrimp farmers are advised not to stock their ponds during cold months from November to February because shrimp get stressed when temperatures dip below 27°C, predisposing them to diseases.

A study by SEAFDEC/AQD scientist Dr. Eleonor Tendencia has shown that a drop in temperature weakens the immune response of shrimp making them prone to infection. The study cites the pattern of white spot syndrome virus outbreaks in tiger shrimp (*Penaeus mondon*) when atmospheric temperatures are low.

Victor Emmanuel Estilo, shrimp pond culture expert of SEAFDEC/AQD, said that culture may be done during the warmer months from April to October.

Estilo also recommends that shrimp farmers, especially those whose facilities are not "biosecure," to consider having only one production run per year within the warmer months. Shrimp farmers also need to take extra precautions to prevent the entry of diseases by using clean fry, filtration systems, tire and foot baths, crab fences and bird-scaring devices among others.

To maximize utilization of ponds, Estilo suggests growing high-value marine fish such as snappers (*Lutjanus* spp.) and Asian sea bass (*Lates calcarifer*) during cold months. He also said that growing these fish species in shrimp ponds is advantageous since they prey on disease-carrying crustaceans.

Meanwhile, Dr. Tendencia's study also showed that several days of continuous rain contributes to the lowering of the pond water's temperature and salinity. Fluctuations in salinity are also linked with disease outbreaks.

Recurring disease outbreaks are considered the most serious problem faced by shrimp farmers. With this constraint, SEAFDEC/AQD intensified its research activities on identification, detection, prevention, and treatment of diseases plaguing the industry. It has also come up with protocols and is studying other variables that may prevent the occurrence of diseases in shrimp stocks.

SEAFDEC/AQD is currently working to boost the shrimp farming industry under its banner program "Oplan Balik Sugpo". a

- RH LEDESMA/RD DIANALA/ MET ALDON

Retired SEAFDEC couple continues promoting aquaculture in Mindanao

Government employees visit Rito Farm during their Lakbay Aral [PHOTO BY R BOMBEO]

Ms. Ma. Eva Aldon (right) interviews Ms. Ruby Bombeo. Joining the interview is Dr. Rolando Platon, former SEAFDEC/AQD Chief [PHOTO BY IT TENDENCIA]

Once an aquaculturist, always an aquaculturist. This may just be a cliché, but this is how Mr. and Mrs. Rito Bombeo, retired researchers of SEAFDEC/AQD are doing now as they continue to promote aquaculture in Purok 7-A, Barangay Poblacion, Naawan, Misamis Oriental.

"Misamis Oriental is blessed with abundant water 24/7," said Mrs. Ruby Bombeo who visited SEAFDEC/AQD in January, two years after her retirement. The free flowing water is very ideal for aquaculture. The couple then developed their 3,000 sq m retirement lot into what is now known as Rito Farm.

Rito Farm houses four compartments of fish ponds composed of hatchery and grow-out for catfish and tilapia. The ponds go well with coconut trees along the river and mango trees between cottages where families and visitors come for recreation. Rito Farm offers fish spa and recreation fishing where clients are allowed to fish using hook and line, buy and cook what they caught.

The farm became so popular that the couple receives several invitations from different groups and even government agencies to conduct aquaculture training for retired employees. They have already trained groups of retired police, military personnel and teachers. Rito Farm was also accredited for OJT of students from Iligan School of Fisheries and Immersion for Naawan Senior High School students.

One thing that amuses the couple is watching the kids play as they fish and enjoy fish spa. "Because of this, the children develop interest in nature especially fish" Mrs. Bombeo added. The couple also enjoys knowing how much other people appreciate Rito Farm in their place. "This place is lovely and cool and what a relief from stressful activities during the week", they said.

As a researcher and trainer herself, Mrs. Bombeo is thankful that her knowledge and skills that she acquired from SEAFDEC/AQD can still be useful even after retirement. The same is true with Mr. Bombeo who worked as aquaculturist at SEAFDEC/AQD and other countries. They are combining both scientific and indigenous knowledge in the farm. "Indeed, there is life after SEAFDEC/AQD", she mused delightedly.

Rito Farm is the first of its kind put up in the place. An integrated farm cum recreation place, the couple also breeds catfish and tilapia and sell fry in nearby towns. They also sell azolla and duckweed starters. They also raise pigs so they will not waste left overs of clients.

"We are indeed very thankful to SEAFDEC/AQD. Notwithstanding the good pay, the training and skills that we learned and eventually shared to others is so gratifying that we feel obliged to teach people how to be self sufficient," Mrs. Bombeo said. She also shared that her husband in conducting training to Mindanaoans, would always mention about his valuable experience at SEAFDEC/AQD, which became a vehicle for getting greener pasteur abroad as consultant in aquaculture. "What we are enjoying now is an endless blessing from God for having SEAFDEC/AQD as our employer," she said. a

Visitors enjoy the fish spa at Rito Farm [PHOTO BY R BOMBEO]

- MET ALDON

AQD reports research updates at JIRCAS meeting

PENANG, Malaysia – The Japan International Research Center for Agricultural Sciences (JIRCAS) held its annual meeting for the research program "Development of Technologies for Sustainable Aquatic Production in Harmony with Tropical Ecosystems" last 5-6 December 2017. The meeting was participated by various collaborating institutions across Southeast Asian regions, namely Laos, Malaysia, Myanmar, Philippines and Thailand.

One of the research projects under the JIRCAS-SEAFDEC/AQD collaboration done in the Philippines, is the "Value-Adding and Improving Economic Efficiency and Benefits in Small-holder Integrated Multi-trophic Aquaculture (IMTA) Milkfish Mariculture in Guimaras, Philippines." AQD Scientist Dr. Nerissa D. Salayo and Senior Technical Assistant Ms. Raisa Joy G. Castel reported during the JIRCAS annual meeting that the results of the study received positive feedback from fisherfolk collaborators as well as the women and local village officers. They also reported that both the fisherfolk and women in Brgy. Pandaraonan, Nueva Valencia, Guimaras had actively participated in the value-adding activities conducted such as milkfish deboning and milkfish in oil enabling them to gain new skills and opened a new avenue for income opportunities.

Another research project presented was the "Biological Feasibility and Environmental Impact of IMTA in Milkfish Mariculture." JIRCAS expert Dr. Masashi Kodama and Rose Ann Diamante, JIRCAS technical assistant, reported the updates on the environmental aspect of the project. Results of the experimental runs of IMTA produced marketable sizes of milkfish, increased production of seaweed, and grew sandfish but survival remained a challenge. It was also discussed that the right combination of secondary organisms that would mitigate environmental impact of milkfish culture needs further investigation.

On the other hand, AQD nutrition scientist, Dr. Roger Eduard P. Mamauag presented the research project on "Nutritional evaluation of distiller's dried grain with soluble (DDGS) as replacement to soybean meal in diets of milkfish, *Chanos chanos* and its effect on fish performance and intestinal morphology." Dr. Mamauag mentioned in his presentation that the results of the study suggested that DDGS can be utilized as a feed ingredient in milkfish diets as a substitute for the commonly used plant protein, the soybean meal. But further study needs to be done to identify the synergistic or antagonistic effects of DDGS supplemented with synthetic amino acids in milkfish diets

Lastly, Dr. Tsuyoshi Sugita talked about the research project on the "Effect of Poultry By-product Meal Based Non-fish Meal Feed on Growth in Juvenile Milkfish (*Chanos chanos*)." Dr. Sugita discussed that milkfish can utilize more effectively the poultry by-product meal-based (PBM) and the low and non-fish meal feed than commercial feed.

Participants' facility tour at Fisheries Research Institute in Batu Maung, Penang, Malaysia [PHOTO COURTESY OF RJ CASTEL]

However, further investigation on the availability of PBM-based, non-fish meal and low fish oil feed for milkfish is still needed.

After the meeting, the participants also had a chance to visit a blood cockle farm and tour the facility of Fisheries Research Institute (FRI) in Batu Maung, Penang, Malaysia.

JIRCAS will continue funding its collaborative research studies with SEAFDEC/AQD since the aim of maximizing the contribution of research findings in bridging the gap of the research sector and the fish farmers was achieved.

- RJ CASTEL/RA DIAMANTE

aqd matters
is published bimonthly by the
Development Communication Section
SEAFDEC Aquaculture Department
Tigbauan, Iloilo, Philippines

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HRMS organizes skills update training for maintenance staff

Ms. Ma. Adiosa Camposano-Embat demonstrates to SEAFDEC/AQD maintenance staff the proper way of making a bed [PHOTO BY RH LEDESMA]

To update the skills of maintenance staff at SEAFDEC/AQD, the Human Resource Management Section (HRMS) organized a training-workshop on housekeeping held from 24 January to 1 February 2018.

Ms. Ma. Adiosa Camposano-Embat, resource speaker of the training-workshop and an instructor of various vocational-technical courses accredited by TESDA, talked about the role of the housekeeping department, principles and practices of cleaning, understanding risks and preventive measures on maintenance, and public area cleaning among others.

The participants also had practical activities such as efficient cleaning of the kitchen, bedroom, bathroom and common living areas, and changing/making a bed.

- RH LEDESMA

Improve and prosper!

Ms. Ma. Adiosa Camposano-Embat shares her knowledge to AQD staff during the Personality Development Seminar [PHOTO BY JM DELA CRUZ]

SEAFDEC/AQD's Human Resource Management Section (HRMS) organized a Personality Development and Prosperity Workshop attended by 64 staff last 2 February 2017 at AQD's Tigbauan Main Station.

Resource speaker Ms. Ma. Adiosa Camposano-Embat, instructor of various vocational-technical course accredited by TESDA, shared that prosperity in life and in work can be achieved by having a positive outlook in money, taking care of one's health and finding one's own happiness. She also imparted to the AQD staff some practical techniques and exercises that would lead to a more relaxed, calm and positive life.

- JM DELA CRUZ

New vaccines for high-value fish introduced by Japanese company

Dr. Kittipong Thanasaksiri of Kyoritsu Seiyaku Corporation in Japan talks about PISCIVAC™ Irido Si, a new vaccine for red seabream and sea bass [PHOTO BY JM DELA CRUZ]

Dr. Kittipong Thanasaksiri of Kyoritsu Seiyaku Corporation in Japan introduced a new vaccine called PISCIVAC™ Irido Si for protection of red seabream (*Pagrus major*) and sea bass (*Lates calcarifer*) against iridoviral disease and streptococcosis during a seminar last 30 January 2018 at SEAFDEC/AQD's Tigbauan Main Station.

Results of the study showed that the vaccine can induce effective protection after only three days by intraperitoneal and intramuscular injections. Both fish sustained the protection against iridovirus for at least two months and against streptococcosis for at least six months on red seabream, and 11 months on sea bass.

"To ensure the sustainable development of aquaculture, disease prevention is the key," said Dr. Thanasaksiri during his presentation. "Vaccination has always been one of the most effective tools and environmentally-friendly approaches to disease control in aquaculture."

The PISCIVAC™ Irido Si vaccine is now available for sale in Japan and Singapore. Kyoritsu Seiyaku Corporation in Japan have been formulating vaccine for high-value aquaculture products since 1955.

- JM DELA CRUZ

DISCLAIMER: Reference to any person, organization, or products does not constitute nor imply the endorsement or recommendation of SEAFDEC/AQD.

AQD rescues "Evelyn"

Mr. Ryan Jutay, a staff at FishWorld museum, removes barnacles from the flippers of "Evelyn" [PHOTOS BY IT TENDENCIA]

GUIMBAL, Iloilo – An untagged green sea turtle which was named "Evelyn" was rescued by local residents and SEAFDEC/AQD last 25 January 2018 along the coast of Sitio Dagongdong, Nanga.

Mr. Andres Gernade, a local resident, found the turtle trapped in a fish corral by the beach. It was then brought to SEAFDEC/AQD's Tigbauan Main Station for checking and cleaning.

Ms. Hananiah Sollesta, FishWorld museum officer-in-charge, made sure that the sea turtles are cleaned prior to release. She explained the importance of cleaning the turtle, "barnacles can cause damage and can disable its flippers, damage the carapace and cover eyes and ears that animals will unable to see, smell, or even survive".

The turtle, weighing around 10 kilos with shell size of 40 by 43 cm, is now safe and healthy. After "Evelyn" was cleaned, it was released back to the wild with tag number PH1023G.

According to the World Wildlife Fund, the green sea turtle is classified as one of the endangered animals in the world which makes the practice of reporting washed-off and injured turtles critical to the survival of the species.

SEAFDEC/AQD rescued 10 turtles last year and "Evelyn" is the first for 2018.

FishWorld is SEAFDEC/AQD's museum-aquarium and visitor center dedicated to aquatic science and environment education.

- JM DELA CRUZ

Membrane filtration: Meeting today's water treatment challenges

Availability of potable water in the Philippines has been a challenge for years. Treatment is needed for sources of water such as surface and groundwater to ensure that the water supplied to the people are potable.

Engr. Christian Ann D. Palino, chemical engineer of Expertline Ventures Corporation, introduced membrane filtration as a treatment option for groundwater and surface water during her seminar on 7 February 2018 at SEAFDEC/AQD's Tigbauan Main Station.

It was discussed during the seminar that sand filtration is the commonly used treatment method especially in third world and developing countries. This treatment method was derived from nature's ability to treat water using layers of rocks. However, at present, this method is not sufficient to make water potable due to pollution problems.

On the other hand, membrane filtration technology uses membranes that act as very specific filters that allow water to flow through, while catching suspended solids and other substances. Membrane filtration can also remove bacteria and other microorganisms, particulates, and natural organic material, which can impart color, unacceptable taste, and unpleasant odor to water.

- RH LEDESMA

Biorisk Management, a must in lab

To increase the laboratory safety awareness of research staff, the AQD Seminar Committee invited Ms. Chloe Joy Gaban of ESCO Global to talk about Biorisk management on 15 February 2018 at SEAFDEC/AQD's Tigbauan Main Station.

The practice of biorisk management is important in laboratories since it ensures the effective handling of risks caused by working with infectious agents and toxins in laboratories. It includes practices and procedures that ensure the biosecurity, biosafety, and biocontainment of infectious agents and toxins.

Ms. Gaban discussed about biosafety and biosecurity, hazards and hazards control, risk groups, biosafety levels, and standard microbiological practices among others.

- RH LEDESMA

PHOTOS BY IT TENDENCIA