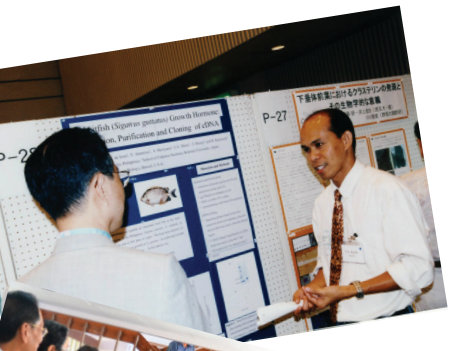
June 2012 www.seafdec.org.ph

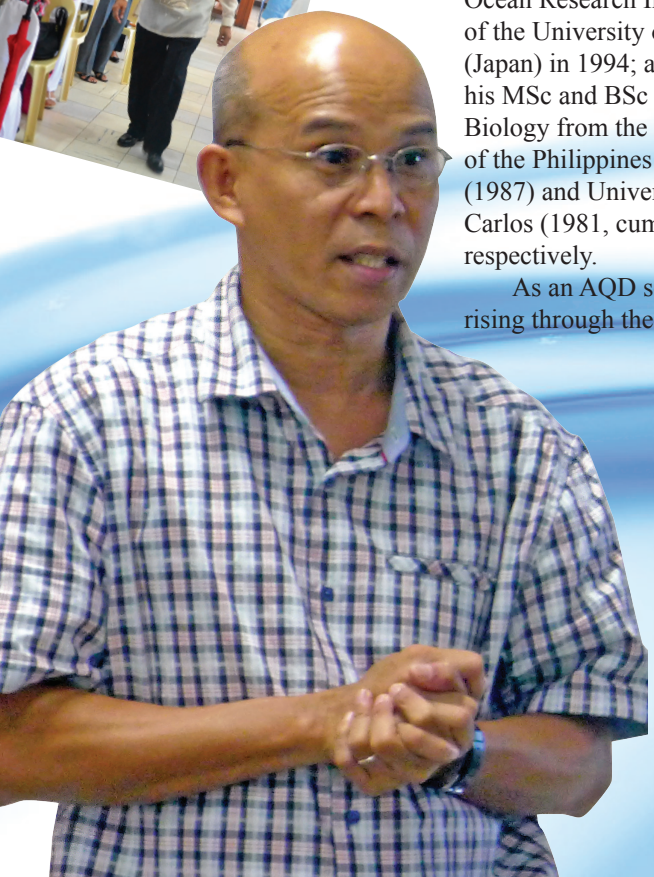
AQD Matters

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

# Dr. Felix Ayson starts term as Chief

Dr. Felix Ayson started his two-year term as AQD Chief on 29 June when the SEAFDEC Council unanimously approved his nomination to the post.





A career fisheries scientist specializing in biotechnology, marine fish hatchery and climate change, Dr. Ayson was selected based on the results of a search process facilitated by the (Philippine) Department of Agriculture. He was endorsed by Philippine President Benigno Aquino III to the SEAFDEC Council for final confirmation.

Dr. Ayson completed his post-doctoral fellowship at Kitasato University in Japan (2000) through a grant from JSPS (Japanese Society for the Promotion of Science); acquired his PhD in Zoology major in fish physiology and endocrinology from the Ocean Research Institute of the University of Tokyo (Japan) in 1994; and obtained his MSc and BSc in Marine Biology from the University of the Philippines Diliman (1987) and University of San Carlos (1981, cum laude), respectively.

As an AQD scientist rising through the ranks (he was first employed as a senior research assistant in 1986), Dr. Ayson has so far published 16 science papers in peer-reviewed international journals as sole author or first author. He has received research grants on rabbitfish from USAID (2001-2004) and AusAID (2004-2005); the latter was for an award-winning proposal on siganid culture for a rural community. More recently, he has received a milkfish grant from USAID-Aqua Fish CRSP (2007-2009) and is a current collaborator of a DOST-PCAARRD milkfish project with UP Visayas. He has headed AQD's programs on marine fish and climate change, which included research, training and information, and extension activities for aquaculture stakeholders.

In between his stints at AQD, he served as the Chief Technical Advisor on aquaculture for the United Nations Food and Agriculture Organization in Rome, Italy (2007–2010); he was a visiting professor at the Tropical Biosphere Research Center of the University of Ryukyus in Okinawa, Japan (2005–2006); and was a research fellow in Kitasato University (1997–1999).

Dr. Ayson is 51 years old; hails from Candijay, Bohol, Philippines; is married to Dr. Evelyn Grace de Jesus-Ayson, also an AQD scientist; and has two children.

With the new leadership, the AQD community is looking forward to better serve the needs of industry stakeholders in Southeast Asia.

## BREAKING NEWS

### AQD Chief takes oath before DA Secretary

AQD Chief Dr. Felix Ayson's formal oath-taking took place before the DA Secretary at the DA headquarters in Quezon City. DA has oversight over AQD – whose budget mostly comes from its host country the Philippines – through PTAC or the Philippine Technical Administrative Committee.


Hon. DA Secretary Proceso Alcala administers the oath-of-office to Dr. Ayson

# AQD scientists on grouper study tour in Taiwan

Sponsored by the Australian government, AQD Chief Dr. Felix Ayson and scientist Dr. Fiona Pedroso went on a 5-day study tour on grouper breeding & culture in Taiwan from 25 to 29 June.

They joined Prof. Abigail Elizur of USC (University of the Sunshine Coast, Australia), principal scientist Dr. Richard Knuckey of Nothern Fisheries Centre - Department of Primary Industries (Australia), deputy director Dr. Tran Dinh Luan of RIA-1 (Research Institute of Aquaculture, Vietnam) and vice director Mr. Hoang Nhat Son of the National Broodsotck Center for Marine Species, also of Vietnam.

The study tour group visits Long Diann Marine Bio Technology Co. Ltd: (L-R) Ms. Claire Huang, business development manager of the Taiwan-based Queensland Trade and Investment Office, Dr. F Pedroso, Prof. Tom Hsiao of the National Kaohsuing Marine University, Dr. FG Ayson, Mr. Hoang, Dr. Knuckey, Dr. Tran and Prof. Elizur

The group at National Kaohsiung Marine University

They visited research centers / universities and grouper farms, talked with researchers & farmers, and met with members of Taiwan's fish breeding association and the national science council.

There exists an established grouper industry in the country that is largely based on three species of groupers, namely, the orange-spotted grouper (*Epinephelus coioides*), tiger grouper (*E. fuscoguttatus*) and giant grouper (*E. lanceolatus*).

"Taiwan has a very organized grouper industry," Dr. Ayson said. "There is a sector that is responsible for producing grouper eggs which costs NT 75,000 a kg for giant grouper; this is mainly done in outdoor ponds. Another sector takes care of grouper seed production or hatchery production, growing grouper fry from eggs until approximately one month old (roughly 2-3 cm in length); this is done either in outdoor ponds or indoor hatchery facilities. Still another sector grows fingerlings, from 3 cm fry until 8 cm fingerling; and this is done in indoor nursery facilities. The grow-out sector starts with an 8 cm grouper fingerling which costs approximately NT 100 per piece; production is done mainly in outdoor ponds; and the desired harvest size is 1.2 kg (for tiger grouper *E. fuscoguttatus*) or 12-15 kg (for giant grouper *E. lanceolatus*) reached in 18 months or 3.5 years of culture, respectively."

"The huge interest in the aquaculture of grouper in Taiwan is largely driven by the very high market price," Dr. Ayson added. "Giant grouper, for instance, sells for about NT 1000 for every 600 g.There is also an active R&D for grouper in Taiwan. Research topics of interests include hybridization to produce faster growing and disease-resistant grouper fry, identifying molecular markers for specific traits, use of probiotics (herbal materials) for improved health management, strategies to control NNV (nervous necrosis virus) occurrence in grouper farms."

Aside from the three aforementioned species of grouper, six other species have been bred in captivity in Taiwan. These are the coral grouper (*Plectropomus leopardus*), potato grouper (*E. tukula*), malabar grouper (*E. malabaricus*), speckled blue grouper (*E. cyanopodus*), *E. bruneus* and yellow fin grouper.

"Production of grouper hybrids has also been tried in Taiwan," Dr. Ayson said. Notable of which are crosses between tiger grouper and giant grouper, and orange-spotted grouper and giant grouper. The idea is to produce grouper fry which are faster growing and inherit the growth traits of the giant grouper, the fastest growing species in the world. "The adult hybrids that we saw, crosses between tiger and giant grouper, and orange-spotted and giant grouper had growth rates that are faster than the tiger and orange-spotted groupers but slower than the giant grouper. The farmers said that the hybrids are more resistant to viral pathogens," he added.

# AQD conducts international course on prawn

(Clockwise) Dr. Hideo Mochizuki of Borneo Marine Research Institute lectures on shrimp culture. Malaysian trainee Mrs. Rathi Sai Muniandy presented the status of freshwater prawn farming in Malaysia. The participants during one of the practical exercises on feed preparation

A special training course on *Freshwater prawn hatchery and grow-out operations* was conducted by AQD with the sponsorship of Government of Japan – Trust Fund (GOJ-TF) at the Binangonan Freshwater Station in Rizal on 18-30 June 2012. The training was attended by participants from Malaysia, Lao PDR, Cambodia, Thailand and the Philippines.

The trainees learned all aspects of prawn hatchery and grow-out, getting lectures on site selection and practical exercises on monitoring and feeding. Also, a special topic on shrimp culture in Asia was discussed by Dr. Hideo Mochizuki from Borneo Marine Research Institute in Sabah, Malaysia.

The participants reported on the status of prawn farming in their own country during the introductory part of the training to provide background and levelling of expectations. The participants also discussed interactively the economic prospects of prawn farming in their countries during the lecture on aquaculture economics and practical sessions on feasibility study preparation.

At the closing program, AQD Deputy Chief Dr. Teruo Azuma thanked the participants for their interest on AQD technologies.

The trainees also went to Dagupan, Pangasinan for an observation tour of the BFAR-National Integrated Fisheries Technology Development Center (NIFTDC) , and Munoz, Nueva Ecija to visit the Philippine Carabao Center (PCC), PhilRice, BFAR-ational Freshwater Fisheries Technology Center (NFFTC) and CLSU-Freshwater Aquaculture Center (FAC).

# BMEG sales personnel undergoes training on milkfish

A three-day training course on *Milkfish hatchery, nursery and grow-out* was conducted at AQD's Tigbauan Main Station in Iloilo and Igang Marine Station in Guimaras (Philippines) from 13 to 15 June. It was a specialized course requested by BMEG, an animal and aquatic feeds company, for 20 of their sales staff to increase their knowledge and better prepare them for the company's future endeavors in aquatic feeds. AQD experts conducted lectures and practical exercises on the basics of milkfish like its biology, nutrition, feeding, disease control and more.

AQD scientists also gave three lectures to BMEG sales staff during the Second SMFI Tech Forum last June 29 at their Ortigas, Pasig City headquarters on the following topics: Fish Farming in Mariculture Parks (Dr. N.D. Salayo), Aquaculture in Philippine Lakes and Understanding Mass Fishkills (Dr. MLC Aralar).

(Top from L-R) Participants observe the proper way of milkfish fry packaging as demonstrated by Ms. Bernardita Eullaran, senior technician of AQD's integrated fish broodstock hatchery complex. (Bottom from L-R) Participants at the Igang Marine Station during the demonstration on cage culture operations and during lectures on milkfish pond and cage culture

# Ten finishes marine fish hatchery course

Ten participants from four countries completed the month-long international training course on "Marine fish hatchery" conducted from 26 June – 01 August by SEAFDEC/AQD at its main station in Tigbauan, Iloilo. The course was filled with lectures and practical activities on rearing marine fishes such as seabass, pompano, rabbitfish, grouper and milkfish. The course also included extensive hands-on exercises on the culture live food organisms (phytoplankton & zooplankton) that are crucial in hatchery operations.

The elected class chair, Dwight Lu, thanked all the AQD staff from the lecturers, technical assistants, technicians in hatcheries to the training coordinators for the skills they acquired and guidance they received in the 37 days that they were at AQD. "We learned a lot… and hopefully, when we go back to our respective places, we can (successfully) operate hatcheries and share the knowledge so we can have a more sustainable source of fish (through aquaculture)," said Lu.

The participants were from the Philippines, Malaysia, Vietnam and Brunei Darussalam, most of whom were sponsored by the Government of Japan – Trust Fund, Government of Brunei, and BFAR & local government units in the Philippines.

(Top from L-R) Participants during the practical activities on live food organism culture and during the formulation and preparation of feed ingredients. (Bottom from L-R) Trainees induce the spawning of seabass and grouper

# Our deepest condolences

***Engr. Salvador Rex Tillo***, former head of engineering section passed away on 16 May 2012 at the age of 61. He served AQD for 36 years from 16 November 1974 until retirement on 10 November 2010.

***Manuel Carlos*** passed away on 27 May 2012 at the age of 59. He was a research associate assigned at BFS from April 1977 until his early retirement in 1988 to work in Saudi Arabia.

***Regino Gomez*** (father of our current monthly casual aide at MCU, Mr. Recoralf Gomez) passed away on 10 June 2012 at the age of 63. He served AQD as a messengerial staff for 29 years from 16 December 1975 until 01 January 2004 when he retired.

***Perla Triño*** passed away on 15 June 2012 at the age of 67. She was the former senior human resource assistant of AQD and had served the department for 26 years. She retired on 01 January 2004.


Administrative officer Kimberly Dianne Caumban-Abrogueña gave birth to a healthy, 6 pound baby boy, Joachim. *Congratulations to Kim and her husband, Jeff!*

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

*Editor this issue:* **JM de la Cruz**

*Contributing writer-photographers:*
RH Ledesma, GK Faigani

*Editorial consultants:*
MT Castaños, Dr. 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