

AQUA Dept NEWS

Internal Newsletter of the SEAFDEC Aquaculture Department

Vol XVII No.33 August 19, 2002

New abalone diets enhance reproductive performance



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Feeding hatchery-bred abalone, *Haliotis asinina* broodstock with combination diet (seaweeds and artificial diet), and artificial diet alone resulted in higher mean instantaneous fecundity and percent hatching rate.

This was the finding of AQD scientists **Ms. Myrna Teruel, Dr. Oseni Millamena and Mr. Armando Fermin**, in a paper titled **Reproductive performance of hatchery-bred donkey's ear abalone, *Haliotis asinina*, Linne, fed natural and artificial diets** published in *Aquaculture Research* 2001, 32

(Suppl. 1), 249-254.

Three batches of abalones with immature gonads were fed with natural diet (seaweeds *Gracilariopsis bailinae*), combination diet, and artificial diet, respectively for over 270 days.

Results showed that abalones fed with combination diet, and artificial diet had higher mean instantaneous fecundity and percent hatching rate. This was due to the higher amount of essential nutrients such as protein, lipid and highly unsatur-

AquaNutrition Online commences

AquaNutrition Online, an Internet-based distance learning course starts today.

Twenty international learners of "Basic Principles of Aquaculture Nutrition" (AquaNutrition Online) are from the following: Brunei (2), Cambodia (2), Indonesia (2), Myanmar (2), Singapore (1), Thailand (2), Vietnam (2), and the Philippines (7).

AquaNutrition Online is a new and exciting learning experience wherein knowledge and skills in aquaculture nutrition is transferred via information technology.

AquaNutrition is the second Internet-based distance learning course offered by AQD, the first is AquaHealth Online.

Participants from all over the world learn at their own paces and time without leaving their respective places of work.

ated fatty acids (HUFA) in artificial diets.

Fecundity was computed as the total number of spawned eggs per gram body weight of abalone. Hatching rate was computed as the total number of larvae divided by total number of spawned eggs multiplied by 100.

However, the low survival rate (75%) observed in abalones with the combination diet, and artificial diet was due to stressful conditions as these abalones spawned more (9.0 and 9.5 mean number of spawning, respectively). Survival rate in abalones fed with natural diet was 88% and mean number of spawning was 8.0.

Abalone commands high price in both the domestic and export markets, however the major constraint in developing abalone aquaculture is the declining seed supply from the wild due to overexploitation and habitat destruction. More so, production of good quality larvae is very inconsistent. Thus, there is a need to develop a reliable technique for abalone broodstock development by manipulating their diet to enhance their reproductive performance.



The course deals with the basic principles of nutrition and feeding, and development of cost-efficient diets for cultured species. It details on the essentials of aquaculture nutrition, feeds and feeding management, and economics of feeding cultured species. At the end of the course, the student is expected to: (1) formulate, prepare, and evaluate diets for aquaculture; (2) apply proper techniques in feed quality control; and (3) apply proper feeding management and feeding practices.

The course is presided by highly competent training specialists in nutrition and feed development, and aquaculture economics. Course coordinator Dr. Oseni Millamena moderates the whole process.

AQD joins technology caravan

Extension of fisheries technology to residents in southern Luzon culminated in Sorsogon, August 9. Dr. Juan Albaladejo assisted by Ms. Maria Abegail Apostol of the Bureau of Fisheries and Aquatic Resources (BFAR) awarded certificates of appreciation to officials and resource persons involved in the activity.

SEAFDEC/AQD's extension team was composed of Dr. Emilia Quinitio, Dr. Fe Estepa, Ms. Marietta Duray, Mr. Roger Edward Mamauag, and Mr. Isaac Abello. They gave lectures on the latest aquaculture technologies, including breeding and nursery of mud crab, and fin-fishes; grouper culture; mud crab culture in mangroves; and shrimp farming techniques that have been demonstrated to be environment-friendly.

Dubbed as the *Fisheries Technology Caravan*, which started in July 22, the activity carried the theme "Isda Sapat Dapat

Alamin at langat (ISDA)." Participants were teachers, students, fisherfolks, and fishfarmers of the overfished coastal areas in Region IV and V. The lectures started off in Lucena City, then in Calauag, Ragay, Mercedes, Calabanga, San Jose, and finally, in Sorsogon City.

The activity was organized by BFAR. Bureau of Post-harvest Research and Extension and Quedan Corporation (offers financial support to the fishfarmers) also joined the activity.

AQD has prioritized its technology verification and extension program in pursuit of sustainable and responsible aquaculture in Southeast Asia.

AquaDep't News is published weekly by DevCom, TID at the Tigbauan Main Station. **Editor this issue:** CB Lago; **Circulation:** E Gasataya