AQUAFISH
COLLABORATIVE RESEARCH SUPPORT PROGRAM

aquafishcrsp.oregonstate.edu
aquafish@oregonstate.edu

DEVELOPING AND IMPROVING THE CULTURE OF INDIGENOUS SPECIES

Stephanie Ichien* and Hillary Egna

Introduction

The Aquaculture & Fisheries Collaborative Research Support Program (AquaFish CRSP), based out of Oregon State University, develops and nurtures strong partnership between US and Host Country institutions to engage in aquaculture and fisheries research, training, and outreach activities. AquaFish CRSP currently fosters collaborations between 17 US and 29 Host Country institutions in Africa, Asia, and Latin America. Within the broader AquaFish CRSP research focus, researchers are addressing biodiversity conservation issues through work that bring indigenous species to aquaculture. This research carries dual benefits. It can be a means to enhance small-scale capture fisheries and at the same time help to alleviate pressure on threatened wild fisheries resources with the availability of farmed fish.

AquaFish CRSP scientists working in six countries (Cambodia, Ghana, Mexico, Nepal, Nicaragua, Vietnam) are currently engaged in various stages of indigenous species production development, ranging from initial species evaluations and breeding experiments to on-farm production trials. Undertaking this research with the goal of diminishing the possibility for negative environmental and social impacts, CRSP is incorporating approaches for best management practices at all levels of the work.

A catch of wild chame.

Wild caught small-sized fish fed to cultured snakehead in Cambodia

Working with native oysters in Boca de Camichin, Nayarit, Mexico

Fishing for snook in southeastern Mexico

Collecting native black cockles in Nicaragua.

Phase One: 2007-2009 Investigations

Lead US Institution: Univerity of Arizona

Development Of Snook (*Centropomus* Spp) Seed Production Technology For Application In Aquaculture And Restocking Of Over-Fished Populations

Incorporation Of The Native Cichlids *Tenguayaca, Petenia Splendida*, And *Castarrica, Cichlasoma Urophthalmus* Into Sustainable Aquaculture In Central America Improvement Of Seedstock Quality And Substitution Of Fish Meal Use In Diets

Lead US Institution: Univerity of Hawaii- Hilo

Spat Collection, Growth Rates And Survival Of The Native Oyster Species, *Crassostrea Corteziensis* At Santa Maria Bay, Mexico

Oyster-Relaying And Depuration In An Open-Water Locations

Microbiological Quality of Shellfish Growing Waters and Tissues

Lead US Institution: Univerity of Michigan

Polyculture of Sahar (Tor putitora) with Mixed-sex Nile Tilapia (Oreochromis niloticus)

Preparing cages for the culture of native ciclid castarrica broodstock in Mexico.

Snook for sale at the market in Villahermosa, Mexico.

Phase Two: 2009-2011 Investigations

Lead US Institution: Univerity of Arizona

Consolidation of Native Species Aquaculture in Southeastern Mexico: Continuation of a Selective Breeding Program for Native Cichlids and Snook Aquaculture

Lead US Institution: Univerity of Hawaii- Hilo

Developing Hatchery Methods for the Mangrove Oyster, *Crassostrea corteziensis* for the Pacific Coast of Mexico

Stock Assessment of "Chame" Dormitator latifrons in Nayarit and South of Sinaloa, México

Induced Spawning and Larval Rearing of the "Chame" Dormitator latifrons in Laboratory Conditions

Lead US Institution: Univerity of Connecticut- Avery Point

Development and Diversification of Species for Aquaculture in GhanaSustainable snakehead aquaculture development in the Lower Mekong River Basin of Cambodia and Vietnam

Lead US Institution: Purdue Univerity

Development and Diversification of Species for Aquaculture in Ghana

Lead US Institution: Univerity of Michigan

Incorporation of tilapia (Oreochromis niloticus) and Sahar (Tor putitora) into the existing carp polyculture system for household nutrition and local sales in Nepal

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WAS Brazil June 2011