

New! Regional e-Notes from CTSA

Center for Tropical and Subtropical Aquaculture <mbrooks@oceanicinstitute.org>

Mon, Sep 30, 2013 at 7:20 PM

Reply-To: mbrooks@oceanicinstitute.org

To: mbrooks@oceanicinstitute.org

Regional e-Notes ~ September 2013

Vol 5, Issue 9



Letter from the Director

Aloha,

We are nearing the end of the CTSA FY13 Development Process! This year, we have implemented substantial changes in an effort to quantify and increase the potential immediate and long-term impacts of each project submitted for consideration. In addition to adjusting our proposal format, we have intensified the scrutiny that proposals undergo during internal and external review.

As I shared with you in July, our IAC and TC members selected eight projects that they believe have the greatest potential to meet industry needs and have lasting beneficial effects. This month, all eight full proposals are undergoing external review by experts in the field of proposed study. These experts will review the proposal and make funding suggestions based on a set of specific criteria, including technical merit, proposed budget, and project impacts.

In years past, some PI's might have considered that a project was often considered accepted if it made it to the full proposal stage. This year, CTSA would like to remind our stakeholders that we will not automatically guarantee funding to any full proposal we receive, and will place significant importance on the results of the reviews.

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Register Now for the 13th Biennial Hawaii SBIR/STTR Conference: Concept to Commercialization

The 13th Biennial Hawaii Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Conference and Pathway to Commercialization is right around the corner. The conference is presented by High Technology Development Corporation - INNOVATE Hawaii.

SBIR/STTR
SMALL BUSINESS INNOVATION RESEARCH
SMALL BUSINESS TECHNOLOGY TRANSFER

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Mark your calendars for October 23-24, 2013. The SBIR & STTR conference will be held at the Hawaii Convention Center in Waikiki.

What's in Store:

- ~ Learn how to apply and win Phase I and Phase II awards.
- ~ Leverage SBIR awards to commercialize your product for a bigger win.
- ~ Meet one-on-one with Federal Funding Managers from Washington D.C.
- ~ Network with local successful SBIR companies and commercialization resources

Who should attend the SBIR & STTR Conference:

- ~ Companies or individuals developing innovations that can lead to broad scale commercialization
- ~ Companies or individuals new to the SBIR/STTR program
- ~ Experienced SBIR/STTR companies looking for partnerships and commercial opportunities
- ~ University of Hawaii researchers
- ~ Investors in technology
- ~ Economic development agencies
- ~ Business consultants and advisors

[Click HERE to download the registration form.](#)

One-on-One meetings: After you register, you will be able to schedule your one-on-one meetings online with the Federal Managers as well as our Speakers.

Poster Session: If you would like to present a poster at the conference, please [CLICK HERE](#) for submission instructions.

NO REFUNDS: Transfers will be accepted.
<http://www.htdc.org/sbir-2013-conference>

Pacific Island Spotlight: Aquaponics Farm in Rota Will Produce Vegetables for Guam



Rota HS students learning about the nitrogen cycle as part of the CTSA-NMCCREES aquaponics project

In 2010, CTSA started a collaborative education project with the Northern Marianas College CREES program to introduce aquaponics in the CNMI, resulting in the successful installation of three aquaponics systems at the high school on the island of Rota. During the project, CTSA conducted a technology transfer trip to the island to introduce the technology to the local community.

Three years later, Rota is in the midst of building an aquaponics demonstration farm that will eventually produce vegetables for export to Guam.

CTSA is pleased to have been a part of the beginnings of something big in Rota, and we wish our CNMI colleagues the best of luck in this endeavor! Below is the original article from the Marianas Variety:

A commercial aquaponic demonstration production farm on Rota aims to produce vegetables for export to Guam, according to Northern Marianas College-Cooperative Research, Extension, & Education Services aquaculture specialist Michael Ogo who was one of the guests of the Rotary Club of Saipan at the Hyatt yesterday. He said NMC-CREES helped the Rota mayor's office obtain a \$270,000 grant from the Office of Insular Affairs to start a commercial aquaponic demonstration farm.

For the first phase, Ogo said five staffers from the mayor's office underwent training in Hawaii to study aquaponic production. The second phase involves constructing the demonstration facility which Ogo said they are doing now, and the third phase is to start producing leafy vegetables and then export them to Guam.

Aquaponics, according to Ogo, was developed in the CNMI to help farmers reduce the cost of production.

"We introduced aquaponics after realizing that a lot of our tilapia and agricultural farmers had problems with production, basically with costs and electricity, so we looked into how we could assist these farmers to reduce production costs," Ogo said.

He said aquaponics is "the combination of aquaculture and hydroponics - it means different things to different people but it's basically about growing fish and vegetables in a symbiotic system. It is fish and plants growing happily together." He said it takes from five to six months for fish to grow to market-size but the wastewater from the fisheries can also be used for the production of vegetables.

"We have increased the use of the aquaponics system to the CNMI from zero to three or four, and one major project has been set up involving Eric Van Der Maas of the Marianas Business Plaza in Susupe," Ogo said.

NMC-CREES helped Van Der Maas construct an aquaponic system on the third floor of the building that will produce about 1,200 lettuce heads every four weeks, Ogo added. Other vegetables and plants that can be grown through aquaponics include parsley, spinach, lettuce, pepper, onion, cucumber, eggplant and basil.

[Click here to read the original article.](#)

AquaClip ~ New "Zero Waste" Shrimp Farming System

By Christine Blank, SeafoodSource. September 12, 2013

A University of Missouri (MU) professor has invented a shrimp-farming system that not only grows shrimp quickly but also produces zero waste.

"No one in the U.S. has yet been able to demonstrate profitability with shrimp. Ninety percent of our shrimp [consumed in the U.S.] comes from Asia," David Brune, professor of agricultural systems management at the University of Missouri, told SeafoodSource.

Over the long-term, Asian shrimp farming methods are unsustainable and harm the environment, according to Brune.

"Most shrimp are grown in China, Indonesia and Thailand, where producers feed wild-caught fish meal and are discharging waste from their ponds into Asian coastal waters. Eventually, these practices will stop and everyone is going to have to go to a limited discharge or zero discharge system," he said.

Brune, who has researched aquaculture for around 30 years, developed a Partitioned Aquaculture System (PAS) which partitions the fish culture from the water retreatment system. Using paddle wheels at the university pond holding one-twentieth an acre of water, a high rate of algae is produced.

"The algae treats the waste internally. We have zero [waste] discharge and internal protein generation," Brune said.

The Pacific shrimp grow quickly too. "I can grow a crop of shrimp here every 120 days. If I can raise the equivalent of 25,000 pounds per acre of water and I can get USD 4 (EUR 3) a pound, that is a USD 100,000 (EUR 75,100) cash flow per acre of water every 120 days," Brune said. The PAS produces between 15,000 to 20,000 pounds of shrimp per acre, per year.

[Click here to read the full article.](#)

The Center for Tropical and Subtropical Aquaculture (CTSA) is one of five regional aquaculture centers in the United States established and funded by the U.S. Department of Agriculture's National Institute of Food and Agriculture (NIFA) under grants 2008-38500-19435, and 2010-38500-20948. The regional aquaculture centers integrate individual and institutional expertise and resources in support of commercial aquaculture development. CTSA was established in 1986 and is jointly administered by the Oceanic Institute and the University of Hawaii.

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