

Residents encouraged to try aquaponics

By Rory Butler

Antiguans and Barbudans are being told growing fish in their own backyard is a real and affordable possibility.

Following the opening of Barbuda's first aquaponics centre – a system which uses water tanks to breed fish and grow vegetables – Brooklyn College professor Dr Martin Schreibman said residents could consider creating their own centres.

"You can use plastic barrels and smaller pipes and still generate a significant amount of food for your family and it is not cost-prohibitive and I think it really is the wave of the future," Dr Schreibman said.

"I say with just a couple of thousand dollars, you can get a system up and running. I mean you could have a small system that costs \$300 but you are not going to produce much, so it depends on what your aim for the yield is," he added.

Schreibman, professor and director emeritus, founded the Aquatic Research and Environmental Assessment Center at the Brooklyn College in the City University of New York (CUNY).

He said aquaponics is geared towards, "trying to



Board members of the Barbuda Research Complex Dr Sophia Perdikaris (US professor of archaeology) and John Mussington (Principal at Sir McChesney George High School) at the opening ceremony of the aquaponics centre in Barbuda.

have a sustainable source of food and trying to solve the problem of insufficient water and soil to grow it."

The professor said the system "utilises the waste of fish to grow edible vegetables and a variety of other plants without really challenging the system."

He explained, "The water is used over and over again. It is cleansed as it circulates through the systems and it's a relationship between the plants and the fish and what the fish are giving up in waste is what the plants require for nutrition."

The aquaponics centre opened last weekend as part of new facilities at the Barbuda Research Complex and will be used to grow tilapia – a fresh water fish.

"It's four tanks, about 300 gallons each. Every six or seven months, they would have about 1,200 fish to grow, 300 per tank. In a year, you have about 2,000 fish," Dr Schreibman said.

"This is a very small system comparatively but this can easily be expanded. They have already built in the infrastructure to make this happen. This can very easily be scaled up to be doubled or tripled in a very short time," he added.

The US professor said a choice has not yet been made on the type of plants to be grown.

"As far as plants are concerned, we have been able to grow all kinds of edible plants, lettuce, herbs, tomatoes, cucumbers, just about any green vegetable. We have been successful with all those plants and they can be grown at the

same time," Dr Schreibman said.

The aquatic research director said residents would be able to benefit from lessons learned at the facility in Barbuda.

"The purpose is two-fold here: one is a demonstration facility and a research facility so we can look into uses of different plants and fish and also as an education facility so we can train the high school students so they can carry the knowledge into their future," Dr Schreibman said.

The aquaponics centre in Barbuda is expected to begin operations within the next couple of months and Dr Schreibman said he hopes to return with students from CUNY to lead research at the centre.

"We are applying for funds now to allow us to carry out the research and hopefully that will be forthcoming. Otherwise, we will find other sources of revenue to make it happen," Dr Schreibman said.