UNIVERSITY OF THE VIRGIN ISLANDS

AQUAPONICS AND TILAPIA AQUACULTURE SHORT COURSE

June 15-21, 2008

Program - 7-day course that will provide in-depth knowledge of the principles and practical application of the aquaponic and biofloc tank culture systems that have been developed at the University of the Virgin Islands. Participants will be introduced to a variety of system designs that maintain water quality by various solids removal techniques and by hydroponic plant culture (aquaponics), a suspended growth process (biofloc tank culture) or fixed-film nitrification. Fish production instruction will be conducted using both the Nile tilapia (*Oreochromis niloticus*) and red tilapia. Hydroponic plant production will focus on vegetables, culinary herbs and ornamental flowers.

Instruction - Each day will include a half-day of classroom lecture and a half-day of hands-on field work. Participants will learn the technology through presentation of the theory and practical skill development. Each student will be given a CD-ROM of reference materials. Water quality labs will cover the methods of analysis and the use of water quality test kits. Field work will include fish handling, vegetable production and system operation.

Facilities - UVI is located in the heart of beautiful St. Croix. The Aquaculture Program operates fifteen research-scale systems (six aquaponic and 16 biofloc) as well as commercial-scale aquaponic and biofloc systems, a biofloc demonstration system with an associated vegetable garden, a fry sex-reversal system, a recirculating system for fingerling rearing and a purge system. Brood Nile and red tilapia are maintained on site. The program annually produces about 50,000 lbs. of tilapia and a variety of vegetables.

Topics

- Aquaponic system
  - System design and management
    - Components
    - Construction techniques
    - Operation
    - Water quality
  - Fish production
    - Stocking rates
    - Feeding, growth and survival
    - Harvesting and processing
  - Plant production
    - Seedling production
    - Disease and insect control
    - Harvesting and packaging
- Biofloc tank system
  - Fish production
    - Stocking and growout
    - Water quality management
    - Feed and feeding methods
  - Sludge use for field crops
- Economics
  - Capital budgeting
  - Operations plan
  - Marketing
- Fingerling production
  - Brood stock management
  - Breeding
  - Fry sex reversal

Cost - This course will cost $920 for participants registering by May 16 and $1020 for registrations received later. Course fee includes instruction, course materials, graduation banquet and a sailing trip to Buck Island National Park for a day of snorkeling amid spectacular coral reefs and a beach barbecue. A limited number of dorm rooms are available for $35 per night (double) from arrival on Saturday June 14 until departure on Sunday June 22, after the class. Local hotel information will be distributed with registration confirmation. Airfare to St. Croix (STX) is not included in the registration fee. Meals are available at the university cafeteria ($10-15 each) or at many other local restaurants ($10-50 each).

Registration - Register by completing the form at the Short Course website and mailing with your deposit. A $300 deposit, payable to the University of the Virgin Islands, is necessary by May 16, 2008. No refunds will be made for cancellation after June 1. The balance will be due the first day of class.

Instructional Staff

Dr. James Rakocy - System design/production/water treatment technology
Dr. Wilson Lennard - Australian guest lecturer/small-scale aquaponics
Donald Bailey - Business planning/marketing/operations/construction methods
Jason Danaher – Biofloc systems/tilapia biology/feeding and nutrition
R. Charlie Shultz - Water quality/pest management/plant production

For more information and to register contact Dr. James Rakocy, RR 1, Box 10,000, Kingshill, VI 00850-9781, Phone: 340-692-4020, E-mail: jrakocy@uvi.edu

Visit the Short Course web site for more information. http://rps.uvi.edu/AES/Aquaculture/UVIShortCourse.html

University of the Virgin Islands

Aquaponics and Tilapia Aquaculture Short Course

June 15-21, 2008

Registration Form

Registration fee: Before May 16 $920
After May 16 $1020

- A $300 deposit is necessary by **May 16, 2008** to reserve enrollment.
- Payment must be in US Dollars ($) only.
- The balance due will be paid on the first day of class
- We accept personal or business checks, money orders or Western Union.
- We do **NOT** accept credit or debit cards.
- Make check payable to the **University of the Virgin Islands**

Enclose this form with payment and mail to:

James E. Rakocy
University of the Virgin Islands
Agriculture Experiment Station
RR 1 Box 10,000
Kingshill, VI 00850-9781

Name: _____

Address: _____

_____

City: _____

State/Province: _____

Zip: _____Country:_____

Phone: _____ Fax: _____

E-mail: _____

Previous aquaponic/fish culture experience:_____

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Housing is not included in the registration. Local hotels and guest houses are available and information will be provided upon receipt of your registration.

Double occupancy dormitory rooms are available for $35 per person per night. Dormitory suites are not co-ed and house six students who share a common bath. Couples cannot be housed together and should choose to stay in a hotel. Students must provide their own bedding, towels and toiletries. Rooms will be assigned in the order that registration is received.

Please complete the following.

I plan to stay in a (circle one): hotel UVI dormitory

Your gender (circle one): male female

You may request a roommate if you know another participant

Name: _____