



A Publication
of the
University of the Virgin Islands
Cooperative Extension Service

March 2015



44th Annual Agriculture and Food Fair of the U.S. Virgin Islands Honors One of Its Own

By Clarice C. Clarke
Public Information Specialist II
Communications

Smililing from ear to ear, both Kwame Garcia, Sr., and Kofi Boateng, State Director and Associate Director of the Cooperative Extension Service respectively, accepted the award naming the Agriculture and Food Fair grounds in honor of CES' retired staff member Clinton George. The Honorable Kenneth Mapp,

Governor of the U.S. Virgin Islands, presented Boateng and Garcia with the award during the opening ceremonies.

Clinton George was born on St. Thomas, US Virgin Islands, and graduated from Charlotte Amalie High School. Upon graduating in 1966, he entered the US Navy. After serving his country, Clinton took advantage of the benefits that the military provided. As a veteran, he enrolled in college under the GI Bill and ultimately received a Master's in Horticultural Science from the University of Florida. Mr. George returned home in 1981 and became a member of the University of the Virgin Islands Cooperative Extension Service as an Agricultural Specialist.



Kofi Boateng (left) and Kwame Garcia, Sr. (center) accepting award on behalf of Clinton George from Governor Kenneth Mapp.

In 1983, Mr. George served on the Agriculture and Food Fair Board of Directors as Director of Farm Exhibits and supervisor of the Farmer of the Year award. From 1985 to 2004, he served as Director of UVI's Exhibitions and Fairs. Mr. George wrote several agricultural articles

FromThe Ground Up is a publication of the University of the Virgin Islands Cooperative Extension Service. It is available to Virgin Islands' residents upon request and is also available on the web at <http://ces.uvi.edu> and www.facebook.com/uvices.

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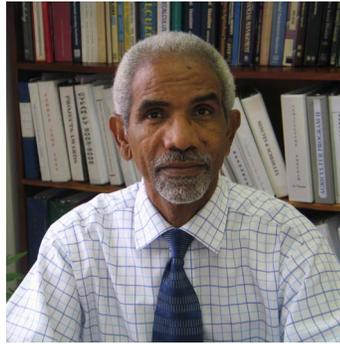
UPCOMING ACTIVITIES

Usefulness of Internet Workshop	April 28-30 (STX)
Beginning PowerPoint Workshop	May 5-6 (STX)
Intermediate PowerPoint Workshop	May 12-14 (STX)
Beginning Excel	May 19-21 (STX)
Intermediate Excel	May 20-22 (STX)
Basic Computer Training	June 8 or 9 (STX)
Mango Melee	July 5 (STX)
Usefulness of Internet Workshop	August 4-6 (STX)
Beginning PowerPoint Workshop	August 24 -25(STX)
Intermediate PowerPoint Workshop	August 26-28 (STX)
World Food Day Activities	October 16-18 (STX)

University of the Virgin Islands
Cooperative Extension Service



The State Director's Message



This edition of the newsletter *From the Ground Up*, similar to former editions, highlights the Cooperative Extension Service's activities in the community that we serve. The diverse focus of the articles is a testimony to the

variety of programs we present to meet the needs of our diverse community. A very important point of reference is the practical nature of each activity or program featured. Our collaborative efforts with farmers, researchers, and agriculturists around the Caribbean and the United States are featured in the recapturing of the events of the 44th Annual Agriculture and Food Fair of the U.S. Virgin Islands, data collection about our forests, as well as other programs. Computer classes not only educate members of the community, but making them computer literate prepares them to survive in the twenty-first century. These are only a sample of the many marketable skills that members of our community learn from the Cooperative Extension Service.

Our primary objective is to reach out to the whole community, which is demonstrated in this edition. The Woodworkers Expo not only exposed the skills and beautiful products of our woodworkers, but it showcased the value of trees in the Territory, while it introduced our youth to the potential in the woodworking trade.

CES has a large variety of information available to members of the community, as well as staff who do educational outreach activities. CES educates the members of the community as we look at environmental issues that do affect our flora and fauna, as is seen in Dr. Williamson's involvement with the data collecting process relating to our forests. The launching of our very practical and informative book about the fruits of the Virgin Islands was a high point in our publication history. The different types of gardening included in this edition are a clear indication that growing food does not require large plots of land. As we work at enhancing the value of the whole person, we aim at producing healthier individuals and healthier families through our Expanded Food and Nutrition Education Program (EFNEP).

The "Did You Know?" facts and figures summarize the extent of programs by our sister agency—the Agricultural Experiment Station and the volume of information available to the community. Please don't hesitate to contact us at the Cooperative Extension Service if we can help you in any way.

Sincerely,

State Director-CES
Assistant Professor



Clinton George conducting fruit production workshop during the 1986 Fair.

the Fair Bulletin to include “Planning the Development of a Tropical Fruit Orchard” and “Reusing Reclaimed Municipal Water for Agriculture in the Virgin Islands.” Included in his list of agricultural writings are publications he co-authored such as “Bananas and Plantains, Mango, & Avocado Production & Marketing in the Virgin Islands,” and “Vegetable & Tropical Fruit Varieties Recommended for the Virgin Islands.”

Mr. George worked with CES’ Agriculture Economist in creating farmer organizations on St. Croix and St. Thomas. Using his relationship with USDA, he conducted short courses in the organization and management of farmer cooperatives. These courses

provided knowledge on pooling supply purchases, sales, and handling expenses allowing them to operate more efficiently. Realizing the aging of our farming community and the rising cost of food in the Territory, Mr. George developed an Urban Gardening Program for the youth and disadvantaged residents of the Virgin Islands. He initiated gardening programs in both the elementary and junior high schools to expose our youth to careers in agriculture and to teach the fundamentals of growing vegetables and herbs on limited land space.

Mr. George is an agricultural visionary; he saw the potential in promoting the growth and use of our tropical fruits, especially mangoes. He urged farmers and home gardeners to plant fruit orchards. It was Clinton who initiated our most successful summer agricultural event called “Mango Melee.” When mangoes were not plentiful, he came up with the brilliant idea of adding tropical fruits—thus our Summer Fruit Festival is now called “Mango Melee and Tropical Fruit Festival.” Today, it is a must-attend summer activity for Virgin Islanders and visitors. Clinton George is an avid proponent of developing and promoting the growth and business of agriculture by rebuilding through cooperatives, establishing sustainable fruit and vegetable farms and gardens, and revitalizing our many historical agricultural plantations and structures as part of an agricultural heritage tourism. Once developed, it will create jobs and put St. Croix and the Virgin Islands on an economic rebirth.

According to members of the Board of Directors, it was a great honor and pleasure to name the 2015 Agriculture and Food Fair Grounds the “Clinton George Fair Grounds.”

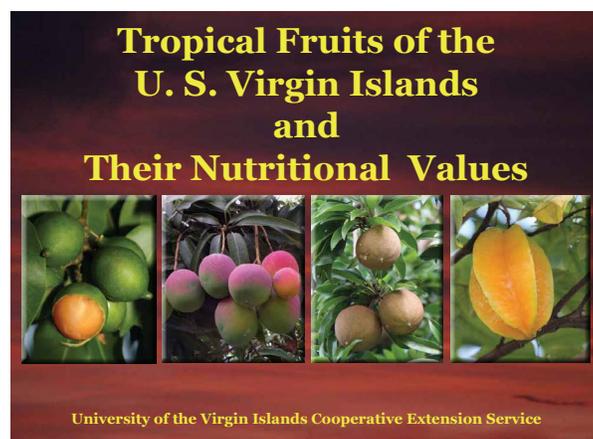


By Clarice C. Clarke
Public Information Specialist II
Communications

A locally made basket filled with tropical fruits elegantly adorned the table as the University of the Virgin Islands Cooperative Extension Service launched its latest book on the Albert A. Sheen campus on St. Croix.

Tropical Fruits of the U.S. Virgin Islands and Their Nutritional Values is one of dozens of books and posters published by UVI since the early 1990s, including *The Heart of the Pumpkin*.

The book, which has as its cover a stunning sunset of the Virgin Islands adorned with eight vibrant tropical fruits, features 75 local fruits with photographs, a list of each variety's health benefits, nutrients, the native origins of the fruits, growing seasons, and calories. Each variety is rated on a scale of one to five stars based on its nutritional benefit. The last few pages are devoted to recipes using some of the fruits.



University administrators, people who collaborated on the book, students, and members of the media attended the reception to introduce the book, which is available at UVI Bookstores on both islands, the Owl and Seahorse on St. Thomas, the St. George Village Botanical Gardens, Undercover Books, and on Amazon.com.

As I thanked those who contributed to the publication, including researchers and scientists from UVI Cooperative Extension Service and Agricultural Experiment Station, the V.I. Agriculture Department and Dr. Letitia Henry, a preventative care specialist, I recognized that this would not have been possible without the efforts made by past extension nutritionists such as the late Nan Lenhart, Ramonita Caines, and Alice Henry, who began the process of analyzing our native foods for their nutritional contents.

Dr. Letitia Henry followed in their footsteps by jumping on board when discussions were brought up on the nutritional benefits of our local fruits.

In 1989, the Cooperative Extension Service took on the task of interviewing local cooks particularly those who sold vegetarian foods. Those recipes were collected, analyzed and tested by Nan Lenhart.

The result was the publication entitled *The Heart of the Pumpkin*—healthy cooking with fruits and vegetables. This was a significant turning point in how UVI Cooperative Extension Service publishes nutritional information. For the first time, local recipes using Caribbean foods were analyzed for their nutritional contents and values. In 2001, *Native Recipes* was re-packaged and nutritional information was provided for all of the local recipes. According to Lenhart, No one food supplies all the essential nutrients you need. That's where good nutrition comes in—this means getting the right nutrients from the right combinations of foods. Throughout the world, a healthy diet comes in many forms and combinations and reflects the availability of local foods and traditions.

In April of 2007 and January of 2012, the UVI Cooperative Extension Service published the first and second series of Tropical Fruit posters, using our local fruits and showing the nutritional benefits and a comparison to the fruits grown in the United States. It was quickly realized, however, that more detailed information was needed for our residents, especially those who are suffering from certain diseases.

Thus, *Tropical Fruits of the U.S. Virgin Islands and Their Nutritional Values* was published. This coffee-table, hardcover book is a significant part of UVI's "Pathways to Greatness." It serves as a resource for the Virgin Islands in addressing critical community issues and Extension's mission in responding to the needs of our community. This book gives Virgin Islanders and the people of the Caribbean vital information so that they can understand the nutritional contents of our native and Caribbean fruits and make wise and informed decisions when eating those fruits.

This book is a MUST HAVE and should be in every home.

In his remarks at the launch UVI President David C. Hall said, "We encourage publication because knowledge is more valuable when shared."



Dr. Letitia Henry, Preventive Care Specialist, addressing the audience at the Tropical Fruit Book launch.



From left, Clarice C. Clarke, Public Information Specialist; Kwame Garcia, Sr., CES State Director; UVI President David Hall, and Dr. Letitia Henry introduce "Tropical Fruits of the U.S. Virgin Islands and Their Nutritional Values" at a book launch event on Wednesday, November 19, 2014.

Agriculture: The Heart of It All

By Clarice C. Clarke
Public Information Specialist II
Communications



This year's 44th Annual Agriculture and Food Fair was a tremendous success for both vendors and fairgoers. According to the Board of Directors, the attendance was slightly down from last year; however, some vendors indicated that the three-day activity brought them a much needed stimulus. One vendor even stated that he made \$1,000.00 more than last year, bringing his total income to over \$8,000.00.

Once again, the fair gave our residents the opportunity to appreciate how essential are the agriculture industry and our cultural arts to our Territory. Additionally, the fair highlighted the opportunities that are available, which can be created to provide an economic stimulus to the community.

If agriculture is the heart of it all, then what better venue than the fair to showcase agriculture and culture as a significant component that can lubricate the economic engine of St. Croix? One doesn't have to look too far to see how this can be done. In the UVI's exhibit area, there were vivid expressions and lots of opportunities displayed that can be used to inspire entrepreneurs to start a business. Some examples of such displays are available through on-going training from the UVI's Small Business Development Center (SBDC), the Cooperative Extension Service, the Agricultural Experiment Station, the Virgin Islands Caribbean Cultural Center, the Center for Marine and Environmental Studies, and the 13D Entrepreneurship Competition.

The cultural expressions were tremendous. Of course, a majority of Virgin Islands' families enjoyed the cultural tribute to Lord Kitchener, the performances by the culture bearers such as the St. Croix Heritage Dancers, Stanley & the 10 Sleepless Knights, West End Masqueraders, the Guardians of Culture Moko Jumbies, and the Rising Stars Steel Orchestra.

Additionally, fairgoers were treated to demonstrations of basket weaving by Eileen Huggins, ice cream making by Clint Ferris, carrot-raisin brownies by Evannie Jeremiah, bush talk by Olasee Davis, kite making by Duane Howell, and storytelling by Auntie Janice Tutein. All of the activities, demonstrations, and cultural displays combined to show that agriculture, is indeed, the heart of our existence.

Agrifest Honors Youth in Various Categories

By Sarah Dahl-Smith

Director, Agrifest Youth Activities & Extension Agent
4-H/Family & Consumer Sciences



The Virgin Islands Agriculture and Food Fair Youth Activities Educational Exhibits included entries from eight (8) public schools, three (3) private schools and (1) parochial school, seven (7) youth groups, and over five (5) educational programs. This year, the Arthur A. Richards Jr. High School FFA Program earned the coveted Sweepstakes Award. A perennial winner, the Good Hope Country Day School 4-H Club, earned 2nd place in the highly competitive Youth Group division.



With seven (7) entries, there was no more room in the Farm Animal Frenzy corral! Using recycled, reduced, reused, and repurposed materials, young people exhibited creativity, ingenuity, and resourcefulness in creating peacock and rabbit families, a sheep and llama, and the proverbial horse or two. Judges unanimously agreed that the peacock family entered by our 4-H Ambassadors showed the most heart, and best exemplified youth engagement.

This year, there were eight (8) entries in the Decorated Hay Bale Contest. Large round bales for this contest were generously donated by Mr. Danny Simmiolkjier, a local farmer and former 4-H member who felt it important to give back! Bales depicted flower gardens, peacocks, a market woman, and an artist's inspiration, among the various displays.



The Poster Contest showcased our local artistic talents. The poster created by young artist Hayse Durand, Jr., a 9th grade student from the Seventh-day Adventist School, was easily the favorite of both the judges and the crowd. His artwork very powerfully depicted his thinking that "if agriculture is the heart of it all, then we are the soul!" Other winners included 4-H Teen Ambassador, Shanice Cazaubon and Cylus Gordon, a 5th grader at Lew Muckle Elementary School.

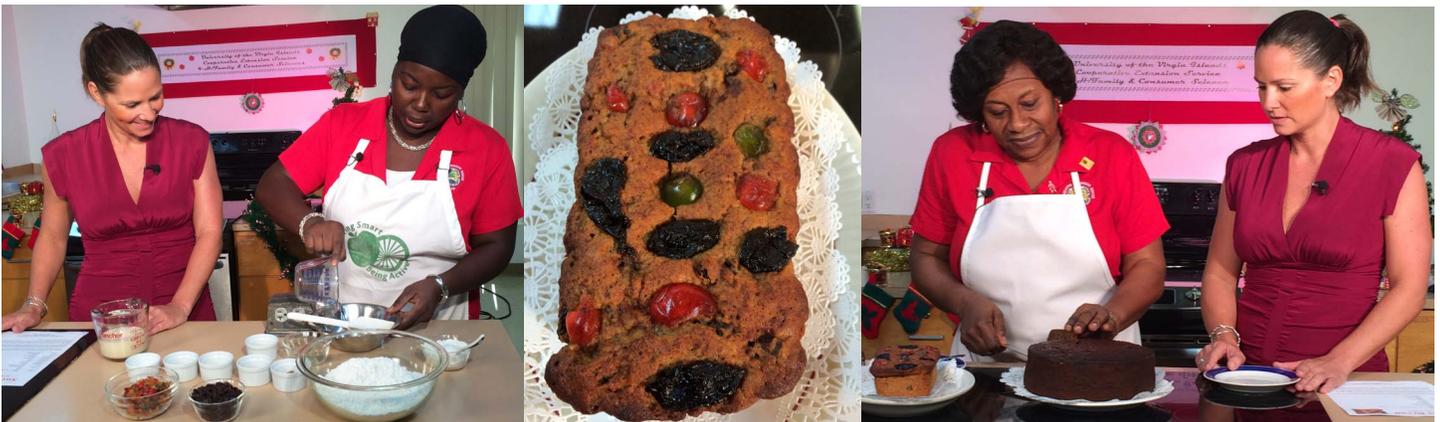
Poetry and essay winners proudly represented many different schools. Caliyah Helliger, a 6th



grade student from the Alfredo Andrews Elementary School, once again authored the 1st place poem and essay. Other winning poetry entries were submitted by Crystal Fahie from the Good Hope Country Day School and Thaliah Felix from the St. Croix Educational Complex. Winning essays were penned by Yousif Moustafa from Elena L. Christian Jr. High School and Candra Ravaviere from the Seventh-day Adventist School.

Special thanks go out to the 4-H Ambassadors and their youth advisor, Idrees Donaie, for their assistance in implementing the many different Youth Activity programs, events, and contests held before, during, and after the fair. Over 500 community service hours were awarded for their support. In addition to trophies and ribbons, winners also received cash awards.

TV2 *Best Bites* Showcases CES' Holiday Baking Tradition



The Christmas season is a very special time in the Virgin Islands and the Caribbean. TV2's Best Bites took us on a food lover's journey from local island kitchens to ours. The program allowed viewers to explore the Virgin Islands as host Jessica Cuyler displayed some of the best local kitchens while introducing unique island cuisines. Every week, residents experience a taste of the islands and learn how to prepare fresh recipes along with meeting fun island chefs.

The Best Bites Holiday Special featured Evannie Jeremiah, and Jo An Josiah of the UVI Cooperative Extension Service 4-H/Family and Consumer Sciences Program making delicious holiday treats: sweet bread and black cake. This exposure of CES' programs to our residents emphasizes the core mission of the University of the Virgin Islands and the Cooperative Extension Service and the continuation of UVI's "Pathways to Greatness," and Extension's mission in "responding to the needs of our community."

Batik for Profit or for Pleasure

By Caryl Johnson, Ed.D.
Extension Program Supervisor-STT/STJ
4-H/Family & Consumer Sciences

The St. Thomas CES Batik class hosted a reception, which was open to the public, with the Virgin Islands Council on the Arts on December 12, 2014. The purpose of the Batik for Profit or Pleasure class is to train women in the community to produce high quality batik art work for which there is a need in our community, as well as a desire to preserve the “Art of Batik.”

The objectives of this program are as follows: (1) To further develop the artistic skills of women who have shown an interest and talent for doing batik design; (2) To bring in highly qualified batik artists to help women to further develop their skills; (3) To enrich the cultural life of Virgin Islanders through the preservation of Batik as a form of art; and (4) To help local women develop a marketable skill as a means of developing their own cottage industry.



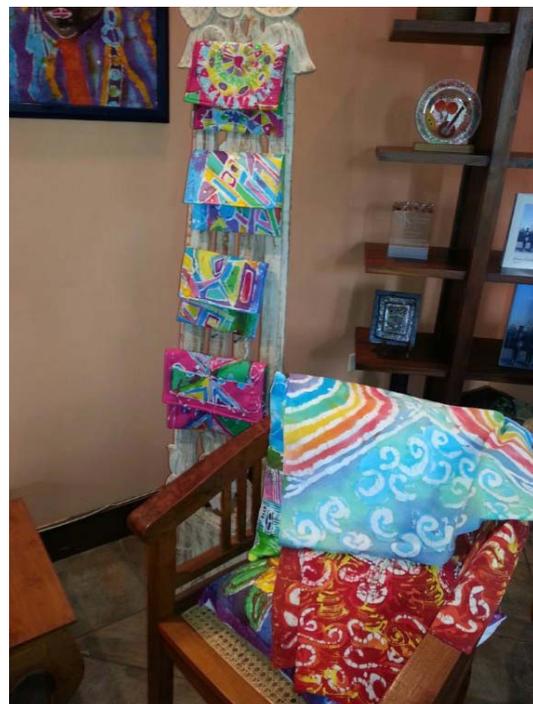
Part of this project was funded by the Virgin Islands Council on the Arts. The funds were used to bring Mr. Henderson Reece, a well-known batik artist from Barbados, to work with the women for one week during August, 2014. The results of this one week workshop are reflected in continued classes of batik work.

Participant reflections on the Batik Show and Reception:

“Thank you for inviting us to your batik show. It was spectacular! Such beautiful work displayed in a lovely setting. And then, there was all of that great food, too. It was a lovely night. We appreciated the work that it took to put the show together, and it was a success!!”
- Dr. David Smith and Kathy Perlich.

“OH my GOOOOODness that was more than I could have words to say about! Thank you so much for all your hard work! It was more than I could even imagine, when I walked in I said am I part of this???? IT WAS AWESOME!!!” - Batik student Kathleen Butler.

The batik art was on display at the Virgin Islands Council on the Arts for one month. Dr. Caryl Johnson is the instructor for the class and the principal investigator on the grant. She is looking forward to more funding opportunities to write grants for the Batik for Profit or Pleasure class. For more information, regarding the 4-H/F&CS Program contact: Dr. Caryl Johnson (St. Thomas) at 340-692-1082 or the St. Croix office at 340-692-4094.





NUTRITION CORNER

TRY EATING A “SUPERFOOD!!

Sugar apple, *Annona squamosa* L. (Family-Annonaceae) is a heart-shaped fruit whose entire surface is knobby and is divided into small sections that easily break when the fruit is ripe. The inside of the fruit contains small black seeds that are covered by a creamy, sweet custard-like pulp. Sugar apples are grown throughout South America and the Caribbean.

The custard-like pulp can be used to add to ice cream mixtures or blended with milk to make a delicious drink.

Health Benefits

- Sugar apples strengthen the immune system
- Help brain and nerves function properly
- Prevent constipation
- Help lower blood pressure

Diabetic Exchange

1 Fruit Exchange = 1/2 medium

Comparison to Imported Fruit

Sugar apple is so rich in Vitamin C and fiber that it can be considered a superfood. One sugar apple contains more fiber than two apples.

CES Continues to be the “Hub” for Computer Training

By Marthious Clavier
Extension Specialist I
Communications

The University of the Virgin Islands Cooperative Extension Service (UVI-CES) has been the hub of activity for adult computer literacy classes. The agency conducted a series of computer trainings, which started in September 2014 and ended in December 2014. The trainings began with two basic computer courses, which were designed to bridge the digital divide in the U.S. Virgin Islands. The seven-week course was developed for individuals with little to no computer skills and sought to make them computer literate by the end of the course. Thirty-eight students participated in the course and received their certificates of completion on November 5, 2014. Participants were first introduced to the basic features of the Windows Operating System. After learning the Windows OS, they were introduced to file management. Upon mastery, the students learned word processing using Microsoft Word. The last lessons the students learned were how to search for information online and how to send and receive electronic mail. These individuals are now better equipped to integrate technology into their daily lives.



Mr. Victor Emanuel receiving his Certificate of Completion from UVI President David Hall and CES State Director Mr. Kwame Garcia, Sr.

After the basic computer courses, UVI-CES conducted three workshops entitled “Usefulness of the Internet,” “MS PowerPoint,” and “MS Excel.” In our fast-paced world, the internet is a great benefit to those who know how to use the vast numbers of websites available. Individuals can perform a variety of tasks via the internet. A few of the tasks include communicating, shopping, and paying bills.

PowerPoint is a very useful and popular presentation software. The workshop taught participants how to apply design templates, insert pictures, insert music files, and symbols. MS participants also learned how to use custom animation to make items enter and exit and how to download animated pictures and insert them into their presentations. MS Excel is a very useful application when creating budgets, analyzing data, and being used for a number of other useful mathematical calculations. Participants learned MS Excel features such as entering data, formatting cells, creating charts, and using functions and formulas.

Ms. Christine Isaac participated in two of the basic computer courses: “Usefulness of the Internet” and “MS PowerPoint” workshops. Ms. Isaac stated, “Before I took these classes, I was afraid of the computer, but now I can’t get off of the computer.” Even though Ms. Isaac is retired, she volunteers at an outreach ministry for children. She also stated that she is able to do much more with the computer skills she has acquired. She can now create folders and subfolders to organize her files, create and print Word documents, and find useful information online to utilize with the children. She also enjoys communicating with her family and friends online via Skype. Another participant, Victor Emanuel, stated that the class was very helpful. He did not know anything about the computer and now he is able to navigate it. He stated, “This class should continue, so that others can benefit as I did.” He went on to say that he is encouraging others to sign up for the class, so that they too can become computer literate. For more information, please contact Mr. Clavier at 340-692-4090.



By Olasee Davis
Extension Professor/Extension Specialist Natural Resources



At Agrifest 2015, I conducted a “bush talk” for the fair goers. The use of medicinal plants in the Virgin Islands is becoming popular as it was in the early 1900s. In the old days of Virgin Islands culture, herbalists were known as the West Indies Weedwomen. Don’t get me wrong! The herbalists were not always women, but many more women practiced the art than men. The herbalists were not always women, but many more women practice the art than men. Nonetheless, in the Virgin Islands community, the Weedwoman had an unusual position and was looked upon with respect and admiration. She was known throughout the community for her skills, knowledge, and the preparation and use of medicinal plants for the sick.

In yesteryears, the Weedwoman was so popular that songs were written and developed about her which spread throughout the Virgin Islands community. Such song as “One day I meet an old woman selling, and I wanted something to eat. / I thought I could put a little bit in she way, but I take back when I did meet. / I thought she had bananas, orange or pear, nothing that I need, / I asked the old woman what she was selling, she said she was selling weed.” Some of the weeds she mentioned were as follows “.....Tan-tan, lemon grass, Gully Root, Granny backbone, Bitter-tally, Iron-weed, and Coolie-bitters.

Today, with so many different types of illnesses such as high blood pressure, diabetes, and other diseases that infect the human body, many people are turning to bush for a cure. The “bush talk” at the agrifest drew a large crowd of people who sought information on how to use local medicinal plants. It was a very informative presentation where fair goers gained knowledge on how medicinal herbs work and what species of bush were good for various ailments. As the old folks say: “Sickness comes on horse back but crawls away like a snail.”



Olasee Davis, Extension Professor/ Extension Specialist -Natural Resources, talking “Bush” at Agrifest 2015.

Third U.S. Forest Service Survey for U.S. Virgin Islands Forests

By Joey R. Williamson, Ph.D.
Extension Specialist-Pest Management
Agriculture & Natural Resources Program



Figure 1. *The FIA field crew sampling downed-woody material along a transect, one of the procedures for the forest health monitoring.*

were also monitored for tree pests and diseases, down-woody material on the forest floor, and soil was collected for laboratory analysis. Between one and three plots were surveyed each workday, in order to finish the field work within the second half of 2014.

Following are some highlights from the 2009 survey. We had approximately 45,000 acres of forest in the U.S. Virgin Islands. Most of our forest land ownership was private (76%), followed by the federal government (19%) and local government (5%). There were 85.1 million trees, representing 118 different species, with 14.5 million cubic feet of marketable wood. Most of the forested areas

The U.S. Forest Service conducted a thorough survey of trees across the U.S. Virgin Islands last summer. That was the third survey, a joint effort by the Forest Service's Southern Research Station-Forest Inventory and Analysis (FIA) unit and the International Institute of Tropical Forestry, which takes place every five (5) years in the Virgin Islands and Puerto Rico. In addition, a different survey with similar goals was conducted in 1994. These surveys are part of a national program to collect, analyze, and report information on the status and trends of America's forests, to include changes in forest cover, land use patterns, biological diversity, and hurricane damage and recovery. Basically, these surveys help researchers know how much forest exists, where it exists, who owns it, and the good and bad of how it is changing.

For the 2014 survey, I was chosen to assist the two FIA scientists from Puerto Rico with pest damage assessment and soil collection. More than 100 sites on St. John, St. Thomas, Water Island, and St. Croix were sampled. Every tree in each of four (4) sub-plots was described by species, growth stage, and growth habit. Almost half of those sites were also sampled for forest health. In addition to forest inventory data, these sites



Figure 2. *Heavy defoliation by palm leaf skeletonizer, a major pest of palms.*



Figure 3. Insect defoliation upon a tree seedling.

(85%) were predominantly small diameter stands. Among the larger trees (5" or greater diameter), 45% showed signs of damage and/or disease, but less than 10% of the roots and stems (parts with most of the marketable wood) were affected. Overall, the 2009 survey was generally indicative of normal, healthy trees, which is typical for a sample period without a significant hurricane event.

Data derived from the FIA surveys give important information beyond forest health. They show a general trend (locally and nationally) towards deforestation, with 7% forest lost between 1994 and 2004. It will be interesting to see if the 2014 data show any changes in that trend, whether positive or negative. The forest cover and soils data are particularly useful for analyzing climate

change, especially since the Forest Service collects data from most forested areas over the entire United States. "Recurring forest inventories with permanent field plots are especially important for the Caribbean, where there's a high reliance on ecosystem services and pressing needs for anticipating the potential impacts of climate change," said Humfredo Marcano-Vega, FIA research biologist and resource analyst for Puerto Rico and the U.S. Virgin Islands. "The forest inventory brings together information on the current situation and recent trends that managers and others can use to support collaborative and participatory approaches to managing the forests of the Virgin Islands under future conditions."

FIA researchers are currently processing the 2014 data. When analyses are complete, they plan to release their information through their website (http://srsfia2.fs.fed.us/states/virgin_islands.shtml). The Southern Research Station plans to release a publication titled "U.S. Virgin Islands Forests, 2014," revising their publication of similar title from the 2009 survey. In the meantime, you can contact Dr. Williamson at jwilli2@uvi.edu or 340-692-4052 for more information.



Figure 4. Heavy feeding within cactus stem by larvae of the cactus mealy moth. This recently introduced invasive pest is threatening the existence of cacti and their pollinators in the Virgin Islands.

WORLD FOOD DAY

By Clarice C. Clarke
Public Information Specialist II
Communications



World Food Day on St. Croix was an exciting event for the youth in junior and senior high schools. Sunday, October 19th, 2014 was no different. On the grounds of the University of the Virgin Islands Albert A. Sheen Campus, they showcased their culinary skills by preparing a variety of dishes.



Once you made your way up Palm Drive, it was hard to miss the brightly colored tents located east of the Research and Extension Center, which housed a food vendors' court and a farmers' market. Participants of World Food Day attended workshops on the nutritional value of eggplants, passion fruit production, and eggplant production. Each person walked away with a "six pack" of vegetable seedlings to start a garden. And if that wasn't enough, all attendees were entertained by the UVI Concert Band, DJ Porter, Guardians of Culture Moko Jumbies, and the youngsters from the St. Croix Martial Arts Center.



As the visitors entered the Research and Extension Center, the aroma of the various dishes being prepared had every mouth watering and ready to taste. Unfortunately, the tasting was delegated only to the judges and the lucky person or persons in the audience. Needless to say, the youngsters did not disappoint the judges or the onlookers. They were professionals—definitely you were watching seasoned chefs competing to see which team could produce the best meals using the provided ingredients just like on *Top Chef*.



Each year, three agricultural products are highlighted. The selections for the 2014 activity were eggplant, passion fruit, and beef. Those products served as the centerpiece for the popular World Food Day "4-H Youth Super Chef" competition. Teams of students from six of St. Croix's junior high and high schools competed in preparing a main course, drink, and dessert with the eggplant, passion fruit, and beef. Their creations were judged by a panel of judges composed primarily of chefs from the community,



as well as one judge selected from the audience by raffle. In addition to taste, the students' efforts were judged on teamwork, presentation, knowledge of the nutritional values, and origin of the products. Questions about the purpose of World Food Day were also included in the judging. In addition to the student competition, a "Passion Fruit Blast" competition was held for the general public. A record number of entries were on display as participants brought their best products, which included preserves, drinks, tarts, and cakes all made from the passion fruit.

October 19, 2014 marked the 6th year of the World Food Day 4-H "Super Chef" Competition and the 32nd year that the University of the Virgin

Islands Cooperative Extension Service has been observing World Food Day. This annual event has grown tremendously, as we see an increase in participants in the competition and the attendance of residents. If you missed last year's activities, please make sure to mark your calendar—the activities kick off with the "Hunger Banquet" on World Food Day itself—Friday, October 16th—and continues on Sunday, October 18th on the beautiful grounds of the University of the Virgin Islands Albert A. Sheen campus. Hope to see you there!! Please remember that your entrance fee is a non-perishable food item. All food collected will be distributed to local food banks.

Agriculture Week

The U.S Virgin Islands joined other states in celebrating National Agriculture Week from March 15–21, 2015, with the theme "Planting the Crop, Crossing the Finish Line." Throughout the United States during this week, there is promotion of the abundance of food and other products provided by agriculture, and the many industries and businesses associated with food production. The Virgin Islands Department of Agriculture hosted a series of activities in commemoration of this national event throughout the Territory.



Student playing string games with Auntie Janice.



Evannie Jeremiah, CES' Administrative Assistant getting some assistance from an eager student.

As usual, the Cooperative Extension Service, through its 4-H/Family & Consumer Sciences Program, was an active participant in the person of Evannie Jeremiah. Once again, Ms. Jeremiah's demonstration on making banana bread was a big hit with the students. Other presenters included Auntie Janice, Eleanor Pemberton, and Melborne Petersen. The students truly enjoyed their morning on the grounds of the Rudolph Shulterbrandt Agricultural Complex.

- The University of the Virgin Islands is the only Land Grant Institution in the USVI.
- A.E.S. stands for Agricultural Experiment Station.
- AES faculty and staff conduct research in agronomy, agroforestry, animal science, aquaculture, biotechnology and horticulture.
- Aquaponics is the production of fish and vegetables in an integrated system.
- The UVI Aquaponics Program has offered a world-renown training workshop for **17** years that has been attended by persons from **7** continents. (That includes Antarctica!)
- Tilapias (the type of fish raised at UVI) are mouth-brooders.
- Plants don't need soil to grow, all they need is nutrient rich water.
- UVI-AES has a sheep farm on campus and a Senepol cattle farm on the south shore of St. Croix.
- The AES Sheep Farm raises 2 breeds of sheep: The St. Croix White Hair Sheep and the Dorper St. Croix White Cross.
- UVI-AES has the largest Senepol cattle herd in the Virgin Islands.
- The Senepol breed of cattle was developed on the island of St. Croix in the early 1900s.
- The St. Croix White Hair Sheep are a hair sheep and do not grow wool.
- AES is performing research with sensor-based controllers to apply water on demand and reduce the amount of water used for irrigation.
- The AES Horticulture program is testing different sugar snap pea varieties as a potential high value crop in the U.S. Virgin Islands.
- The AES Biotechnology program was the first in the world with field trials of genetically engineered cassava.
- The AES Biotechnology program maintains virus-free sweet potatoes for farmers and backyard gardeners.
- The AES Agroforestry program focuses studies on rare and endangered native trees.
- The AES agroforestry program promotes the use of native tree species for landscape plantings.
- There is a wild frangipani, which has white flowers and an ornamental frangipani with pink flowers.
- Cover crops are crops planted during fallow periods in rotation with income-generating crops to provide a host of additional ecosystem services.
- Cover crops provide ecosystem services to our soils through reduced soil erosion, reduced soil organic matter loss, reduced nutrient leaching, and increased soil water holding capacity.



Virgin Islands' Artistry on Display at Woodworkers Expo

The Cooperative Extension Service and the Agriculture and Natural Resources Program held its 9th Annual V.I. Woodworkers Expo at the Yacht Haven Grand on St. Thomas. Residents were treated to finely crafted



furniture, carvings, and sculptures by artisans from St. Croix, St. Thomas, and St. John. The Expo, which was held December 5-7, 2014, featured 11 woodworkers. The Expo also included a Friday activity for students filled with demonstrations by master wood turners Avelino Samuel and African



Southwell. Approximately 350 to 400 persons attended the Expo. A similar expo was held on St. John on December 19-21, 2014 at the Market Place in Cruz Bay.



Albion "Chico" George, Extension Assistant in the Agriculture and Natural Resources Program explaining the concept of raised-bed gardening to fairgoers.

By all accounts, the 31st annual St. Thomas/St. John Agriculture and Food Fair held on November 22-23, 2014 on the grounds of the Reichhold Center for the Arts on St. Thomas was a tremendous success. Staff from the Cooperative Extension Service (CES) displayed several types of growing systems to include tires, raised bed/box gardens, and a portable raised garden bed built by young men from My Brother's Workshop. CES provided the vegetable plants that were used in the educational display, and distributed handouts on tire and raised-bed gardening. Approximately 250 to 300 persons interacted with extension staff about the unique display and usefulness of that type of garden system.

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