The Ministry of Agriculture and Fisheries (MAF) organized the 2018 Agriculture and Fisheries Show in Savaii and Upolu. This annual festivity show-casing the fertility and harvest of Samoa. Also, the event was in line with the Agriculture Sector Plan 2016-2020 and this year’s theme was “Enhancing Partnerships to Develop and Sustain Agriculture and Fisheries in Samoa”. The Agriculture and Fisheries show aims to promote and acknowledge agriculture and fisheries for the development and sustainability of the country’s agriculture and fisheries sector. The event took place in Savaii at the Salelologa Market on the 17th-19th of October and in Upolu at the Malaeafatu Park, Sogi on the 24th-26th of October. In both occasions, the locations were flooded with different displays from the participants headed by the MAF, private sectors, farmers and NGOs. Both venues were transformed into a vibrant marketplace of flowers, ornaments, vegetables, livestocks, food stalls and even farm machineries on displays. Crops, Fisheries and Livestock competitions were another highlights of the event wherein different local farms and individuals participated and won prizes given by generous sponsors including cash prizes and gifts. (cont. in page 2.)
Celebrating the Abundance of the Island Samoa!

The Minister of MAF, Lopao Natanielu Mua in his speech during the closing ceremony at the Malaeafatu Park acknowledged the farmers and fishermen on their contributions and said that “without you all, there would be no organisation known as M.A.F.”. He emphasized the importance of farming and fisheries in the country since all citizens are dependent for survival, however, many undermined this fact. He also mentioned that the ministries and government of Samoa are doing their best in seeking funds to try and assist the farmers and fishermen in any possible way and finally, ended his remark with a bible verse that says, “Those who sow in tears, will reap with shouts of joy”. (LTU)
The University of the South Pacific participated in the 2018 Agriculture and Fisheries Show both in Savaii and Upolu. Products from the Food Technology Laboratory and IRETA Farm’s crop and animal sections were on display during the show. USP also gave away prizes to those who have won in the competition organized by the Ministry of Agriculture and Fisheries.
Two postgraduate students under the ACIAR scholarship presented their research proposals on the 9th of October namely Mr. Kelemeni Tavuto and Ms. Luisa Ranadi Wara. They are both under the supervision of Dr. Sonny Lameta and co-supervised by Mr. Falaniko Amosa. Their research proposals focused on the two major commodities in Fiji, pineapple and coconut. Mr. Kelemeni will quantify postharvest losses at the different stages of the postharvest supply chain of pineapples in Fiji. It will focus on commercial farmers who are located on the western side of Fiji from Rakiraki to Sigatoka. The study will cover postharvest practices at the farm to the local municipal market. Moreover, the study will also identify and evaluate farmers’ postharvest and handling practices identifying weaknesses and to suggest improvements. While Ms. Wara will conduct a comparative study on the supply chain of Virgin Coconut Oil (VCO) domestic market for Cicia island and Rabi island, Fiji. The study aims to realize the importance of supplying to the local market and help in minimizing oil import as well as minimizing marketing costs from exports. This will also shed more light in VCO business for rural communities as it aids in policymaking and funding agencies.

The activity was attended by students and academic staff wherein right after every presentation, the audience had the chance to ask questions and comment on the proposals’ improvements. (LTU)
The USP Alafaua Campus was visited by a professor in Soil Science from the Department of Agronomy and Agricultural Extension, University of Rajshahi, Bangladesh, Prof. Toufiq Iqbal. He was a Third World Academy of Science Visiting Professor. During his visit in the campus, he presented a paper entitled “Mechanisms involved in greenhouse gas emission from sub-tropical saline paddy soil” which was attended by students and staff. It was a very informative topic although Samoa does not cultivate rice the importance of soil salinity is relevant among Pacific Island Countries. Having an impressive record in teaching and research in different universities of Asia and Europe including Cukurova University of Turkey, Rhine-Waal University of Applied Science in Germany, Zhejiang University of China, Agroscope, Zurich and Research Institute of Organic Agriculture, Switzerland, Dr. Iqbal accommodated queries from the students and academic staff which were helpful and applicable in the region. (LTU)

Dr. Toufiq Iqbal, a Third World Academy of Science Visiting Professor

Student’s Research Activities in Campus

One of the mandates of USP is to promote the importance of research and cultivate the love for research among students. Three Masters students are currently conducting their research in the campus on different research topics. Ms. Pierre-Loius Randy of Haiti and Ms. Oikali Selina of Solomon Islands are working on crop fertilization while Mr. Aiono Luaiufi from Samoa is on tomato variety trial. Specifically, Ms. Randy is evaluating the effectiveness of vermicompost application on tomato cultivation in Samoa and Ms. Selina is investigating the nutrient budget in fertilized and unfertilized taro with legume and non-legume mulches. Mr. Aiono Luaiufi is conducting an evaluation of selected improved genotypes of tomatoes under open field conditions in Samoa. There is high hopes that the following researches will yield agricultural advancements in the region and will be disseminated once completed. (LTU)
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AFT’s 2nd Board of Studies (BOS) meeting was held on the 11th October 2018. The Head of the School and all Academic staff participated. During the meeting, online conversion of several courses was the main agenda. The conversion will hopefully encourage more enrollees since being Online would mean accessibility to all students particularly those who are already working and needing to improve their qualification.

Meanwhile on the same day, the ACIAR Review Team from Australia visited the School of Agriculture and Food Technology. ACIAR has initiated a review of the ACIAR-USP Scholarship program and USP-USC twinning scheme. The HOS and SAFT academic staff attended the meeting to discuss the impact of the said scholarship scheme.

The Campus Advisory Committee headed by the Chair, Hon. Loau Solamalemalo Keneti Sio of the Ministry of Education, Sports & Culture and the members of the committee visited the USP Alafua to conduct a meeting and site visit on the 25th of October. During the meeting, Assoc. Prof. Mohammed Umar gave the overview of the campus activities particularly the current strategic plan as well as the new strategic plan which will be implemented beginning 2019-2024. It was followed by the presentation of the highlights and achievements of the different sections in the campus and finally, each member of the committee raised questions, clarifications and suggestions which were duly noted by the secretary of the Campus, Ms. Rasela Seiuli. The meeting was followed by a quick visit to the Food Technology laboratory. (LTU)
On the 11th of October, 2018 AG363 students together with Drs. Leslie Ubaub and Alminda Fernandez, and Mr. Michael Sefilino visited the Biosecurity Office and Tausala’s Organic Farm. The visit was part of the course activities which aimed to provide students additional information on Plant Protection particularly in Plant Quarantine and the farm practices in Samoa on pest and disease management. The group was welcomed by Ms. Talei Fidow-Moors and Ms. Jakie Adams who are both Biosecurity Officers. The visit started by an interesting lecture on various topics on Samoa Quarantine Services and then a quick tour at the Biosecurity facilities.

Then the group proceeded to the farm of Tausala. Ms. Tausala is a former student of USP. Together with her siblings, they run the organic farm that was started by their parents 25 years ago. The farm is planted with diverse fruit trees and vegetables. Ms. Tausala proudly said that diversification is the key to minimize pest and disease problems in their farm. They produce their own compost from their farm and household kitchen wastes. They are also producing coconut coir and they supply local agricultural stores and other farms. The half-day visit was very educational to the students. It reinforced the topics that were taught in the four corners of the lecture room and the practical activities in the laboratory and field. (LTU)
School of Agriculture and Food Technology

Other October Updates in USP Alafua Campus

1. A team from the Office of the Vice-Chancellor’s Assurance and Compliance headed by their Director, Ms. Dulari Doras Traill, visited the campus to conduct training on RISK CULTURE AWARENESS from the 22nd - 26th of October, 2018 to the academic and INJ Staff. The team also visited the Food Technology Laboratory wherein they tasted delicious Papaya Ice cream and some chips made from root crops.

2. SAFT participated in an event organized by Nobesity Samoa called ‘Kids Kicking Obesity’. It is an awareness event that aims to keep Samoan children active and engaged in physical activities and nutritious food to maintain a healthy lifestyle. The event was held on the 6th of October at the St. Joseph’s College Ground, Alafua. Displays from Food Technology Laboratory was the contribution of SAFT to encourage parents to prepare food that is both tasty and nutritious.

3. Dr. Sonny Lameta was invited to attend the 9th Annual Meeting of the Global Forum for Rural Advisory Services (GFRAS) from the 22-25, October 2018 at the headquarter of the Rural Development Administration (RDA) in North Jeolla Province, Republic of Korea, with side events on 22 October. A meeting of the Asia Pacific Island Rural Advisory Services Network (APIRAS) as well as a sub-region meeting of the Rural Innovation Centre preceded the annual Meeting for Knowledge and Investment (RICK).

   The topic of the Global Forum for Rural Advisory Services Annual Meeting was “Addressing Challenges and Seizing Opportunities: Developing Effective Partnership in Rural Advisory Services (RAS)”.

   The 9th GFRAS Annual Meeting provided a unique opportunity to exchange and learn about the roles, relations, challenges and opportunities of rural advisory services (RAS) in the context of rural and urban transformation. The event was mainly participatory and has given more than a 100 participants from all sectors and regions many opportunities to contribute.
IRETA Farm Monthly Update

The IRETA farm operates both Crop and Animal Section for students’ practical activities and income-generation. The Animal Section maintains goat, sheep, pig and cattle for student’s practical and research while, 7,813 layer chicken are regularly producing eggs that supply Frankie Supermarket which is one of the biggest supermarkets in Samoa and Marion Supermarket. Between January to April, the farm produced an average of 6,100 dozens per month but able to increase it in May to October to an average of 8,600 dozens per month or an increase of 40% due to improved management in the farm. Aside from the eggs, the poultry farm also sells an average of 150-200 bags of manure every month collected from the cage free houses to FAO, Samoan Farmers Association, Ministry of Agriculture and Fisheries, and small farmers alike for their organic vegetables.

The piggery section also contributed in sales of the farm aside from the pigs used for students practical, we are able to sell an average of 15-20 pigs in months with special occasions such as Father’s and Mother’s Day and White Sunday, and about 10-15 pigs in ordinary months. The sheep and goat although currently not for sale, their manure had been collected and sold to Samoan Farmers Association.

The Crop Section is currently producing different vegetables and papaya fruits that are regularly supplied to the USP staff and outside customers. This month the IRETA Crop section has started to develop the gene bank for bread fruit and nursery for coconut and vegetables. (OCCU)
In 2017, the government of Samoa through the Ministry of Agriculture and Fisheries (MAF) initiated the revival of the banana industry in the country. However, the target date to put back Samoa among the countries to produce and export banana has been put on hold for several months due to the damage caused by Cyclone Gita early this year.

Finally, the Banana Growers Association consolidated the first 500 boxes of ‘Cavendish’ Banana to New Zealand on the 6th of October 2018. This first batch of export was the harvest of several plantations owned by Taimalie Charlie Westerlund, Ututa’aloga Charlie Ulia and Tuisuga Sofara Aveau, who planted their bananas from South Africa in early 2017 (Samoa Observer, 2018). It is expected to continue and increase in number of boxes in the next shipments. Meanwhile, since the journey will take five days to reach the port of New Zealand, it is a challenge to the Samoan growers to time the ripening stage of each produce as not to jeopardize the quality of the fruits. The banana will be distributed by Fresh Direct, a local distributor in New Zealand.

*(LTU) Photos: JMGeralde*
It is not uncommon that honey is listed among the prohibited product in the biosecurity of a country. Countries like New Zealand, Australia, US and EU have been very strict in implementing their “NO Honey” policy. There are different reasons behind this biosecurity policy including fake honey products and the dreaded pests and diseases associated with honeybees which threaten the local apiary. In Samoa for instance, Honey product is number one on the list of prohibited products to import. This is to protect the local apiaries from the diseases particularly the European Foulbrood (EFB). EFB is a bacterial disease caused by *Melissococcus plutonius* that affects honey bee larvae before the capped stage. The bacterium once ingested by honey bee larvae will compete for food inside the larvae. If the bacterium out-competes the larva, the larva will die before the cell is capped. Alternatively, the bee may survive until adulthood if the larvae has sufficient food resources. EFB occurs on all continents where honey bees are reared.

Fortunately, in Samoa, EFB has never been reported in the country. In 2009, a survey was conducted by AsureQuality Limited in 22 apiaries and results show that there was no evidence of this disease found during this survey or past survey. However, the country is still at risk as there is an active exchange of goods, regular shipping and air flights from a number of countries. For now, Samoa is mainly protected by the Importation Prohibition Order of March 2000 to preserve Samoa’s bee stock from the world’s major diseases. This biosecurity policy, and citizens’ awareness and cooperation are very important to safeguard the growing honey industry in Samoa.

*(LTU)*

Sources:

Sweet corn is everyone’s all-time favorite for it not only tastes great but is also healthy. It is a cereal with a high sugar content, scientifically known as Zea mays convar. saccharata var. rugosa which is also called sugar corn and pole corn. It is picked when immature (milk stage) and prepared and eaten as a vegetable, rather than a grain unlike field corn varieties, which are harvested when the kernels are dry and mature (dent stage).

A medium ear contains about 2.8 grams of fiber, 3.5 grams of protein, vitamin C (more than 10 percent of recommended daily values), thiamin (14.8 percent of recommended daily values), riboflavin, niacin (8.3 percent of recommended daily values), pantothenic acid (9 percent of recommended daily values), magnesium (8 percent of DV), and phosphorus (11 percent of DV).

Corn is also rich in folic acid and has a moderate glycemic index of 56 (compared with 100 for white bread), providing energy without excessively raising the sugar in our blood. More so, it contains phytochemicals lutein and zeaxanthin that are helpful in reducing the development of macular degeneration in the eye. Based on research at Cornell University, sweet corn releases a phenolic compound called ferulic acid when cooked at high temperatures, which provides health benefits such as battling cancer (www.dietdetective.com).

The IRETA farm at the USP Alafua campus grows sweet corn as the demand is very high in the neighborhood. Make sure you don’t miss to try these healthy snack and vegetable. This can be mixed in soup, steamed, baked or grilled, all tastes fantastic. (AMF)

Photo Credit: OCubaub
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Md. Abdul Kader (PhD)
University of the South Pacific
School of Agriculture and Food Technology
Alafua Campus
Samoa, Apia
Tel: (+685) 21671 Ext 286; Facsimile: (+685) 22933
E-mail: mdabdul.kader@samoa.usp.ac.fj