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The official magazine of Agrofest 2016

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Sell,
Eat,
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Message from
Dr. The Hon. Dr. David C. Estwick MP
Minister of
Agriculture, Food, Fisheries & Water Resource Management,

It is with great pleasure that I welcome one and all to Agrofest 2016. This year's instructive and inspiring theme of "**Grow, Sell, Eat, Repeat**", is indeed a timely and appropriate message befitting these challenging times and marries well with the slogan of the Ministry of Agriculture, Food, Fisheries and Water Resource Management's current media campaign, "Grow Well, Eat Well, Live Well - Right Here in Bim".

Our country is currently grappling with an alarmingly high food import bill, and the need to hastily decrease our dependency on imported foods and increase our level of food security is evident. The situation is further exacerbated by disturbingly high levels of chronic non-communicable diseases, even among our children.

My Ministry has sought to undertake initiatives which focus on increasing local production and improving the competitiveness of the farming community, through actions which build capacity and improve the skill set of local farmers, while encouraging the nation to engage in wholesome dietary practices through



Dr. the Hon. David Estwick MP
Minister of Agriculture, Food, Fisheries & Water Resource Management,

the consumption of safe, healthy, local foods.

Moreover, the Ministry is cognizant that the agricultural sector is currently being driven by an aging farming community, and recognises that for there to be sustained growth in the sector, there must be a continuous injection of zealous youth, armed with the requisite skills to propel the sector forward.

To address this, in 2015 the Minis-

try launched the Youth Agri-prenuership Incubator Programme under the Human Resource Development Strategy, which is currently being implemented by the Ministry of Labour, Social Security and Human Resource Development.

Through this intensive and multi-disciplinary programme, which teaches the rudiments of agriculture, science and technology, organic farming, research methodology, business accounting and finance, and cooperatives formation, the Ministry is seeking to introduce a highly skilled cadre of young agriculturalists into the sector.

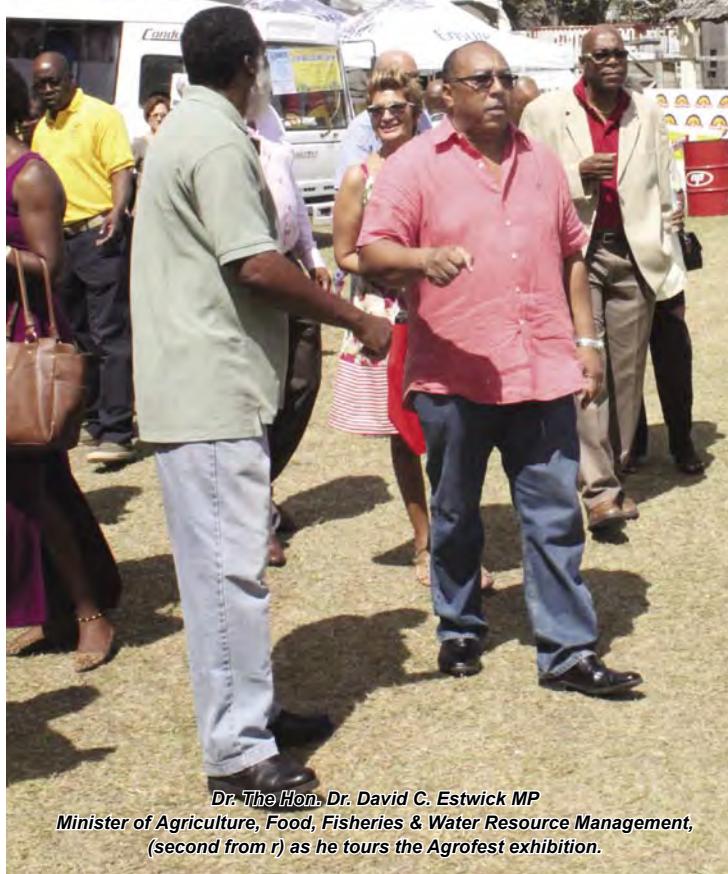
In its second year, the programme will expand to include the development of a demonstration farm. This project will provide practical experience to participants in the planning and management of a number of agricultural enterprises, including aquaponics, aquaculture, protected agriculture and the cultivation of medicinal crops. This facility will also offer training courses and workshops to other farmers, schools, and community groups.

In recognising the undeniable effect of climate change on the agricultural

"...the Ministry is seeking to introduce a highly skilled cadre of young agriculturalists into the sector."

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Dr. The Hon. Dr. David C. Estwick MP
Minister of Agriculture, Food, Fisheries & Water Resource Management,
(second from r) as he tours the Agrofest exhibition.

Message from

Dr. The Hon. Dr. David C. Estwick MP

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sector, the Ministry has taken a proactive approach to addressing the impact of the climate on the sector, especially through the promotion of climate smart crops, drought mitigation practices and the introduction of protected agricultural systems. The Ministry will also seek to establish a unit to address climate change issues affecting the sector.

So as we aim to increase production; reduce food imports, thus saving valuable foreign currency; build our agro-processing industry; generate employment for our youth; and transform and reposition the agricultural sector; it is imperative that the mantra of "Grow, Sell, Eat Repeat" be echoed across the length and breadth of our beautiful nation, proudly becoming an anthem for all Barbadians in our quest to achieving these goals.

The Ministry pledges its continued support to the development of agriculture and the agribusiness sector, and would like to commend the Barbados Agricultural Society, supporting agencies, sponsors and contributors, and the general public for their contribution towards making Agrofest 2016 what I am sure, will be a resounding success.

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The Hon. James Paul - MP
CEO - Barbados Agricultural Society



BARBADOS AGRICULTURAL SOCIETY

**Message from
Honourable James Paul MP,
CEO - Barbados Agricultural Society**

KEEPING AGRICULTURE RELEVANT

Agrofest can be considered to be a mature event that has gone through all type of challenges to be what it is today. The agricultural sector has benefitted in no small measure from its existence as it is quite noticeable that young people have more than a passing interest today. This interest is in part due to the efforts of the organisers of Agrofest to portray agriculture as a viable career choice for young people. Clearly, the efforts have borne and are bearing fruit.

There are challenges, the first being how we keep agriculture relevant to a small island state like Barbados in which the notion of a service economy solicits strategies that are at times inimical to the long term development of the agricultural sector. The second challenge is how interest in the sector can be maintained taking into consideration the apparent propensity to trivialise agricultural pursuits. The development of agriculture in this environment has been facilitated by the presence of the event and over the years the sector has been able to utilise Agrofest to demonstrate that the economy benefits as a result of the activities of agriculture.

Some may say that it is well known already the contribution of agriculture to the economy; however, there is nothing wrong in showcasing your strengths. The fact that the choice has been made to be relevant

to our stakeholders is significant as without them the event would not be possible year after year. Our sponsors play a critical role and this year we have managed to attract an array of sponsors which speaks to the diverse stakeholders and service providers that help to maintain the industry. The theme for the event this year is "**Grow, Sell, Eat, Repeat**" and it was particularly chosen because its message is simple and speaks to the fact that agricultural activities are business oriented. Business activities must be facilitated and this applies to the agricultural sector like any other and should not be taken for granted by those seeking to enter the industry. Failure to do this can result in costly business failures for farmers and acknowledgement must be given to the fact that the world dynamics in business is constantly changing.

Agriculture must therefore follow the "**Grow, Sell, Eat, Repeat**" theme if it is to fulfil its role as one of the key determinants in maintaining food security in a developing country like Barbados. Governments can no longer ignore the fact that the world's population is expanding and that there are signs that the battle against malnutrition and hunger is ongoing. Further, countries have traditionally taken steps to ensure that their respective populations have access to adequate supplies of food and have used ag-

ressive legislation and policies to ensure their citizens have access to food. Hence, agriculture in these countries has benefitted from a strong policy and legislative environment and has flourished as a result. In the United States the numerous farm bills have ensured generous subsidies to the farming sector and the European farmers have benefitted from subsidies provided by the Common Agriculture Policy. Further, while there have been attempts to reduce these huge programs it is very unlikely that there will be any significant adjustments bearing in mind that the developed countries have found a way to justify the support provided to their farming sectors.

Hence, it is against this background that we must "**Grow, Sell Eat, Repeat**" in order to ensure that agriculture continues to be relevant and that it provides a living to the thousands of persons involved in the sector. Agrofest seeks to ensure that the public buys into the concept and that the public is reminded of its importance. Further, the presence of the event provides support to the likely policy initiatives which provide support to the sector providing clear evidence as to why they are needed. A level playing field is provided for the sector when the policies we speak of are implemented.

Hence, Barbadians must support the event if we are to achieve an enhanced level of food security.

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The Agriculturalist is produced and Published by **MediaPlus Ltd**
in association with the **Barbados Agriculture Society**



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Printed by Graphic Impressions (Bdos.) Ltd.



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2016 Exhibition



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Theodore Fraser	(Coordinator)
Camille Ashby	
Saunjean Cutting	
Adrian Yard	
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Peter Edey	
Jean Robinson	
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Mr. Randolph Outram
DIRECTOR -The Rural Development Commission



RURAL DEVELOPMENT COMMISSION

Message from Director of The Rural Development Commission Randolph Outram

RDC Grows, Sells, Eats and Repeats Too!

Greetings from the Rural Development Commission as we wish for another successful Agrofest Exhibition.

The Rural Development Commission stands fully behind the Barbados Agricultural Society in hosting this annual Exhibition which now signals for the Commission, some 12 years in an amicable and rewarding partnership.

Over the years, we have tried through our own offerings in the Commission's booth at B33B to comply with the theme of the exhibition and we have always encouraged our clients whom we sponsor to do the same.

This year's theme of **Grow, Sell, Eat, Repeat** appeals to us at the RDC in a number of ways, for while we have hundreds of farmers and vendors who we assist and who follow this theme like a daily mantra, we also follow it in other ways through our loans portfolio and housing programmes.

The growth at RDC is not just in vegetable gardens and other agricultural processes but is embedded in the very nature of the development which our name speaks to. We assists families in improving their living conditions, by constructing and expanding the structures in which they live through our housing solutions and by constructing roads and granting loans to facilitate the development of an entrepreneurial class in the rural corridor.

Let us now focus on the theme's literal meaning.

We as a nation in 2011 imported \$981 million in food, and by 2014 it was down to \$800 million and has further declined since then. This indicates that as a country we are still

importing a very large percentage of the food which we consume and we must be cautious and mindful of this situation because this can lead to our food security being easily compromised by external factors.

Indeed this situation affects all countries of the Caribbean region.

According to the Food and Agricultural Organisation in the State of Food Insecurity in the CARICOM Caribbean 2015 Report, CARICOM countries currently import in excess of US\$ 4 billion in food annually, an increase of 50 percent since 2000. Food imports are projected to increase to US \$8-10 billion by 2020 if current efforts are not successful in addressing this problem. Almost all CARICOM countries import more than 60 percent of the food they consume, with half of them importing more than 80 percent. Only three countries (Belize, Guyana, and Haiti) produce more than 50 percent of their consumption. Processed foods, grains (wheat and corn), and livestock products (meat and dairy) are among the top five food import categories, accounting for over US\$ 1 billion or approximately 25 percent of annual food imports regionally. In several essential food groups, national production per capita has declined, most notably in the fruits and vegetables category.

Let us as Barbadians in this our 50th year of Independence, do our part individually and collectively to stem these rates of importation. We can as individuals do some backyard, patio or window box cultivation, even if it is just of herbs and

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RDC Grows, Sells, Eats and Repeats Too!

seasonings. Other governmental agencies such as Soil Conservation sell dwarf varieties of several indigenous fruit trees which we can plant around our homes. Local farmers are also growing as much as they possibly can, even though environmental conditions may not always be ideal. The RDC has been doing as much as it can to help farmers increase production yields in several areas as well as help them to ensure that when their produce or livestock gets to market, it is in the best possible condition for sale. The Commission has been doing this through a number of seminars.

There are also vendors and rural minimarts whom we have helped to provide seed capital for and we promote and encourage linkages with other farmers who can supply them with their fruits, vegetables and meats.

The eating aspect of the theme is something which all of us need to do but in moderation and with our food groups appropriately proportioned; ensure that the carbohydrates, proteins, minerals etc. are in a well-planned meal to help control the rate of growing non-communicable diseases such as obesity,

diabetes and heart disease which are rising in our local population.

Locally grown food crops and meats are higher in nutritional value than those which are synthetically produced and we must see the consumption of locally produced foods as doing our part for the local economy as it is a cyclical process.

We must let patriotism and the love we have for things Barbadian drive the pride which we have in growing local, selling local and eating local. If we as a people demand what is ours, then chefs will have no other option but to prepare fine cuisine from locally sourced meats, vegetables, crops and fruits.

Our children should be encouraged to cultivate an appreciation for breadfruit chips as well as the English potato variety. Take them into rural Barbados and let them see the crops in the fields and observe the hard work which the farmer puts in. An appreciation can only come by observing what actually goes into the process.

So let's all **Grow, Sell, Eat and Repeat** and push local agriculture more and help Barbados to feed itself.



For the love of

By Donna Sealy

We got to Kendal Plantation way after the time we said we would.

It was quiet. No cows bellowing, no tractors, no workers about. It was lunch time and after a check with the manager to find out where we would find her, we set off to have a chat with Richina "China" Gaskin-Evelyn.

Boy was I in for a surprise, not having met her before. Now don't go jumping to conclusions. It's not that I had formulated an image in my mind of how she would look when we spoke on the phone, but I certainly was not expecting the petite, 21-year-old woman dressed in overall and boots who came out to meet the photographer and I.

China, as she prefers to be called was not put out by the fact that we came to the St John plantation during her lunch hour. She was welcoming and assured us that it was okay. After a quick chat about the photos we wanted she went to fix her hair and returned.

It was feeding time and the area China was in, was full. There she was this small woman unafraid of those huge animals munching away on the hay mixed with the pungent odour of molasses.

"They're more afraid of you than you are of them," she said to calm me. She was right but I was taking no chances with the animals that were giving me the evil eye because I know they easily could crush me with one hoof - the heifers!

It was the first time I had ever been so close to those heavy weights apart from passing them staked out in the pasture close to my house when I was growing up. I couldn't recall if I had ever been so close to them at Agrofest.

Despite her repeated assurance I took no chances. As I watched her and



Richina "China" Gaskin-Evelyn with one of her "prized" animals

the photographer try different angles to get the shots we wanted, I saw someone who was comfortable in her element. She knew those cows and bulls by number and easily told us about them.

My curiosity piqued, I had to start asking questions being careful not to pepper her because I was fascinated that she was totally unafraid and they knew her.

Why work with cows? How did she you get started? Did you go agriculture science at school? Aren't you afraid? What exactly do you do on the farm I wanted to know.

"I really got interested in agriculture when I was at Lester Vaughan School, I was around 14-15 years. I want to be a Vet and this is the field I want to be in, I don't want to do the dogs and cats; I like farm animals.

"I always had dogs and cats and all were strays," she said bursting into laughter. "My uncle had bulls when I was younger. We live in Eden Lodge and he kept them on open pastures and places with a lot of bush. My and my cousin, had a beef and a

Holstein and this is why I like the black and whites which have a lot more stuff to deal with.

"Holsteins are the same as the other breeds but much higher maintenance because the milk goes in for human consumption every day. You have to feed them every day, but with the beef now, they are not fed, they graze their whole life. You raise the bull or heifer to a certain age and then they are killed for the supermarket," China said.

For the last four years, her job has been to work with the calves and she aids in their delivery, feeding, worming and care.

"When they go outside we do synchronisation programmes to get them in heat together and then we breed them together and from there after they calve, they have to go on the inside and their milking life starts... just like humans," she said matter of factly.

The young farmer made it seem so easy as though she was teaching Farming 101 for novices but it is much more complicated than that.

With her unceasing love for the farm animals, after secondary school she

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animals

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headed to the Samuel Jackman Prescod Polytechnic to do the certificate course, comprising mainly animal husbandry. She opted not to do the diploma because she doesn't like working with plants.

A component of her the course was a day release programme and that is how she became involved with Kendal.

"I used to come every Monday. After school was finished I did the job attachment and after that I was able to get a job here. I was sent to Indiana and Wisconsin, where I did a select check school, this is where we get our semen from. They taught me how to pregnancy check. I did some artificial insemination here, but they [US] taught me how to do everything else."

Her next step is to become a qualified veterinarian and she is exploring her options because she intends to start university next year and has been saving towards her education.

So, next came the question about how early she starts her day because television series and movies always show farmers rising before the sun and there is a huge distance between her house and the plantation.

"I have a motorcycle. I get to work for 7 o'clock. When I first started here, I used to wake up at 4 in morning to get in the 5 o'clock bus. I had to sit outside the bus terminal but I stopped that and now I get up at 5 a.m. If I don't get a ride, or ride my bike, I get in the first bus at 6:30. When I get here, depending on the day it is, I either clean the pen or I would feed the calves and clean the pens out there."

China deals with all the cows on the farm and one of her daily duties is to check each one to see which one has given birth, if they are any sick ones, if one or two got away from its herd and has mixed with another.

She knows each cow and not by number, She told us how.

"No cow has the same pattern, even if we

had a twin, they are not the same. I carried a triplet to Agrofest last year and they were identical but one either had a small patch or a big patch or medium one, but they are never the same," she explained.

Her bulls' name are Miracle and Ambition and she was yet to name another one.

Despite the mammoth tasks and magnitude of the job, she loves it and couldn't imagine doing anything else. Her advice to the young person contemplating getting into livestock rearing was to come see her.

"Come and talk to me about farming. I enjoy it so I like talking about it. If somebody wants to learn something, come talk to me and get on a farm," she said breaking into a smile.

"It may not be that you will get a job on the farm but you may get to help and learn. That's how you start, by learning and then if you like it, you will probably buy a cow or two, or a sheep, something," she said.

It is hard not to speak with her and not be caught up in her exuberance. Her face changes and the passion comes through in her voice. Sensing that she discussing her favourite topic, the bull in the nearby pen, pushed his face outside for a rub.

With the early mornings and long days, she is often tired but her love for animals supersedes everything.

"I don't get to relax. It is from the farm to school where I am doing Chemistry, dealing with my bulls and that's it. Animals are my children, I don't have any children and my animals require the same care as children. They get shots the same way. When I told my parents this is what I wanted to do they said go ahead ... because my mother knows I love animals. On my way to and from school, I would stop and pick up strays and take them home.

"Apart from the cows, up here I have seven



"China" getting the affection from one of her cows.

cats and when my mother cycle pulls in you see all of them coming. Then I have a dog and a cat at home," she said.

She added: "I don't like to see cows being beaten. I don't really see an animal, I see a soul just like me because they can be trained so well. When it is time for milking they walk and go to the area and when it's over you don't have to shout at them. They know the time better than me and you. They get accustomed to the routines....".

Around 4 o'clock in the evening is when China calls it a day unless there's a cow calving and it is a difficult one, then she stays until delivery. She works six days a week, and is on call for holidays and when bad weather is looming.

Anxious to show off her calves, we headed in that direction where we saw the cutest things. After that we said our goodbyes and she went back to work, which was for her just another day but for us, it was quite a fascinating lesson.

A New Approach

Having experienced significant changes in weather patterns and in fact just come through the driest “wet season” on record, it should be obvious to farmers and indeed the population in general, that we must think much more seriously about water and adapt our agriculture and horticulture to a more restricted/uncertain supply of this resource. As Meena Palaniappan, a senior research associate and project director at the Pacific Institute, a research group in Oakland, California notes “Unless a water main erupts, people don’t think about water. It’s easy to ignore, because right now you can turn on your tap.”

But water supply shortages are becoming a problem of global proportion. In the past month, 2,000 farmers in India were arrested for stealing water; the regional government of Catalonia in Spain said it was going to import water by boat and train beginning in May to provide summer supplies; the Queensland Water Commission in Australia put local residents on the toughest water restrictions; and in Atlanta, residents filed lawsuits against the municipal government in protest over faulty water pipes and failing sewer systems .

According to the World Water Institute, a mere 2.5 percent of the earth’s ground and surface water is accessible for human use. This finite resource, maintained by the earth’s hydrologic cycle, is used for everything from drinking water to sanitation, agriculture and industrial processes. Undermined by overuse, pollution and inefficient

infrastructure as well as natural occurrences like drought, humankind’s water supply is nearing its limit.(<http://www.nytimes.com/2008/04/25>).

Of course there are a number of technologies available to supplement fresh water supplies, like desalination , reclaiming wastewater and so on, but these are expensive , so farmers should do their utmost to harvest rainwater and to use technologies which reduce the water requirement on their farms.

In horticulture, in the landscaping business and in home gardens, serious thought will have to be given to using drought resistant plants in attractive garden designs, known as xeriscapes i.e landscaping and gardening that reduces or eliminates the need for supplemental water from irrigation. One such garden in St Peter was shown by the Barbados Horticultural Society this year.

More trees with dense canopies may also have to be used to shade garden beds and thus reduce water loss due to evaporation. Tall windbreaks are to be recommended to protect plants from severe winds which increase evaporation of water from plants and soil.

Choice of plants is important. Plants with leaves which are waxy, succulent, hairy, sticky, small, needle-like, or silver in colour are usually drought resistant. Some examples of tropical drought resistant ornamentals are; dracaena, cordyline, oleander, jatropha, agave, euphorbia(e. g Song of Jamaica) , oyster plant, Rhoeo spathacea, Pit-

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to Farming



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tosporum, plumbago, bougainvillea, schefflera, allamanda, powder puff plant, portulaca, silver dollar, aloe, vinca , desert rose and of course cactus. Those attending the Barbados Horticultural Society's recent annual flower show would have seen the very attractive display of cacti and succulents. The landscaping on the "Life of Barbados roundabout" is a good example of what can be done with drought resistant plants.

As far as agricultural crops are concerned, ability to survive under drought conditions is one of the many reasons for retaining sugar cane in Barbados. Very few crops other than sugar cane could withstand drought under the very shallow soil conditions in Barbados. Although growth and yield would be affected , plants seldom die, and recovery is evident after a few showers of rain. Sugar cane also ratoons, so that the soil surface does not have to be exposed for about 3 to 4 years. Use of strip tillage in sugar cane is also another way of minimizing loss of soil moisture from fields.

We may have to consider other drought tolerant crops like sorghum, especially in the driest areas like St Philip and St Lucy. Sorghum has been well researched under local conditions, so there would be a base of information to build on. It would also be a good choice, seeing that we import considerable quantities of animal feed ingredients.

Aloe is also another possibility. There is some experience growing aloe commercially in Tobago and Aruba, where there is a processing plant producing skin care products for export.

But, as Ministry of Agriculture entomologist Ian Gibbs notes, these drought resistant crops do attract specific pests, so proper control measures have to be put in place. In both food crop and ornamental farming, improving the water holding capacity of the soil by adding organic matter like well - rotted animal manure and/or compost is highly recom-

mended. Mulching of soil also reduces evaporation of soil moisture by covering the soil surface. Sugar cane produces its own mulch (trash) which is in fact one of the characteristics which makes it attractive for our soils.

In vegetable production, the use of plastic mulches which can be mechanically laid is also another option. This is already being used, but may have to be introduced on a

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A New Approach to Farming

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larger scale. There is however, a risk of nematode buildup under the plastic as has been observed in the past.

In ornamental gardens, gravel, pebbles and wood chips also make an attractive soil covering to reduce water loss from soils.

The benefits of collecting rainwater are well known. This has been done for many years at Redland Plantation in St George. The surface water from roads etc is led by drains into a fabric lined pond. Fish are kept in the pond to prevent mosquito breeding. This water is best used via drip irrigation.

Timing of irrigation is also important. Watering before the heat of the day sets in is recommended. This also gives the crop time to dry off before night fall, reducing the likelihood of fungal diseases developing on the foliage.

The use of overhead irrigation is very wasteful, especially under our windy conditions. Using drip irrigation where the water is applied to the spot where it is to be used, will not only conserve water, but will reduce weed growth.

Hydroponics is also a way to reduce water use, especially if it is a recirculating system.

There are a number of water retaining products on the market. These reduce the quantity of water required for irrigation, since they retain moisture in the soil for an extended period. Some of these products have been tried locally with positive observations made.

There is also a variety of growth boosters coming on the market. These help plants to germinate quickly and to establish strong root systems so that they are better able to stand up to drought. Less frequent, heavier irrigations also encourage plants to establish deep root systems, while frequent light irrigations encourage the plant roots to grow near the surface where they are more vulnerable to drought.

If farmers can harvest water off farm buildings to water their livestock and collect surface water to irrigate crops, the portable water from the BWU can be freed up to be used for drinking, cooking and other essential uses.

As usual, the best approach to any situation is to be proactive and to take corrective steps before the situation becomes critical.

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The Bajan Way

By Donna Sealy

Chef and businessman Peter Edey knows more than a thing or two about cooking the Bajan way.

And if he has his way, more people -not only chefs- will be cooking food that bears that distinct Barbadian flavour.

Not pleased with what was taking place among the senior chefs in the industry 12 years ago, he started the Duelling Chefs competition with the hope of changing what was served in hotels and restaurants.

"I was not happy with what I saw. Nothing they produced represented Barbados or Barbadian cooking at all to the point where if we had Barbadian items in the mystery basket or Barbadian items in the community kitchen, they wouldn't touch them. They would try to get all of the international things they could use."

"So, it told me that these people were being pointed in the wrong direction. They were all for the imported carrots, they wanted the baby carrots that would be all the same size, beans the same thing but that's not what we grow here."

"I said 'this can't be right' so we decided we had to change it so we can focus on local produce and locally manufactured products. I said the only way we could do this was to get the young people, and, we went into the schools. The Barbados Association of Teachers of Home Economics was looking at the same thing at the same time so there was really a marriage made there," he said.

Together with Hedda Philipps-Boyce, the Junior Duelling Chefs Programme was started with about 80 students who were trained in the art of cooking which include internationally accepted standards of cutting, dicing and preparation.

Hundreds of young chefs later and with ten years under his hat, Chef Edey recalled giving the youngsters 80 per cent local produce to work with and 20 per cent international foods.

"We brought in all the breadfruit and the cassava and the yam and sweet potato, and we started using all the local meats like the pork, chicken and the Blackbelly lamb when we could get it. Fish was always locally caught fish. So they were forced to use 80 per cent local produce without them even knowing it."

"We were all amazed really, not me so much because



Chef and businessman Peter Edey

I knew what it could do, but all the people involved were amazed at what these students could produce with these things they got from Barbados. The thing was not to have what was happening in the industry, that is, having all of the plates look like clones, the same way."

He added that while the dishes would be plated the same way, the carrots and vegetables would be different shapes and sizes. Then, what had to be developed was "a method or style that could include all these things but make it look good on the plate".

Chef Edey explained: "This is where the rustic elegance comes from, using local produce but creating a way

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The Bajan Way

Cont'd from page 15

of presenting them on a plate where they look really elegant and ready for any five star, fine dining restaurant and that's what these students do every time on this programme."

To say he is pleased with the progress and growth of the programme which is a big drawing card to Agrofest is an understatement, and the verve with he speaks about it is unmistakable.

For those who are unaware, the cooking programme is a practical one, definitely not a chalk and talk style of teaching and the young chefs go through lots of vegetables and meats before they get it right.

"What you see these children doing on TV is a culmination of three months of hard training. After school every evening they come here and train. When you see them wielding the knife [the way they do] that's a lot of practice and a lot of produce because they cut up a lot of carrots and potatoes in trying to get it right.

That's why the sponsors, such as platinum sponsor Roberts Manufacturing which was there from the start, Bryden Stokes and the others who joined later, are so very important, we couldn't do it without them", he said.

Today, given the work and the prominence that the Junior Duelling Chefs programme has brought to local produce, Chef Edey is satisfied with the change in the attitude of local chefs whom he said were "talking all over the place about Barbadian food and cooking local and appreciating local food".

He maintained they did not do this before which was the reason for starting the programme and "now they seem to be jumping on board and I'm happy to see that".

Additionally, he is pleased with the response from parents who report that their sons and daughters are "expensing

them" as they want to buy the food to cook at home.

His response when they say that to him is: "They are saving you money because its either do that or buy fast food which isn't cheap."

Chef Edey also gets lots of satisfaction when the young chefs have landed jobs in hotels and are making good for themselves in the industry.

Cont'd on page 17

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The Bajan Way

Cont'd from page 16

So what about the senior chefs and a programme for them?

"We're going to get back to them. Look, this programme [for juniors] took a life of its own and I kind of got bombarded with it. Now, everybody wants to do a competition, everybody wants something with food. It is the big trend now and I've been doing a lot of those programmes now. I have to be careful because I don't want to go too far away from what the aim of the programme is which is teaching and empowering young adults.

"Yes, we do the other things because it helps bring some sort of income to help the programme run, everything that we do is actually to help continue the development of this programme. What we do with it for instance, is that the winner every year goes to an international culinary conference.

"They go and they are out there with all the big chefs. They get to mingle with them and see what they are doing, watch the competitions they are involved in and in most cases they get to work in the kitchen. Wherever possible, we get them to go in as apprentices. ... Just to be there with these big chefs is a big thing".

This year at Agrofest, patrons will see the competitors having the full farm to table experience in the Park as they will have to purchase their supplies from vendors to cook.

With a smile, as he reflected on how it all started, Chef Edey said that he was cursed by chefs who told him he was cooking foolishness during his Cooking the Bajan Way or Cooking with Chef Edey shows on television simply because he used Barbadian produce and meats and not just a pinch of salt and a dash of pepper to flavour food as the ex-patriate chefs had done.

What followed though was not just a show but a whole

new way of thinking as several viewers, young and old, became excited about cooking and eating local food which is exactly what Chef Edey hoped for.

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AGROFEST 2016 SCHEDULE OF EVENTS

FRIDAY, February 26, 2016

Time	Item
10:00 AM	GATES OPEN
11:30 AM to 11:30 AM IICA's Booth, Main Pasture	JUDGING OF AFRICAN HERITAGE SECONDARY SCHOOLS CULINARY COMPETITION
10:30 AM to 11:00 AM Main Stage	FRUIT EATING COMPETITION
11:00 AM to 11:30 AM	AEROBICS Presented by Brenda Worrell & the Taskforce for Physical Activity
11:30 PM to 2:30 PM Main Pasture	AFRICAN HERITAGE CONCERT (Featuring: Warrens Primary, Sharon Primary, Wesley Hall Junior, Eden Lodge, Christ Church Girls' School)
11:30 AM to 12:30 PM Main Stage	SACK RACE, LIME & SPOON RACE ROLLER RACE Hosted by KB Kleen & Fuhnominon
2:30 PM to 3:00 PM Dining Club, Main Pasture	SOUND CHECK
6.00 PM to 9:00 PM Main Stage	BAJAN TUH DE BONE LAUGHS & LIME COMEDY COMPETITION & KARAOKE SESSION Hosted by the Nation Group

SATURDAY, February 27, 2016

Time	Item
10:00 AM to 12:00 PM Show Ring	BEEF SHOW & PINE HILL DAIRY SHOW <i>Dairy Show Presented by Pine Hill</i>
11:00 AM to 12:30 PM Dining Club Booth, Main Pasture	JUNIOR DUELING CHALLENGE – THE AGROFEST - SPECIAL EDITION <i>Hosted by Caribbean Cuizine</i>
12.30 PM to 1.00 PM	SOUND CHECK
1:00 PM to 2:00 PM Main Stage	SACK RACE, LIME & SPOON RACE ROLLER RACE Hosted by KB Kleen & Fuhnominon
1:00 PM to 1:30 Main Stage	FRUIT EATING COMPETITION
2:00 PM to 2:45 PM Play Park	STORY TELLING – Jennifer Walker
2:00 PM to 3:30 PM Dining Club Booth Main Pasture	JUNIOR DUELING CHALLENGE – THE AGROFEST SPECIAL EDITION <i>Hosted by Caribbean Cuizine</i>
2:00 PM to 5:30 PM Show Ring	SHEEP SHOW <i>Presented by the Barbados Sheep & Goat Farmers Inc.</i> Sponsored by Pinnacle Feeds
3:30 PM to 4:00 PM Main Stage	LINE DANCING <i>Facilitated by Leon Greaves on Physical Activity</i>
5:00 PM to 5:30 PM Main Stage	FRUIT EATING COMPETITION

5:30 to 6:00 PM
Main Pasture

DEMONSTRATION BY
BARBADOS WORKING DOGS
ASSOCIATION

5:00 PM to 6:30 PM

Dining Club Booth,
Main Pasture

7:00 PM

Main Stage,
Entertainment Area

JUNIOR DUELING CHALLENGE
– THE AGROFEST - SPECIAL EDITION

Hosted by Caribbean Cuizine

ON STAGE

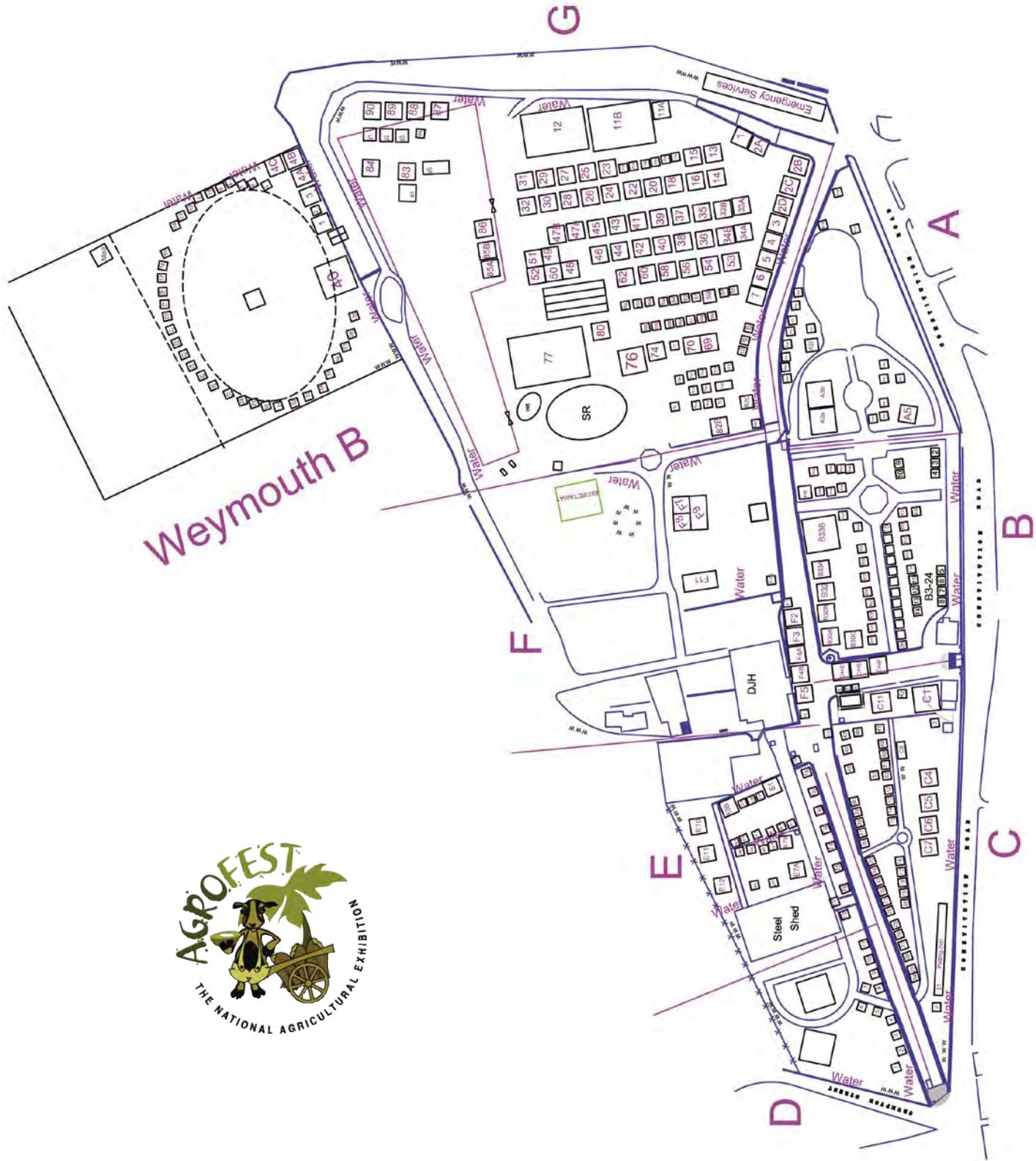
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SUNDAY, February 28, 2016

Time	Item
8:00 AM to 12:00 PM	PLANTATION BREAKFAST <i>IICA Booth, Main Pasture, Produced by IICA</i>
9.30 AM to 10:30 AM	JUDGING OF PIGS
10.30 AM to 11:00 AM Main Pasture	JUDGING OF RABBITS
12:00 PM to 12:30 PM Main Stage	FRUIT EATING COMPETITION
12.30 PM to 1:00 PM Main Pasture	OBSTACLE COURSE <i>Presented by the Task Force on Physical Activity</i>
12.30 to 1:00 PM	SOUND CHECK
1:00 PM to 2:00 PM Show Ring, Main Pasture	SACK RACE, LIME & SPOON RACE ROLLER RACE <i>Hosted by KB Kleen & Fuhnominon</i>
2:00 PM to 4:00 PM Show Ring, Main Pasture	DAIRY GOAT SHOW <i>Presented by the Barbados Sheep & Goat Farmers Inc.</i>
2:00 PM to 3:30 PM Dining Club Booth Main Pasture	JUNIOR DUELING CHALLENGE – THE AGROFEST-SPECIAL EDITION <i>Hosted by Caribbean Cuizine</i>
2:00 PM to 3:00 PM Band Stand	STEEL IN THE PARK
4.15 PM to 4:30 PM Main Pasture	FRUIT EATING COMPETITION
4:30 PM to 5.30 PM Show Ring, Main Pasture	AGILITY DOG SHOW <i>Presented by the Barbados Dog Training Club</i>
5:00 PM to 6:30 PM Main Pasture	JUNIOR DUELING CHALLENGE – THE AGROFEST-SPECIAL EDITION <i>Hosted by Caribbean Cuizine</i>
5:30 PM to 5:45 PM Main Stage	JUGGLE LOONIES PERFORMANCE
6:00 PM to 9:00 PM Main Stage	AGROFEST EVENING OF GOSPEL CONCERT, <i>(Featuring: Marrissa Boyce, Word Alive Christian Centre (WACC), Keishan Rollins, James & Carlyn Leacock, Barbados Mass Choir, Sister Marshall & KFL Band) Barbados Mass Choir will be doing a special tribute to the late Joseph Niles.</i>

N.B. THIS PROGRAMME IS SUBJECT TO CHANGE



BANANA BORER – A MAJOR PEST OF BANANAS, PLANTAINS AND FIGS IN BARBADOS

Ian Gibbs

Entomology Section

Ministry of Agriculture, Food, Fisheries and Water Resource Management

The Banana borer, a weevil scientifically known as *Cosmopolites sordidus* (Germar) (Coleoptera: Curculionidae: Calendrinae) is found in nearly all banana-growing areas of the world. It is a major pest of bananas, plantains and figs in Barbados and it produces tunnels and cavities in corms (underground portions) of these *Musa* spp. plants. These tunnels and cavities allow secondary infestation and rotting by fungi and bacteria which combine to weaken the plant. Feeding by this pest also reduces storage of food materials used for plant growth and fruit production. This results in reduced bunch size and weight and may even cause death of suckers. In addition, pest damaged plants easily topple over and require frequent replanting if the borer not properly controlled. Many plants may fail to establish if planting is done in a field previously infested by the borer.

Banana borer life cycle

The banana borer egg, larval and pupal stages all occur within the host plant or crop residues.



Banana borer adult



Banana borer pupa



Banana borer larval damage to banana corm

After mating, the female banana borer weevil lays her eggs, usually about one per week, between the leaf sheaths and stems as well as around the corm. The eggs are white, sausage-shaped and about 2 mm long. They hatch in 5-7 days and bore into the

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Banana borer egg



Banana borer larva

BANANA BORER – A MAJOR PEST OF BANANAS, PLANTAINS AND FIGS IN BARBADOS

corm. These larvae have a white body and the head capsule is dark, reddish-brown. The larval period lasts for 15-20 days at the end of which the mature larvae change into the resting or pupal stage. The pupae are white and about 12 mm long and they remain in this stage for 6-8 days. The adult weevils emerge from these pupae and they are dark brown to grey black, shining and about 11 mm long. They usually live for about one year but can live for up to four years and can survive for long periods without food. The weevils usually hide in plant debris or in the soil during the day and become active at night, when they feed and breed. The borer's total life cycle is 30-40 days.

Control of the banana borer

The longer the crop remains in the field the greater becomes the damage done by the banana borer if it is not properly controlled. You should therefore:

- Practice good field sanitation as crop residues serve as a refuge and breeding ground for adult weevils, resulting in higher populations and increased damage to the banana, plantain and fig plants
- Select healthy sword suckers for planting and trim corms back to clean tissue. The latter practice removes borer eggs and young larvae and nematodes
- Hot water treatment of corms before planting (at 54°C for 10 mins) or dipping bases of suckers in 10% bleach solution (100 ml Clorox® in 1L water) for 20 mins or soaking corms overnight in soapy water will kill borer eggs and larvae
- Monitoring/trapping adult weevils by laying freshly cut pseudostems on the ground or using commercially available pheromone based traps. Check cut pseudostem traps daily and remove and kill borer adults. The pheromone based traps contain a chemical called sordidin (Cosmolure®) which attracts the male borer adults. As they crawl into the traps the weevils come into contact with an insecticidal fungus like Beauveria bassiana or fall into a soapy liquid and drown.



Traps made from pseudostem discs or split pseudostems



Pheromone trap



Banana borer adult infected and killed by the parasitic fungus Beauveria bassiana

- Use tissue cultured plants or plants derived by the Ministry of Agriculture's recently demonstrated Rapid Multiplication Technique (contact Mr Colin Maynard at the Agronomy Section). These plants, particularly the tissue cultured ones are free from pests and are usually better than field grown planting material in terms of not transferring pests into new fields
- Cover banana plant wounds with soil after pruning suckers or fruited pseudostems. This prevents easy entry by the weevils into the corms
- Plant suckers deep to minimize root exposure and to produce stable plants able to tolerate wind
- Maintain healthy, vigorous plants. The healthier the plant the better is it able to resist insects and diseases
- Use of insecticides for borer control - fipronil (Mortel® or Regent®), imidachloprid (Imidachlor® or Merit®), bifenthrin (Bifen®), chlorpyrifos (Lorsban®) and dimethoate (Rogor®)

You can contact the author at the Ministry of Agriculture on 434-5103 for further information.

Living the “Grow Well, Eat Well, Live Well”

The Ministry of Agriculture, Food, Fisheries and Water Resource Management is presently implementing an educational campaign under the theme “Grow Well, Eat Well Live- Right Here in Bim” to improve the level of food and nutrition security within the country.

The Campaign was officially launched on October 14, 2016 during the week of activities to celebrate World Food is targeted at addressing a number of critical issues that are affecting the country. These include the excessively large food import bill, the high incidences of chronic non communicable diseases and the aging farming community.

This initiative will be implemented over the next three years and will explore all issues that related to food and nutrition security such as nutrition, production and health and lifestyle matters. In particular, the campaign will seek:

- To increase the production of quality food through the adoption of new technologies and approaches;
- Promote the adoption of healthier eating habits and lifestyle practices within the community;
- Increase the participation of the younger generation in the agricultural sector; and
- Build public awareness relating to the Government’s policies targeted at improving the level of food security within the country.



The programme seeks to highlight such messages through various methods, primarily through the use of social media, in order to reach a wide range of stakeholders, in particular the younger generation. More traditional means of communicating with the public will also be utilised including the development and circulation of radio and television public service announcements and advertisements on transport board buses, utilizing the slogan “Grow Well, Eat Well, Live Well – Right here in Bim”.

In addition, the Ministry has launched a facebook page: <https://www.facebook.com/GELinBim> and a youtube channel on food and nutrition security, to provide existing and new farmers with tips on producing crops.

It is intended that within each year of the programme, the activities of the campaign will focus on a different element of the “Grow Well, Eat Well, Live Well – Right Here in Bim” slogan.

In this the inaugural year of the Campaign, under the “Grow Well” component, the Ministry of Agriculture, Food, Fisheries and Water Resource Management has sought to enhance the level of local production through the promotion of sustainable agricultural practices and home gardening. In particular, a major focus of this year activities aimed to encourage the involvement of the youth in the agricultural sector.

This included the introduction of the “Grow Well! School Gardening Competition in the Primary and Secondary Schools”, where schools were encouraged to participate in open field gardening, container gardening and protected agriculture.

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Living the “ Grow Well, Eat Well, Live Well”

The participants were also encouraged to submit photos of their experience to be uploaded to the GELinBim Facebook page. The competition extended through the period October 2015 to February 2016 and attracted over 30 schools.

Moreover, the Ministry has developed the “GEL in Agriculture” television series to showcase various opportunities available in the



Jelani from the Lodge School the Winner of Week 3 of the Grow Well School Gardening Competition - “Grow Well at Home”

local agriculture sector and promote the use of good agricultural practices in the sector.

In the upcoming months, the Ministry will seek to continue these efforts by collaborating with various community groups and organisations to expand home gardening activities within the community.



Rafael from Queen's College the Winner of Week 2 of the Grow Well School Gardening Competition - “Grow Well at Home”



Nahj from The Alleyne School



EARLY STARTERS IN AGRICULTURE

By Donna Sealy

About 25 students at Gordon Walters Primary School love getting their hands dirty.

They love to get into the school's garden and green house and plant vegetables, herbs and other crops that will bear fruit in a short space of time.

This year's Agrofest theme – **Grow. Sell. Eat. Repeat.** – could easily become the motto for the Christ Church school's agricultural programme.

Teacher Cherry-Ann Layne who heads the programme said that although it is for students from Infants B to Class 4, the younger ones - those aged 5 to 6 years - are eager to get involved.

"We do the 4-H programme and the Ministry of Youth Affairs' programme- R.E.A.P, we incorporated that into the 4-H programme. What we've done with that is those children who

show a keen interest in planting and looking after the crops and so on, we- the principal [Tyrone Marshall] and I- decided that if this was where the interest lies, we would let them start from that age. Before the children had to wait until they got into Class 1, but we let them come.

"We try to meet at least once a week on Fridays from 3:15 p.m. to 4:15 p.m. but if we have a competition or presentation coming up, I would get the children to come and spend a few hours on a Saturday, if possible, to get things ready. An example of this would be the 4-H programme's Achievement Day, when some of them stayed after school during the week leading up to the day and those who could have come on Saturdays, did," she said.

R.E.A.P is the Regional Entrepreneurship and Agriculture Programme which was launched back in June 2014. It falls under the ambit of the Junior Achievement Charity and its aim was to implement innovative agricultural projects for youth

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EARLY STARTERS IN AGRICULTURE

Cont'd from page 24



in schools and communities.

The spirit of cooperation and community is high at Gordon Waters Primary and it is not unusual for donations of seedlings and other necessary materials to have a good garden, time and labour, to be made freely.

"Some seedlings are donated and some we buy. At present, the husband of one of my colleagues at the school would give seedlings and also, if there's any that the Division of Youth Affairs we would get those also. Sometimes parents would send some for me," said Ms. Layne.

The teacher noted that they had tried growing root crops a few years ago but they did not do too well so these days she prefers to stick to chives, marjoram, thyme, all types of lettuce and egg plant, which is a short crop.

"We try to do the crops that will be ready in six months," she added.

Asked what accounted for the younger children's interest, she said: "I don't know if they're fascinated by digging in the dirt, getting to use the different hand tools and watering the plants. I believe it stretches further to the Science aspect where they are able to see that they plant the seeds because that is what is done in the classroom. They can see that and then what comes from the seed, the young plant shoots up and then they can watch it growing. I feel that also fascinates them," she said.

To ensure that the children are not in the same area doing the same thing at the same time and getting in each other's way, Ms. Layne assigns them tasks. She explained though, that all 25 of do not attend each session which makes it a little easier.

"Sometimes we have sit down sessions where I would discuss an upcoming event and we plan for that. Sometimes I give them pep talks about looking after the plants, I tell them about pests that can harm the plants and seeing that we're trying as much as possible to make the garden an organic one, we try to use all the natural fertilizers we have at hand. I try to educate them on those things."

"When we go into the garden, I pair the older ones with

the younger ones and if we are planting seeds that day, I tell the younger child to watch the older one and then the younger one gets an opportunity to do it. Some of the children look for weeds, and I always tell them if they're not sure about something they can ask me. Another set will look after the watering, turn over the soil or look to see if they need to add more mulch.

"There's also a team that would tidy up. If there's any garbage lying around the greenhouse area, they would remove it and if inside needs sweeping they would do that also. I try to delegate the duties as I see fit," she explained.

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EARLY STARTERS IN AGRICULTURE

Cont'd from page 25

She shared that most of the students understand the importance of growing their own food and are eager to take home seedlings when they are available.

"From time to time, if I have a lot of seedlings, I would let them take them home and look after them. Some will come back with reports such as 'teacher it is growing well' or 'my mummy put it in a [particular place] and it is doing well, it has young fruit' or 'the peppers are coming out'. Some of them report that it died and we talk about what happened," Ms. Layne said.

She reassures them that it is okay and gives them another if she has any available.

How did she get involve in agriculture and teaching the students how to grow food?

"When I got to Gordon Walters Primary, they had a 4-H programme going. I would have read about [4-H] in the newspaper and from older persons in the community who used be in the 4-H, you would hear them talking from time to time talking about how they would have looked after crops and animals."

"When I got [here four years ago], I was excited because I wanted to be part it. The teacher that was in charge of the programme before, Mrs. Moseley, was glad for the help and I took it from there. All the things I needed to do and all the information I needed from the 4-H and Youth Affairs I got as well as from some of my parents who do their own gardening. I took a little bit from everybody and then passed it on to the children."

As stated before, parents are not left out and do what they can to help.

"I have quite a few parents that would help even though they work. They come on their off day. [Recently] when we were tidy-

ing up and trying to get more containers to fill with soil and potted mix, a parent came and assisted us the cans and bringing in the soil we got from Gale's Hatcheries to the greenhouse area. ... My parents are always willing to help," she said.

Ms Layne also spoke about two parents -brothers- who worked helping the school restore the green house which was damaged and ultimately prohibited them from participating in Agrofest last year.

Thanks to the generosity of Grantley Adams International Airport Inc. which donated some materials, they were able to rebuild it and will be at Agrofest this year.

Ms. Layne said that it really is a whole school effort and the teachers "are very helpful" and although some of them might not be physically involved they always encourage the children and offer suggestions and share ideas.

In the past, the school has come up with novel ways to plant crops and promote recycling. The plants in the bag was a hit and this year, teacher Sherry-Ann Murray has come up with an idea that Ms. Layne and her team of students are hoping to exhibit during the three-day event.

"This year we came up with a way to recycle our pallets, thanks to Ms Murray, who does this at home. We cut the pallets in half, take some of the weed block, the black plastic material you put on the ground so the grass would not grow. Then the inside of the pallet is lined with that, the wooden part can then be painted in a colour of your choice. One side is opened so you can pour the dirt inside and you plant what you want," she said.

What Ms Layne also said was that even after graduating, some of her students maintained their interest in gardening working along with their parents.

An avocado pest to look for

Ian Gibbs

Entomology Section

Ministry of Agriculture, Food, Fisheries and Water Resource Management

Be on the lookout for a new pest of avocado. It is called the Avocado lace bug (*Pseudacysta perseae* (Heidemann)) (Hemiptera: Tingidae)). It was described in 1908 as *Acysta perseae* from Florida specimens and considered then as a minor pest of avocado. Persistent population outbreaks of this pest, however, observed since the mid-1990s in Florida and in the Caribbean region, suggested that it has become one of the most important pests of avocado in the region. It is found in California, Florida and Georgia in the US, Bermuda, Dominican Republic, Jamaica, Puerto Rico and USVI in the Caribbean, French Guyana and Mexico.

Description and life cycle



Adults and nymphs of the lace bug

Adult Avocado lace bugs (ALB) are small winged insects about 2 mm in length. Their bodies are black with yellow wings, legs and antennae. They live in colonies on the lower surfaces of leaves,

often with adults, eggs and nymphs in close proximity. The female lace bug lays her eggs in an irregular pattern or in loose rows and they are covered with globules of a black, sticky, tar-like substance excreted by adults. The eggs look like grains of black pepper.



ALB eggs

The eggs hatch into wingless young called nymphs and are dark red-brown to black and covered with spines. These nymphs go through gradual metamorphosis, shedding their exoskeleton several times as they grow in size. They feed for approximately two to three weeks before developing wings and becoming flying adults. Population trends, observed in Florida, are strongly influenced by the development of the leaf canopy following bloom on the avocado trees.

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An avocado pest to look for

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Feeding injury



Early feeding damage

ALB feed only on the undersides of the avocado leaves. They insert their needle-like mouthparts into the leaf tissue cells to suck out the cell contents. Feeding initially causes small, white or yellow spots on the surface of the leaves as individual cells dry. Feeding damage can also provide entry of pathogenic fungi like *Colletotrichum* spp., which cause leaf anthracnose.



Older ALB leaf damage

As the avocado lace bug colonies grow, brown necrotic (dead) areas develop where there has been heavy feeding damage by the pest. Heavy feeding can cause striking leaf discoloration and early leaf drop. Other signs of ALB are dark, varnish-like excrement and shed white nymphal skins on the undersides of leaves. ALB nymphs and adults do not feed on fruit, but significantly affect fruit yield as a result of the loss of photosynthetic capacity in the damaged leaves.

Host plants and economic consequences

ALB have only been reported feeding on avocado (*Persea americana*), red bay (*Persea borbonia*) and camphor (*Cinnamomum camphora*), all members of the Lauraceae family. Experimental evidence from Florida indicates that avocado varieties vary widely in their susceptibility to ALB feeding damage. The West Indian x Guatemalan avocado hybrids appear to be particularly resistant to ALB attack in Florida but observations in the Dominican Republic indicate that Hass avocados (a Mexican-Guatemalan hybrid) can be severely damaged by ALB. The cultivar Simmonds, grown for a long time in Barbados, had 100% of leaves infested, exhibited an early leaf drop and produced no fruit!

Biological control of ALB

A variety of natural enemies parasitize and prey upon the various stages of the avocado lace bug. Two tiny wasps parasitize and kill the eggs. They are the Trichogrammatid *Oligosita* sp. *Oligosita* sp.



and the Mymarid wasp *Erythmelus klopomor*

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An avocado pest to look for

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Erythmelus klopomor

Four species of predatory insects feed on the eggs, nymphs and adults of the ALB. They are the thrips *Franklinothrips vespiformis*



Franklinothrips vespiformis

two species of bugs i.e. the Glassy winged Mirid Hyaliodes vitripennis



Hyaliodes vitripennis

and the Mirid Stethoconus praefectus



Stethoconus praefectus

and the larvae and adults of the green lacewing Chrysopa lanata



Green lacewing larva



Green lacewing adult

Insecticidal control of the ALB

The natural enemies previously mentioned should be conserved as much as possible as the more you have of them on your avocado trees the less there is the need for insecticides.

A trial at University of Florida showed that citrus oil, insecticidal soap and the entomopathogenic fungus Beauveria bassiana provided short-term ALB control.

If, however, the infestation is severe and no natural enemies are observed, use a systemic insecticide like Actara® (thiamethoxam) or Rogor® (dimethoate) or the contact insecticides Sevin® (carbaryl) or Malathion® to reduce the population levels. Imidachloprid (also available as Merit®) may be used up to 4 months before blossoming.

Information sources

Pena, J.E., Sundhari, S., Hunsberger, A., Duncan R. and Schaffer, B. (1998) Monitoring, damage, natural enemies and control of avocado lace bug *Pseudacysta perseae* (Hemiptera: Tingidae). Proc. Fla. State Hort. Soc.

111:330-334

University of Florida – Avocado lace bug web page

Mead and Pena (2012) Avocado lace bug. Circular #346. University of Florida Publication # EENY-39

**You can contact the author at the
Ministry of Agriculture on 434-5103
for further information.**

ORGANIC FARMING



With the push to have more people grow and eat their own food, there are groups and organisations in Barbados underscoring the need to go organic and fill our bodies with wholesome food.

One of these groups is the Organic Growers and Consumers Association which was registered back in 1998 "as an off shoot of an environmental park programme in the Scotland district of Barbados."

Its mission as listed on its Facebook page is this: "To maintain a collective sustainable culture by sharing information through education and innovation and to produce healthy certified organic products using a variety of natural methods and resources while working towards satisfying local and international demand."

A chat with John Hunte, the head of the Association, was interesting and not only did he share ideas but also their plans, some of which will be revealed at Agrofest.

"We try to encourage farmers to conduct their operations to organic sustainable methods of agriculture," he said, and noted, that while people getting into agriculture in recent times ask about it not everyone "sticks it out".

"They often want to find out what it takes to do organic farming. When some conventional farmers that might farm in my area see that my ground has the same pests as they do, they ask me what I use to maintain or control a particular pest. So there's interest from even conventional farmers even if they don't convert their whole system to organic," Mr. Hunte said.

But what exactly is organic farming?

Well, according to the Organic Farming Research Foundation's website, organic farming "refers to agricultural production systems that do not use genetically modified (GM) seed, synthetic pesticides or fertilizers. Some of the essential characteristics of organic systems include: design and implementation of an organic system plan that describes the practices used in producing crops and livestock products; a detailed recordkeeping system that tracks all products from the field to point of sale; and maintenance of buffer zones to prevent inadvertent contamination by synthetic farm chemicals from adjacent conventional fields."

Now that you have a better idea Mr. Hunte told the Agriculturalist that he cannot offer a comparison because he has never done conventional farming.

He did say that it is physical work and "you have to be out there in the sun and anybody who goes to a gym on a regular basis does as much as an organic farmer.

"It is just general body exercise and fresh air. You don't have to do anything that you can't physically manage. So if you have a wheelbarrow with stuff to move you can take it one time if you are strong enough or five small portions if you feel to You set your own pace, that's the good thig about it," he asserted.

He also said that his involvement in organic farming came while working with the later Professor Oliver Headley and William Hinds when Headley was in charge of CERMES. We wanted to do an environmental park project and I was tasked with organising the organic farm as a part of that renewable energy project.

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ORGANIC FARMING

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"Then we decided through the advocacy group that we'd form with Ena Harvey and Andrew Bynoe, and a few other people, we decided that we would try to set up an organisation of farmers to produce and supply the local market," he said.

Talks were held with a certified organic farmer from the UK, as well as others. From there training courses were organised to examine standards required for certification, and it went from there with more people joining.

"We do a registration drive every two years. In the last drive, those who are continually farming is about 22 but over the years we've trained about 60-65 different people in various methods," he added.

Planting crops is seasonal, the same as with conventional farming, Mr Hunte noted, and there was a season when butterflies were prevalent.

"Most organic farmers, once they are aware of the seasons they will watch it more closely and they won't plant things that might be susceptible to butterflies at that time of the year. Similarly, if you have irrigation you can plant things generally all year round but some farms may not have adequate irrigation in the dry time so they'll plant crops to suit that dry season."

"So you might find some organic farmers might try and plant more cassava when it is coming up to the dry time so they'll have a crop they can get through the dry season with rather than having to irrigate large areas they might not be able to maintain. When it comes to planting the organic farmer is usually encouraged to plant a variety of things in order to maintain a lower level of pests, instead of a single crop which would encourage that one type of pest which may infect that crop," said Mr. Hunte. Where his land is located in St Andrew, he has no problems with land slippage.

He was also thankful to Chief Executive Officer of the Barbados Agricultural Society, Mr. James Paul, who had shown an interest in organic farming from the start.

Apart from OGCA, there are other associations that promotes organic farming and eating whole foods such as Slow Food Barbados which recently launched its school gardening programme at Ellerton Primary.

And if you want to get started farming organically now, the Ministry of Agriculture's website (www.agriculture.gov.bb) offers "some necessary and important steps that can be taken to attain food that is free of inorganic chemical sprays."

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OFFERINGS WORTH REPEATING

The clients of the Rural Development Commission have been presenting a horn of plenty when it comes to agricultural produce, agro-processing, horticulture and craft for the past 12 years.

This year's theme of Grow, Sell, Eat, Repeat is very timely as this is a mantra which we encourage our rural entrepreneurs to live by but in a far more extensive way. Not only do we encourage them to grow local food through fruits and vegetables, but we also point out to them the importance of growing relationships with clients and suppliers to ensure the smooth and sustained life of their businesses. We encourage them to not just sell the product but the brand which is theirs. Eat your own goodies and locally manufactured drinks etc. to ensure that the taste and quality is constantly improving.

As for the repeating, repeatedly give your customers something to look forward to in terms of new products and services and repeat high quality customer service. We at the RDC also repeat in that the Loans Programme is a revolving



one so we never stop the process of empowering entrepreneurship.

This year's Agrofest will see the return of some of our loans clients and some additions and may I add young additions. We at the RDC are thrilled to see their passion and commitment to the agricultural sector.

Among those who will have offerings worth repeating are the agro-processors. Whether it is in aromatherapy or confectionery. Sandra Weekes of Earth Mother Botanicals will be offering sheep milk and molasses soap, and an insect repellent to help with the Dengue,

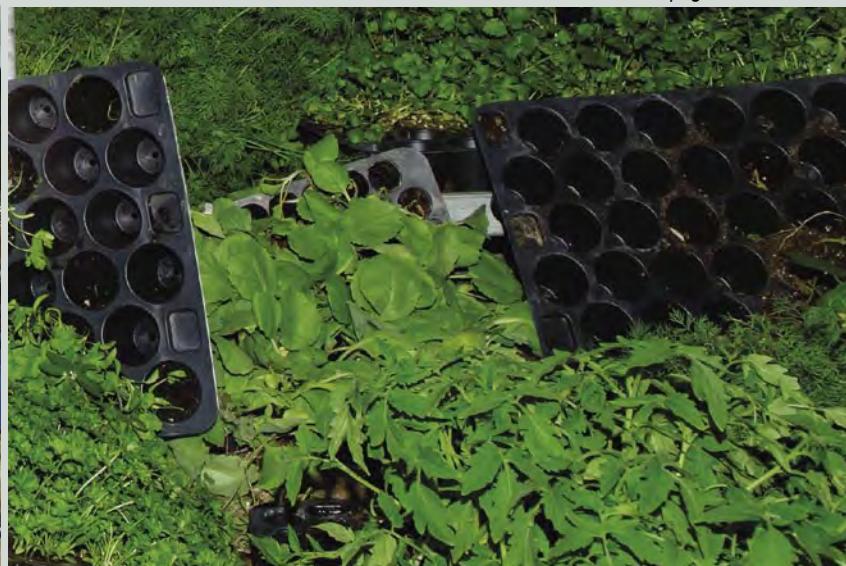
Chikungunya, and Zika viruses borne by mosquitoes, called Bug Be Gone. All ingredients are locally and organically grown. You can find her in a booth with a difference at G73 A.

Staying with the aromatherapy clients, Cheryl Wiggins of Cheggins is commemorating this island's 50th anniversary in fragrance. The oil of the Pride of Barbados flower is what has inspired her Pride line of products which carries body mists, body butters and body scrubs for both men and women. The line also carries bath soaps, key rings, magnets and book marks. There are also other new products in her line such as 29 and 1, Ms. Fabulous, Million Bucks and Romance in Paradise, a product for men, who she believes need to be given lots more attention.

"I believe we need to do extra for the men. The ladies are covered and we need to help the men step up their game and focus on the men," Wiggins said.

The plant section as usual will have sharp focus as they bring many exotic blooms. Of interest will be Nolan Corbin

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OFFERINGS WORTH REPEATING

Cont'd from page 33

at G 66 B with his Bonsai and his fish and he will be offering special packages for the children.

Some youngsters are also trying their hands at growing, and Keiriah Scantlebury a newcomer, will be providing a range of seedlings at G39.

All the action is not in section G though, go visit our food clients in section C 50 to C 53 and head over Weymouth at W4 C for a site which many of you would never have seen before...a massive Pompeii oven. It is using the traditional red brick to keep the heat but there are several modern twists. Steven Whittaker who designed and made it has been with us before with his wide

range of organic/ natural foods. He tells me the taste of the pizza is unbelievable.

Special presentations and prizes will be in store for the school children as there is much history surrounding the oven.

Agrofest 2016 is special for the RDC also because this year marks 20 years for the Commission and they will bring back the ole time something display in their tent at B33 B as well as show you some of the work they have done over the last two decades.

So come out and partake of all we have to **Grow, Sell, Eat and Repeat**.

Bajan Food Recipes

BANANA PUNCH

*4 ripe bananas
1/4 pt evaporated milk
3 drops vanilla essence
Honey or sugar
3/4 water
1/4 grated nutmeg*

1. Peel and mash bananas
2. Liquidise in blender
3. Add water, milk nutmeg and essence
4. Sweeten with honey or sugar
5. Chill before serving



COCONUT PUNCH

*1 Coconut
1 1/2 pt water
4 oz. sugar or sugar to taste
1/2 tsp. almond essence*

1. Shell, peel and grate coconut flesh. Mix grated coconut with water and strain through a sieve, lined with muslin.
2. Squeeze muslin to extract all the juice
3. Sweeten liquid with sugar, stir until dissolved
4. Flavour with almond essence and chill



GINGER BEER (1)

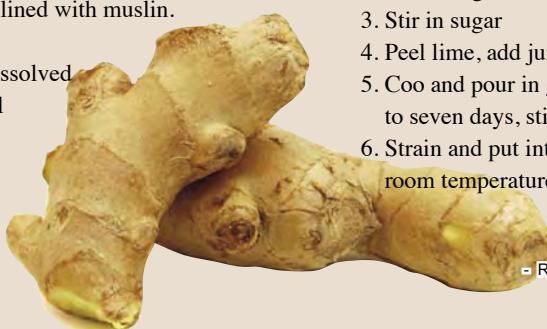
*1 lb fresh root ginger
3 pts water
Juice of 2 limes
1 lb. raw cane sugar*

1. Peel and grate the ginger
2. Put in a large saucepan and add water
3. Boil, then leave to simmer for 4 minutes
4. Remove from heat, cover and leave for at least 24 hours
5. Strain liquid and add lime juice
6. Stir in raw cane sugar until dissolved, then chill
7. Serve with plenty of ice.

GINGER BEER (2)

*1/4 lb green ginger
1 gallon water
1 large green lime (optional)
2 lbs sugar or sugar to taste*

1. Scrape, wash and pound the ginger
2. Put in large bowl or jar and add boiling water
3. Stir in sugar
4. Peel lime, add juice and rind to liquid
5. Coo and pour in glass container, cover and leave for five to seven days, stirring in between days.
6. Strain and put into refridgertor to chill and use or keep at room temperature for a futher 2 days before using.



Recipes by Majorie Bradshaw
Reproduced from: Island Cooking Bajan Styles

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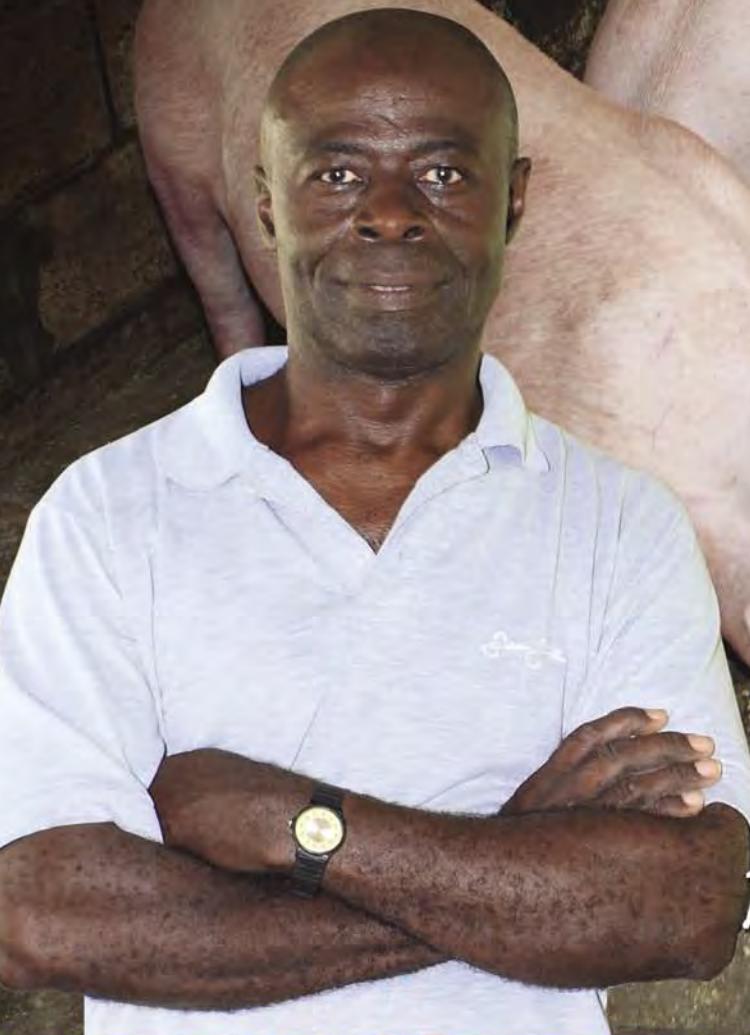
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