



The Tale of The Scorpion



*Trinidad Pepper's Ranking as
The Hottest in the World has a Sting in the Tail*

(See Page 4) PHOTO: www.pepperlover.com



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■ President Bharrat Jagdeo reveals Independence Honours

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A Feast of Chataigne

■ New machine takes the work away



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Cave Hill Wins

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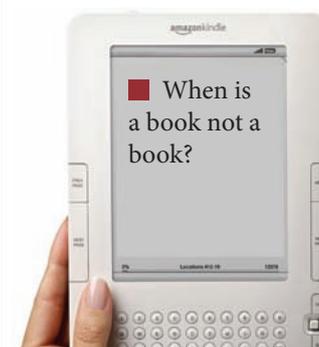
Peas like Peas

■ New varieties bring year-round yields



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CAMPUS NEWS

CACIQUE CROWNS

Vice Chancellor of The UWI, Professor E. Nigel Harris and Pro Vice Chancellor and St. Augustine Campus Principal, Professor Clement Sankat have been conferred the Cacique Crown of Honour, the third highest honour of Guyana under the National Awards, to mark the country's 45th Independence anniversary on May 26.

President Bharrat Jagdeo, who delivered a lecture on "Guyana's evolving relationship with Brazil and its implications for the Caribbean" at The UWI on June 11, made the appointments in his capacity as Chancellor of the Orders of Guyana. The award ceremony will take place later this year.

Prime Minister of Guyana, Sam Hinds was conferred the Order of

Excellence (OE), the nation's highest award. Dr Arlington Chesney of CARDI was conferred the Golden Arrow of Achievement (AA), as was Dr Edward Greene, former CARICOM Assistant Secretary-General.

Other recipients of the Cacique Crown of Honour, are the late Minister in the Ministry of Education Dr Desrey Fox; Bank of Guyana Governor, Lawrence Williams; Chief Statistician, Lennox Benjamin; Donna Yearwood; Clyde Roopchand; Former Chief Justice, Ian Chang; GRA Commissioner-General, Khurshid Sattaur; Malcolm Parris; doyen of the art community, Phillip Moore; Miles Fitzpatrick; and Clinton Collymore.



President of Guyana, Bharrat Jagdeo, as he addressed the audience during his lecture on "Guyana's evolving relationship with Brazil and its implications for the Caribbean" at the Office of the Campus Principal at St. Augustine on June 11.

FROM THE PRINCIPAL

A New Way of Seeing India



Two conferences about building relations between India and the Caribbean took place a month ago, both invoking diaspora bonds as a medium to deepen linkages.

The first of these conferences, organised by the High Commission of India, was titled "Building a New Partnership between India and the Caribbean: The Role of Diaspora," and the second was on the "Global South Asian Diaspora." Neatly dovetailing into each other, both events took place primarily at the St. Augustine Campus, which played a key role, and the latter was the seventh conference in the series.

The value of deepening such ties cannot be underestimated in this global environment; India as one of the Big Four economies tagged the BRIC along with Brazil, Russia and China, would be an important economic partner for this region.

There is no denying that the cultural bonds between India and the Caribbean, particularly Trinidad, Guyana and Suriname, have shaped the way of life up and down the region. Indeed, with over 170 years gone by since the first shiploads of indentured workers came to the region, it is a source of fascination how much of that way of life – in food, clothes, music, ritual and religion – has survived intact to this day.

Many visitors from modern day India have been struck by the preservation of their culture, transplanted and kept alive and unchanged in many ways, while much of it is not as visible in its ancestral home. The Caribbean might well have become a place where people can see how an old way of life had been exquisitely re-crafted to fit into a different space, and how a culture has maintained many traditional aspects and adapted to the new world. This is cause for celebration.

Those cultural bonds have long been the mainstay of the relationship between India and the Caribbean, and as we seek to further deepen our ties, we should also focus on other areas that can enhance this, such as business/industrial partnerships, sports, tourism and other creative enterprises. It may seem irrelevant, but even the current tour by the Indian cricket team did not seem to be arranged so as to maximise spectator attendance, including those fans from the Indian diaspora at the games. We simply have to adjust our ways of seeing and planning to reap the rich rewards of this diasporic connection.

The conferences had looked at networking of diaspora associations in the Caribbean and their role in development, at economic enterprise and technology, and in looking at innovative financing mechanisms. These are the kinds of initiatives and perspectives that can move the region forward in a holistic way, and they really invite us to consider our ancestral links from the other side of the traditional lens.

CLEMENT K. SANKAT

Pro Vice Chancellor & Principal

EDITORIAL TEAM

CAMPUS PRINCIPAL
Professor Clement Sankat

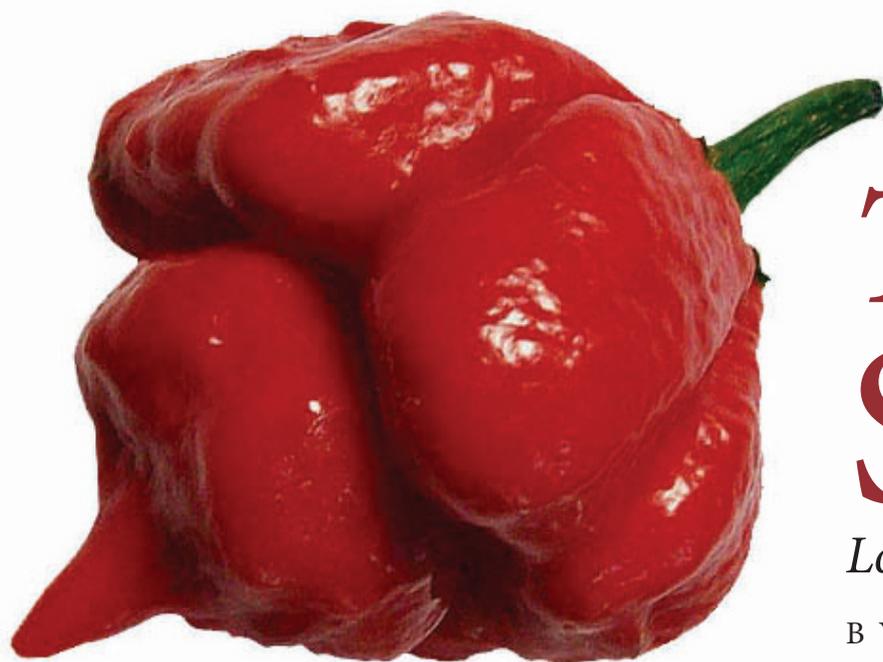
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RESEARCH



The Sting of a SCORPION

Local pepper is hottest in the world

BY VANEISA BAKSH

When the news broke that a Trinidadian pepper is now ranked as the world's hottest pepper, it raised a burning question. Why was Australia being named as the place of origin of the Trinidadian Scorpion Butch T? The local Scorpion emerged as an even hotter honcho than the English Naga Viper, ousting it from the Guinness World Records as of March 2011.

Fortunately, the Scorpion's name features its homeland because this is a blistering business when it comes to marketing origins, and already heat has been turned up as its Trinidadian roots are not being touted in its international ranking.

The Guinness World Records lists it as a pepper grown in Australia by The Chilli Factory, who named it the Butch T, after an American, Butch Taylor, owner of Zydeco Hot Sauce. Taylor had passed out some of the seeds and they ended up in the gloved hands of the Chilli Factory Owners.

The pepper is indisputably of Trinidadian origin, as even its name reflects, but it needs to be more aggressively claimed or its commercial potentials may be diminished.

A local chemist, Dr Rosalie Holder, was actually the one to begin measuring the Scorpion's incendiary qualities from as far back as 1998. While she was doing research for her PhD at The UWI, visiting farmers and checking out their pepper yields, she was presented with some Scorpions by Lawrence Constantine, a farmer in the Maracas Bay area, who'd found this crop particularly hot.

Measured at 1,4463,700 Scoville Heat Units for the world record, the Scorpion packs a good 100,000 SHU over the Viper. To give you an idea of their potency as chilli peppers, the Jalapeno only goes up to 5000 SHU, and if you're going to touch Scorpions and Vipers, it is advisable to wear gloves and masks.

Constantine's peppers were growing at some altitude and it had been a blistering season, stressing out the crop. That would explain why the heat units went up, says Professor Pathmanathan Umaharan, a UWI professor of genetics, who worked with Dr Holder on her peppers, doing the purification, the agronomy and the morphology. He says that heat brings heat.

"The heat of the pepper is determined by the amount of stress the plant undergoes. Cool weather will keep them

calm. Of course it has to do with the strain of the pepper," he said. It sounds like something we can all identify with.

Dr Holder had been working on a dissertation, "Processing Potential of Peppers of the Capsicum Series," and was gathering samples for her research. She bought hot peppers grown in areas like Caroni, Chaguanas, Tabaquite, Caigual and St. Helena.

"My first green and yellow peppers were purchased from Farmer Maikoo who grew them at St. Helena," she said, but most of her samples were bought at the Port of Spain Market, and she got some from CARDI in Barbados and Trinidad. "However, Lawrence Constantine sourced the seeds of the Scorpion, Seven Pot, Chinese White and Congo peppers. He grew these peppers on the hillside at the one-mile mark of the North Coast Road that leads to Maracas Bay."



Dr Rosalie Holder

When Mr Constantine's peppers came to her in that hot season more than a decade ago, Prof Umaharan did the purification process that would ensure consistency, and as she began measuring, she was blown away.

Prof Umaharan recalls how a student, wearing two sets of gloves while examining the peppers, reported that he spent that night with his arms extended into two ice baths, such was the pain. Indeed, a couple years ago, Indian scientists were considering using the Bhut Jolokia, once ranked as the world's hottest pepper, in hand grenades as a non-lethal weapon. Imagine it as a pepper spray!

Dr Holder is very perturbed at the idea that the Australian marketing thrust threatens the identity and origin of the pepper.

Dr Holder's concern may be primarily about recognition for her work regarding the Scorpion, but it raises a larger question about the way we manage our business. Peppers are an almost folkloric component of Caribbean culture. The variations of heat and spice are invoked as human characteristics: she hot like a Congo, means she is not to be trifled with. Trinidadians know the difference between slight, medium and plenty. The names alone are revealing cultural markers.

In the brilliant novel, "The Sly Company of People Who Care," by Rahul Bhattacharya, there is a character called Ramotar Seven Curry on account of his predilection for attending weddings up and down Guyana. His name shadows the phenomenal Seven Pot Pepper – known by some as the Seven Pod Pepper – but respected by all as one of the hottest peppers in the world. Just as Ramotar Seven Curry needs seven times the amount of curry the average person needs to sate his palate for wedding fare, so the pepper is hot enough to spice the equivalent of seven pots.

Pepper pots and stories – hot and sweet – abound; it is a part of our culture. The idea that the Trinidad Scorpion pepper is named after an American, and credited with an Australian origin suggests that once again we have been too slow to assert ownership of an indigenous product, and we have to act speedily and assertively to rectify this potential pickle.

"The pepper is indisputably of Trinidadian origin, as even its name reflects, but it needs to be more aggressively claimed or its commercial potentials may be diminished."

TAKE A CLOSE LOOK AT THE GOOD BOOKS

BY DR. JUDITH GOBIN



Small farmers clearing Northern Range hillside land for crops. An old fridge dumped into the St. Ann's River. A high-rise townhouse development in the Diego Martin hillside. A successful water-bottling factory in Trinidad. An unsuspecting patron at the T20 cricket match between India and the west Indies at the Oval.



What do these have in common?

The first four continue to contribute to the severe flooding this country regularly experiences. By the time you read this article, you would have witnessed or read about the flooding that occurred on Saturday 4th June in Port of Spain and environs. Unfortunately, the unsuspecting patron suffered the direct impact, finding his flooded and muddied car on Ariapita Avenue; the final straw after the unhappiness of West Indies losing the match!

Unfortunately, this event appeared to be timed almost in celebration of World Environment Day (WED) on June 5th.

You may also have read the full-colour supplement with wonderful encouraging messages from the Minister of Environment, Dr. Roodal Moonilal, and appreciated the beautiful "green" advertisements. In that supplement we were reminded that 2011 is International Year of Forests and the theme for WED was "Forest: nature at your service". This is only fitting since our forests provide water, food, medicine and clean air and regulates climate, thus embodying the three sustainable development pillars: economic, social and environmental.

Forests also play a major role in regulating the impacts of floods and storms. In Trinidad and Tobago, numerous

studies and comprehensive reports (done by local specialists and local and foreign consultants) have provided extremely good solutions to critical activities such as unmanaged hillside agricultural practices, illegal deforestation, improper garbage disposal and dumping of wastes into our watercourses.

Why then do we continue to find ourselves in this situation year after year? It is time our decision makers take a close look at the various recommendations (within costly documents) sitting on shelves in their ministries. Many of us in the environmental field agree that we have most of the tools and do not need to re-invent the wheel. Solutions such as containment of rain/flood waters lie within the "Integrated Water Resources Management for TT;" regular collection of household and other garbage lies within the "Waste Management Strategy for TT" and managing plastics can be found within the Beverage Containers Bill (Draft), etc.

These activities which have such severe negative impacts on the environment and quality of life for citizens of this country could be so easily alleviated, if our decision makers would simply institute the appropriate recommendations. Environmental management, which includes flood management, is a cross cutting task in T&T and we already have the various institutions in place, for instance, the

Water Resources Agency, which has primary responsibility for water resources management; the Drainage Division, Ministry of Works and Transport, which is responsible for the construction and maintenance of storm water and flood control structures in the catchments of the major river basins; and the Forestry Division, Ministry of Agriculture, Land and Marine Resources, which is responsible for forest management, the promotion of watershed management, and the management of wetlands.

Decision makers, we urge you to please be more proactive and attack this problem at the "sources" rather than applying bandages at the areas downstream of impacts!

So again:

Small farmers clearing Northern Range hillside land for crops. A high-rise townhouse development in the Diego Martin hillside. The Planning Bill must be passed, adhered to, publicized and illegal activities curtailed!

An old fridge dumped in the St. Ann's River. Efficient collection systems/dump areas must be sustained!

A successful water-bottling factory in Trinidad. Beverage Containers Bill must be passed, adhered to and publicized!

An unsuspecting patron at the T20 cricket match at the Oval... not sure, but maybe we can pass a law that West Indies must win?

Dr. Judith Gobin is a Lecturer, Department of Life Sciences, The University of the West Indies, St. Augustine, Trinidad and Tobago

The Chataigne Peeler

Student's machine could put this delicacy on your table every week

BY RODNEY HARNARINE



The Chataigne fruit is well known in parts of the Caribbean, notably Trinidad and Guyana, as a delicacy served in a coconut curry sauce at special occasions, such as weddings and at Divali.

A close relative of the breadfruit (*Artocarpus altilis*), the chataigne (*Artocarpus camansi*) contains twice the protein, and its seeds are low in fat compared with nuts such as the almond, brazil, and macadamia.

Known in the region as the bread nut or katahar (Guyana) it is prized when ripened for the seeds, and when mature, but not ripe, it is prepared in delicately flavoured curries.

To do this, the thick, spiky skin must be removed, and the flesh shredded apart by hand after the seeds are painstakingly removed. Served with roti (paratha) along with other vegetables, it is a popular dish at weddings and other functions.

While the demand for curried chataigne has been growing, the task of peeling and preparing the fruit is so labour intensive that it makes it almost prohibitive.

A typical wedding might require 300 chataigne fruits for a side dish, and this would take about 12 man-days for preparation, i.e. peeling, shredding and then preparing the seeds before cooking. No wonder it has remained such an occasional delicacy!

That might soon be a thing of the past.

Nishad Gopaulchan, a final year Mechanical Engineering student at The UWI, has designed and built a simple machine that can prepare 100 chataigne fruits in an hour.

DEVELOPING THE MACHINE

Various methods for separating the seeds from the fibrous inner core of the fruit were considered and these included friction, brushing and impact, however the one that showed the best potential was impact.

Initial trials with steel rods impacting on the inner



Nishad Gopaulchan with the chataigne peeler machine.

core of the fruit, left bruises or marks of injury on the final product. Although this could be minimized and managed, it showed up as brown to black marks on the product when kept refrigerated for awhile.

Replacing the steel rod beaters with a steady rubber one, minimized, if not eliminated, the problem of impact injury on the finished product.

Placing the rotating and stationary rubber fingers was a critical factor in the design, as the spacing must be appropriate to allow the flow of the separated fiber and seeds through the machine without clogging and “sticking” the machine.

The machine is powered by a single phase 110 Volt motor; hence it can be plugged into any domestic household electric supply.

The machine is ergonomically designed; the hopper is at the top and can be easily reached by the average adult while the lower chute allows enough height to place a receptacle to collect the finished product. There are no sharp edges or projecting bolts that could create risks for injury to users of the machine.

COMMERCIAL POTENTIAL FOR THE MACHINE

The machine was on display at both the recently concluded Sci-technofest, run by NIHERST and the Open Day at the Faculty of Engineering; without quoting a price for the machine, more than 100 persons have indicated an interest in having one of these machines.

Among those who have expressed interest, caterers were the largest group. At the Faculty of Engineering at UWI, we see this as a wonderful opportunity to expand the consumption of local cuisine, with its attendant backward linkage with agriculture, while simultaneously creating the opportunity to commercialize our homegrown mechanical, machine-building skills.

The project has a high potential for success both locally and internationally.

Rodney Harnarine is a development engineer at the Department of Mechanical and Manufacturing Engineering, at The UWI, St. Augustine. He supervised the construction of Nishad Gopaulchan's Chataigne Peeler.

“A typical wedding might require 300 chataigne fruits for a side dish, and this would take about 12 man-days for preparation ...that might soon be a thing of the past.”

Fresh Pigeon Peas all year

BY ALBERTHA JOSEPH - ALEXANDER

From December to February, pots come alive as they bubble away with popular pigeon peas. For that is when they are most likely to be bought fresh, from the markets, or from the trays of pick-up vans parked at the sides of highways and byways.

Nothing beats a pelau made from fresh pigeon peas, many a cook will declare – or a hearty stew or curry. In fact, a survey conducted by Albada Beekham, a former postgraduate student at The UWI, has indicated an overwhelming preference by consumers for the fresh version, which is not surprising to any pigeon pea connoisseur.

But when the season is over, they have to resort to the dried version or even tinned pigeon peas. “Absence makes the heart grow fonder,” might be an apt phrase to describe the longing for this staple legume.

The earliest breeding efforts on the pigeon peas crop in the Caribbean started in 1934 at the Imperial College for Tropical Agriculture (ICTA) in Trinidad, the forerunner to the St Augustine Campus. Research continued under ICTA's successor, the Regional Research Centre (RRC), which was part of the Faculty of Agriculture in the fifties. This work, along with similar breeding efforts in Puerto Rico led to the development of the traditional varieties that are now consumed.

However these varieties, planted by farmers and others in their backyard gardens, cannot meet the demand for fresh pigeon peas throughout the year. They are confined to flowering and production during the three-month span when day lengths are shorter – minimum day lengths between 12 to 14 hours are required for the initiation of flowering. These varieties also take from 180-280 days to mature, thus the customary June planting of pigeon peas is

put into perspective. The crop is also low yielding due to its extended period of vegetative growth during the flowering period.

Now research being done at The UWI has shifted the pigeon peas paradigm. You might now have access to fresh peas all year round, thanks to expansion of the breeding work that began more than 75 years ago.

The UWI has focused on solving this seasonal problem by developing new varieties which:

- (i) *are less sensitive to day length (photoperiod insensitive);*
- (ii) *mature, flower and produce over a shorter period (short duration);*
- (iii) *are dwarf in size (pods picked without the need to tiptoe);*
- (iv) *grow less after flowering (determinate), and*
- (v) *produce pods at the top of the plant. This feature aids in mechanical harvesting.*

The first generation or batch of improved varieties released in the early 1980s, included UW 17, UW 26 and UW 10. These created considerable interest since they were the first short-duration, year-round varieties in the Caribbean. Unfortunately, the shorter pod size, unfavourable seed quality attributes and the poor yields during the off-season made farmers reluctant to adopt them.

The pods of the early varieties were shorter, narrower (making it harder to shell), had less seeds and were smaller in size (lower hundred seed weight). The seeds also had a lower starch content and higher levels of phenolics, leading to the greater nuisance of fingers being stained from shelling.

Further improvements saw the development of a second generation or batch of pigeon pea varieties – UW 223, UW 263, and UW 282 – in the early part of the past decade (2000s). The new varieties produced pigeon peas in less than four months, as compared to the long wait of six months or more for the traditional varieties. They can be planted throughout the year and are expected to yield pigeon peas in 3-4 months. These combined higher off-season yields with better pod and seed quality characteristics, longer and wider pods with lower levels of phenolics and larger number of seeds per pod, as well as starchy, less fibrous seeds. Although the seed size was superior to the early varieties it was still falling short of that of the popular traditional varieties by 20% to as much as 60%.

From a genetic perspective could the seed size be increased to an acceptable level among these new varieties, or is it an elusive dream?

Building on the previous work of Albada Beekham on physical and biochemical quality traits and M.S.A. Fakir on yield, I undertook further research on the link or genetic relationship between seed size, other important pod quality features and yield. Findings indicate that seed size can be further improved without negatively affecting yield or seed number per pod, which is fantastic, because it appears that you can have year-round production and have the pod and seed qualities of the traditional varieties. Early results indicate that seed size can be improved by as much as 40% over the second generation varieties previously developed.

If the study can be replicated over time and different parts of Trinidad the farmers and consumers can have their favourite pigeon peas dish, all year through.



Albertha Joseph-Alexander has a BSc. in Botany and Biochemistry and an MSc in Crop Protection from The UWI. She is completing an MPhil in Plant Science. The research is entitled Morphophysiological characteristics associated with nitrogen fixation and yield in pigeonpea.

RESEARCH

Biodiversity at its Boldest

Research symposium airs it all

BY ALANA JUTE

The range was wide, diverse and fascinating. Presentations included an exploration into a biological control against the dreaded *Aedes aegypti* mosquito (bringer of yellow fever and dengue); counting the Tufted Capuchin monkey population; enhancing breadfruit production, analysing cassava tissue protein, studying dwarf pigeon peas and evaluating trawl fishery in the Gulf of Paria.

All in all, 29 oral presentations were made when the Department of Life Sciences (DLS) at The UWI hosted its first research symposium over two days in April. Themed, “Engendering Collaborative Research – Linking Science with the Environment,” it was an opportunity for students to share and critique each other’s work, as well as for the Department to give outsiders a sense of the nature of the research being done within.

Among some of the other topics under scrutiny were: “Isolation and characterization of potential diesel-degrading bacterium isolated from oil contaminated soil,” “Concentration and genetic composition of airborne micro-organisms and pathogens during African dust events,” “Assessing the state of human leptospirosis” and “Seedling Leaf Toughness in the Tropical Forest – Is Mora the tough one?”

The DLS carries out research in a variety of areas of ecology, management of tropical habitats, conservation of biodiversity, biotechnology and genetic improvement and integrated management of tropical pests and parasitoids. Scientific research such as this is what is needed to diversify the economy of Trinidad and Tobago in a competitive global market.

OUTLINES OF RESEARCH PRESENTATIONS

Cassava Stem Tuber: Analysis of Cassava Tissue Protein Profiles – Mr. Richard Farrell

Cassava plants are mainly propagated via hard stem cuttings or seeds. There is new evidence that cassava tubers can also form from the stem itself when grown in an inverted position from hard stem cuttings.

Use of bio-elicitors for modulation of plant growth and enhancing disease resistance – Dr. Jayaraj Jayaraman

Bio-elicitors are bio chemical substances that induce the production of defence related proteins in higher plants which primarily enhances the level of resistance to pathogens. This crop production strategy is relatively inexpensive, and offers moderate level of resistance to several pathogens. Preliminary results have shown seaweed extract formulations (SWE) for disease control in carrots and greenhouse cucumber have been proved to be successful in earlier studies.

Analysis of Trinidadian fruits for Phosphorous and Potassium in relation to dietary restrictions of End Stage Renal Disease (ESRD) Patients – Mr. Andrew Dhanoo

In Trinidad and other tropical territories ESRD patients are told to stay away from local fruit. This research looked at the levels of phosphate and potassium in local fruits, the two major ions which cause complications in the body of an ESRD patient. Results showed that Carambola, Pomerac, Portugal and Paw Paw can be safely consumed in normally recommended portions without any ill effect.

A biodiversity Monitoring System for Trinidad and Tobago – Mrs. Yasmin S. Baksh-Comeau

This study involved an intensive and extensive botanical inventory to determine the status of vascular plants in Trinidad and Tobago; 21,000 specimens were identified of which 20,000 were digitized and entered into a database using BRAHMS (Botanical Research and Herbarium Management Systems) for developing the Virtual Field Herbarium (VFH). The survey provided more accurate and updated information on plant species distribution.

One of the more interesting presentations came from the undergraduates. These young and creative second-year students decided to use video to create an informative and entertaining presentation on Giradia, a parasite. The use of video showed the adoption of the film medium in tertiary education, representing a shift in the way science is reported. We live in a very visual world and students increasingly

learn on a daily basis visually. UWI is well placed to nurture and advance these interdisciplinary modalities and surely academic staff will see the value of adopting these visual media in dissemination of knowledge.

The symposium provided an environment for discussion of research ideas and the plan is for it to become an annual event.

ORAL UNDERGRADUATE PRESENTATION WINNERS

1st – Mr. Keston Finch

A pilot investigation into the diet of four commercial fish species found in the marine environment in Trinidad

2nd – Mr. Andrew Dhanoo

An analysis of Trinidadian fruits for Phosphorous and Potassium in relation to dietary restrictions of End Stage Renal Disease

3rd – Mr. Antonio Ramkissoon, Ms. Safia Varachhia, Ms. Jodie Sooknanan, Ms. Tavia Badoo and Mr. Aadil Reid

Screening of potential antibiotic activity amongst bacteria taken from the Pointe-a-Pierre Wildfowl Trust, Trinidad.

UNDERGRADUATE POSTER PRESENTATION WINNERS

1st – Ms. Michele deVerteuil

Thermoregulatory behaviour of freshwater turtles in the wet season

2nd – Mr. Andrew Dhanoo

An analysis of Trinidadian fruits for Phosphorous and Potassium in relation to dietary restrictions of End Stage Renal Disease

3rd – Mr. Richard Farrell

Cassava Stem Tuber: Analysis of Cassava Tissue Protein Profiles

POSTGRADUATE ORAL PRESENTATION WINNERS

1st – Seema Ramkissoon

Assessing the concentration and genetic composition of airborne micro-organisms and pathogens during African dust events in Trinidad.

1st – Darshan Narang

Population density of an introduced primate: The Tufted Capuchin in Chaguaramas, Trinidad

2nd – Kerrie Naranjit

Ecology of the Trinidad “Piping-Guan”

3rd – Amaala Muhammad

*Diversity of Caribbean *Ralstonia solanacearum* strains associated with selected host species*

POSTGRADUATE POSTER WINNERS

1st – Nicole Sookoo

Toxicology of Pesticides in Tropical Amphians

2nd – Darshan Narang

Population Density of an introduced primate – The Tufted Capuchin in Chaguaramas, Trinidad

3rd – Nerissa Ali

Effect of seaweed extract on plant growth and disease incidence in field tomatoes

Prof. John B.R. Agard
Head of Department
of Life Sciences

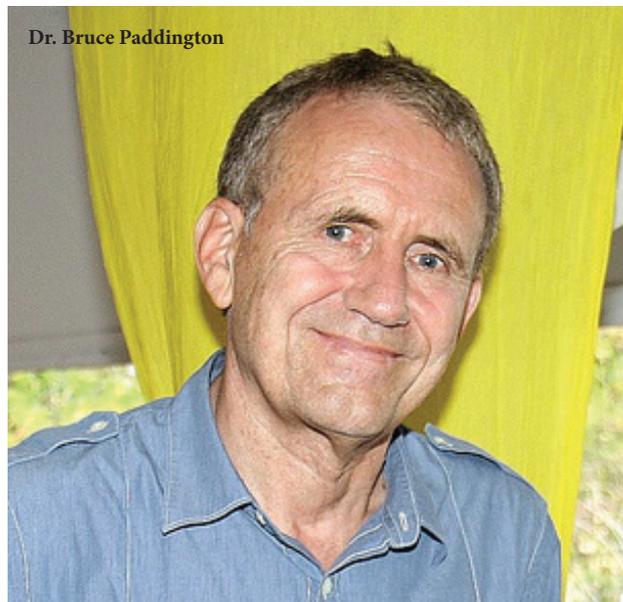


Alana Jute was one of the Committee members organising the research symposium

■ CAMPUS NEWS

FILM-MAKERS WITHOUT BORDERS

Dr. Bruce Paddington and Dr. Christopher Meir, both Lecturers in Film at The UWI, St. Augustine participated in the recent CARIFORUM talks in Jamaica on the development of a model audiovisual co-production treaty for CARIFORUM states.



Dr. Bruce Paddington

The talks, which were funded by the European Development Fund, brought together film-makers, film commissioners and experts in international trade from throughout the Caribbean. The event was part of CARIFORUM's implementation of the Economic Partnership Agreement (EPA) signed with the European Union in the region and was the culmination of months of consultation. The meeting itself was concerned with finalizing a model treaty for CARIFORUM states to utilize in their attempts to foster audiovisual co-production across national borders.

Dr. Paddington, who co-founded the UWI Film Programme and is one of the world's leading experts on Caribbean cinema, worked as the lead consultant on the project, compiling data on the audiovisual industries of the CARIFORUM states. He also represented the Trinidad and Tobago Film Festival – one of the region's most important cinematic institutions – of which he is founder and director. Dr. Meir was invited by the event's organizers as an expert on the subject of international co-production. Both also represented the Film Programme at UWI, which is itself a major stakeholder in the region's audiovisual industry.

The meetings took place in May in Kingston and resulted in the drafting of the model treaty as well as a strategic roadmap for the overall development of the region's audiovisual sector.

Discussing the talks and the UWI Film Programme's



Dr. Christopher Meir

role in the development of the region's audiovisual industry generally, Dr. Meir said, "It was a great honour to be asked to participate in these talks which will go some ways towards improving working conditions for film-makers and consumers in the region. The commitment to assisting in the development of the region's audiovisual sector is a crucial part of our mission in the UWI Film Programme."

EXCHANGING IDEAS IN AGRICULTURE

BY DR DAVID DOLLY

For just over a week in March, the St. Augustine Campus hosted a team of agricultural experts from Texas Agricultural and Mechanical (A&M) University and the University of Florida. The visit represents a new trend from the exclusive undergraduate exchanges which commonly occur between The UWI and many overseas universities. The trip facilitated the exchange of ideas, teaching methods, research topics and methodologies among selected faculties at the respective universities. The intention is to globalise curricula with contextually-rich reusable learning objects (RLOs) and authentic case studies that address multidisciplinary issues.

The team of 12 faculty and two graduate students paired with a host counterpart in a parallel expertise. The visitors were from a range of disciplines as follows: Agricultural Engineering, Wild Life, Fisheries, Horticulture, Health and Kinesiology, Ecosystem Science and Management, Agricultural Leadership, Recreation, Parks and Tourism. Overseas faculty was selected based on their passion for teaching and willingness to internationalise their undergraduate courses.

Dr Corlyss Outley, Assistant Professor in the Department of Recreation, Parks and Tourism Sciences at TAMU has done extensive research on inner city play habits of youth with particular interest on positive youth development, racial/ethnic identity and out of school time experiences. Outley paired with lecturer Margaret Gordon of the DAEE. Gordon was able to test a new evaluation technique which Outley introduced. Gordon also introduced Outley to a familiar primary school in north Trinidad.

Professor Gary Briers is a livestock producer of Simmental cattle and also teaches courses in research methods and data analysis and interpretation. He noted



Dr Amy Harder, University of Florida, Corlyss Ottley, Jim Lindner and Gary Briers of Texas A & M University visiting the Northern Wholesale Market.

the tremendous opportunities which exist in Trinidad and Tobago to improve livestock production. Staff of the departments of Food Production and Life Sciences also hosted visitors in their areas of expertise and with similar positive outcomes.

There was much student involvement in the exchange. The agribusiness society of the Faculty of Science and Agriculture hosted their graduate counterparts from TAMU. They assisted in the conduct of a study to determine consumer perceptions of healthy foods in Trinidad and Tobago. In addition Society members were responsible for

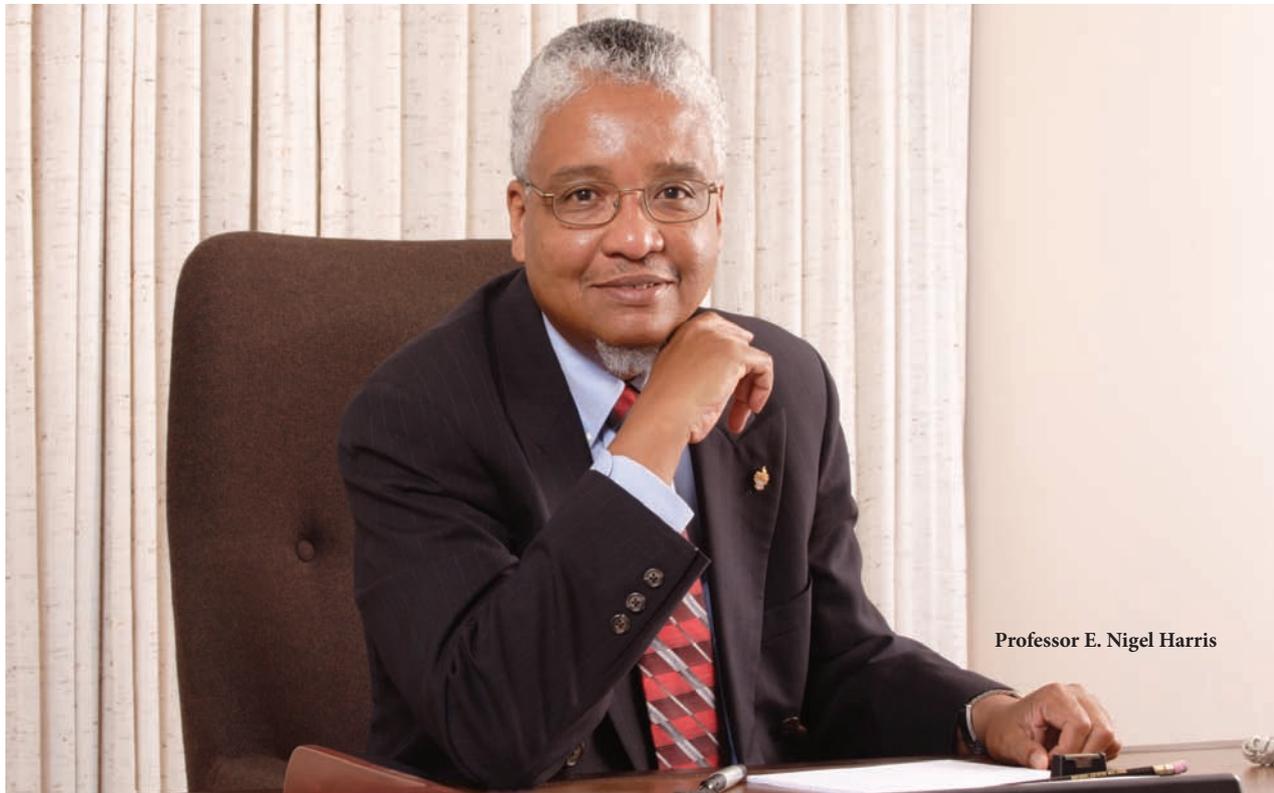
field trips around Trinidad and the entire visit to Tobago. The visitors toured the operations of the National Agricultural Marketing and Development Company (NAMDEVCO). Included in other tours were visits to the Cocoa Research Unit's prized germplasm collection, research laboratories on the Campus, the Caroni Swamp, the Pitch Lake, Asa Wright Nature Centre, Buccoo Reef, Little Tobago and several small farm operations. Society executive member, Stephan Moonsammy relished the experience and felt it was a useful opportunity for UWI students to interact with Faculty from another university.

Dr David Dolly of the Department of Agricultural Economics and Extension (DAEE) St. Augustine, led the initiative, which was supported by department head Dr Selby Nichols and staff of the DAEE.

AWARDS

VICE CHANCELLOR'S AWARD FOR EXCELLENCE 2011

SEVEN TO RECEIVE VC'S AWARD



Professor E. Nigel Harris

The UWI will recognize the outstanding contributions of seven members of its staff at its 2011 Vice Chancellor's Award for Excellence on October 5, 2011 at the St. Augustine Campus. Vice Chancellor, **Professor E. Nigel Harris** will present the prestigious awards to this year's recipients **Professors Kathleen Coard, Minerva Thame, Anthony Clayton** and **Mrs Eda Martin** of the Mona Campus; **Dr. Anna-May Edwards-Henry** and **Professor Vijay Narayansingh**, St. Augustine Campus, and **Professor Julie Meeks Gardner** of the Open Campus.

Professor of Pathology, Kathleen Coard will receive the award for Teaching while two awards each will be presented in the categories Research Accomplishments and Service to the University Community. Awardees in the Research category are Professor Minerva Thame, Head, Department of Child Health, Mona, and Professor Vijay Narayansingh of the Department of Surgery, St. Augustine, while Dr. Anna-May Henry, Director of the Instructional Development Unit at St. Augustine and Mrs. Eda Martin, Manager Customer Service, Office of Finance, Mona will be recognized for outstanding service to the University. Director of the Institute for Sustainable Development, Professor Anthony Clayton will be awarded in the category Public Service and Professor Julie Meeks-Gardner who heads the Open Campus' Caribbean Child Development Centre will receive the award for All-round Performance in two categories: Research Accomplishments and Public Service.

Jannel Philip, a PhD Student from the Faculty of Social Sciences was awarded the David Picou Young Researcher Prize at the 56th Annual Scientific Meeting of The Caribbean Health Research Council (CHRC).

Ms. Philip's paper, "Healthcare Students' Willingness to Interact with Patients Living with HIV/AIDS(PLHIV): Examining the Influence of Attributions, Prejudicial Evaluation, Perception of Occupational Risk and Emotions," emphasized the integral role of emotions in forming HIV related attitudes and behaviours of healthcare providers and recommended that emotions such as empathy be considered in efforts to enhance provider-patient interactions.

The CHRC, a health research organization, stages an annual scientific conference which brings together research and minds from the Bahamas to Belize. At this year's conference in Guyana in April, there were more than 100 presentations, including oral and poster presentations and feature lectures.

The Young Research prize is awarded annually to the researcher whose presentation at the CHRC Scientific meeting is the most outstanding, and who is not known to be an established scientist. According to the CHRC secretariat, the following is taken into account when adjudicating the presentation: Objective or hypothesis is sound; Paper is well written; The results and their interpretation are credible and statistical analyses of the data are valid; The conclusions are important and relevant to Caribbean health problems; The quality of the presentation is high, especially with regard to: delivery, clarity of slides, discussions are pertinent and supported by the results.

The awarding of this prize to social science research signals the acknowledgement and appreciation of the contribution of social science research to health and wellness. It highlights the need for combining the bio-medical and social approaches to address health challenges in the region.

YOUNG RESEARCHER PRIZE



Jannel Philip (left) receiving the David Picou Young Researcher Award from Professor David Picou.

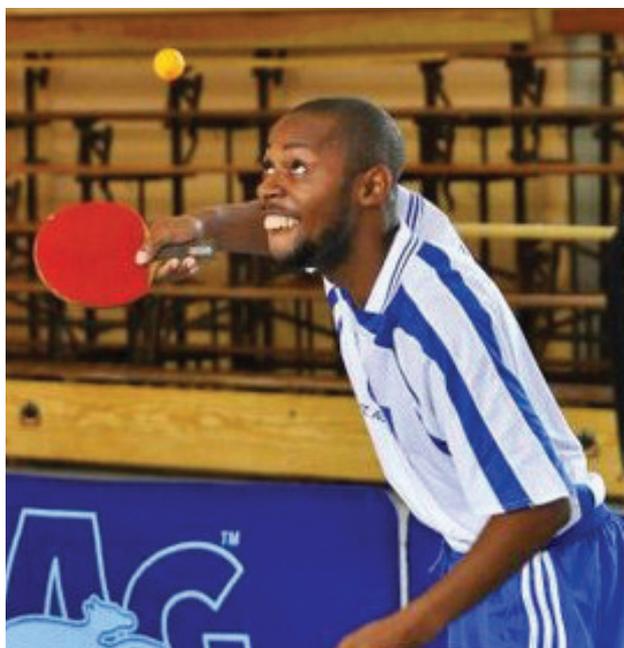
CAVE HILL BLACKBIRDS RULE THE ROOST

BY KAREN WICKHAM & JUSTIN LATAPY-GEORGE

The UWI Games has long been the major sporting event for the three campuses at St. Augustine, Cave Hill and Mona. It provides one of the few opportunities where students gather collectively as one university.

Each campus was represented by exactly 135 athletes. The Games are rotated biennially on each campus and involve the following 10 sporting disciplines: basketball, cricket, football, hockey, lawn tennis, netball, swimming, table tennis, track & field, and volleyball.

The motto for the 2011 Games was “4 Become 1: One UWI, One Caribbean, One Champion”. This is to emphasize that national loyalties are set aside at these



games and to reinforce that all athletes were there to represent their Campus.

Two outstanding athletes from each campus were featured in the UWI Games 2011 booklet. The St. Augustine team highlighted Mauricia Nicholson (track & field, football, netball, and hockey) and Shervon Penco (cricket). The Cave Hill team highlighted Monique James (netball) and Tyrell Forde (track & field). The Mona team chose Hansle Parchment (track & field) and Sherone Forrester (netball, football). These student-athletes were chosen for their dedication to competitive sport on their campus whilst excelling in academics.

Cave Hill dominated the Games, winning volleyball, basketball, tennis, hockey, cricket and netball – six of the ten disciplines. Mona won at football and as expected, they dominated the track & field with 373 points, with Cave Hill in second with



292 points and St. Augustine in third place with 280.5 points. The day was very exciting since at midday, St. Augustine was in second place and it was a fight to the finish.

After 28 years, St. Augustine captured the first place in swimming, and once again captured the table tennis trophy.

In adherence to the World Anti-Doping Agency standards, drug testing was a new feature of the UWI Games and athletes were required to undergo random drug testing under the supervision of a doping control officer. A month prior to the Games, the Sport Coordinators of the various campuses arranged Anti-Doping Education workshops for all athletes with their Doping Control Bodies.

At St. Augustine, Mr. Andre Collins, a Doping Control Officer and Mr. Tyrone Marcus, a board member on the Regional Anti-Doping Organization ensured the athletes were thoroughly educated on the protocol of the drug test and the different banned substances that may render a positive test.



■ CAMPUS NEWS

FOUR NEW PROFESSORS

Four senior academics at The UWI have been promoted to the rank of Professor. The announcement was made by University Registrar/Director of Administration, **Mr. C.W. Iton** following the recently concluded University meetings at The UWI Cave Hill Campus in Barbados, where the University's Finance and General Purposes Committee (F&GPC) endorsed the professorial appointments for **Dr. Frederick Ochieng'-Odhiambo, Dr. John Ayotunde Isola Bewaji, Dr. Gary Garcia** and **Mr. Surendra Arjoon**.

Professor Ochieng'-Odhiambo is now a Professor in Philosophy and Head of the Department of History and Philosophy at The UWI Cave Hill Campus. A native of Kenya, he received his PhD from the University of Nairobi, Kenya. Professor Ochieng'-Odhiambo's research interest is African Philosophy with a focus on Philosophic Sagacity a concept introduced into international philosophical circles in the 1970s.

Professor John Bewaji is a Professor in Philosophy in the Department of Language, Linguistics and Philosophy at The UWI Mona Campus and also serves as Coordinator of the Philosophy section. Professor Bewaji has a Doctor of Philosophy degree from the University of Ibadan and a Master of Arts from the University of Ife. His research interests include the Philosophical Analysis of Leadership in African and African Diaspora and its relation to Society and Development as well as the Economics of Religion

Gary Garcia is a Professor in Animal Science at The UWI St. Augustine Campus. Professor Garcia obtained both his BSc and PhD degrees at UWI and now lectures in the Faculty of Science and Agriculture, teaching courses in Lifestyle Products Technology and Tropical Animal Science. Professor Garcia's main areas of research include Production of Cattle and Wildlife Management.

Professor of Business Ethics and Quantitative Analysis, **Surendra Arjoon**, is a member of the Department of Management Studies at UWI St. Augustine. He is the holder of a degree in Mathematics from the University of Waterloo and a Master's from the University of Western Ontario. Professor Arjoon's research interest lies in areas of the application of natural law ethics to education, business and the economy with a specific focus on Corporate Governance, Corporate Social Responsibility and Reporting and the Nature and Purpose of Business.

These professorial appointments took effect on May 18th, 2011.

Peter Pan to fly in Queen's Hall

Must Come See Productions (MCS), the production arm of the UWI Arts Chorale, in collaboration with *Flying by Foy*, Nevada, USA, presents for the second weekend, its seventh full length musical, *Peter Pan*, at Queen's Hall from Friday 1 to Sunday 3 July, 2011. *Flying by Foy* is a world renowned group expert in theatrical flying. They will assist MCS in bringing theatrical flying to Trinidad and Tobago for the very first time.

Peter Pan, the children's story written by novelist J.M. Barrie and set to music by Broadway legend Jule Styne, and Mark Charlap, is touted as being the "one children's show that adults have no trouble enjoying". This production promises to be another spectacle as it features the combination of technical flying prowess, seasoned actors, an award-winning production team, live orchestra, and a host of talented singing and dancing children. *Peter Pan* features a cast and crew of Cacique winners, including: Jerrylee David in the title role of Peter Pan, Kearn Samuel as Captain Hook, and a host of talented singing and dancing children in the roles of the "Darling Children" and the "Lost Boys".

In this story, *Peter Pan* is the boy "who won't grow up." Accompanied by Tinker Bell, Peter Pan meets Wendy,

John and Michael in their nursery while searching for his shadow. He teaches them how to fly and journeys with them to the magical Neverland. There they join the Tribe of the Lost Boys, meet Indians and battle pirates, led by the notorious Captain Hook.

Louis McWilliams will direct and Cacique award winner, Jessel Murray, who recently directed the National Steel Symphony Orchestra at NAPA, will conduct the live orchestral accompaniment. Cacique award-winning costume designer Paulette Alfred-Guy-James, scenic designer Sarah Morris and Cacique award winning choreographer Adele Bynoe round out the production.

Reserved seating tickets are available only at Queen's Hall Box Office. Schools can call 746-7499 to make arrangements for tickets for the student matinees on Friday 24th and Thursday 30th June. There are also two discount nights, Wednesday 29th and Thursday 30th, where all seats are priced at only \$175.

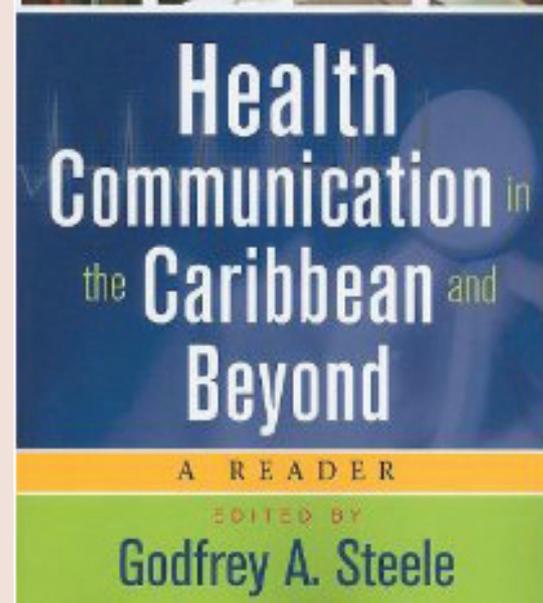
MCS has been awarded fourteen *Cacique* awards from the National Drama Association of Trinidad and Tobago (NDATT). Past successes include: *Fiddler on the Roof*, *Oliver!*, *The Sound of Music*, *Disney's Beauty and the Beast* and 2010's *AIDA*.

Health Communication in the Caribbean and Beyond: A Reader



Dr. Godfrey Steele, Deputy Dean and Lecturer in Communication Studies, at The University on June 21.

Health Communication in the Caribbean and Beyond: A Reader provides a comprehensive, well-researched and up-to-date discussion of the local and international health communication literature and provides a theoretical and practical framework for teaching health and/or medical communication skills. It reviews, explains and applies health communication concepts and principles, and provides contexts for their application in both the classroom and in the health professions.



Dr. Steele's book is available at the UWI Bookshop.

What can't an e-book do?

Texture, scent and weight... it's all about contact

BY SERAH ACHAM

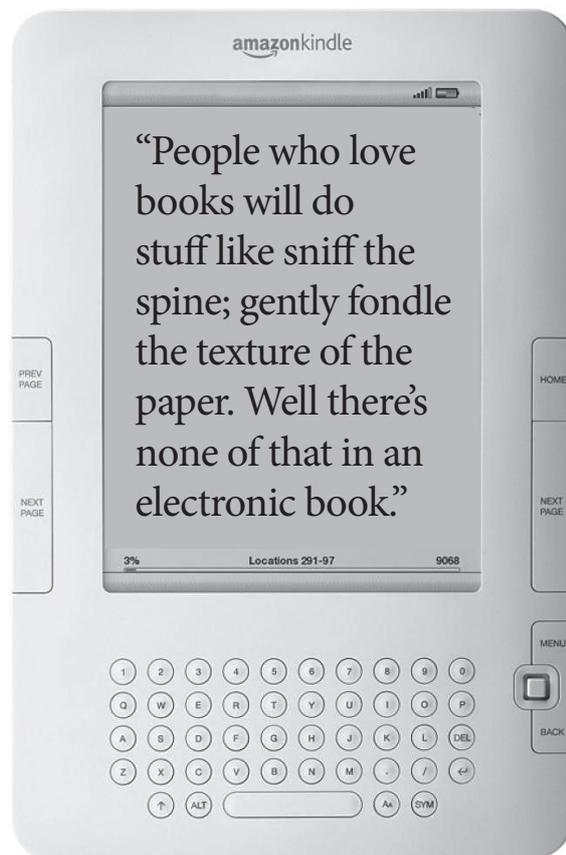
I don't think I'm an e-book person. I love books. I'm never without one. When I finish a book, I immediately go in search of a new one. As I spot the book I'm about to begin, I feel my senses ignite. The cover piques my curiosity – the colours, the images, the book's name and author written in any of a variety of fonts, sometimes embossed, sometimes not. The thickness of the book further intrigues me – what kind of adventures lie in all those pages? When I pick up the book, its weight feels good in my hands. I open it and the scent of the paper takes me back to past escapades. I flip through and the texture of each page beneath my fingers makes me tingle with excitement. Within these pages lies my next adventure. All that's left to do is sit back, crack it open and begin my journey.

Enter a new milestone for our digital age – the creation of the e-book. What is an e-book? Mark Lyndersay, writer, photographer and technophile cites what he calls a “very brief” definition by Wikipedia, “a book-length publication in digital form,” in his presentation at the first Bocas Lit Fest, Trinidad and Tobago's annual literary festival. The festival took place this year, from April 28th to May 1st, at the National Library/Old Fire Station compound, and included readings by celebrated authors, performance poetry, panel and roundtable discussions, workshops, book signings and launches and storytelling sessions for children.

Lyndersay joined fellow writers, Andre Bago, Elspeth Duncan and Georgia Popplewell, at a roundtable session titled *Digital reading: the future of literature*, which sought to discuss the influence of emerging technologies on the way we read and write. The biggest topic? The e-book.

Characterized by its convenience – you can walk around with over 300 full-length novels in one sleek e-reading device as opposed to just one bulky novel and you can buy an e-book anytime, anywhere with an internet connection and the push of a button, click of a mouse or tap on a touch screen, instead of waiting until you get to a book store – is the e-book a threat to the courtship between a reader and her book?

“Off course, there's no romance to the experience,” Lyndersay states. “People who love books will do stuff like



sniff the spine; gently fondle the texture of the paper. Well there's none of that in an electronic book.”

Additionally, it's not enough to simply be interested in reading the book. With an e-book, the e-reading device is just as vital – the reader must choose one that matches her taste. While some may prefer a tablet, such as Amazon's Kindle, Barnes & Noble's Nook, or the iPad, Lyndersay prefers reading on smaller devices, so his iPhone is ideal for him.

Another down side to e-books, he says, is that reading on a screen encourages “satisficing” ... when most people look at a screen, they skim through it, find the stuff they're interested in and move on and because we deal with screens like that all the time, it takes a long time for people to begin to read things off of a screen.”

Yet, an avid e-book reader himself (he boasts a past reading list of over 500 e-books, including audio books and comics, since 2002), his list of advantages of the new digital craze is great. For instance, “you can read in odd places,” he says. “I read in lines ... anywhere that I'm stuck where I have nothing to do.” Listening to an audio book while stuck in traffic is a calming experience, he says.

Another benefit is that “it's a way of bringing readers and authors together.” He explains that, since the process of creating an e-book is quite simple, authors can sell their digital publications at a minimal cost, or give them away for free.

E-books also present an advantage to publishers since there's no “back stock...no giant pile of paper that's been printed on that you have to wait for somebody to buy.” Therefore, he continues, a book can never go out of print.

Audience members also chime in with their own experiences with e-books. A teacher introduces the topic of how they can be used in the classroom. Since new entrants into our secondary schools are given their own laptop computers, she says, can't they be equipped with e-books? Will the publishers of text books consider publishing them in digital format? Another assures that, for those readers who like to curl up with a book and a cup of tea and settle in for a nice read, an e-reading device is “just as curlupable.”

So what's the verdict? Book or e-book?

“I'm not an e-book person,” says Duncan whose recently published novel, *Daisy Chain*, is currently available as an e-book.

Popplewell raises her own e-reader to the audience, clad in a case designed to resemble a book cover.

“The Kindle wins,” Lyndersay says, narrowing it down to his preferred e-reading device.

I'm a book person, but I'm willing to put down my paperback for a couple weeks and try out an e-book.



UWI CALENDAR of EVENTS

JUNE – OCTOBER 2011

CTLPA 14TH ANNUAL CONFERENCE

30 June-2 July, 2011
Learning Resource Centre
UWI St. Augustine

The Caribbean Tertiary Level Personnel Association (CTLPA) hosts its 14th Annual Conference, themed, “CTLPA: Bringing More to Student Learning and Professional Development in Higher Education.”

For further information, please contact Chandar Gupta Supersad at Chandar.supersad@sta.uwi.edu, or at 662-2002, ext 2360

SUSTAINABLE ENERGY PATH: EMERGING TRENDS IN SUSTAINABLE ENERGY FOR THE CARIBBEAN

5 July, 2011
Hyatt Regency Trinidad

Are you looking for ideas, technologies and know-how which will ultimately affect your bottom line? Would you like to learn about energy efficiency and how you can achieve it in all aspects of your business? The Arthur Lok Jack Graduate School of Business addresses these questions and more at its upcoming conference titled, “Sustainable Energy Path: Emerging Trends in Sustainable Energy for the Caribbean.”

For further information, please contact 645-6700 ext 299, or conferencing@gsb.tt.

DISCOVERY CAMP 2011

11-30 July and 8-27 August, 2011
Department of Creative and Festival Arts,
Agostini Street
UWI St. Augustine

Arts-in-Action, the Applied Creative Arts Outreach Unit of the Department of Creative and Festival Arts (DCFA), hosts its annual Discovery Camp for children between the ages of five and 13. In keeping with the UN declaration of 2011 as the year for people of African descent, this year the theme will be “SARAKA!” Campers will enjoy a camp experience inclusive of Mas-making, storytelling, drama, folk-dancing, drumming and music workshops and performance. Weekly visits to the pool and field trips are included in the camp package.

For further information, please contact Alicia Goddard, Camp Coordinator, at 663-0327 or 663-2002 ext. 2377, or via e-mail at email@artsinaction.org.

MANGO FESTIVAL

3 July, 2011
10am-6pm
University Field Station, Mt Hope

This celebration of the diversity of mango features a mango market, milking exhibitions, grafting demonstrations, a children’s corner, horse and pony rides, games, competitions and other entertainment. Under the theme of “A Celebration of Diversity and Utility of the Mango,” the Festival has grown significantly in its third year. Tickets are priced for adults at \$10, and for children over 12, \$5, while under 12s pay nothing.

*For further information, please call Gia Gaspard-Taylor at IICA, 640-9141. Facebook: <https://www.facebook.com/pages/Network-of-Rural-Women-Producers-Trinidad-Tobago>
Blog: <http://posatlsn.org/nrwp/>*



PETER PAN

24 June-3 July, 2011
Queen’s Hall, Port of Spain

Must Come See Productions in collaboration with Flying by Foy, Nevada, USA, presents its seventh full-length musical, Peter Pan. Flying by Foy is a world renowned expert in theatrical flying and will assist MCS in bringing theatrical flying to Trinidad and Tobago for the first time. Tickets are priced at \$200 (general seating) and \$250 (reserved) and are available at Queen’s Hall Box Office, Crosby’s North, First Priority Music Gulf City and the Department of Creative and Festival Arts, UWI. Reserved seating tickets are available only at Queen’s Hall Box Office. Schools can call 746-7499 to make arrangements for tickets for the student matinee on Thursday 30th June. There are also two discount nights, Wednesday 29th and Thursday 30th, where all seats are priced at only \$175.

For further information, please call 462-0358, 332-4450 or email info@mustcomeseesee.com or visit www.mustcomeseesee.com.

UWI TODAY WANTS TO HEAR FROM YOU

UWI TODAY welcomes submissions by staff and students for publication in the paper. Please send your suggestions, comments, or articles for consideration to uwitoday@sta.uwi.edu

30TH ANNUAL WEST INDIAN LITERATURE CONFERENCE

13-15 October, 2011

The UWI Department of Liberal Arts hosts the 30th Annual West Indian Literature Conference, themed “I Dream to Change the World”: Literature and Social Transformation. This conference will take place from the 13th-15th October, 2011.

For further information, please contact Dr. Geraldine Skeete at Geraldine.Skeete@sta.uwi.edu, or Dr. Giselle Rampaul at Giselle.Rampaul@sta.uwi.edu

SOCIAL INSECTS

1-4 August 2011
Lecture Theatre B, Frank Stockdale Building,
UWI St Augustine

The Bolivarian Section of the International Union for the Study of Social Insects (IUSI) holds its eighth research conference, which is a forum for the discussion of research results and organizational questions relating to social insects in Latin America and the Caribbean. The languages of the conference will be English, Portuguese and Spanish.

For further information, please contact Dr Christopher Starr at 662-2002 ext 3096. The conference’s site is at <https://sites.google.com/site/iussibolivariana2011home/>

DECADES OF RESEARCH

28 June, 2011
2.30pm-4.30pm
Daaga Auditorium, UWI St. Augustine

The Office of the Campus Principal at The UWI, St. Augustine Campus, hosts a publication and film launch, first the publication, “Decades of Research: UWI St. Augustine at 50” then the screening of the film, “An Oasis of Ideas, Leadership and Learning UWI St. Augustine at 50.” This film was directed by Professor Patricia Mohammed, Professor of Gender and Cultural Studies and Campus Co-ordinator of the School for Graduate Studies and Research at The UWI, and Francesca Hawkins, television and radio broadcaster. This event is open to the public.

To find out more, please contact Shelley-Ann Patrick-Harper, Campus Principal’s Office, at 662-2002 ext 2635, or Roxanne Maloney-Eddy, School for Graduate Studies & Research, at 662-2002 ext 4186.