Programme

International Congress on Tropical Agriculture
“Overcoming Challenges to Developing Sustainable Agri-food Systems in the Tropics”

Monday 01 December, 2008

8.00 – 8:30 am Registration

Subtheme 1 – Meeting the Global Challenges through Innovation

Session 1: International Perspectives
Chairperson – Florita Kentish, FAO Representative in Trinidad and Tobago, Guyana and Suriname, Food and Agricultural Organisation (FAO), Trinidad and Tobago

8:30 – 9:00 TAC_1: Keynote Address:
“Innovations in Plant Science & Technology for Sustainable Agri-food Systems in the Tropics”
Prof. Malcolm Elliott, Executive Director, Norman Borlaug Institute for Crop Improvement, United Kingdom

9:00 – 9:10 Discussion

9:10 – 9:40 TAC_2: Keynote Address:
“Biofuels – Fuelling a Food Crisis or Fuel of the Future”
Prof. Arthur B.J. Mol, Chair and Professor in Environmental Policy, Agricultural Research Centre, Wageningen University, the Netherlands

9:40 – 9:50 Discussion

9:50 – 10:05 COFFEE BREAK

10:05 – 10:35 TAC_3: Keynote Address:
“Overcoming the Effects of Climate Change: What Can Underutilised Crops Bring to the Table?”
Prof. Sayed Azam-Ali, Professor of Tropical Agronomy, University of Nottingham, Malaysia Campus

10:35 – 10:45 Discussion
10:45 – 11:15  TAC_4: **Keynote Address:**
“New Frontier Science - Nanotechnology / Implications for the Developing World”
Dr. Thembela Hillie, Principal Research Scientist, National Centre for Nano-Structured Materials, Council for Scientific and Industrial Research, Pretoria, South Africa

11:15 – 11:25  Discussion

12 noon – 13:00  **LUNCH**

**Session 2: Caribbean Response to Global Challenges**
Chairperson: Dr. H. Arlington D. Chesney, Executive Director, Caribbean Agricultural Research and Development Institute (CARDI), Trinidad and Tobago

13:00 – 13:20  TAC_5: **Invited Paper**
“Globalization and Internationalization of Agri-Food Chains and Markets”
Winston Rudder, Cropper Foundation, Trinidad and Tobago

“Strategies for Sustaining Food Security in The Caribbean”
Dr. Deep Ford, Food and Agricultural Organisation, Rome, Italy

13:40 – 13:50  Discussion

13:50 – 14:10  TAC_7: **Invited Paper**
“Globalisation and Governance: Some Selected Issues”
Dr. Ridwan Ali, University of Florida, USA.

14:10 – 14:30  TAC_8: **Invited Paper**
“Overcoming Challenges Facing the Cocoa Industry – An Industry Perspective”
Tony Lass, Cocoa Research Association Ltd., United Kingdom

14:30 – 14:50  TAC_9: **Invited Paper**
“Innovations in Combating the Effect of Climate Change in the Tropics.”
Dr. Carlisle Pemberton and Ms. Hazel Patterson, The University of the West Indies, Trinidad and Tobago

14:50 – 15:00  Discussion

15:00 – 15:15  **COFFEE BREAK**

**Session 3: Panel Discussion**
“Overcoming Challenges to Developing Sustainable Tropical Agri-Food Systems”
Moderator – Dr. Chelston Brathwaite, Director General, Inter-American Institute for Co-operation on Agriculture (IICA), Costa Rica

15:15 – 16:45 TAC_10: Panel Discussion:

Lead Discussants:
- Dr. Chelston Braithwaite (Moderator)
- Professor Malcolm Elliot
- Professor Arthur Mol
- Professor Sayed Azam-Ali
- Dr. Thembela Hillie
- Mr Winston Rudder
- Dr. Hesdie Grauwde
Tuesday 02 December, 2008

8.00 – 8:30 am    Registration

Subtheme 2 – Innovations in Production and Post-production and Science and Technology

Session 4: Innovations in Agricultural Production
Chairperson – Ms. Judith Francis, Programme Leader, Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA), the Netherlands

8:30 – 9:00   TAC_11: Keynote Address:
“Goat Genetic Resources in Developing Countries: Strategies for Improved Use, Increased Productivity and Socio-Economic Relevance”
Dr. C. Devendra, Consultant and Retired Senior Program Officer (Animal Production Systems - Asia Programme), International Development Research Centre (IDRC)

9:00– 9:10   Discussion

9:10 – 9:40   TAC_12: Keynote Address:
“Engineering Cassava to Feed the Hungry and Boost Local Production”
Dr. Claude Fauquet, Director, International Laboratory for Tropical Agricultural Biotechnology (ILTAB), Donald Danforth Plant Science Centre, University of Washington, USA

9:40 – 9:50   Discussion

9:50 – 10:05  COFFEE BREAK

10:05 – 10:25  TAC_13: Invited paper
“The Caribbean Regional Fisheries Mechanism in Search of a Common Fisheries Policy and Regime for CARICOM”
Hugh Saul, Caribbean Regional Fisheries Mechanism (CRFM), Belize

10:25 – 10:45  TAC_14: Invited paper:
“Innovations in Land Capability and Associated Soil Management within the Caribbean”
Professor Emeritus Nazeer Ahamad & Gaius Eudoxie, The University of the West Indies, Trinidad and Tobago

10:45 – 10:55  Discussion
27/11/2008

10:55 – 11:15  TAC_15: Invited paper:
“Recent Progress in Breeding for Specific Traits in Cocoa”

11:15 – 11:35  TAC_16: Invited paper:
“Innovations in Crop Biotechnology and its Impact in the Caribbean”
Prof. Pathmanathan Umaharan, The University of the West Indies, Trinidad and Tobago

11:35 – 11:55  TAC_17: Invited paper:
“The Impact of Agricultural Science and Technology on Poverty Reduction”
Dr. Maria Cristina Plencovich, Universidad de Buenos Aires, Argentina

11:55 – 12:05  Discussion

12:05 – 13:30  LUNCH

Session 5: Innovations in Post Production Technologies and Marketing
Chairperson – Mr. Harry Seeram, Chairman, Trinidad and Tobago Agribusiness Association and Marketing Manager, Caribbean Chemicals Ltd., Trinidad and Tobago

13:30 – 13:50  TAC_18: Invited paper:
“Innovations in Post-Harvest Biology and Technology in the Tropics”
Dr. Majeed Mohammed, Prof. L.A. Wilson, and Dr. Wickham, The University of the West Indies, Trinidad and Tobago

13:50 – 14:10  TAC_19: Invited paper:
“Cold Preservation Technologies for Coconut Water”
Dr. Rosa S. Rolle, Food and Agriculture Organisation of the United Nations (FAO), Thailand

14:10 –14:20  Discussion

14:20 – 14:40  TAC_20: Invited paper:
“Overcoming Challenges to Marketing and Distribution in the Caribbean”
Vassel Stewart and Aaron Parke, Trinidad and Tobago Agribusiness Association, Trinidad and Tobago

14:40 – 15:00  TAC_21: Invited paper
“A Generic Country Agricultural Implementation Plan with Proposals for Quick Response Commercial Enterprise Funding”
Basil Springer, Caribbean Business Enterprise Trust Inc. (CBET), Barbados

15:00 –15:20 TAC_22: Invited paper:
“CARICOM E-Marketplace for Agricultural Commodities and Services.”
Dr. Alexander Nikov, The University of the West Indies, St. Augustine.

15:20 –15:30 Discussion

15:30–15:45 COFFEE BREAK

Session 6: Contributed papers

Session 6a: Crop Production and Post-production Technology
Chairperson – Prof. Richard Brathwaite, Senior Lecturer, The University of the West Indies, St. Augustine

Venue: Regency I & II

15:45 – 16:00 TAC_23: “An Evaluation of the Fertility Status of Guyana Soils from Villages 52-74 in Region 6”
Gomathinayagam, Subramnian and Chandrate Thakoorden, University of Guyana, Guyana

16:00 – 16:15 TAC_24: “Greenhouse Technology is Once Again Washing the Caribbean. Can We Ride the Wave This Time Around?”
St. Martin, Chaney C.G.1, Wendy-Ann Isaac1, Wayne Ganpat2, Richard A.I. Brathwaite1, Simon Bedasie2, 1The University of the West Indies, Trinidad and Tobago and 2Ministry of Agriculture, Land and Marine Resources, Trinidad and Tobago

16:15 – 16:30 TAC_25: “Dwarfing Tall Golden Apple (Spondias cytherea Sonn.)”
Andall, R.P., Caribbean Agricultural Research and Development Institute (CARDI), Grenada

16:30 – 16:45 TAC_26: “Sustainable Exploitation of Forests in Trinidad Based on Population Genetic Diversity and Structure Gleaned from Five Tropical Species”
Austin, N.A., P. Umaharan, M. Oatham and B.N. Cockburn, The University of the West Indies, Trinidad and Tobago
16:45–17:00  TAC_27: “Conservation and Utilisation of the Global Cacao Genetic Resource: The Value of the Trinidad Collections”
Cryer, Nicholas¹, Penny Tricker¹, George Gibbings¹, Andrew Daymon¹, Jan Engels ², Paul Hadley¹, Mike Wilkinson³, David Butler⁴. ¹The University of Reading, United Kingdom, ²Biodiversity International, Italy; ³Aberystwyth University, United Kingdom and ⁴Cocoa Research Unit, The University of the West Indies, Trinidad and Tobago

17:00 – 17:15  TAC_28: “Candidate Gene Primer Screening in Theobroma cacao L.”
Motilal, Lambert A.¹, Pathmanathan Umaharan¹, Dapeng Zhang², Claudia Bellato², Lyndel Meinhardt² and Sue Mischke², ¹The University of the West Indies, Trinidad and Tobago and ²USDA-ARS, PSI, SPCL, USA

17:15–17:30  TAC_29: “Breadfruit Germplasm Collection and Evaluation at the University of the West Indies”
Roberts-Nkrumah, Laura, The University of the West Indies, Trinidad and Tobago

Schröder, Eduardo C., University of Puerto Rico, Puerto Rico

17:45 – 18:00  TAC_31: “A Field-Based Approach to Screening for Nitrogen Fixation Ability in Dwarf Vegetable Pigeon Pea, Cajanus cajan (L.) Millsp.”
Joseph-Alexander, Albertha, Pathmanathan Umaharan, Adesh Ramsubhag, Gregory Gouveia, The University of the West Indies, Trinidad and Tobago

Session 6b: International Trade Relations & Agro-tourism; Food Security and Food Safety; Livestock Production Technology
Chairperson – Dr. Lynda Wickham, Senior Lecturer, The University of the West Indies, St. Augustine

Venue: Topaz

15:45 – 16:00  TAC_32: “CARICOM Relations to an Evolving North American Union – Will CARICOM be Excluded?”
Appleton, Peter, Tillman School of Business, USA

16:00–16:15  TAC_33: “Antigua and Barbuda Agriculture, Tourism and Agripreneurship Linkages–Promoting Sustainable Agri-Food Systems through Agrotourism”
Joseph, Jeannelle¹, Doolarie Singh-Knights¹, Marlon Knights² and Dennis Smith³ ¹The University of the West Indies, Trinidad and Tobago, ²University of Trinidad and Tobago, Trinidad and Tobago and ³West Virginia University, USA

Lopez, F.B. and L.E. Chinnery, The University of the West Indies, Barbados

16:30 – 16:45  TAC_35:  “Meeting the Challenges of Food Safety Standards for Cocoa Beans in Trinidad and Tobago”
Chang Yen, Ivan,¹ Isaac Bekele,¹ Lawrence Wilson,¹ Gideon Ramtahal,¹ Alisha Hamid,¹ Jillian Roberts,¹ Frances Bekele,¹ Balmattee Sukha². ¹The University of the West Indies, Trinidad and Tobago and ²Ministry of Agriculture, Land and Marine Resources, Trinidad and Tobago

16:45–17:00  TAC_36:  “Agriculture and Food Security in the Eastern Caribbean Currency Union”
Labadie, Beverley Peltier, Eastern Caribbean Central Bank, St. Kitts

17:00 – 17:15  TAC_37:  “Food Security – An Analysis of Estimated Marketing Margins of Selected Agricultural Commodities in Trinidad and Tobago”
Patterson, Asisha¹, Doolarie, Singh-Knights¹, Marlon Knights² and Donald Palmer¹. ¹The University of the West Indies, Trinidad and Tobago and ²University of Trinidad and Tobago, Trinidad and Tobago

17:15–17:30  TAC_38:  “Food Security and the Information Paradigm Shift”
Renwick, Shamin, Multimedia and Information Technology Unit, The University of the West Indies, Trinidad and Tobago

17:30 – 17:45  TAC_39:  “Establishing a Sustainable Regional Small Ruminants Industry: Beating the Odds”
Gibson, N, A., Fearon and A. Hosein, Caribbean Agricultural Research and Development Institute (CARDI), Trinidad and Tobago and Jamaica

17:45 – 18:00  TAC_40:  “Recovering from the Trauma of Liberalization: The Jamaican Dairy Industry as Case Study”
Jennings, P.G. Jamaica Dairy Development Board, Jamaica
Wednesday 03 December, 2008

8.00 – 8:30 am Registration

Subtheme 3 – Innovations in Agricultural Research, Education, Training and Outreach

Session 7: Education, Training and Outreach
Chairperson – Dr. Joseph Seepersad, Senior Lecturer, The University of the West Indies, Trinidad and Tobago

8:30 – 8:50 TAC_41: Invited Paper:
“Caribbean Extension and Outreach: Not a Question of if, but how?”
Dr. James, R. Lindner, Texas A&M University, Texas, USA

8:50 – 9:10 TAC_42: Invited Paper:
Dr. Keith Archibald, Former Chairman, CARDI Board of Directors, St. Kitts

9:10 – 9:20 Discussion

9:20 – 9:40 TAC_43: Invited Paper:
“The Role of GIS, GPS and Communication Technology in Extension”
Dr. Edwin Joseph, Grand Valley State University, Michigan, USA

9:40 – 10:00 TAC_44: Invited Paper:
“Farmers as Researchers: A Complimentary Participatory Methodology for Sustaining Research and Development in the Region”
Dr. Wayne G Ganpat¹, Wendy-Ann P Isaac² and Richard A I Brathwaite², ¹Ministry of Agriculture, Land and Marine Resources, Trinidad and Tobago and ²The University of the west Indies, Trinidad and Tobago

10:00 – 10:20 TAC_45: Invited Paper:
“Caroni Initiative for Food Production”
Christine Sahadeo, The University of the West Indies, Trinidad and Tobago

10:20 – 10:30 Discussion/Coffee break
Session 8: Contributed papers

Session 8a: Crop Production and Post-production Technology
Chairperson – Dr. Gene Pollard, Lecturer, Department of Food Production, The University of the West Indies, St. Augustine

Venue: Regency I & II

10:30–10:45 TAC_46: “Genetic Diversity and Genetic Structure of Capsicum chinense in the Caribbean and its Relationship to Populations in Central and South America”
Moses, M. and P. Umaharan, The University of the West Indies, Trinidad and Tobago

10:45 – 11:00 TAC_47: “Effect of Benzylaminopurine on Vasculature of Pigeonpea (Cajanus cajan) and the Possible Consequence on Potential Yield.”
Narine, D. and G. F. Barclay, The University of the West Indies, Trinidad and Tobago

Patil, N.G. and P.V. Bhosale, Mahatma Phule Krishi Vidyapeeth Agriculture College, India

Robin, Gregory C., Mervin St. Luce and Dorian Etienne, Caribbean Agricultural Research and Development Institute (CARDI), Dominica

11:30 – 11:45 TAC_50: “Isolation of Polygalacturonase cDNA from Cajanus cajan (pigeonpea) Leaf Abscission Junctions”
Rouse-Miller, Judy1, 2Zinnia Gonzalez-Carranza, 3Katherine Elliot, Julian E. Duncan1, Grace Sirju-Charran1, Brian N. Cockburn1 and 3Jeremy A. Roberts. 1The University of the West Indies, Trinidad and Tobago, 2University of Nottingham, UK and 3Biotechnology and Biological Sciences Council (BBSRC), UK

11:45 – 12:00 TAC_51: “The Quest for Increasing Tuber Yield in Sweet Potato (Ipomoea batatas (L) Lam.): Retrospect and Prospect.”
Sirju-Charran, Grace, Lynda D. Wickham and Lawrence A. Wilson, The University of the West Indies, Trinidad and Tobago
Session 8b: Livestock Production Technology
Chairperson – Dr. Reynold Stone, Senior Lecturer, The University of the West Indies, Trinidad and Tobago

Venue: Jade

TAC_52: “A Market Assessment of the Demand of Goat’s Milk in Trinidad”
Palmer, Donald¹, Doolarie, Singh-Knights¹, and Marlon Knights². ¹The University of the West Indies, Trinidad and Tobago and ²University of Trinidad and Tobago, Trinidad and Tobago

Seepersad, Govind¹ and John Toussaint². ¹The University of the West Indies, Trinidad and Tobago and ²Food and Agriculture Organisation of the United Nations (FAO), Barbados

TAC_54: The Performance of Improved Pekin And Mule Duck Strains Reared Under Intensive Conditions in a Humid Tropical Environment Trinidad
Lallo, Cicero H. O. and Shivanna Ramraj, The University of the West Indies, Trinidad and Tobago

O’Brien, Colleen, M.S Tufts University, The Bahamas

TAC_56: “History of Sugarcane Derived Feeds (SDFs)”
Garcia, Gary Wayne¹, Floyd Neckles,² Harry Archemede³ and Alain Xande³. ¹The University of the West Indies, Trinidad and Tobago , ²Sugarcane Feeds Centre, Trinidad and Tobago and ³INRA, Guadeloupe

Singh, Michele¹, Harry Ramlal² and Cicero H. O. Lallo¹. ¹The University of the West Indies, Trinidad and Tobago and ²Sugarcane Feeds Centre, Trinidad and Tobago

LUNCH
Session 9: Contributed papers

Session 9a: Crop Production and Post-production Technology
Chairperson – Dr. Jann Joseph, Dean, Grand Valley University, USA

Venue: Regency I & II

Umaharan, P., Elibox, W., Avila–Rostant, O. and Lennon, A.M., The University of the West Indies, Trinidad and Tobago

13:45 – 14:00 TAC_59: “Pathogenicity of Four Entomopathogenic Fungi to Aleurocanthus woglumi Ashby (Homoptera: Aleyrodidae”
Gangaram, Nipaul and Ayub Khan, The University of the West Indies, Trinidad and Tobago

14:00 – 14:15 TAC_60: “Phylotyping and Rep-PCR Fingerprinting of Ralstonia Solanacearum Isolates collected from Trinidad”
Lawrence, Dwayne1, Adesh Ramsubhag1, Pathmanathan Umaharan1 and Emmanuel Wicker2, 1The University of the West Indies, Trinidad and Tobago and 2CIRAD, Reunion Island

14:15 – 14:30 TAC_61: “Evaluation and determination of the genetic basis of copper resistance in Xanthomonas campestris pv. campestris in Trinidad”
Lugo, Alshia1, Jeff Jones2, Pathmanathan Umaharan1 and Adesh Ramsubhag1. 1The University of the West Indies, Trinidad and Tobago and 2 University of Florida, USA

14:30 – 14:45 TAC_62: “Effect on Temperature on Radial Growth and Pathogenicity of Metarhizium anisopliae And Verticillium lecanii to Toxoptera citricida”
Mohammed, Ian and Ayub Khan, The University of the West Indies, Trinidad and Tobago

14:45 – 15:00 TAC_63: “Determination of Non- Target Effects of Exotic Natural Enemies for the Control of the Hibiscus Mealybug, Maconellicoccus Hirsutus (Green) in Trinidad”
Ram, Petal1, Ayub Khan2 and Lilory McComie1, 1 Ministry of Agriculture, Land and Marine Resources, Trinidad and Tobago and 2The University of the West Indies, Trinidad and Tobago

15:00 – 15:15 TAC_64: “Host Specificity of Verticillium dahliae Isolates From Pumpkin”
Rampersad, Sephra, The University of the west Indies, Trinidad and Tobago

15:15 – 15:30 TAC_65: “Yield and fruit quality of Lycopersicon esculentum Mill. as affected by Potato Yellow Mosaic Trinidad virus infection”  
Walker, Jermaine, Pathmanathan Umaharan, Majeed Mohammed and Richard Brathwaite, The University of the West Indies, Trinidad and Tobago

15:30 – 16:00 COFFEE BREAK

Session 9b: Research Institutions, Development and Intellectual Property; Farmer Training
Chairperson – Dr. Rosa Rolle, Agro-Industries Officer, Food and Agriculture Organisation, Thailand

Venue: Jade

13:30 – 13:45 TAC_66: “Understanding the Challenges to Developing Sustainable Agri-Food Systems Using a Common Property Based Experimental Model”  
Jaggasar-Clement, Patricia, The University of the West Indies, Trinidad and Tobago

13:45 – 14:00 TAC_67: “New Initiatives in Agriculture at the University of the West Indies, Mona”  
Kahwa, Ishenkumba A., The University of the West Indies, Jamaica

14:00 – 14:15 TAC_68: “An Analysis of the Biotechnology Training and Development Opportunities Present in Jamaica that are Relevant to Tropical Agriculture Especially for the Caribbean”  
Mitchell, Sylvia and M.H. Ahmad, The University of the West Indies, Jamaica

14:15 – 14:30 TAC_69: “Protecting Intellectual Property Rights in the Agricultural Sector of Trinidad and Tobago”  
Renwick, Shamin, The University of the West Indies, Trinidad and Tobago

14:30-14:45 TAC_70: “Schooling for Success: A Call to Leadership”  
Brathwaite, Candace, Trinidad and Tobago

14:45 – 15:00 TAC_71: “Reviewing the Farmer Field School Experience in the Caribbean with Specific Reference to Trinidad and Tobago”  
Dolly, David, The University of the West Indies, Trinidad and Tobago
15:00 – 15:15  **TAC_72:** “Towards a Model for Promoting Youth in Agriculture in the Caribbean”
Ganpat, Wayne¹ and Nicole Webster². ¹Ministry of Agriculture, Land and Marine Resources, Trinidad and Tobago and ²Pennsylvania State University, USA

15:15 – 15:30  **TAC_73:** “A swarm-optimisation-based approach for usability measurement and design of agriculture eCommerce systems”
Alexander Nikov, Pathmanathan Umaharan, Koffka Khan, The University of the West Indies, Trinidad and Tobago

15:30 – 15:45 **COFFEE BREAK**

**Session 10: Contributed papers**

**Session 10a: Crop Production and Post-production Technology**
Chairpersons – Mr. Bruce Lauckner, Head, Strategic Alliances, Caribbean Agricultural Research and Development Institute (CARDI), Trinidad and Tobago

Venue: Regency I & II

16:00 – 16:15  **TAC_74:** “Quality Changes and Capsaicin Stability in Three Hot Pepper Cultivars During Storage at Chilling and Non-Chilling Temperatures”
Mohammed, M.¹, G. Hong² and M. Cantwell². ¹The University of the West Indies, Trinidad and Tobago and ²University of California, USA

16:15–16:30  **TAC_75:** “The Challenges of Increasing Production and Marketing of Sweet Potato in the Caribbean Region”
Titus, Pathleen and Janet Lawrence, Caribbean Agricultural Research and Development Institute (CARDI) St. Vincent and the Grenadines and Jamaica

16:30 – 16:45  **TAC_76:** “Effects of Pectolase Enzyme on Physicochemical and Sensory Quality/Acceptance of Yellow Plum (Spondias pुpurea var. lutea) Wine”
Badrie, Neela and Rishi Singh. The University of the West Indies, Trinidad and Tobago

18:30 – 21:30 **BANQUET**