





# International Conference on Integrated Disease Management in Tropical Vegetables

# The University of the West Indies

St. Augustine, Trinidad

June 16<sup>th</sup> and 17<sup>th</sup> 2016

### FIRST CALL

#### **CALL FOR ABSTRACTS**

The Department of Life Sciences, Faculty of Science and Technology at The University of the West Indies will be hosting the International Conference on Integrated Disease Management in Tropical Vegetables. The conference will be focusing on the research being carried out on the disease control of tropical vegetables with special emphasis on sustainable and integrated disease management. Vegetable production is primarily characterized by a high prevalence of crop diseases and pest damage. There are also wider environmental and human health repercussions due to over dependence on chemical fungicides. The low yields due to losses from pests and diseases also affect regional and global food security. Integrated disease management systems need to be emphasized for maintaining sustainable crop production and productivity.

The Conference sessions have three thematic areas:

- 1. Etiology and Epidemiology of Diseases
- 2. Disease Diagnosis
- 3. Integrated Disease Management

# Provisional Conference Program Schedule Day 1

Inauguration

Session 1: Etiology and Epidemiology of Diseases Session 2: Pathogen variability and Plant Disease

Diagnosis

#### Day 2

Session 3: Integrated Disease Management –I Session 3: Integrated Disease Management –II



# Abstracts for the conference are invited for oral presentations and poster sessions. (details attached).





Apart from the sessions a field trip will be arranged. Sightseeing trips will also be organized to visit the popular attractions in Trinidad or for a 2 day trip to the world famous island of Tobago at an extra cost. (June 18<sup>th</sup> and 19<sup>th</sup>).

The University of the West Indies is a regional University catering the academic and research needs of the entire Caribbean region. It has campuses in Trinidad, Barbados and Jamaica and has a current enrolment of over 39, 000 students. The University's Mission is to advance education and create knowledge through excellence in teaching, research, innovation, public service, intellectual leadership and outreach in order to support the inclusive (social, economic, political, cultural, environmental) development of the Caribbean region and beyond.

The University is guided by its Core Values: Integrity, Intellectual freedom, Excellence, Civic responsibility, Accessibility, Diversity and Equity.

Trinidad and Tobago is known for its biodiversity and the world-famous beaches. Visitors can hike through rain forests, visit beaches and waterfalls, explore caves and go turtle-watching. There are also more than 700 species of birds, mammals, reptiles and amphibian as well as over 600 kinds of butterfly. The country is excellent for visiting all round the year.

# Registration Fees\*

Students: US\$50.00

Faculty / Post Doctoral Researchers / Scientists: US\$150.00

Companies & Institutions: US\$500.00 Non-Profit Organizations: US\$300.00 Caribbean participants: 300 TT\$ Caribbean students: 100 TT\$

\*includes abstract fees (up to two abstracts)
Please contact the organizers for bank details.



## Accommodation

# UWI Inn (1 minute from campus): US\$110 - US\$150 / night (+tax & VAT) https://sta.uwi.edu/iir/documents/TheUniversityInnFact

Sheet.pdf

# Pax Guest House (10 minutes from campus):

US\$48 –US\$102 / night (breakfast included) http://www.paxguesthouse.com/

# Canada Hall (on campus):

US\$50 / night (US\$55-US\$60 breakfast included)

# Airlines flying to Port of Spain, Trinidad and Tobago

http://www.gotrinidadandtobago.com/travel-information/flight-info http://www.piarcoairport.com

# **Organizing Committee**

## Professor Jayaraj Jayaraman

Professor of Biotechnology and Plant Microbiology Project Leader, ACP-EU project

## Dr. Adesh Ramsubhag

Head, Department of Life Sciences Co-PI, ACP-EU project

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#### ABSTRACT AND POSTER GUIDELINES

Abstracts should be no longer than 300 words. Please follow the format below

### SAMPLE ABSTRACT

# Pathogenic, morphological and molecular characterization of *Phytophthora* spp., causal agent of cacao black pod disease in Puerto Rico

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Cacao (Theobroma cacao L.) production is concentrated in West Africa, and Central and South America. In recent years its production has increased significantly exceeding an annual growth of 2.2% according to FAO in 2010. The final report of the "Global Industry Analysts, Inc." stated that cacao production will reach 4.8 million tons by 2015. Worldwide this crop is affected by diseases that drastically reduce its production. Among them, cacao black pod caused by Phytophthora palmivora, with losses that exceed \$400 million annually. The aim of this study was to characterize three (Phytopththora spp. isolates on the basis of morphology, DNA analysis and pathogenicity. Isolates were obtained from symptomatic cacao pods of clones HY 27418, UF 122 and SIAL 56, collected at Tropical Agriculture Research Station (TARS) germplasm collection located in Mayaguez, Puerto Rico. Oomycetes isolates were cultivated on acidic PDA, PARPH and V8 agar. Isolates were identified by light microscopy using taxonomic keys. Criteria such as sporangia shape, size and prominence of papillae, as well as chlamydospore production were examined. PCR amplification of cytochrome c oxidase gen (COXI) was used for molecular characterization of isolates. Pathogenicity tests were conducted on healthy cacao fruits, inoculated with one ml of sporangia (1  $\times$  104 sporangia/ml). (P. palmivora was identified using morphological characters. To confirm our findings COXI gen was amplified and sequenced from an isolate obtained from clone SIAL56. DNA sequence has 99% homology with (P. palmivora GenBank accession number: AB688308. Four days after inoculation, isolate obtained from SIAL 56 recorded the highest disease severity per fruit (50.93%) compared to the other two isolates obtained from clones UF 122 (30.82%) and HY 27418 (29.76%).

#### **POSTER**

Posters should be 36" x 24"each, landscape.

Each poster should contain a Heading, Abstract, Introduction, Methodology, Results and Discussion with explanatory information and relevant illustrations and /or photographic images. Contact information should also be included.