







UWI/AACCI Workshop

on

"Detection Methods for GMOs in the Food Chain"

Institute of Critical Thinking (ICT), The University of the West Indies, St. Augustine, Trinidad and Tobago

10-13 February 2015

DAY 1: TUESDAY 10 FEBRUARY 2015

SESSION 1 OPENING SESSION

- Chair: Dr. Michelle John, Regional Project Manager, Regional Biosafety Project
- 9:00 9:10 Welcome remarks

Professor Pathmanathan Umaharan, Head Cocoa Research Centre/Technical Lead, Regional Biosafety Project

- 9:10 9:20 Welcome remarks
 - Dr. Anne Bridges, Director of Technical Resources, AACC International (formerly American Association of Cereal Chemists, AACCI)
 - Dr. Raymond Shillito, Bayer Research and Development Fellow
- 9:20 9:30 Introduction of facilitators and participants

SESSION 2 PRESENT STATUS, FUTURE OUTLOOKS

9:30 – 10:15 Cartagena Biosafety Framework (Cartagena Protocol on Biosafety - general overview - application process, risk assessment, decision making, decision implementation, biosafety clearing house)

Dr. Raymond Shillito, Bayer Research and Development Fellow

- 10:15 10:45 COFFEE BREAK
- 10:45 11:30 Global Status of GMO Crops Approved for Planting and Food and Feed

Dr. Clara Alarcon, Research Director, Analytical and Genomics Technologies Department, Pioneer Hi Bred 11:30 – 12:00 Cartagena Biosafety Protocol in the Caribbean (seed and grain trade, overview of policy related to the biosafety and regulatory framework, regulatory implementation in Caribbean)

Professor Pathmanathan Umaharan, Head Cocoa Research Centre/Technical Lead, Regional Biosafety Project

12:00 – 1:00 LUNCH

SESSION 3 SUPPLY CHAIN – TESTING OPTIONS AND MANAGEMENT

- 1:00 1:30Supply Chain, Seed, Grain, Feed and Food what we are testing?Dr. Anne Bridges, Director of Technical Resources, AACCI
- 1:30 2:00 It All Starts With Sampling

Dr. Raymond Shillito, Bayer Research and Development Fellow

- 2:00 2:30 Sampling in the Field Mr. Doug Miller, Chief Executive Officer, Illinois Crop Improvement Association
- 2:30 3:00 COFFEE BREAK AND GROUP PHOTO

SESSION 4 MOLECULAR DETECTION METHODS

- 3:00 3:30 Developing GMO Detection MethodsDr. Raymond Shillito, Bayer Research and Development Fellow
- 3:30 4:00 Protein-based Detection Methods

Dr. Clara Alarcon, Research Director, Analytical and Genomics Technologies Department, Pioneer Hi Bred

- 4:00 4:30DNA-based Detection Methods Qualitative/Quantitative PCRMr. Pearce Smith, Laboratory Manager, Eurofins GeneScan
- 4:30 4:45 Review of day Dr. Anne Bridges, Director of Technical Resources, AACCI and Dr. Raymond Shillito, Bayer Research and Development Fellow

END DAY 1

DAY 2: WEDNESDAY 11 FEBRUARY 2015

SESSION 5	SAMPLING
8:30 - 9:15	Design of Sampling Plans (including seed calculation)
	Dr. Raymond Shillito, Bayer Research and Development Fellow
SESSON 6	CRITERIA FOR DETECTION METHODS
9:15 – 9:45	International Standards (ISO, etc.)
	Mr. Doug Miller, Chief Executive Officer, Illinois Crop Improvement Association
9:45 - 10:15	Principles and Methods of Quantitation of GMO Content Using Real-time Quantitative PCR
	Dr. Raymond Shillito, Bayer Research and Development Fellow
10:15 - 10:45	COFFEE BREAK
10:45 - 11:15	Performance Criteria, Validation, Reference Materials
	Dr. Anne Bridges, Director of Technical Resources, AACCI
11:15 - 11:45	Design and Management of the GMO Testing Lab
	Mr. Pearce Smith, Laboratory Manager, Eurofins GeneScan
11:45 - 12:15	Introduction to the Laboratory Session I
	Dr. Clara Alarcon, Research Director, Analytical and Genomics Technologies Department, Pioneer Hi Bred
12:15 - 1:15	LUNCH
SESSION 7	LABORATORY MODULE I
1:15 - 5:30	Introductions: Overview, Safety and Logistics
	All facilitators

END DAY 2

DAY 3: THURSDAY 12 FEBRUARY 2015

SESSION 8 IMPLEMENTATION OF THE REGULATORY FRAMEWORK

8:30 – 9:15 Role of Laboratory Testing in the Implementation of the Regulatory Framework Dr. Raymond Shillito, Bayer Research and Development Fellow

SESSION 9	NEW TECHNOLOGIES
9:15 - 9:45	New Detection Technologies
	Dr. Clara Alarcon, Research Director, Analytical and Genomics Technologies Department, Pioneer Hi Bred
9:45 - 10:15	New Plant Breeding Technologies
	Dr. Raymond Shillito, Bayer Research and Development Fellow
10:15 - 10:45	COFFEE BREAK
SESSION 10	PRACTICAL APPLICATIONS
10:45 - 11:15	Selecting the Best Method for "The Situation" - the Rice Case (Case Study)
	Dr. Anne Bridges, Director of Technical Resources, AACCI
11:15 - 11:45	Challenges of "Unknowns"
	Mr. Pearce Smith, Laboratory Manager, Eurofins GeneScan
11:45 - 12:15	Proficiency Testing as a Quality Control Measure
	Dr. Raymond Shillito, Bayer Research and Development Fellow
12:15 - 1:15	LUNCH
SESSION 11	LABORATORY MODULE II
1:15 – 5:30	Introductions: Overview, Safety and Logistics
	All facilitators

END DAY 3

DAY 4: FRIDAY 13 FEBRUARY 2015

SESSION 12 REVIEW OF LABORATORY RESULTS

- 8:30 9:30 Group presentation of results (workshop participants)
- 9:30 10:15 Discussion of findings
- 10:15 10:45 **COFFEE BREAK**

SESSION 13 FUTURE PLANS

10:45 – 11:30 Panel Discussion: GMO detection, sources of methods, equipment sources, reference materials, laboratory networks, additional resources

- Dr. Raymond Shillito, Bayer Research and Development Fellow
- Dr. Clara Alarcon, Research Director, Analytical and Genomics

Technologies Department, Pioneer Hi Bred

- Mr. Pearce Smith, Laboratory Manager, Eurofins GeneScan
- Mr. Doug Miller, Chief Executive Officer, Illinois Crop Improvement Association
- 11.30 12:15Presentation of CertificatesWorkshop Feedback Survey
- 12:15 1:15 LUNCH

END DAY 4