

IPM Innovation Lab Trip Report

Names' of Travelers: R. Muniappan, Director, IPM IL, and E. A. Heinrichs, Asia Program Manager, IPM IL.

Countries visited: Cambodia

Dates of Travel: September 3, 2016 to September 11, 2016.

Purpose of the Travel: To conduct *Tuta absoluta* awareness workshops at Phnom Penh and Siem Reap, Cambodia

Description of activities

September 3: Muniappan and Heinrichs departed for Shanghai from Chicago at 10:40AM.

September 4

Arrived at Phnom Penh at 12:30 AM

2:00- 4:00 PM- Discussions with Rica Flor, post doc who is managing the in-country activities for the IRRRI rice IPM project (EPIC). Rica provided information on the current status of the EPIC project and plans for the coming season. Rica also discussed the nematode survey conducted by Dr. Eisenback, VT nematologist.

September 5

Program- *Tuta absoluta* awareness workshop conducted in the Cambodiana Hotel, Phnom Penh

Time	Subject
8:30	<u>Inaugural session</u> Mr. Srun Sokhom, DDG, GDA Bruce Todd, iDE Cambodia Mr. Heng Chhun Hy, Deputy Director, Department of Plant Protection Sanitary and Phytosanitary Dr. Muniappan, IPM IL
9:00	Coffee break
9:30	Self introduction of participants
9:45	Objectives of the workshop – Seng Kimhian, iDE Cambodia
10:00	<i>Tuta absoluta</i> – Challenges and opportunities – R. Muniappan
10:30	IPM Innovation Lab Global Programs – Short Heinrichs
11:00	Presentation by GDA, PPP Department
11:30	Breakout groups (2) Goals: Development of a monitoring program and management strategies. Identify the role of each agency and develop a Cambodian <i>Tuta</i> IPM Network.
12:30	Lunch
1:30	Presentations of breakout groups
2:30	Question and answer session/discussion
3:00	Development of a <i>Tuta absoluta</i> management strategy for Cambodia
4:00	Proposed follow up

Phnom Penh Tuta awareness workshop summary:

1. **Number of participants** = 40
2. **Agencies present:** GDA, RUA, NGOs, CARDI, Extension Services, National Institute of Agriculture
3. **Breakout groups** were lively and developed strategies as per the goals of the workshop.
4. **Follow up:**
 - Develop relations with authorities in neighboring countries to share Cambodian knowledge of Tuta with them.
 - Promote a Tuta monitoring program in neighboring countries so as to detect the Tuta invasion.
 - Sites for the establishment of monitoring traps include the border with Vietnam (large amounts of vegetables are exported from Vietnam to Cambodia by truck), at Poipet on the border with Thailand, Battambang and the vegetable market in Phnom Penh.
 - GDA Department of Plant Protection Sanitary and Phytosanitary will take the lead in developing an inter-country network.
 - Establish a Cambodian inter-agency network on Tuta to be led by GDA.
 - Establish a Tuta working group consisting of all Cambodian stakeholders; farmer cooperatives, extension services, governmental research agencies, NGOs, universities and private industry.
 - Extension officers need training on the monitoring and detection of *Tuta absoluta* according to DDG, GDA.
 - GDA will need to seek financial assistance from the government to fund the Tuta monitoring and management project
 - GDA DDG Mr. Srun Sokhom informed the group that follow up activities and a plan monitoring and management of Tuta for Cambodia will be discussed at the Siem Reap workshop.



Participants in the Phnom Penh Tuta awareness workshop



Bruce Todd, iDE; Mr. Srun Sokhom, DDG GDA; R. Muniappan, IPM IL



Mr. Srun Sokhom, DDG GDA



Seng Kimhian, iDE Cambodia, Vegetable IPM Cambodia Project Coordinator and workshop organizer



Breakout group discussing the Tuta monitoring and management plan.



Participants listening to a presentation. All presentations were translated into Khmer.

5:00 PM Muni and Heinrichs met with Mr. Khun Kimkhuy, Entomologist, Royal University of Agriculture to discuss the status of his application for a PhD in the VA Tech Department of Entomology. Due to a low GRE he will not pursue his application. A discussion followed as to who could replace him. Due to the time remaining on the project we will seek an MSc student for his replacement.

September 6

9:00 AM

Muniappan and Heinrichs traveled to Siem Reap

September 7

8:30-2:00 *Tuta absoluta* awareness workshop conducted in the Angkor Palace Hotel, Siem Reap

Siem Reap Tuta awareness workshop summary:

1. **Number of participants** = 45
2. **Agencies present:** Ten departments of GDA, Battambang University, iDE Siem Reap Staff, Provincial Agriculture Department Staff, NGOs (CODES, ADDA, CARITAS and AGRISUD).
3. **The program** was similar to that conducted at Phnom Penh except for the breakout groups. In contrast to Phnom Penh, the participants were not in a position to make administrative decisions so breakout groups were not considered necessary. Instead the workshop was designed to be informative and simply provide an awareness of the impending invasion and to be on the lookout for the pest.
4. All presentations were translated to Khmer.
5. Discussions were lively and participants asked questions and made comments.
6. Mr. Srun Sokhom, DDG, GDA stated that the GDA would be the lead agency in developing a monitoring plan to detect the invasion of Tuta and would develop a management plan to deal with Tuta once it invades Cambodia.



Siem Reap *Tuta absoluta* awareness workshop participants



Bruce Todd, iDE Cambodia; Mr. Srun Sokhom, DDG, GDA; Muniappan, IPM IL.



Muniappan presentation, *Tuta absoluta*- Challenges and opportunities



Participants

3:00 PM

Muniappan leaves Siem Reap for Kula Lumpur, Malaysia

8:00 PM

Heinrichs leaves Siem Reap for U.S.A.

11.30 PM

Muniappan arrives in Kuala Lumpur.

September 8

8.00 AM

Muniappan participates in the USAID Horticulture Review and Strategy Meeting. He presented IPM IL overview to the participants.

2:00 PM Heinrichs arrives in Lincoln, NE

September 9

Muniappan participates in the USAID Horticulture Review and Strategy Meeting. He participated in a panel discussion on Technology Transfer.

September 10

7.00 AM

Muniappan leaves Kuala Lumpur

September 11

Muniappan reaches Roanoke at 11.15 PM