## **IPM CRSP Trip Report**

Countries Visited: Indonesia and the Philippines.

Dates of Travel: July 17<sup>th</sup> to 30<sup>th</sup>, 2010.

Travelers Names and Affiliations: R. Muniappan

Purpose of Trip: To attend the planning meeting of the IPM CRSP Southeast Asia project and to visit IPM CRSP sites in Indonesia and the Philippines.

Sites Visited: Cipanas, Ioap, Cipandawa, Jakarta, and Bogor in Indonesia; and Manila, Munoz, Urdaneta and Los Banos in the Philippines.

Description of Activities/Observations:

July 17<sup>th</sup> and 18<sup>th</sup> – Travel to Jakarta from Blacksburg.

July 19<sup>th</sup> – Met with Mike Hammig, and Eric Benson in Jakarta and Merle Shepard, Gerry Carner and Aunu Rauf in Bogor. Traveled to Cepanas in the evening and met with Dr. Sanath Reddy, Senior Economic Growth Adivisor, USAID mission.

July 20<sup>th</sup> and 21<sup>st</sup> - Attended IPM CRSP Southeast Asia program planning meeting and presented overview of the IPM CRSP and Plant Virus Diseases Global Theme Project. Host country partners presented their progress reports and workplans. Meeting ended at noon on 21<sup>st</sup>.

In the afternoon, we visited Mr. Pak Ujang's *Trichoderma* production facility. He was producing *Trichoderma* and selling 250 kg/month to a private company in addition to supplying to farmers' organizations. The product was sold under the trade name "TRONC".

Also we visited a tomato field that had two plots (1) treated with *Pseudomonas fluorescens*, *Bacillus subtilus* and *Trichograma* and the other (2) control. The plot treated with microbials had less viral attack than control. In the nearby fields, tomato and pepper crops were affected by viral diseases. I took blots of virus infected plants to be sent to Dr. Naidu Rayapati for viral diagnosis.

July 22<sup>nd</sup> – Mike, Eric, Merle, Aunu, Yayi Kusumah and I visited a farmers group, at the Cipendawa village in the Kabupaten Cianjur district, who were growing potatoes. There were 6 women and 25 men in the group. Common pests found in the potato field were *Spodoptera litura*, leafminer, and the disease *Phytophthora*. Women farmers presented their findings to the group.

July 23<sup>rd</sup> – Attended Gerry Carner's presentation on "Insect Pathology" in the IPDN workshop conducted at the Bogor Agricultural University. Later I visited the Entomology laboratory and collected specimens of solenopsis mealybug and fortuitously introduced papaya mealybug parasitoids.

July 24<sup>th</sup> – Travel to Manila, Philippines.

July 25<sup>th</sup> – Collected mealybug samples on plumeria at Pasay, Manila in the morning and traveled to PhilRice with Hermie Rapusas in the afternoon,.

July 26<sup>th</sup> – Mike, Merle, Eric, Gerry, Hermie, Mr. Jun Ramos, Ms. Salve Santiago and I traveled to Urdaneta city in the Panganisan province and met with the City Agriculturist Mr. Bonifacio Parinas and Mayor Amadeo Bobom Perez. Both were very supportive of IPM CRSP program being implemented in Urdaneta. Later we visited a farmers' field school at the San Jose village. There were 50 farmers (10 women and 40 men). Main crops grown by this group were bitter melon, eggplant, and okra. In the afternoon we visited a Soils Laboratory where *Trichoderma* was produced and supplied to the farmers and in the evening we met with Mr. Ronilo A. Beronio, Executive Director of the PhilRice.

July 27<sup>th</sup> – At the Entomology laboratory of PhilRice, I processed insect samples collected during the trip. Later we visited Plant Pathology laboratory and observed various insect pathogens being cultured by Dr. Troung. In the afternoon, we traveled to Manila and met with Mr. Oliver Ogoncillo and Ms. Teresita Calabia at the USAID mission.

July 28<sup>th</sup> – Visited vegetable plots at Los Banos with Drs. Adala, Baltazar and Opina and Ms. Juana Opina. An eggplant trail using *Solanum surattense* as rootstock and Dumaguete long purple scion has been laid out to examine for bacterial wilt resistance and compatibility. Some of the common pests observed were tomato leaf curl virus, little leaf of beans, leaf hoppers on eggplant and okra, *Diaphania indica* on sponge gourd, and eggplant fruit and shoot borer. In the afternoon we visited laboratories that produced *Trichogramma*, earwig *Euryborus annulata* and VAM. Also we met with Dr. Jose M. Yorobe, Economist who is involved in the IPM CRSP Impact Assessment project in the Philippines.

July 29<sup>th</sup> – We met with Dr. Helen Dayo, Gender Specialist and Dr. Virginia C. Cuevas, Microbiologist who conducts research on *Trichoderma*. Dr. Cuevas has transferred *Trichoderma* production technology to a private company and also applied for a patent.

Dr. Baltazar will be collaborating with the scientists at UPLB producing *Trichogramma*, *Trichoderma*, earwigs, and VAM and she will be incorporating these components in the IPM packages developed for different vegetable crops.

 $\label{eq:July 30th} \textbf{-Left Manila in the early morning and reached Blacksburg in the evening.}$ 

**Training Activities Conducted** 

Program type (workshop, seminar, field day, short course, etc.)	Date	Audience	Number of Participants		Training Provider (US university, host country	Training Objective
			Men	Women	institution, etc.)	
Southeast Asia Program Planning Meeting	July 20-21, 2010		34	16	Indonesia, Philippines, Cambodia, Clemson University, Virginia Tech	Planning for the FY 2011

## Suggestions, Recommendations, and/or Follow-up Items:

Mealybug and scale insect specimens collected during the trip were sent to Dr. Gillian Watson, California Department of Agriculture for identification. Papaya mealybug parasitoids collected in Indonesia were sent to Dr. Gregory Evans, USDA for identification.

## **List of Contacts Made:**

List of Contacts Made.		Contact Info
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