Country Visited: India

Dates of Travel: 15-24 July 2011

Travelers Names and Affiliations: Doug Pfeiffer (VT Department of Entomology), Amer Fayad (VT OIRED)

Purpose of Trip: Participate in IPM CRSP International Workshop on Production of Biocontrol Agents, meet with USAID personnel at our site, and consult with Indian collaborators on project planning.

Sites Visited: Tamil Nadu: Tamil Nadu Agric. University, and one CRSP farm research site; Karnataka: Bio-Control Research Laboratory at Bangalore.

Description of Activities/Observations: Tamil Nadu: Participated in IPM-CRSP sponsored workshop on biocontrol agents, specifically *Trichoderma* and *Pseudomonas*. Participants represented several of the IPM CRSP regional projects (South Asia: India, Bangladesh), Central Asia: Kyrgyzstan and Uzbekistan), South Asia (Indonesia) and Latin America/Caribbean (Honduras). We met with USAID staff and provided input on benefits of project, explained our research on site. Visited with two deans, discussed prospects for collaborative educational programs and recruited a likely prospect for a doctoral student position in the VT Department of Entomology (faculty member at TNAU); this student project would concentrate on local IPM CRSP problems.

Bangalore, Karnataka: Received tour of BCRL, and learned of the range of work done at this facility. The mix of commercial development and sales with research presented at conferences and published in high impact refereed journals is most impressive. We discussed prospects of a more formalized collaboration with our project.
Training Activities Conducted:

<table>
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<tr>
<th>Program type (workshop, seminar, field day, short course, etc.)</th>
<th>Date</th>
<th>Audience</th>
<th>Number of Participants</th>
<th>Training Provider (US university, host country institution, etc.)</th>
<th>Training Objective</th>
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<tbody>
<tr>
<td>IPM CRSP International Workshop on Production of Biocontrol Agents</td>
<td>18-22 July 2011</td>
<td>Plant protection specialists involved in regional projects of IPM CRSP</td>
<td>6 5</td>
<td>Tamil Nadu Agricultural University (TNAU), Bio-Control Research Laboratory (BCRL)</td>
<td>To inform participants on biology of biocontrol agents (specifically Trichoderma spp. and Pseudomonas spp.), the ability to isolate local strains from soil, and production and formulation of commercial products.</td>
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Suggestions, Recommendations, and/or Follow-up Items: This workshop was an excellent experience for those participating, and can serve as the beginning of useful biocontrol activities using these agents in the regional projects. This end may be served by creation of some electronic venue to allow sharing of continuing activities in this area. Formal inclusion of Bio-Control Research Laboratory should be pursued. Follow-up communications will be made with BCRL staff, and with the prospective doctoral student.

List of Contacts Made:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Organization</th>
<th>Contact Info (address, phone, email)</th>
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<tbody>
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