Country Visited: Tajikistan

Dates of Travel: 6-12 June, 2011

Travelers Name and Affiliation: Mustapha El Bouhssini, senior entomologist at the International Center for Agricultural Research in the Dry Areas (ICARDA).

Purpose of Trip:

1. Participate in the plant disease and pest diagnostics training workshop.
2. Visit IPM sites established through the IPM USAID/CRSP project.

Sites Visited:
- Wheat demonstration plots in Turdi village, Hissor district.
- Tomato demonstration plots in Kahramon village, Shahrimav district.
- Potato demonstration plots in Muminabad district.

Description of Activities/Observations:

1. Plant Disease and Pest Diagnostics Training Workshop 7-8, June.

A regional plant disease and pest diagnostics training workshop was organized in Dushanbe, at Tajik National University on June 7-8. Some 100 participants from the three collaborating countries in Central Asia (Kyrgyzstan, Uzbekistan and Tajikistan), and students from Tajik National University attended this training workshop. The main trainers were: Dr. Megan Kennelly (pathologist, Kanas State University), Dr. George Bird (nematologist, Michigan State University), Dr. Naidu A. Rayapati (virologist, Washington State University), Dr. Walter Pett (entomologist, Michigan State University), Dr. Frank Zalom (entomologist, University of California-Davis) and Dr. Mustapha El Bouhssini (ICARDA). The workshop discussed new and emerging problems and diagnostic techniques for insects, diseases, viruses, and nematodes. The workshop consisted of lectures and practical sessions in labs and fields.

2. Visit IPM sites

On Thursday, June 9, all the participants visited one wheat and one Tomato IPM sites in Hissor and Shahrimav districts, respectively. The wheat site demonstrated one newly released cultivar (Ormon) resistant to yellow rust and three flowering medicinal plants (Coriander, sweet basil, and dill) to enhance beneficial insects. The tomato site demonstrated four varieties.
On Friday, June 10, the group visited the University of Central Asia (UCA), Mountain Societies Research Center. The meeting took place at the Ismaili Center in Dushanbe. The key person met was the UCA Director of Research (Dr. Nasreen Dhanani). Among the people who participated at this meeting, Dr. Karim Maredia (Central Asia IPM CRSP Project Director, Michigan State University) and Dr. Muniappan R.N. (Director of Global IPM CRSP, Virginia Tech, USA). One potential IPM area of collaboration with the Mountain Societies Research Center could be the use of flowering medicinal plants to enhance insects biodiversity (natural enemies and pollinators).

On Sunday, June 12, the group visited an IPM site on Potato in Muminabad district where several varieties are demonstrated. At this high elevation area, there was a very high infestation of Russian wheat aphid (RWA) on late planted wheat. I did collect some RWA specimens from this location, which I brought in 95% alcohol. These specimens were sent to Kansas State University for a global phylogenetic study of RWA.

### Training Activities Conducted

<table>
<thead>
<tr>
<th>Program type</th>
<th>Date</th>
<th>Audience</th>
<th>Number of Participants</th>
<th>Training Provider</th>
<th>Training Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pest Diagnostics Workshop</td>
<td>June 7 - 8</td>
<td>Scientists and students</td>
<td>77 Men 36 Women</td>
<td>IPM CRSP Team members from the U.S. and ICARDA</td>
<td>Pest Diagnostics capacity building</td>
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### Suggestions, Recommendations, and/or Follow-up Items:

1. The wheat demonstration plots should have proper design, and be planted far away from the control (farmer managed fields) so that there will be no confounding effects with the flowering plants planted around the wheat plots to enhance natural enemies.

2. The demonstration plots should be well managed.

3. Muminabad district should be used as hotspot to screen for resistance to Russian wheat aphid.

### List of Contacts Made: Same list as given by other colleagues (i.e. Dr. Dr. Karim Maredia).