

# Feed the Future: Innovation Lab for Integrated Pest Management Trip Report

**Country Visited:** Niger

**Dates of Travel:** September 13-22

**Travelers' Names and Affiliations:** Sara Hendery, Communications Coordinator, and Muni Muniappan, IPM IL Director

**Purpose of Trip:** Muniappan to attend the Innovation Council Meeting. Muniappan and Hendery to meet with ICRISAT team members in Niger to assess progress on the biological control of the pearl millet head miner project and to assess the damage of the Fall Armyworm on all crops.

**Sites Visited:** Niamey, ICRISAT

## Description of Activities/Observations:

Sept 10, 2018: Muniappan left Blacksburg at noon to Washington, D.C.

Sept 11, 2018: Attended Innovation Council Meeting.

Sept 12, 2018: Attended BIFAD meeting.

Sept 13, 2018: Sara Hendery and Muni Muniappan travel from Washington, D.C. to Niamey, Niger.  
Reach Niamey Sept 14, 2018.

The first few days of the trip were spent with the ICRISAT team in Niger assessing damage done by the Fall Armyworm (FAW) on a multitude of crops, especially sorghum. Samples of the worm, moth, and its eggs were gathered to observe in the lab. The FAW damage on sorghum was very significant, which is another reason the use of biological control over genetically modified crops would be beneficial. Dr. Muniappan also observed additional pests by looking in the light traps on the ICRISAT grounds. Local villages were visited to see if the FAW is an issue on pearl millet, maize, and other crops, and it was confirmed that it is. Interviews on video were taken to capture the level of FAW damage in the community and the importance of controlling it quickly and through holistic means. Further, Sara Hendery documented on film the process of the multiplication of natural enemies of the pearl millet head miner. Dr. Muniappan offered suggestions to the ICRISAT team working in the lab on more efficient processes. Pearl millet head miner damage was assessed in the field. Dr. Muniappan spent several days helping PhD student Laouali Amadou on his manuscript about controlling the pearl millet head miner with biological control. Further, the trip was an opportunity for technician Peter Malusi, from Kenya, to learn about the multiplication of natural enemies so that he might apply the process in his home country.

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

Sara Hendery will write an article about the attack of FAW on sorghum, emphasizing why biological control is a good method to capture a pest that harms more than one crop. She will also write about the new market of selling natural enemies. Two, possibly three, videos will be created from the trip. One will cover the process of generating natural enemies for the biological control of the pearl millet head miner, one will cover the damage of the Fall Armyworm in Niamey, and possibly another video could be created for the IPM Innovation Lab in general that could be used on the front page of the website. Sara Hendery and Muni Muniappan will also check back in with Laouali Amadou on to assess the progress of his

manuscript and check back in with Peter Malusi to ensure that introducing natural enemies for the Fall Armyworm in Kenya is efficiently done.

**List of Contacts Made:**

<b>Name</b>	<b>Title/Organization</b>	<b>Contact Info (address, phone, email)</b>
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