

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

Country Visited: India

Dates of Travel: Aug 30, 2018 - Sep 12, 2018

Travelers' Names and Affiliations: Godshen Pallippambal (Affiliation: Center for Integrated Pest Management, North Carolina State University)

Purpose of Trip: The travel was to (1) collect *Aproaerema modicella*, i.e. groundnut leafminer (GLM) samples from multiple locations in India. Some of these samples were brought back to the United States and some were submitted to a lab in India for molecular analysis (2) meet and discuss the project with researchers collaborating with us on GLM collection and processing.

Sites Visited: Hyderabad/Telangana, Bangalore/Karnataka, Pusa/Delhi, Kochi/Kerala

Description of Activities/Observations:

1. Hyderabad/Telangana: Visited our collaborator in ICRISAT Patancheru. Collected GLM specimens from multiple sites, brought some back to the United States and some were submitted in India for COI analysis. At the same time, we received communication from the National Biodiversity Authority of India regarding the approval of the permit to transfer the specimens to the United States.
2. Pusa/Delhi: Visited with our collaborator in IARI Delhi and developed a framework to collect GLM samples worldwide and transfer to an integrated molecular-morphological identification approach.
3. Bangalore/Karnataka: Visited project collaborator in IIHR Bangalore and submitted some specimens for molecular analysis. Some of these specimens were also brought back to the United States.
4. Kochi/Kerala: This served as the hub for travelling to the different locations for sample collection and collaboration.

Training Activities Conducted:

Some activities included below:

Program type (workshop, seminar, field day, short course, etc.)	Date	Audience	Number of Participants		Training Provider (US university, host country institution, etc.)	Training Objective
			Men	Women		
Field visit	Sept 3 2018	ICRISAT locations				Collect GLM samples
Seminar	Sept 4, 2018	IARI, Delhi	25	20	CIPM, NC State	
Seminar	Sept 6, 2018	IIHR, Bangalore	10	4	CIPM, NC State	

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

We have decided to collect more samples in India, Africa and Australia and to integrate both morphological and molecular identification for confirming the identity of the GLM species that was recently introduced in Africa.

List of Contacts Made:

Name	Title/Organization	Contact Info (address, phone, email)
Dr. Jaba Jagdish	ICRISAT	J.Jagdish@cgiar.org
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