

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

Country Visited: Tanzania

Dates of Travel: January 15-17 2018

Traveler Name and Affiliation: Tadele Tefera, icipe

Purpose of Trip: Meeting with local partners and project supported students

Sites Visited: Dar Es Salaam

Description of Activities/Observations:

Meeting with Bonaventure January, PhD Student at Sokoine University

PhD title: Management of rice stem borers in irrigated low land rice ecosystem in Tanzania

Discussion on progress of his thesis chapters:

1. Farmers' perceptions of rice production constraints and stem borers management practices in irrigated low land rice ecosystem in Kilombero valley, Morogoro, Tanzania. A paper has been prepared and submitted to International Journal of Pest management on January 17, 2018.
2. Species abundance and damages associated with Lepidopteran stem borer in irrigated low land rice ecosystem in Tanzania. Journal of Integrative Agriculture submitted on January 31, 2018.
3. Distribution of rice stem borers and their parasitoid in irrigated low land rice ecosystem in Kilombero valley, Morogoro, Tanzania. Journal of Entomology and Zoology. Accepted for publication.
4. Efficacy of selected mycoinsecticides and botanical extracts in managing rice stem borer, *Chilo partellus* (Swinhoe) (Lepidoptera: Crambidae) in Tanzania. The paper is with supervisors for editing and improvement.

Meeting with Ibrahim Hashim, PhD Student at Sokoine University

Discussion on progress of his thesis chapters:

1. Smallholder farmers' knowledge, perception and management of rice blast disease in upland rice production system in Tanzania. Submitted to a journal.

2. *In vitro* and *in vivo* evaluation of microbial agents for management of rice blast disease in Tanzania. Under internal review.

3. Reduction of rice blast disease initial inocula on rice seeds by microbial and hot water seed treatments. Under internal review.

Meeting with Dr Charles Chuwa, rice IPM:

- 2017 data collected and being analysed
- Lan preparation for 2018 completed
- Rice seeds sown in nursesey
- Site selection completed and waiting for rain to come

Meeting Nsami Elibariki, maize IPM:

- Selected demo farmers for push-pull technology
- Procured seeds
- Prepared land for planting

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

Bonaventure: To determine the effects of spacing and nitrogen fertilizer on incidences of rice stem borers in irrigated rice ecosystem. Installation of season 2 trial for objective no. 5, diversity of rice stem borers and their parasitoids. Survey planned to be conducted in lowland and upland rice ecosystems in different altitudes.

Ibrahim:

- i. Evaluation of microbial agents for management of rice blast disease under field conditions.
- ii. Field experiment to establish yield loss caused by rice blast disease on selected upland rice genotypes grown in Tanzania
- iii. Field survey to establish incidence and severity of rice blast disease in upland rice ecosystem

To have reliable data, the following should be done:

- include three locations for yield loss experiment
- repeat the experiment at least for two seasons.

Dr Charles Chuwa:

- Planting diseases-tolerant rice demo plot with 20 farmers reaching 450 farmers
- Planting about 50 rice genotypes in screenhouse under artificial inoculation against blast diseases
- Training farmers and extension workers

Nsami Elibariki:

- Training farmers and extension workers on fall armyworm detection and control options
- Planting demos with 20 farmers
- Organizing field days

List of Contacts Made:

Name	Title/Organization	Contact Info (address, phone, email)
Dr Charles Chuwa	Senior Rice Pathologist, ARI	Charles Chuwa <chuwacj@yahoo.co.uk>
Nsami Elibariki	In charge National Biological Control Program	bio_nsami@yahoo.com
Ibrahim Hashim	PhD Student	ibrahimhashim@gmail.com
Bonaventure January	PhD Student	bojatetsha@gmail.com