

FTFNIPM Trip Report

Name of the Traveler: Asst. Prof. Sushil Nyaupane

Affiliation: Faculty of Agriculture, Far Western University (FWU), Tikapur, Kailali

Country Visited: India

Places Visited: *Bengaluru*

Purpose of the Visit: Participation in the training "Production protocol of biocontrol agents for the management of fall armyworm"

Description of Activities:

Participation on the training program named "Production protocol of biocontrol agents for the management of fall armyworm" was very effective. It was the five days training conducted from May 22 to 26, 2023 by ICAR- National Bureau of Agricultural Insect Resources, Bengaluru, India with the financial support USAID program.

Participants were engaged in theoretical and practical based training. Five days training was intense and each day we were exposed to different schemes of biocontrol program. Trainers have instructed us about the regulatory mechanisms of India to prevent the spread of various invasive species, and this was followed by identification, biology and current status of fall armyworm in India. They instructed on identification of different natural enemies of fall armyworm. We visited their Insect museum with different natural enemies and the insectary. We learned about mass production of various biocontrol agents such as *Trichogramma*, *Telenomus*, *Chelonus* spp., and others. We also visited the different laboratories that are producing different microbial agents such as bacteria, fungus, virus, and nematodes. We learned the protocol for mass production of those agents. We also visited the ICAR-NBAIR technology area where semiochemicals are produced by Dr. Kesavan Subaharan and pollinator garden that attracts beneficial insects, and different species of bees and wasps at the ICAR-NBAIR farm, Yelahanka. We also learned about the push pull strategies for fall armyworm management.

In conclusion, we had great exposure on different biocontrol agents for management of fall armyworm and other species of insect pests. We also had the opportunity to garner lab skills to operate different functions related to biological control and pest management. Tour of insect rearing facility and its management was a great learning experience for us. Thank you again for providing this opportunity.

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

Program was quite successful to impart the knowledge and skills related to biological control and pest management. However, it would be more fruitful to have an intensive lab training on specific biological control agents with more focus on laboratory work. However, it was a great learning for us.

List of Contacts Made:

Name	Title/Organization	Contact Info (email)
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