



MOHAN GANESH BALAGA

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Mohan Ganesh is pursuing his PhD on Genetic diversity of fruit fly species from different regions of Assam using molecular tools. He also wants to prepare and illustrate key, distribution maps and *mtCoI* barcode of the collected and reared species. For which he has to collect samples from 5 districts each from northern, central and lower Assam regions. He collected six different fruit fly species from lower Assam, from those samples he was able to identify five fruit fly species with the help of taxonomic keys which were *Bactrocera cucurbitae*, *Bactrocera dorsalis*, *Bactrocera latifrons*, *Bactrocera tau*, *Bactrocera zonata*. The remaining unidentified specimen were sent to NBAIR Bangalore for identification. He will also be carrying out molecular work using universal primers barcode region (*mtCoI*) for the collected specimens and will continue the rest of his work in remaining regions of Assam.

In future, he would like to work on the effect of elevated CO₂ and temperature levels on fruit fly biology and explore their morphological and molecular variations.



SOUMYA E

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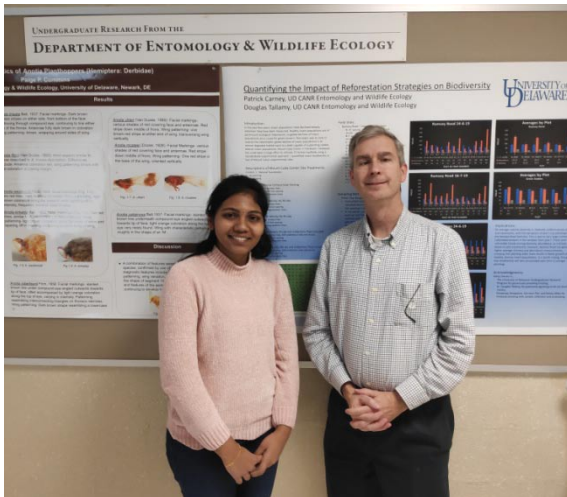
Sowmya is a Ph.D. student working on Isolation and molecular characterization of entomopathogenic fungi and their efficacy studies against the sugarcane root grub *Holotrichia serrata* Fab. (Coleoptera: Melolonthinae) in Northeastern Karnataka under the guidance of Dr. Arunkumar Hosamani and Dr. Ramanujam. B (ICAR-NBAIR, Bangalore). Goal of the investigation is to describe the root grub species associated with the major crops of Northeastern Karnataka. Also to facilitate the accurate identification and authentication, isolation, morphological and molecular

characterization of different strains of *Metarhizium anisopliae* and to conduct bio efficacy studies against *H. serrata* and thereby develop a liquid formulation for the management of sugarcane root grub.

Further, she is planning to continue her research on major subfamilies of Indian Scarabaeoidea and genome editing of root grub with Ovo gene using CRISPR-Cas 9 in order to disrupt the wing and gonad development in *H. serrata*, a major pest of sugarcane in India.

International training at University of Delaware, USA

Hi everyone, I am Ramya N, Ph.D. Scholar at Division of Entomology, ICAR-IARI, New Delhi. Presently working on the Biosystematic studies of family Delphacidae (Hemiptera: Fulgoroidea) from India. I recently visited the University of Delaware, Newark, USA -19716 under student exchange program of Centers for Advanced



Agricultural Science and Technology-National Agricultural Higher Education Project, Indian Council of Agricultural Research, Ministry of Agriculture and Farmers Welfare, Government of India (CAAST-NAHEP). It was a great opportunity for me to work under the guidance of renowned planthopper taxonomist Dr. Charles Bartlett, Associate Professor, Department of Entomology and Wildlife Ecology, University of Delaware. He is hosting a website on Planthoppers of North America and Curator of University of

Delaware Insect Research Collection. It was an amazing experience to work in his lab, where I learned both classical and molecular taxonomy techniques. We had healthy discussion on the Indian delphacid fauna. The current research in delphacids, from the very basic insect collections to improved techniques like mitogenome sequencing and its applications in getting better results for identification as well as for evolutionary studies.

Despite the well-known economic importance of delphacids, very few attempts have been made to explore and identify these in India. We have attempted to explore the delphacids from different localities of India and identify them. Fortunately this International training made it possible to understand and shown the way forward in delphacids

Ms. Arya P. S. and Mr. Mogili Ramaiah, Division of Entomology, ICAR-IARI, New Delhi compiled the information for this section.