

## STUDENT CORNER

### Rutik Ghanshyambhai Pansuriya

Mr. Rutik Ghanshyambhai Pansuriya is currently pursuing his M.Sc. in Entomology at the Department of Entomology, B. A. College of Agriculture, Anand Agricultural University, Anand. He is conducting his postgraduate research under the guidance of Dr. C. B. Varma, Associate Professor. His research focuses on the biology, seasonal occurrence, and management of the sapota midrib folder, *Banisia myrsusalis elearalis* Walker, an emerging pest of sapota. The study includes detailed laboratory investigations on the biology of the pest reared on sapota leaves. Observations are being recorded on the duration of different developmental stages—egg, larva, pupa, and adult—as well as the total life cycle, with the aim of understanding its life history, behavior, and identifying the most vulnerable stage for effective management.



In addition, the research examines the seasonal incidence of the midrib folder in sapota orchards and its relationship with various weather parameters to understand population dynamics under field conditions. The study also evaluates the efficacy of selected natural inputs against the pest under both laboratory and field conditions, using standard experimental methodologies. Through this work, he aims to generate insights that will contribute to the development of eco-friendly management strategies for sapota midrib folder.

### Amogha

Ms. Amogha is currently pursuing her Ph.D. in Entomology at the Department of Agricultural Entomology, College of Agriculture, GKVK, University of Agricultural Sciences, Bangalore. She completed her undergraduate degree in Agriculture from the College of Agriculture, Hassan, UAS Bengaluru. Her interest in entomology developed from a deep fascination with insects and their remarkable versatility in nature—from ecosystem engineers and decomposers to important agricultural pests—highlighting their critical roles in maintaining ecological balance. She obtained her Master's degree from Rani Lakshmi Bai Central Agricultural University (RLBCAU), Jhansi, under the guidance of Dr. Usha Maurya. Her M.Sc. research focused on "Screening of chickpea genotypes for resistance against the pod borer, *Helicoverpa armigera*, and its management." During this work, she screened 100 chickpea genotypes and identified 11 lines exhibiting significant resistance to the pest. She also developed an integrated management module combining Spinosad 45% SC with Datura leaf extract, which proved highly effective in suppressing pod borer populations.



Currently, her doctoral research is titled “Deciphering the role of insecticide-degrading gut bacteria of *Spodoptera frugiperda* and its susceptibility responses to insecticides.” She is working under the guidance of Dr. Shivanna B., Professor, Department of Agricultural Entomology, UAS Bengaluru. Her research aims to identify and characterize specific gut bacteria involved in the metabolic degradation of insecticides in *S. frugiperda*. Understanding these microbial pathways may provide valuable insights for developing more effective Insecticide Resistance Management (IRM) strategies. Ms. Amogha is an ICAR Senior Research Fellowship (SRF) awardee and has also qualified the ICAR-NET examination in 2023, reflecting her academic excellence and commitment to advancing research in agricultural entomology.

## Sabitha Chellem

Ms. Sabitha Chellem is currently pursuing her Ph.D. in Entomology at Acharya N. G. Ranga Agricultural University (ANGRAU), Andhra Pradesh. Her interest in entomology developed during her postgraduate studies, where hands-on exposure to insect physiology and pest management research sparked a deep fascination with insect science and its relevance to sustainable agriculture. She completed her Master’s degree from Acharya N. G. Ranga Agricultural University, where her thesis, titled “Study on Compatibility and Bioefficacy of Insecticides and Fungicides Against Insect Pests and Diseases of Rice,” was carried out under the guidance of Sanyasi Dhurua. Her doctoral research focuses on “Identification and Validation of miRNA in *Spodoptera frugiperda*,” and is being conducted as a collaborative effort between Acharya N. G. Ranga Agricultural University and ICAR–National Bureau of Agricultural Insect Resources (ICAR-NBAIR). She is working under the guidance of D. V. Sai Ram Kumar, Professor of Entomology at ANGRAU, and R. Gandhi Gracy, Principal Scientist at ICAR-NBAIR.



Her research aims to identify and validate microRNAs involved in the biology of the fall armyworm, with a focus on developing RNA interference (RNAi)-based strategies for pest management. One of the most rewarding moments in her research journey was successfully observing consistent gene silencing and associated phenotypic effects following dsRNA treatment. The study is expected to establish effective dsRNA- and miRNA-mediated silencing of key reproductive genes in adult fall armyworm, potentially leading to reproductive suppression and providing a basis for species-specific, environmentally safe pest management strategies. Ms. Sabitha has qualified the ASRB–NET (2021) and received the Best Master’s Thesis Award (2024) for academic excellence in entomology. She also won the Best Rapid Oral Presentation Award (2025) at the International Conference on Biological Control for her review work on miRNA. In addition, she has actively participated in several national-level scientific conferences. Following the completion of her doctoral studies, she aspires to pursue a career in academic research and teaching, focusing on sustainable insect pest management and molecular entomology.