

## Integral Institute of Agricultural Science & Technology (IIAST) Integral University, Lucknow



## Report on Two-Day Integrated Pest Management (IPM) Orientation and HRD Training Program

A two-day Integrated Pest Management (IPM) Orientation and HRD Training Program was conducted on February 5th and 6th, 2025 by the Department of Agriculture, IIAST, Integral University, in collaboration with the Central Integrated Pest Management Centre (CIPMC), Lucknow. The objective of the training was to educate farmers on IPM principles and encourage sustainable, eco-friendly agricultural techniques.

The program aimed to provide participants with a thorough understanding of IPM, covering essential topics such as pest identification, pest biology and behavior, and different control methods, including cultural, mechanical, biological, and chemical approaches. It also emphasized the responsible and safe application of pesticides in accordance with label instructions.

The training commenced with a welcome address by Prof. Saba Siddiqui, Head of the Department of Agriculture, IIAST, Integral University. Dr. Gyan Prakash Singh, Joint Director, CIPMC, Lucknow, introduced the core concepts, principles, and tools of IPM, detailing various strategies for pest management while reducing pesticide dependency. Sri Shailesh Kumar, Plant Protection Officer (Entomology), delivered a session on survey and surveillance techniques, emphasizing the importance of monitoring pest populations in agricultural fields. Sri Sandeep Kumar Maurya, Assistant Plant Protection Officer (Plant Pathology), discussed cultural practices in IPM, explaining the role of crop rotation, intercropping, and pest-resistant varieties in reducing chemical pesticide use. Sri Dharmraj Singh, Assistant Plant Protection Officer (Plant Pathology), elaborated on the role of mechanical practices in IPM, highlighting the use of physical barriers and traps for effective pest control. Sri Amit Kumar Singh, Plant Protection Officer (Plant Pathology), explained the significance of biological control in IPM, stressing the role of natural predators in managing pest populations. Concluding the first day, Sri Amit Singh, Assistant Plant Protection Officer (Entomology), spoke on the importance of Agro-Ecosystem Analysis (AESA) in IPM, focusing on field-based decision-making techniques for pest management.

The second day of the training began with Sri Roopesh Kumar, Assistant Plant Protection Officer (Plant Pathology), who introduced the NPSS app for pest surveillance, explaining its role in monitoring and managing pest outbreaks effectively. Dr. Rahul Kakasaheb Sutar, Assistant Plant Protection Officer (Weed Science), provided insights into integrated termite management in agriculture, discussing various preventive and curative approaches. Sri Shailesh Kumar, Plant Protection Officer (Entomology), conducted a session on rodent management in field crops, outlining effective strategies for controlling rodent infestations. Sri Faraz Ahmad Khan, Assistant Plant Protection Officer (Plant Pathology), concluded the training with a presentation on the safe and judicious use of pesticides, emphasizing best practices to minimize health and environmental risks.

An exhibition was organized at the Department of Agriculture, showcasing various biological pest management techniques. Displays included Trichograma, Trichoderma (trichocard), Corcyra egg-laying cages, and plant-based insecticides like Azadirachta formulations. Mechanical control methods, such as pheromone traps, light traps, and yellow and blue sticky traps, were also demonstrated. Participants also visited the university's agricultural farm, where trainers guided them in identifying natural enemies of insect pests. A live demonstration at the guava orchard illustrated the effective use of fruit fly traps for pest control.

The training program successfully achieved its objectives, as participants gained in-depth insights into IPM principles and practices, enabling them to implement sustainable pest control strategies. They developed enhanced pest identification skills, learning to recognize various insect pests and their natural predators in different cropping systems. The training also introduced them to a diverse range of IPM strategies, reducing reliance on chemical pesticides and fostering environmentally friendly agricultural practices. Participants were trained in the use of mechanical and biological methods for pest control, contributing to long-term agricultural sustainability. The program further emphasized cost-effective solutions, providing valuable insights into reducing overall pest management expenses while improving productivity.

The training session was attended by 35 farmers from Panchayatpurwa, Dasauli, and Basha Village, Lucknow, along with students from the B.Sc. (Hons) Agriculture program. The event garnered significant media attention, with coverage in English, Hindi, and Urdu newspapers, as well as news channels and social media platforms. The program's success was made possible by the dedicated efforts of faculty coordinators Dr. Ambreesh Singh Yadav, Dr. Salman Ahmad, Dr. Sunil Kumar, and Dr. Kalpana Bisht. It was conducted under the supervision of Prof. (Dr.) Mohd. Haris Siddiqui, Dean, Faculty of Agricultural Science and Technology, and Prof. Saba Siddiqui, Head of the Department of Agriculture, IIAST, Integral University.

Active participation from attendees played a key role in the program's effectiveness. Their enthusiasm, insightful discussions, and eagerness to apply the acquired knowledge contributed significantly to the learning experience.

## **GLIMPSES**

