



**Brief Report of Kisan Goshthi on “Climate-Smart Agriculture from Crop Physiology Perspective”.**

"फसल क्रियाविज्ञान के दृष्टिकोण से जलवायु अनुकूल कृषि"

In line with its commitment to uplifting the lives of farmers and strengthening rural communities, the Department of Agriculture, IIAST, Integral University, Lucknow organized a Kisan Goshthi on 8th May 2025 at Rajauli Village. The goshti was held under the leadership of Prof. (Dr.) Mohd Haris Siddiqui, Dean, Faculty of Agricultural Science and Technology, and Prof. . Saba Siddiqui, Head, Department of Agriculture, IIAST. The goshti was organized by Faculty Coordinators Dr. Malik Mobeen Ahmad, Dr. Muzeev Ahmad, and Dr. Pallavi Srivastava, who provided valuable insights into climate-smart agriculture and various physiological aspects of cereal and horticultural crops.

Dr. Malik Mobeen Ahmad, introduced the farmers to smart agricultural tools and IoT-based solutions, emphasizing their role in modern farming. Dr. Ahmad also discussed the identification and management of major diseases affecting cereal crops, highlighting the benefits of mobile applications for real-time disease detection. He stressed that the adoption of such advanced technologies not only enhances agricultural productivity but also promotes resource conservation and cost efficiency. Dr. Muzeev Ahmad focused on climate-smart agriculture in the context of horticultural crops, with particular emphasis on mango cultivation. He highlighted how changing climatic conditions such as temperature fluctuations, irregular rainfall and increased pest pressure pose significant challenges to mango growers. Dr. Ahmad explained adaptive strategies that can help farmers mitigate these impacts, including the selection of climate-resilient mango varieties, efficient water management practices like drip irrigation, and the use of organic mulching to conserve soil moisture. He also emphasized the importance of timely pruning, pest monitoring and integrated nutrient management to ensure sustainable and productive mango farming in the face of climate change. Dr. Pallavi Srivastava emphasized the physiological aspects of crops and shed light on various physiological disorders that affect both cereal and horticultural crops. She explained how factors such as nutrient imbalances, water stress, and extreme environmental conditions can lead to disorders that significantly impact crop growth and yield. Dr. Srivastava elaborated on common issues like chlorosis, fruit cracking, and blossom end rot, highlighting their causes, symptoms, and preventive measures. She stressed the importance of understanding plant physiology to manage these disorders effectively, thereby promoting healthier crop development and improving overall farm productivity.

The Kisan Goshthi saw active participation from over 35 attendees, including farmers, students, and local leaders. The interactive nature of the session provided a platform for farmers to voice their concerns and receive expert guidance in real time. The positive response and enthusiastic feedback from participants highlighted the success of the event and the practical value of the information shared. This initiative proved to be an impactful medium for knowledge transfer, effectively bridging the gap between academic research and on-field practices, while also offering a meaningful learning experience for students involved in the program.

**Glimpses of the Goshthi**





