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

Brief Report on Kisan Goshthi on the topic "Enhancing Productivity and Sustainability in Rabi Crops through Natural Farming Practices"

(प्राकृतिक कृषि पद्धतियों के माध्यम से रबी फसलों की उत्पादकता और स्थिरता बढ़ाना)

The Department of Agriculture which is committed and dedicated to farmers' welfare undertakes several initiatives to support and empower farmers. In accordance with it, a Kisan Goshthi was organized by the Department of Agriculture, Integral Institute of Agricultural Science & Technology IIAST) on 19th October 2024, at Anwari Village. The faculty coordinators, Dr. Ambreesh Singh Yadav, Dr. Usman Sayeed, and Dr. Kalpana Bisht, facilitated the session, sharing valuable insights into sustainable practices tailored specifically for Rabi crops such as Wheat, Mustard, Pea, and Potato under the Goshthi theme: Enhancing Productivity and Sustainability in Rabi Crops through Natural Farming Practices (प्राकृतिक कृषि पद्धतियों के माध्यम से रबी फसलों की उत्पादकता और स्थिरता बढ़ाना)

Dr. Ambreesh Singh Yadav, Associate Professor, Department of Agriculture, IIAST welcomed the farmers and highlighted the role of seed treatment before sowing using natural methods *viz.*, use of entomopathogenic fungi and plant based formulations. During his session, Dr. Yadav provided a step-by-step process for the seed treatment: Step 1. Preparation of organic solutions, Step 2. Seed soaking and Step 3: Drying and sowing. This treatment ensures that seeds are better equipped to withstand early-stage pests, leading to improved germination rates and healthier plant development.

Further, Dr. Usman Sayeed, then introduced the farmers to the Plantix app, a mobile application designed to aid in pest detection and identifying nutritional deficiencies in crops. He explained how farmers can use this app to analyse and diagnose pest infestations or nutrient imbalances. This approach helps in maintaining the principles of natural farming, ensuring that pest and nutritional issues are managed in an eco-friendly way.

Dr. Kalpana Bisht, further emphasized on the conservation of predators and parasitoids, such as Spiders, ladybird beetles, Lacewings, Predatory stinkbugs and parasitic wasps, in the field and how they manage the aphid population in Rabi crops. Dr. Bisht also demonstrated the method of application of entomo-pathogenic fungal formulations for the management of termites in wheat field and white grubs in pea field. These biological agents help to maintain the ecological balance in the fields, reducing the need for chemical insecticides and supporting sustainable crop production.

This session of Kisan Goshrhi was conducted under the expert guidance of Prof. Mohd Haris Siddiqui, Dean, Faculty of Agricultural Science and Technology, and Dr. Saba Siddiqui, Head of the Department of Agriculture, IIAST.The Goshthi witnessed the participation from

over 45 attendees, comprising students and farmers. The feedback received from the farmers reflected high satisfaction with the organization of the Kisan Goshthi and the useful content delivered. This positive response underscores the effectiveness of such initiatives in bridging the gap between academia and the farming community and fostering a collaborative environment for mutual learning and growth for the students as well.

Glimpses of the Goshthi

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