



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

Report on 3 day training program on “Training on Precision Nutrient Management for Sustainable Agriculture”

(स्थायी कृषि के लिए सटीक पोषण प्रबंधन पर प्रशिक्षण)

The Department of Agriculture at the Integral Institute of Agricultural Sciences and Technology conducted a comprehensive training program on "Precision Nutrient Management for Sustainable Agriculture" 18th March, 2022. The program was attended by scholars, students and farmers.

The training aimed to provide in-depth knowledge and practical skills for optimizing nutrient use efficiency, reducing environmental impact, and improving crop productivity through precision nutrient management techniques. The curriculum covered a wide range of topics, starting with an understanding of soil properties, nutrient cycles, and plant nutrient requirements, as well as soil testing methods and interpretation of results.

Dr. P. Smriti Rao, introduced participants to site-specific nutrient management techniques, such as grid soil sampling and management zone delineation, along with variable rate nutrient application methods. Hands-on sessions were conducted on variable rate technology and precision fertilizer application, where participants learned about the principles and components of variable rate technology, as well as the calibration and operation of precision fertilizer applicators. Additionally, Dr. Deepti Srivastava covered the calculation of nutrient use efficiency indicators and assessment of environmental impacts of nutrient loss. The training program also introduced participants to decision support systems and precision farming tools, including software and mobile applications specifically designed for nutrient management. Participants had the opportunity to gain practical experience with these tools through interactive sessions. The training adopted a comprehensive approach, combining classroom lectures, interactive discussions, case studies, and hands-on field demonstrations. Participants were able to gain practical experience with soil sampling techniques, remote sensing data interpretation, and operation of precision agriculture equipment.

Training was concluded with feedback from the participants which was overwhelmingly positive, with many expressing their appreciation for the comprehensive coverage of topics and the practical applicability of the knowledge gained. The training program successfully enhanced the participants' understanding of precision nutrient management and its potential to improve agricultural productivity while minimizing environmental impacts. The Program was observed under the guidance of Prof



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Glimpses of the program





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