

Brief report of Guest lecture on the topic "Soil Testing and Nutrient Management" Organized by Department of Agriculture, Integral Institute of Agricultural Sciences and Technology IIAST, Integral University

The Department of Agriculture, Integral Institute of Agricultural Science & Technology (IIAST), Integral University, Lucknow organized a Guest lecture on the topic "Soil Testing and Nutrient Management". The lecture was delivered by Dr Lal Bahadur, Principal Scientist, Soil Science Laboratory, CSIR-National Botanical Research Institute, Rana Pratap Marg, Lucknow on December 05, 2023 at 11:00 A.M. in the Seminar Hall, Department of Agriculture, IIAST. Dr Lal Bahadur, has enlightened the students on various topics related to advanced techniques of soil testing and management practices and procedures followed in soil nutrient management. His basic focus area of work is evaluation of non-traditional economic plants (medicinal, aromatic, spices and floricultural) for their yield and quality under abiotic (salt/drought/water) stress conditions.

Prof. Saba Siddiqui, Head, Department of Agriculture, IIAST, Integral University, Lucknow welcomed Dr. Lal Bahadur who commenced the lecture by emphasizing the pivotal role of soil in Agriculture and its direct impact on crop productivity. Dr. Bahadur highlighted the importance of soil testing as a fundamental tool for understanding soil health, composition, and nutrient levels. The first segment of the lecture focused on the fundamental concept of soil testing, where Dr. Bahadur elucidated the basics of collecting and analyzing soil samples. He highlighted the critical role of accurate soil testing in identifying nutrient deficiencies, determining soil pH, and recognizing other factors that are pivotal for optimal crop growth. Moving on, the speaker delved into the manifold benefits associated with soil testing. He provided a detailed exploration of how embracing soil testing practices can lead to cost-effective fertilizer application, improved crop yield, and enhanced environmental sustainability. Dr. Bahadur augmented his points with real-world examples and case studies, offering tangible evidence of the positive outcomes arising from the adoption of robust soil testing methodologies. The lecture progressed to a discussion on nutrient management strategies, where Dr. Bahadur provided insights into effective approaches tailored to specific soil types and crops. Essential nutrients such as nitrogen, phosphorus, and potassium were highlighted, emphasizing the delicate balance required for optimal crop performance. This segment aimed to equip the audience with practical knowledge on implementing nutrient management techniques that align with the unique characteristics of different soils and crops. He also emphasized upon the technological advances in soil testing, showcasing the evolution of precision agriculture tools and remote sensing techniques. Dr. Bahadur elucidated how these innovations contribute to more accurate and efficient soil analysis, enabling farmers and researchers to make informed decisions. By integrating technology into soil testing practices,



the lecture emphasized the potential for enhancing the precision and sustainability of agricultural practices.

The students and faculty members were immensely benefited from Dr. Bahadur's expertise and engaging presentation style. The lecture not only broadened the understanding of soil science but also provided practical knowledge that can be applied in the field of agriculture. The event concluded with a session for questions and answers, fostering an interactive exchange of ideas and further enriching the learning experience for all participants. This definitely proved to be a valuable initiative by the Department of Agriculture at IIAST, contributing significantly to the academic and practical knowledge of the attendees. The Programme was observed under the guidance of Prof. Mohd Haris Siddiqui, Dean, Faculty of Agricultural Science and Technology and Prof. Saba Siddiqui, Head, Department of Agriculture, IIAST. This lecture was coordinated and moderated by Dr. Zeeshan Ahmed Khan, Assistant Professor, IIAST.

Glimpses of guest lectures













