



Institute of Forest Genetics and Tree Breeding, Coimbatore

Webinar on

Soil Health: Research and Development

3rd February 2022

A Webinar on 'Soil Health : Research and Development' was organized by the Institute of Forest Genetics and Tree Breeding, Coimbatore on 3rd February 2022 as a part of the monthly seminar series under Azadi Ka Amrit Mahotsav. The objective of the webinar was to create awareness on the importance of soil health among the community. About 105 participants from various parts of the country attended the Webinar. At the outset, Dr.C. Buvaneshwaran, Scientist G and Head, Silviculture and Forest Management Division, IFGTB welcomed the resource persons and participants. He highlighted the importance of soil as a soul of infinite life. Dr.A.C.Surya Prabha, Scientist D and Webinar Co-ordinator gave an overview of the webinar and IFGTB initiatives on soil research. Dr.C. Kunhikannan, Director, IFGTB delivered the special address. He highlighted the importance of forest soils, nutrient dynamics and the process of soil formation. He emphasized the soil challenges mainly land degradation due to soil erosion and the need for soil conservation. The technical session began with a lecture on '**Soil Quality Assessment Protocol: Progress, Challenges and Opportunities**' by **Dr.Tapan Jyoti Purakayastha**, Principal Scientist, Division of Soil Science and Agricultural Chemistry, Indian Agricultural Research Institute, New Delhi. He informed the participants about the importance of agroforestry soils in carbon sequestration. He explained the factors leading to the deterioration of soil quality and the significance of soil quality in relation to food security, water security, waste recycling, protection of biodiversity and habitat, environmental protection and human health. He discussed the need for soil quality assessment, indicators of soil quality, soil quality research undertaken in various parts of the country. He also mentioned about the relationship between the management goals and soil functions for the selection of soil quality indicator. He discussed the development of soil quality index, rapid

soil quality assessment using x-ray fluorescence scattering spectroscopy, visible near infra red spectroscopy and also mentioned about the decision support system developed by IARI for online assessment of soil health. He stressed on the need to establish standard protocol for identifying master key soil quality indicators.

Dr.P. Malarvizhi, Professor & Head (Soil Science), Department of Soil Science & Agricultural Chemistry, Tamil Nadu Agricultural University, Coimbatore delivered a talk on '**Soil health and its maintenance**'. She briefed on the different functions of healthy soil, properties of soil health, causes of low nutrient use efficiency, nutrient status in Indian soils and nutrient mining. She highlighted the importance of various management practices to be adopted for maintaining soil health viz, Integrated Nutrient Management, Site Specific Nutrient Management. She discussed on the need for utilization of indigenously available nutrient sources, the use of fortified and coated fertilizers. She informed about the various technologies developed by the university viz, TNAU water soluble fertilizers and macronutrient mixtures, Nutrient seed pack technology, Decision support system for balanced fertilizer recommendation, development of sensors for automated irrigation and dispensers for precision nutrient management. She stressed on the need for strengthening soil testing services in the country.

The participants shared their views and clarified their queries in the interactive session.

The webinar ended with a formal vote of thanks by Dr.A.C. Surya Prabha, Scientist D and Webinar Co-ordinator, Silviculture and Forest Management Division.



Welcome address by Dr.C. Buvanewarar, Scientist G & Head, SFM Division



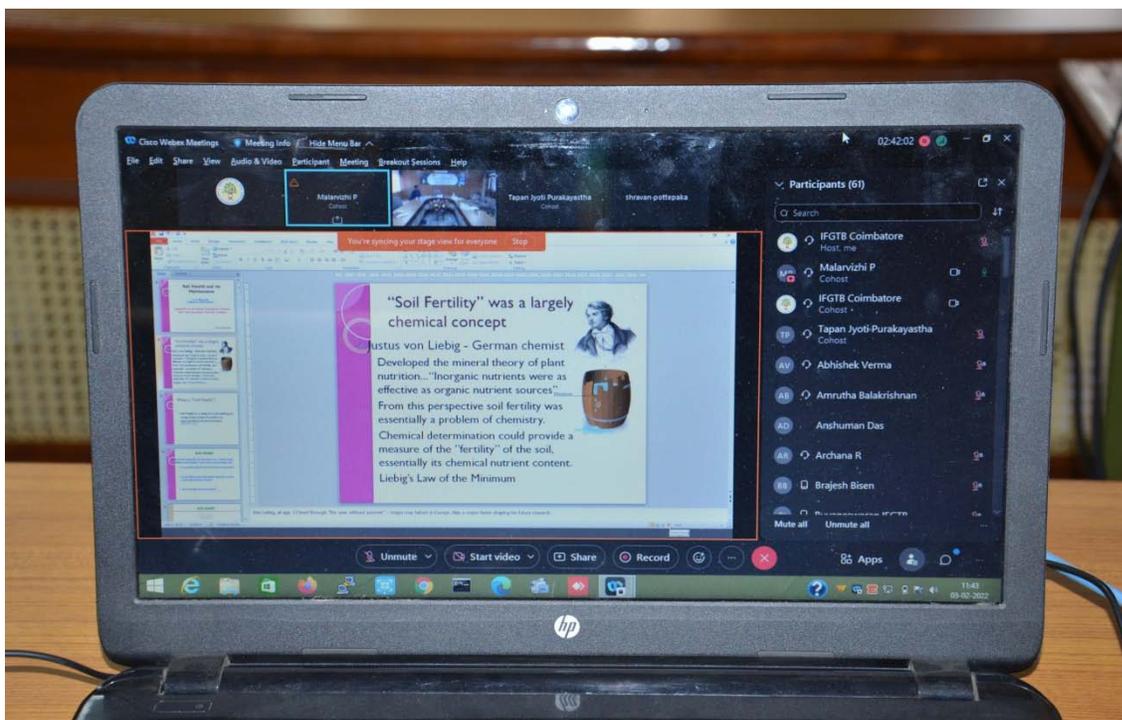
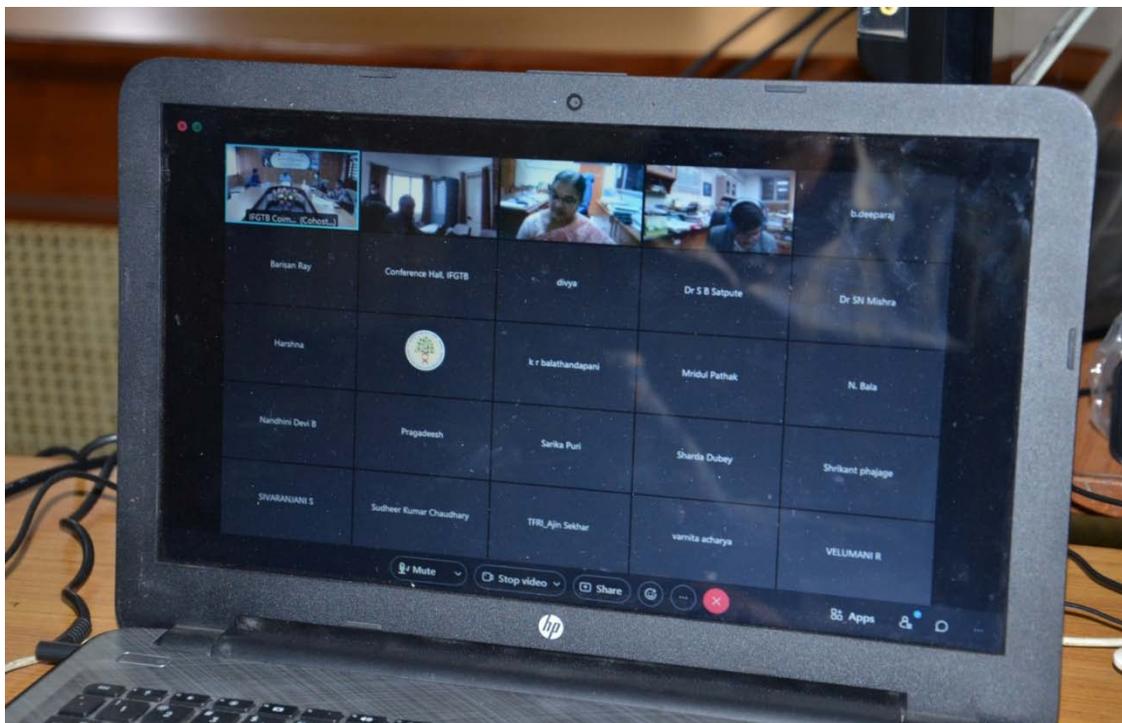
Overview of the webinar by Dr.A.C.Surya Prabha, Scientist D & Webinar Co-ordinator



Special address by Dr.C.Kunhikannan, Director IFGTB



Dr. T.J. Purakayastha delivering lecture on 'Soil Quality Assessment Protocol:Progress, Challenges and Opportunities'



Dr. P. Malarvizhi delivering lecture on 'Soil health and its maintenance'