

International Webinar on ‘Soil Spectroscopy’ jointly organized by ICAR-IISS, Bhopal and ICRAF, Nairobi on 1 October 2020

ICAR–Indian Institute of Soil Science (IISS), Bhopal, and World Agroforestry (ICRAF), Nairobi, Kenya jointly organized [an International Webinar on Soil Spectroscopy: An Emerging Technique for Rapid Soil Health Assessment](#) on October 1, 2020. The webinar was organized in the pursuit of developing fast, cost-effective, environmental-friendly, non-destructive, reproducible, and repeatable analytical technique for soil characterization/ assessment which will be helpful in achieving the Govt. Schemes, such as soil health cards. Around 850 participants representing 28 countries from scientific, educational and private & public research institutions across the globe attended the webinar.

During inaugural address, Dr. Trilochan Mohapatra, Hon’ble Secretary, DARE and DG, ICAR addressed the participants of the webinar and expressed his views on state of the art of ‘Soil Spectroscopy’ as well as its potential application as an alternative to traditional laboratory analyses. Dr. Mohapatra further suggested for creation of a standard for the collection of laboratory soil spectra to promote the sharing of spectral libraries across countries.

In his address, Dr. Tony Simons, Director General, World Agroforestry (ICRAF), Nairobi, Kenya emphasized on creation of local and regional partnerships to generate the necessary technical competence on use of soil spectroscopy for land degradation surveillance on a landscape scale.

Later, Dr. SK Chaudhari, Deputy Director General (NRM), ICAR, New Delhi stressed on rapid development of portable and handheld spectrometers for the development of monitoring networks across the country for swiftly and efficiently assessing the state of the soil resources at minimal costs.

Dr. Ravi Prabhu, Deputy Director General (Research), ICRAF, Nairobi and Dr. Javed Rizvi, Director, South Asia Program, ICRAF, New Delhi highlighted about the use of soil spectroscopy for soil mapping and enumeration of soil health.

Dr. Ashok K Patra, Director, ICAR-IISS highlighted major research achievements of ICAR-IISS-ICRAF collaborative project on ‘Soil Spectroscopy’. During the occasion the work carried out using this technology for last five years at ICAR-IISS, Bhopal was presented showing its potential in rapid analysis of soil organic carbon, pH, soil texture and soil water retention. Improvement in prediction models for available nutrients using this technique may help farmer for better fertilizer prescription.



In addition, seven eminent speakers across the globe made elaborate presentation on different aspects of soil spectroscopy and its application. Eminent speakers shared their research experiences from Australia, Africa, UK, and India. The webinar and panel discussion generated a wealth of information on use of 'Soil Spectroscopy' with respect to its potential, usefulness, limitations and future perspectives in soil health assessment. Thus, it is an emerging technique which can replace the traditional wet chemistry for analysis of soil and could be integrated with soil health card vis-à-vis fertilizer recommendation and thus optimize the use of fertilizers.

(Source: ICAR–Indian Institute of Soil Science, Bhopal)
