ICAR Indian Sugarcane Research Institute launches IKSHU Cane Sugarcane Model

To commemorate the occasion of 74th Foundation Day of ICAR- Indian Sugarcane Research Institute, Lucknow, a Foundation Day Lecture and launching of the IKSHU-Cane Sugarcane model was held on 14th of February, 2025 at ICAR-ISRI, Lucknow. The model has been jointly developed by ICAR-ISRI, Lucknow and ICAR-IARI, New Delhi for predicting sugarcane growth and yield, assessing the impact of edaphic-climatic factors on crop performance and simulation of sugar yield for early and mid to late harvesting sugarcane varieties grown in tropical and sub-tropical regions of the country.

Dr. T. K. Srivastava, Convener of the programme introduced the background and need of developing this sugarcane yield simulation model. On this occasion, Dr Soora Naresh Kumar delivered the 74th Foundation day lecture on the topic 'How to run IKSHU-Cane sugarcane model for estimation of sugarcane growth and yield' and informed that the IKSHU-Cane (Integrated Knowledge System for Sugarcane Harvest Output) model is a process based model that takes into account the soil properties, water availability, nitrogen supply, radiation use efficiency, photosynthesis, dry mater partitioning, stalk biomass and sugar accumulation pattern as influenced by weather variability on daily basis. The Foundation Day lecture was followed by launching of IKSHU-Cane Sugarcane model on ISRI website (Developers: Dr Soora Naresh Kumar, Head, Division of Environmental Science, ICAR-IARI, New Delhi, Dr. T. K. Srivastava, Principal Scientist, ICAR-ISRI, Lucknow, Dr. Ashok K. Srivastava, Former Principal Scientist, ICAR-ISRI, Lucknow and Mr. Vikas Srivastava, ICAR-IARI, New Delhi). Dr. R. Viswanathan, Director, ICAR-ISRI, Lucknow congratulated the team and the expressed the hope that this model would be useful for researchers as well as stakeholders for advance estimation and forecast of sugarcane and sugar production in India. Dr. Sangeeta Srivastava, Principal Scientist and In-Charge, PME Cell, ICAR-ISRI, Lucknow expressed her gratitude to the distinguished audience and proposed the vote of thanks. The programme was conducted by Dr. Anita Sawnani.





