

Press Release

TUESDAY, FEBRUARY 8, 2022

Presentation of Significant Educational Achievements for the year 2021 by the Professors representing different Schools of the teaching disciplines (Virtual Mode)

The third day of the convocation-2022 witnessed the school-wise presentations of the significant educational achievements for the year 2021 made by the Professors of various disciplines of six different schools, namely Crop improvement, Crop protection, Natural Resource management, Basic Sciences, Horticultural Science and Social Sciences. The welcome address was given by Dr. Rashmi Aggarwal, Dean & Joint Director (Edn.), IARI, New Delhi. The chairpersons of the different sessions were introduced by Dr. Ashok Kumar Singh, Director, IARI, New Delhi. The sessions were convened under Dr S. P. Datta, Professor, SSAC, IARI, New Delhi through a virtual mode.

The session of crop improvement was chaired by Dr Kuldeep Singh, Head (Consultant), ICRISAT, New Delhi. The professor of Genetics and Plant breeding mainly highlighted the works on abiotic stress tolerance in rice and chickpea; biotic stress tolerance in mungbean, soybean, wheat; quality traits improvement in maize, wheat and rice. The works done by the postgraduate students of Plant Genetic Resources PGR focused on assessment of genetic diversity for insect pest resistance, abiotic stress in black gram, brinjal, wheat. The Division of Seed Science and Technology SST highlighted the standardisation of seed production technology and seed quality enhancement.

The session of School of Crop Protection was chaired by Dr Bhushan L. Jalali, Former Director of Research, CCSHAU, Hisar. The research studies included development of agrochemicals and formulations for management of pathogenic diseases in wheat, mustard; Bioremediation of aliphatic and poly aromatic hydrocarbons (PAHs) from oil contaminated soil using microbial consortia; Taxonomic and Toxicological studies; Climate change and insect pest management; Nematode biosystematics and various modes of plant-nematode interaction; pathogen characterisation in bamboo, arecanut, mustard, carrot and maize and novel ways for efficient disease management of blast, Karnal bunt, Citrus Tristeza Virus, powdery mildew, leaf blight.

Dr S. K. Chaudhari, DDG (NRM), ICAR, New Delhi chaired the session of School of Natural Resource Management. The major themes of postgraduate research studies included nutrient management, conservation agriculture and the newly developed resource conservation technologies to achieve precision and minimise wastage; and application of IoT in agriculture. Deliberations were also on works of image processing, remote-sensing, digital soil mapping, crop simulation modelling, technologies for climate resilience, Biomass valorisation, Synthesis and evaluation of novel fertilizer products and Waste water management.

The session on school of Basic Sciences was chaired by Dr. M. Ravindran, Professor & Head, Dept. of Plant Biotech., TNAU, Coimbatore. The research work of basic sciences

covered diverse aspects like Non-destructive nutrient profiling of food crops for their nutritional quality assessment; Deciphering factors controlling quality, bioavailability and functionality of nutrients in different food matrices; Enhancing the nutritional and keeping quality of food products through processing; Abiotic and biotic stress tolerance; Plant nutrition.

The session of Horticultural Sciences was chaired by Dr Hari Har Ram, Former Professor & Head, Dept. of Vegetable Science, GBPUAT, Pantnagar. The session witnessed elaborate presentations on Improvement of flower crops; Crop production and management in flowering plants; Post-harvest management in flower crops; Genetical studies and molecular characterization; Crop improvement and character association; Crop regulation; Post harvest management of fresh fruits and vegetables; Processing of horticultural crops; Processing of arable crops; Genetic improvement and heterosis studies; Mapping of traits and molecular breeding; and Standardization of seed production technology.

Dr Rakesh Singh, Professor and Head, Agricultural Economics, BHU chaired the session of School of Social Sciences. The presentation from school of Social Sciences included various aspects like Groundwater-energy nexus in agriculture and its implications on farm economy in western Uttar Pradesh, economic analysis of agricultural markets and value chain, assessment of diversification, custom hiring centres, Soil health card Scheme; evaluation of Sansad Adarsh Gram Yojana; FPO led extension approach; Effectiveness of agri-business incubators; financial inclusion and skill development; social media and acceptance behaviour for GM Crops. The works on Designing of experiments and analysis of experimental data; Statistical modelling; Statistical genetics and genomics; Genome bioinformatics; Computational biology; Metagenomics; Artificial intelligence/machine learning application in agriculture; Decision support system/mobile based application in agriculture were also covered.

The word of thanks was proposed by the convenor, Dr S P Datta. The programme was live-streamed on IARI's you tube channel in two different parts and can be accessed at

<https://www.youtube.com/watch?v=7ptIip5o8os>

<https://www.youtube.com/watch?v=5kiLuS6ZWqQ>.