

Gold Medal Presentations of 58th Convocation

The 58th ICAR –IARI Convocation week (Feb.10-14, 2020) started on 10th February, 2020 with presentations of significant research findings of post-graduate and doctorate students under the chairmanship of Dr. V.S. Tomar, Former Vice Chancellor, JNKVV, Jabalpur and convener Dr. Anil Dahuja, Professor, Biochemistry. Dr. A. K. Singh, Director, ICAR-IARI and Dr Rashmi Aggarwal, Dean & Joint Director (Education) were present on the dais. Dr. R. Srinivasan, Former Project Director, NIPB, New Delhi; Dr V. K. Bhatia, Former Director, IASRI; Dr W. S. Dhillon, ADG (Horticulture), ICAR; Dr T. Janakiram, ADG (Horticulture), ICAR; Dr D P Abrol, Dean, SKUAST-J, Jammu graced the occasion as jury members. Dr. Rashmi Aggarwal shared in her remarks that from the students’ research; more than 300 research publications were published in reputed research journals. She highlighted that one of PG student’s research paper got publishes in a journal of NAAS rating 13.91. Significant post graduate students research work presentation session comprised of 27 presentations by meritorious students, out of which there were 17 M.Sc. and 10 Ph.D presentations.

The presentation from crop improvement included the research work on morphological and biochemical characterization of MAS-derived quality maize genotypes; Seed vigour in hybrids and parental lines of rice. The presentation from Molecular Biology and Biotechnology dealt with Heterologous expression and characterization of aetylcholine esterase–1 of *Helicoverpa armigera*; cross-talk among plant hormone salicylic acid and jasmonic acid and ABA in Brassica.

The presentation from Agronomy highlighted evaluation of ZnO nanoparticles embeded NPK complex fertilizer in aromatic rice. The presentation of Agricultural Physics included modelling evapotranspiration and water productivity of wheat; Assessing and arresting transfer of arsenic from soil to rice plant was the highlight of Soil Science and Agricultural Chemistry. The Microbiology presentation included expression of xylose utilizing yeast for single cell oil production; Nanoparticles augmented Calothrix as biocontrol agents against fungal diseases of tomato. The presentation from Plant Pathology highlighted the Comparative analysis of Spermosphere and phyllosphere bacteriome of rice and their effect on foliar pathogens. The Entomology presentation discussed taxonomic studies on *Lepidopteran* pests associated with lac insects; characterization of BG-II resistance in field collected strains of pink bollworm. Nematology highlighted identification of Odorant response gene.

School of Basic Sciences presentations included CRISPR/Cas9 mediated targeted genome modification for inactivating phytic acid transporter gene in soybean. School of horticultural Sciences presentations included morpho-physiological and molecular characterization of heat tolerant genotypes in eggplant; marker assisted breeding to incorporate combined resistance to late blight and tomato leaf curl virus disease in tomato; Molecular studies on interaction of gladiolus and *Fusarium oxysporum*.

School of Social Sciences represented research on market integration and price forecasting of major vegetables; prospects and challenges of millets as nutri-health foods for enhancing nutritional security; development of Bayesian framework for long memory; small domain interference from survey-weighted counts. Bioinformatics presentation dealt with identification and characterization of circular RNAs in legumes. Computer Application highlighted the mobile based decision support systems for postural assessment of agricultural activities using RULA technique.

The Session ended with vote of thanks to the chair, jury and members present on and off the dais and students present in the hall.