

Brainstorming session on Insect Genomics and Its Prospects in Pest Management Organized

ICAR-National Bureau of Agricultural Insect Resources, Bengaluru successfully organized one day National Brainstorming session on "Insect Genomics and its Prospects in Pest Management," on 23rd August 2024. The session was inaugurated and chaired by Dr. Rakesh Mishra, Director of the Tata Institute for Genetics and Society, Bengaluru, and co-chaired by Dr. L. S. Shashidhara, Director of the National Centre for Biological Sciences, Bengaluru, along with Dr. S.N. Sushil, Director of ICAR-NBAIR, Bengaluru. Dr. Sushil welcomed all the delegates, briefed about the major achievements of ICAR-NBAIR, and reiterated the commitment of the Bureau towards harnessing the potential of the insects for sustainable agriculture. Dr. Rakesh Mishra emphasized the importance of exploring the innovative molecular techniques to develop ecofriendly pest management strategies in order to reduce the ill effect of the chemical pesticides. He also insisted on the importance of developing regulatory guidelines for the molecular derived technologies. Dr. L. S. Shashidhara stressed upon the significance of dsRNA sprayable formulations and gene-drive technologies for the pest management. Dr. T. Venkatesan, HoD, Division of Genomic Resources presented an overview and status of genomic research at ICAR-NBAIR and prevailing guidelines in India and across the Globe. Prominent expert panelists included Dr. Y.G. Prasad, Director, ICAR-CICR, Nagpur; Dr. C. Vishwanathan, Joint Director (R), ICAR-IARI, New Delhi; Dr. R.C. Bhattacharya, Director, ICAR-NIPB, New Delhi; Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited and Dr. D.K. Nagaraju, Joint Director (Entomology), RPQS, Bengaluru. The discussions focused on the utilization of genomic techniques like RNAi and CRISPR on various insect species, challenges in insect molecular research, guidelines for dsRNA sprayable formulations, existing guidelines on insect genome editing for developing novel cutting-edge technologies in pest management. The session concluded with recommendations for sharing insect genomic data through collaborative platforms, addressing ethical and regulatory issues, and formulating policies for future action plans. The session brought together around fifty participants and twenty expert panelists from various research institutes including ICAR-IARI, New Delhi; ICAR-CICR, Nagpur; Seribiotech Research Laboratory, Bengaluru; IBAB, Bengaluru; TIGS, Bengaluru; PAU, Ludiana etc., across the country along with the scientists and students from ICAR-NBAIR. The meeting ends with the formal vote of thanks proposed by Dr. Gandhi Gracy, Principal Scientist of the Bureau.







