Science Setu Webinars by NIPGR

"Plant Metabolomics - A novel and versatile tool for crop protection and enhancing productivity"

Press- Note

Date: 28-10-2022, Friday

Resource person: Dr. Jyothilaxmi Vedaserry, Scientist V, NIPGR

The Department of Biotechnology, Government of India, has planned "Science Setu" as a virtual platform to connect research Institutes with undergraduate students. Under this, our college has been assigned to National Institute of Plant Genome Research (NIPGR), New Delhi. NIPGR is an autonomous institution aided by the Department of Biotechnology. Research at NIPGR focuses on functional, structural, evolutionary and applied genomics of plants, including crop plants. Through the Science Setu program, our students and faculty virtually connect with NIPGR, New Delhi and got to know about the multifarious kinds of plant based research. It is a unique opportunity for science students at undergraduate and postgraduate level to get an exposure to high-level research.

Dr. Pinky Agarwal and Dr. Amarjeet Singh, Scientists, NIPGR gave welcome note on this event. Resource person: Dr. Jyothilaxmi Vedaserry, Scientist V, NIPGR started her lecture by enlightening our knowledge on importance of metabolomics as a tool to enhance crop protection. Metabolomics using highresolution mass spectrometry is being used worldwide to identify and quantify physiologically and ecologically relevant plant metabolites. It allows rapid phenotyping of crops according to their metabolomic status and can be used as a tool for precision agriculture and cutting-edge biology. Low-abundant plant metabolites are functionally classified, as defense or growth-related phytohormones, primary and secondary metabolites.

She discussed history and latest trends in using metabolomics as a tool to improve crop protection and increase productivity of different plants along with technologies used for both targeted and untargeted metabolite analysis. Two faculties and three students from KMV, Jalandhar attended the event. Dr. Pinky Agarwal and Dr. Amarjeet Singh, Scientists, NIPGR attended the questions of the participants and gave vote of thanks. It was an intellectual and exciting experience for all the participants.



