



## The Oxford College of Science

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## **DEPARTMENT OF ZOOLOGY AND GENETICS**





Event: INDUSTRIAL VISIT: INDIAN INSTITUTE OF HORTICULTURAL RESEARCH (IIHR), HESSARAGHATTA

Date & Time: 19-01-2024

Venue: Indian Institute of Horticultural Research, (IIHR), Hessaraghatta

Co-ordinators: Dr Deepa Gopinath, Assistant Professor and Ms. Lakshmi Ratnakaran, Assistant

Professor, Department of Zoology and Genetics.

Resource Person: Dr Manmohan M, Principal Scientist (Plant Physiology).

Mr Yogi Arun Dhawane, Research Associate, Plant Physiology

Dr Usha Rani, Senior Scientist, Div. of Basic Sciences

The Department of Zoology and Genetics organized a visit for Final Year UG Genetics students to Indian Institute of Horticultural Research (IIHR), Hessaraghatta, on 19<sup>th</sup> January 2024. The objective of the visit to IIHR was to expose the students to the latest developments in horticulture science and technology, observe ongoing research projects and experiments, understand the methodologies and techniques used in horticultural research and interact with scientists and researchers to discuss current research topics. The IIHR team provided an overview of the institute mission, ongoing projects, and significant achievements. They showcased their improved varieties introduced to farmers and market. Mr Yogi Arun Dhawane, Research Associate, gave an overview of CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) technology on improving crop quality, yield, and resistance to diseases and pests. He explained in detail the CRISPR-Cas9 system, its mechanism, its importance and challenges in genome editing for horticultural crop. This visit was an opportunity to observe first-hand the technologies. The visit helped the students to enhance their theoretical knowledge with practical insights and prepare them for advanced studies or careers in horticulture, and foster a deeper understanding of the field and methodologies used in the plant research labs to enhance crop traits and improve agricultural productivity.