



Bal Bharati
PUBLIC SCHOOL
Sector-21, Noida, G.B. Nagar

A BIOTECHNOLOGICAL JAUNT

With the aspiration of mastering in the field of biology, the Biology students of Class XII went on an educational venture to the National Research Centre of Plant Biotechnology (NRCPB) of the Indian Centre for Agricultural Research (ICAR) at Pusa Road, Delhi on 9th October 2022 to open their minds to a diverse field of Plant Biotechnology.



LEARNING BEYOND THE WALLS OF CLASSROOM

After a journey, filled with chatter, fun and food, of around 1.5 hours, the students finally arrived at NRCPB where they were welcomed with the beautiful sight of nature. As they waited at the reception, excitement filled the corridors of the institute. Then they were taken to the auditorium where Dr. Negi briefed them about what all is done at ICAR and what fields are open for biology students. After a healthy discussion that enlightened the young minds, what waited for them were the NRCPB's Tissue Culture Labs.

In these labs where the rice genome was modified and studied, the students came across various machines involved in the process. The students also saw the process of centrifugation and were amazed by seeing the electrophoresis tool which till then they had only seen in their textbooks. Students were astonished to see the RT-PCR machines, they were also told about the difference between PCR and RTPCR. Students learned a lot about how all the processes undertaken are done carefully and cost effectively.

They also came across the storage refrigerators where the plant samples are kept in around -80°C , so that they remain intact as it is not possible to study thousands of sample at a time.



After that, the students traveled to another block where a scientist guided them about the research which takes place at that centre. He also showed various Phytotrons where different plant species underwent different biotic and abiotic stresses in the process of making a suitable, sustainable and economic hybrid. The successful hybrids were kept in huge containers which regulated the environment for proper growth by providing optimum temperature, adequate CO₂ concentration along with specific light spectrums. The students also learnt that the entire block came under the UNDP and was funded by the World Bank.



PLANTS IN PHYTOTRON

Due to the shortage of time, the students had to leave early without exploring the other blocks but they were happy as they left ICAR with a suitcase filled with knowledge, experience and jolly memories.



SWEET MEMORIES TO BE CHERISHED

**REPORT BY:
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