

Department of Biotechnology

Activity Report (Session-2024-25)

- Extension Lecture on the Topic- "Prevention and Cure of Lifestyle Diseases through Alternative Methods" on October 21, 2024

The Department of Biotechnology of Kumari Vidyavati Anand D.A.V. College for Women, Karnal organized an extension lecture on the topic- "Prevention and Cure of Lifestyle Diseases Through Alternative Methods" on October 21, 2024.

The Resource person for the lecture was Dr. Amita Gupta, Assistant Professor at U.I.E.T., Kurukshetra University. Dr. Gupta emphasized that due to sedentary lifestyle, stress and lack of awareness, people suffer from lifestyle disorders (hypertension, diabetes, obesity). She highlighted the importance of yoga, meditation, physical activity and balanced diet for combating lifestyle disorders. Dr. Amita Gupta shared her deep knowledge and personal experiences with the students. The lecture was attended by the undergraduate and postgraduate students of Biotechnology. She motivated the students to have an optimistic approach in life and incorporate healthy habits in their daily routine to help improve their health and well-being. The lecture was very informative and an enriching experience for the students.



- **Two-day workshop on Bio fertilizers: For Sustainable Agriculture (27-28, March 2025) Resource Person: Dr. Priyanka Chandra.**

Two-day workshop on Bio fertilizers: For Sustainable Agriculture was organized by the Department of Biotechnology, Kumari Vidyavati Anand D.A.V. College for Women, Karnal on 27-28, March 2025. On the first day of the workshop, the keynote speaker Dr. Priyanka Chandra, Senior Scientist, ICAR-CSSRI, Karnal threw light on the topic and shared valuable insights.

She discussed microbes as bio fertilizers and emphasized that

PGPR and VAM are very important microbes that help in improving soil fertility and boost crop productivity.

Dr. Priyanka Chandra highlighted that CSSRI, Karnal is dedicated to pursue interdisciplinary research on salinity/ alkalinity management and use of poor quality irrigation waters in different agri-ecological zones of the country. She concluded her talk by mentioning that soil is the foundation of nutrition.

On the second day, total 29 students of M.Sc.(Biotechnology) First and Second year visited CSSRI, Karnal and gathered knowledge about various crops through a field visit

Under the guidance of revered scientist Dr. Anita Mann (Senior Scientist, CSSRI, Karnal) and Dr. Priyanka Chandra (Senior Scientist, CSSRI, Karnal) the students visited Central Laboratory and Molecular Plant Physiology Laboratory of the Institute and garnered information about the various instruments and latest techniques used in soil research.

The workshop enriched students with practical insights and knowledge relevant to their academic curriculum and future research endeavours.



जैव उर्वरकों के विषय पर दो दिवसीय कार्यशाला का आयोजन



दो दिवसीय कार्यशाला के दौरान मुख्य अतिथि व विद्यार्थी • किर्झिति

जासं • कर्नाल : कुमारी विद्यावती आनंद डीएवी महिला महाविद्यालय में बायोटेक्नोलॉजी विभाग द्वारा सतत कृषि के लिए जैव उर्वरकों के विषय पर दो दिवसीय कार्यशाला का आयोजन किया गया। कार्यशाला के पहले दिन मुख्य अतिथि व मुख्य वक्ता के रूप में डा. प्रियंका चंद्रा, वरिष्ठ वैज्ञानिक कृषि अनुसंधान परिषद केंद्रीय मृदा लवणता अनुसंधान संस्थान ने महाविद्यालय के परिसर में शिरकत की। कालेज की प्राचार्या मीनू शर्मा ने मुख्य अतिथि को हरा पौध भेंट कर स्वागत किया। डा. मंजू सिंह ने छात्राओं को कार्यशाला के विषय की प्रासंगिकता से अवगत कराया। डा. नादियान चौहान विभागाध्यक्ष वनस्पति विज्ञान एवं कार्यशाला कन्वीनर ने अतिथि का औपचारिक परिचय देकर छात्राओं को संबोधित किया।

- **Educational visit to NDRI-National Dairy Research Institute, Karnal on November 18, 2024 for Post graduate and Undergraduate students**

The Department of Biotechnology and Chemistry, Kumari Vidyavati Anand College for Women, Karnal organized an Educational visit to NDRI-National Dairy Research Institute, Karnal on November 18, 2024. The students of M.Sc. Biotechnology First Year, B.Sc. Biotechnology Third Year and B.Sc. Physical Sciences Aided Second year visited the institute and gathered knowledge about various varieties of cows and buffaloes through their exhibition unit, accompanied by Mr. Rakesh (Young Professional II). He also explained various clones of cattle produced by NDRI through video. At present, there are 2000 cows in the Research centre for the production of different dairy products. Later, the students visited the Dairy Experimental Division and observed the equipments used, viz. fermenters, packaging machines, etc. and learned sweet-making production process. Under the guidance of Mr. Rahul (Lab Technician), the students also visited Animal Biotechnology research Centre at the Institute and garnered information about the latest research technology regarding CRISPR, IVF and Embryo transfer technology and various lab equipments. The educational visit was very enlightening for the students aspiring to build-up a career in the field of Biotechnology.



- **RPL (Recognition of Prior Learning) on Plant Tissue Culture was organized in collaboration with Centre of Excellence for Horticulture Skills in India (CEHSI), Karnal**

The Department of Botany and Biotechnology of our College in collaboration with Centre of Excellence for Horticulture Skills in India (CEHSI), Karnal organized an RPL Training Program (Recognition of Prior Learning) on Plant Tissue Culture on October 11, 14 and 15, 2024. Dr. Ritu Sharma, Head of Operations at CEHSI, contributed as the subject matter expert and imparted practical knowledge to the participants. Other two subject experts during the program were Dr. Nirmalkant Sharma, Director, Pathik Agrihorti Solutions and Dr. Akhilesh Thakur, Chief Technical Officer, Pathik Agrihorti Solutions. The resource persons meticulously explained the students about various important aspects and technical concepts of the plant tissue culture techniques. They shared valuable insights from their extensive research and experiences in this field with them. A total of 66 students from B.Sc. Medical/Life Science stream of our college participated in this training. E-certificated of this training will be provided to the participants by Agriculture Skill Council of India. The program also reflected CEHSI's commitment to equipping women with specialized knowledge and skills, fostering gender equality and advancing technical capabilities in the field of agriculture and biotechnology.



Achievements of Biotechnology UG/PG Students

- University Positions (in the Final examinations May-2024)

The Post-graduate students of the Department of Biotechnology have excelled by securing distinguished university positions in the final examinations conducted by Kurukshetra University in May-2024, bringing great honour and recognition to the institution.

- Ms. Renu Yadav of M.Sc. II Biotechnology (Roll no.220158303) bagged Third position in Kurukshetra University examinations.
- Ms. Manshi, student of M.Sc. II Biotechnology (Roll no. 220158314) secured fourth position.
- Ms. Deepika Choudhary, M.Sc. II Biotechnology (Roll no. 220158318) secured sixth position.
- Ms. Ishika, student of M.Sc. II Biotechnology (Roll no. 220158305) bagged eighth position.
- Ms. Shashi, M.Sc. II Biotechnology (Roll no. 220158307) secured twelfth position.
- Ms. Kesar, student of M.Sc. II Biotechnology (Roll no. 220158319) bagged thirteenth position

Biotechnology students of UG/PG Courses had participated in various activities/events/Competitions and received prizes/secured positions. The details are mentioned below:-

Five-Day Workshop on ‘Chromatic Chemistry’ – The Art of Pigments and Dyes : The Department of Chemistry of our college organized a Five-Day Workshop titled ‘Chromatic Chemistry’ – The Art of Pigments and Dyes (March 20-24, 2025). Different competitions were organized during the workshop and the results of the competitions were as follows-

- **PowerPoint competition-** Ms. Chhavi, B.Sc Biotechnology (II Year) bagged second position in the PPT competition.
- **Poster making Competition-** Ms. Sanjam, student of B.Sc. Biotechnology 1st Year participated in the workshop. She bagged 2nd Position in the competition.

World Water Day, 2025: The Department of Botany and Eco Club of our college organized an Intra-Departmental Poster Making Competition to commemorate World Water Day, 2025- Theme: Glacier Preservation. Our undergraduate students participated in the Competition, Ms. Lovely (B.Sc. Biotechnology Third Year) bagged First Prize and Ms. Jannat (B.Sc. Biotechnology First Year) bagged 3rd position.

PowerPoint Presentation Competition: Two of our students Ms. Yashika and Ms. Jyoti of B.Sc. Biotechnology 2nd year participated in the PowerPoint Competition organized by G.V.M.

College, Sonapat as part of National Science Day Celebrations on February 28, 2025 and both of them secured 2nd position in the competition.

Poster-making Competition: Ms. Nancy of B.Sc. Biotechnology 2nd year participated in the Poster-making Competition organized by G.V.M. College, Sonapat as part of National Science Day Celebrations on February 28, 2025 and she bagged 1st position in the competition

State Level Online PowerPoint Competition: Ms. Yashika of B.Sc. Biotechnology Second year participated in the State Level Online Power Point Presentation Competition on the topic Innovative Approaches for Preserving Wild Flora and Fauna essential for Harmonious Coexistence organized by the Department of Botany and Zoology of our college to commemorate Wild Life Week, October 02-08, 2024. She bagged 3rd position in the competition.

District Level Inter College Science Quiz: Pt. Chiranji Lal Sharma Govt. College, Karnal organized a District Level Inter College Science Quiz sponsored by Haryana State Council for Science and Technology, Panchkula, Haryana. Two of our students, Ms. Lovely (B.Sc. Biotechnology Third Year) and Ms. Chhavi Seth (B.Sc. Second Year) were members of the team and got selected for the Zonal Level of this Quiz Competition.

Farewell: Youth and Cultural Affairs Society of our college organized farewell on April 19, 2025, our student Ms. Griffin of B.Sc. Biotechnology III Year participated in the event and she was the First runner up.

Green Olympiad for Youth: Ms. Anjali of M.Sc. Biotechnology First Year was awarded under the category 'Top scorers of GO4Youth-State/UT

Best Cadet Award: Ms. Deepti of M.Sc. Biotechnology First year was awarded Best NSS Cadet Award on 13th October 2024 organized by Traffic Welfare and Road Safety Foundation, Ministry of Corporate Affairs, Govt. of India (Sponsored by Anti-Corruption Foundation).

Debate Competition: Ms. Chhavi Seth of B.Sc. Biotechnology Second year participated in the Debate Competition organized by G.V.M. College, Sonapat as part of National Science Day celebrations on February 28, 2025 sponsored by HSCSIT, Govt. of Haryana.

Science Quiz: Ms. Chhavi Seth of B.Sc. Biotechnology Second year participated in the Science Quiz organized by S.D. (PG) College, Panipat on February 25, 2025 to March 03, 2025.

Zonal Level Quiz Contest: Two of our students, Ms. Lovely (B.Sc. Biotechnology Third Year) and Ms. Chhavi Seth (B.Sc. Second Year) were members of the team and participated at the Competition on November 2, 2024 sponsored by Haryana State Council for Science, Innovation and Technology.

State Level Quiz Competition: Ms. Lovely (B.Sc. Biotechnology Third Year) participated at the competition organized by Dyal Singh College, Karnal on 19th March, 2024 under the aegis of Haryana State Council for Science, Innovation and Technology, Panchkula for the year 2024-25.