

Session 2020-21

Microbiology Department Activity

1. Preparation of slogan and digital banner regarding COVID-19 awareness

Preparation of slogan and digital banner regarding COVID-19 awareness Preparation of slogan and digital banner regarding COVID-19 awareness activity by Department of Microbiology in first week of April 2020 and propaganda on social sites for the COVID 19 awareness in second Week of April 2020

2. Online Quiz competition on subject

Online Quiz competition for UG and PG M microbiology students has been organized by department of Microbiology on subject topic in first week of May 2020

3. Online Quiz competition on COVID-19

Online quiz on COVID-19 general awareness quiz for UG-PG students of college in third Week of April 2020 organized by Department of Microbiology, BCS, Wardha.

4. Online Quiz competition on COVID-19 for other college students and faculties

Online COVID-19 general awareness quiz for other college students and faculties was organized by Department of Microbiology, BCS, Wardha.

5. International level webinar on “Career Opportunities and Entrepreneurship in Bioscience”

Department of Microbiology organized International level webinar on “Career Opportunities and Entrepreneurship in Bioscience” organized by Department of Microbiology, Bajaj College of Science, Wardha in Collaboration with Microbiologist Society India (MSI) held on 22 July 2020. There were two speakers namely Two Speakers. I : Dr. Sanjeev Patankar, Ex Principal, SS Jaiswal College, Arjunimor, Dist. Gondia and delivered lecture on ‘Career opportunities & Entrepreneurship in Biosciences’ the second speaker was Dr. Devendra Lingojwar, Founding Director, Adeetechgene Biotech Pvt. Ltd,Pune, India. He talk on ‘Success story as Bio-entrepreneur’ Total 1246 participants from 21 states and 5 different countries were participated.

6. Guest lecture of Dr. Sujata Bhargava

Department of Microbiology in collaboration with Department of Botany organized A guest lecture of Dr. Sujata Bhargava, Former Professor & Head, Department of Botany, SP Pune University, Pune on Topic “Autotrophy” on 13th August 2020 at 12.00 pm. Total 78 Participants were attended the lecture on Zoom meeting platform.

7. Inauguration of Microbiology Biotechnology Society Student Unit for the session 2020-21 and guest lecture

The Microbiology Biotechnology Society Student Unit for the session 2020-21 has been inaugurated online on Saturday, 30th January 2021 at 10.30am. The programme was chaired by Dr. Om Mahodaya, Principal, Bajaj College of Science, Wardha. Dr. A. M. Deshmukh, President, Microbiologist Society, India (MSI) has addressed the students. The introductory speech was delivered by Dr. Mrs. S. S. Khandare, HOD, Department of Microbiology. She introduced the office bearers of the Microbiology Biotechnology Society Student Unit for the session 2020-21. On this Occasion Dr. Sanjeev Patankar, Ex Principal, SS Jaiswal College, Arjunimor, Dist. Gondia and President, MSI, Maharashtra and Goa region delivered a guest lecture on the topic “Nutritional Immunology & its Possible Role in COVID-19 Like Infections” Total 86 undergraduate and Postgraduate students along with Microbiology and Biotechnology faculty members were present for the programme. The vote of thanks was given by Dr. Ulka Malode-Bidwai, Coordinator, Biotechnology Department.

8. Preparation and Participation of PG students in awareness video on Hand sanitization, Vaccination and Mucormycosis

PG microbiology students (Jr. And Sr.) prepared videos on various topics like Hand sanitization, Vaccination and Mucormycosis for COVID 19 awareness. Students also convinced their family, friends, neighbours about the use and significance of hand sanitization, prevention of COVID 19 by vaccination and danger of Mucormycosis and treatment for it.

9. Survey on Corona Vaccination

The survey on awareness on Corona vaccination for Wardha district (<https://forms.gle/1PR4v8eeir2XP4qu8>) is going on by PG students of department of

microbiology as their MSc. Dissertation. They are collecting data related to vaccine for COVID 19 and its post consequences by online mode. They also try to convince people for vaccination, if they are not ready to take vaccine.

10. Online Seminar Competition for Undergraduates and Postgraduates

Online Seminar Competition for Undergraduates and Postgraduates department students were arranged between 25th -28th November 2020 for Undergraduates and for Postgraduates on 5th December 2020. Total 35 undergraduate (BSc Sem V- 07 students , BSc Sem III -12 students, BSc Sem I- 06 Students) and 03 postgraduate students were participated and presented on different microbiology topics. Each student presented for 10 min Presentation on Zoom platform.

11. Canvas Competition for Undergraduate students

Canvas Competition was organized for Undergraduate students of the department and called for the canvas submission upto **15th January 2021. Various microbiology topics were choosen for the completion such as** Post Corona Impact on Society, Bioluminescence, Bioleaching, Bioremediation, GM Foods, Use of Microorganisms in day today life, Hazards of Biotechnology. Students had chosen any one topic for presentation out of it. 14 students have participated in the activity

12. Poster Competition for Postgraduate students

Poster Competition was organized for Postgraduate students of the department on **19th January 2021. Various microbiology topics were choosen for the completion such as** Different Vaccines for COVID 19, CRISPER Technology, Microbes as a solution to pollution, DNA Fingerprinting, Newly Emerging Diseases, Gene Therapy. Students had chosen any one topic for presentation out of it. 03 students were participated in the activity.

13. Celebration of Birth Anniversary of Scientists in Microbiology

The online quiz competition organized by Department of Microbiology on the occasion of Birth Anniversary of renown Microbiology Scientists: Louis Pasteur and Robert Koch" is organized on 5th January 2021 at 12.00 pm. The quiz competition will be on Moodle platform. The Quiz Timing is 25 Min for 25 marks. Bsc Sem I 25 Student has participated in the quiz.

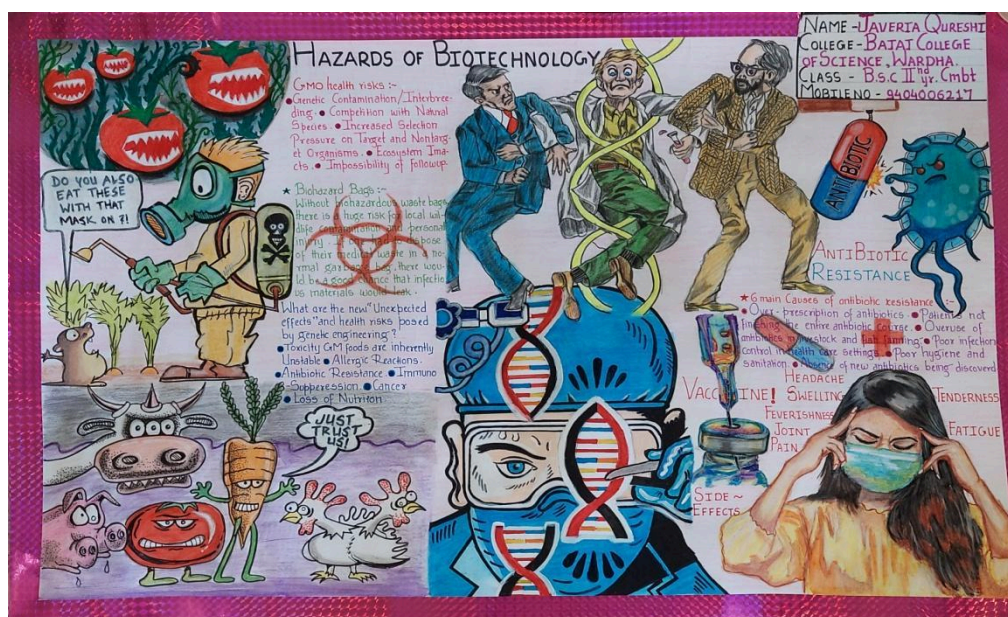
14. Celebration of Gandhi Jayanti

On the occasion of Gandhi Jayanti on 2 October 2020 department cleaning programme was carried out under the guidance of Head of Department Dr. Mrs. Suhas Khandare and Mahila Adhayan Kendra, Bajaj College of Science, Wardha. The teaching and non teaching staff has participated for the cleanliness of the department and surrounding campus.

15. 20th State Level MicrobiOlympiad contest

19th State Level MicrobiOlympiad contest was organised for all the microbiology students of BSc on 5th March 2020. Total 49 students appeared and passed the exam. Along with this 'Canvas competition' was organised for BSc and MSc students. In Canvas competition total 13 students of UG (06) and PG (07) were participated. In Microbio-Slet competiotn 01 UG and 02 PG students were participated.

Photo Gallery



GENETICALLY MODIFIED FOODS

History of GM Foods

The first genetically modified food to be approved was **Flavr Savr Tomato** in 1994 (developed by Calgene). This tomato was developed by regulating expression of an enzyme, **polygalacturonase**, so it would easily ripening was prevented and shelf life of tomato got increased.

What are GM Foods?

GM foods are bioengineered foods produced from organisms that had changes introduced into their DNA through some **genetic manipulation**. The foods have such genes introduced in their genome which make them resistant to certain pathogens, pests or insects & also contribute to increase yield.

Science of GM Foods

Genetic modification may include the addition of DNA from species that would not breed in nature.

Cross species - or transgenic - genetic manipulation and gene of foods combine **FISH (Arcticounder)** with **STRAWBERRIES** and even **TOMATOES**.

An **antifreeze gene** from Arcticounder has been introduced in strawberries to extend their growing season in northern climates.

Studies of GM Foods

The advance research is now proved that use of GM pesticides generated **abnormal** structural and chemical changes in various organs and specifically reduced fertility.

Wildlife resistant crops can cross-pollinate. As a case **herbicide-resistant** weeds.

Will GM foods affect my body?

As resistance between **Arctic** and **strawberry** is not possible.

Herbicides found for gene transfer naturally which does not transferred by **Arctic**.

How are GM Foods produced?

STEP 1: Identification of a gene of interest

Agricultural need → Growth of an appropriate environment → Screen lib of chosen plants

STEP 2: Isolation of genetic trait of interest

Comparative analysis of genome to identify trait and then isolate the gene

STEP 3: Insertion of desired trait into the new genome

Targeted trait gene is cut and pasted into a plasmid vector using appropriate enzymes.

STEP 4: Introduction of the recombinant genome into the host cell

This can be done in the following two ways:

- I. Gene gun shoots DNA coated metal particles into cells.
- II. Plasmid vector inserted into bacteria even it infects the host cell.

STEP 5: Growth of GM Crops/Plants

Genetically controlled growth chambers are monitored to ensure that the new GM crops grow and replicate. Optimum growth conditions are determined at each stage.

GM Foods in Agricultural Biotechnology

Approved Commercial Products (Worldwide)

Crop Example	Genetically Engineered Trait
Coconut	Insect Resistance
Soybean	Herbicide Tolerance
Cantaloupe	Altered fatty acid composition
Plum	Virus Resistance

Products still in Development

Crop Example	Genetically Engineered Trait
Rice	Vitamin Enrichment
Tobacco	Vaccines
Mango	Oral vaccines
Cattle	Protein modification

Prevalence of GM foods

Indian Estimates

BT cotton is the only GM crop allowed in India, which has 12 active genes from *Bt* bacterium *Bacillus thuringiensis* to protect the plant from pest pink bollworm.

World Estimates

Percent of crops in total crop production (USA):

- 94% Soybean
- 87% Corn
- 87% Cotton

It is seen that use of GM foods is increasing day by day.

30,000 different genes used in growing corn (because of its being a genetically modified crop).

Source: Anuradha N. Ingole, College (Biology) of K. J. Somaiya Institute of Science & Technology, Mumbai-400076.

Recording...
Speaker View
Exit Full Screen

BYJ542

Mayur Ingale

Harshada Sonawale

darshana mankar

Pranali Kheikar

Pallavi R...

Ruchika Rewatkar

Bhumika Dhoke

Sakshi Wagmare

RUCHIKA BHSEKAR

pranali Jaunjal

Jayanti Mishra

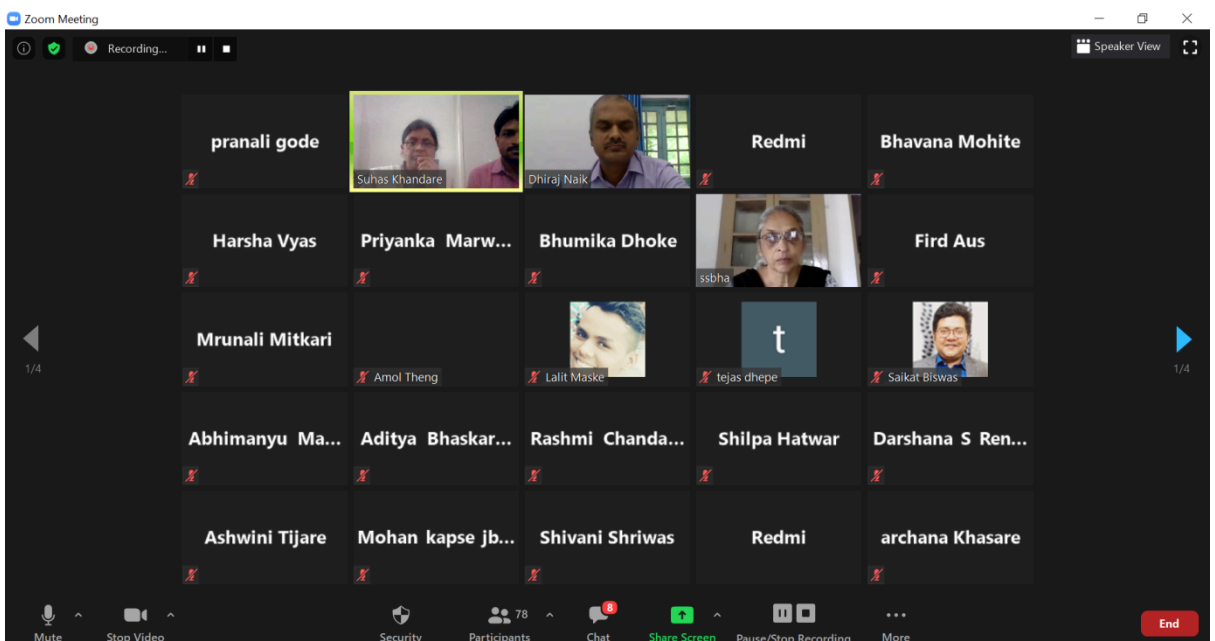
Harsha Vyas

pragati 1234

Bhavana Mohite

Connecting to audio...

Mute
Stop Video
Security
Participants 16
Chat
Share Screen
Pause/Stop Recording
Reactions
End



HIV - Microsoft PowerPoint

File Home Insert Design Transitions Animations Slide Show Review View

Clipboard Font Paragraph Drawing Editing

Slides Outline

1 Back stages of AIDS/HIV/AIDS
Subject: Microbiology
Class: B.Sc. III (SemV)
Topic: HIV (introduction, history, structure, pathogenesis, transmission, stages, facts.)
Presented by- ku. Vaishnavi Anil
Roll no: 1851639

2 WHAT IS HIV?

3 HISTORY

4 STRUCTURE OF HIV

5 TYPES OF HIV

6 Click to add notes

Shiksha mandal's
Bajaj college of science, Wardha.

Subject: Microbiology
Class: B.sc. III (SemV)
Topic: HIV (introduction, history, structure, pathogenesis, transmission, stages, facts.)

Presented by- ku. Vaishnavi Anil
Roll no: 1851639

Mayur Ingale
Ganesh Khare
Ganesh Soni
ulka malode

Slide 1 of 14 | Office Theme | 69% | 12:07 PM 11/25/2020