DEPARTMENT OF MICROBIOLOGY WORKSHOPS

Workshop on "Mycorrhizal Biofertilizer technology-a tool for agriculture, horticulture and forestry"

Date: 03.08.2018

The Department organized one day workshop (hands on training) on "Mycorrhizal Biofertilizer technology-a tool for agriculture, horticulture and forestry" on 03.08.2018. Dr.V.Mohan, Scientist – G, Forest Protection Division, IFGTB, Forest Campus, R.S. Puram, Coimbatore explained about the various types of bioferilizers like PSB, *Azospirillum, Azotobacter*, VAM production and its application in agriculture. He also explained about the demerits of chemical fertilizer and usage of waste as a substrate for the production of compost. He provided hands on training on the isolation of VAM spores by wet sieving and decanting technique, mass production of spores and application of spores in the field. This is a promising event for the development of successful entrepreneurs in agricultural field.





Dr.V.Mohan, Scientist – G, Forest Protection Division, IFGTB with Students in Hands on Session





Discussion and Feedback from students

Workshop on Foldscope

Date: 27.08.2018

A workshop on Foldscope was organized by the department on 27th August, 2018. Dr. Baluprakash, Head, Department of Microbiology, Vivekanandha College of Arts and Science, Thiruchencode was the Resource person. A Foldscope is an optical Microscope that can be assembled from simple components, including a sheet of paper and a lens. It was developed by Manu Prakash, an Indian. It is part of the "frugal science" movement which aims to make cheap and easy tools available for scientific use in the developing world. He explained the methods to fold and unfold the parts of a Foldscope. Observation of microorganisms using Foldscope was demonstrated. Students took environmental samples and observed individually.



Dr. Baluprakash with the Foldscope in his Lecture

Workshop on PCR Techniques

Date: 05.03.2019

On 3^{rd March} 2019, a workshop was organized by PG and Research Department of Microbiology on PCR TECHNIQUE in association with ABBES BIOTECH. The chief guest introduction was given by Dr. Lali Growther Head, PG and Research Department of Microbiology. Dr. S. Vijayakumar, Production Manager, Abbes Biotech, gave a short introduction to PCR techniques and directly went onto giving the students hands on training on PCR techniques. He started with composition of primers and reagents added for a 50µl PCR reaction and explained on how to design primers and to set up a PCR reaction. The workshop was concluded by observing the amplified DNA bands on agarose gel electrophoresis and Gel documentation system. Techniques were performed by all the batches of IIIrd B.Sc,. Microbiology.

Workshop on PCR Techniques





Workshop on PCR Techniques- Hands on Training





TRAINING PROGRAMMES Training Programme on Food Safety

Date: 14/10/2018

Hindusthan College of Arts and Science, Department of Microbiology organized a one day training programme on "Opportunities for Microbiologists in Food and other related Industries" on 14th October. Ms. K.Sukirtha, Assistant Professor, Department of Microbiology, welcomed the gathering. Sugathan.S.Nair, Food Safety trainer, & Life Member QCI, Coimbatore was the resource person. The topics chosen were students self development and understanding the personal hygiene in food industry. He clearly explained the HACCP (Hazard Analysis Critical Control Point) and GMP (Good Manufacturing Practice) to ensure the safety of the food. The programme was interactive, informative, interesting, and enlightening. Dr Arun Kumar.G, Assistant Professor, Department of Microbiology proposed the vote of thanks.



Students with the Resource person Mr. Sugathan .S.Nair

Student Development Programme

Date: 14/10/2018

Hindusthan College of Arts and Science, Department of Microbiology organized Student development programme on Stress Management and Entrepreneurship Development on 14th October. Miss K.Sukirtha, Assistant Professor, Department of Microbiology, welcomed the gathering Dr. Rohini Sharma, Assistant Professor, Department of Food and Nutrition, PSG College of Arts and Science, Coimbatore was the resource person. The topics chosen were Entrepreneurship, Stress Management. She clearly explained the skills developed by the students to become a successful entrepreneur in the society and she also delivered about laughing therapy

to release the stress. Nearly 48 students from B.sc Microbiology participated. The programme was interactive, informative, interesting, and enlightening. Dr Arun Kumar.G, Assistant Professer, Department of Microbiology proposed the vote of thanks.



Dr. Rohini Sharma addressing the participants

GUEST LECTURES

Guest Lecture on Basic Tools in Bioinformatics

Date: 11.09.2018

The Department of Microbiology conducted a guest lecture on "Basic Tools in Bioinformatics" on 11.09.2018. Dr. M. Rajeswari, Assistant Professor, Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam University for women explained about the tools used in bioinformatics like Gen Bank, NCBI, PDB, EMBL and also gave hands on training on gene prediction methods, sequence analysis methods, retrieval of proteins and nucleotide sequence from PDB and NCBI. II.M.Sc., & III.B.Sc students participated and acquired knowledge in this field.

Guest Lecture on Use of Microbes in Agriculture-An Overview

Date: 15.12.2018

A Guest lecture on "The Use of Microbes in Agriculture-An Overview" was organized by the department. The Resource person was Dr. S. Easwaramoorthy, Managing director, Green life Bio-tech. The presidential address was given by Dr. Lali Growther, Head, PG and Research Department of Microbiology. The welcome address was given by R.Saikishore of IIIrd B.Sc., Microbiology. Dr. S. Easwaramoorthy covered the fields of Agriculture where he shared many of his research works regarding the usage of Bio-Fertilizers as an alternative to NPK source (Nitrogen, phosphorous, potassium). He pointed out that most of the phosphorous that is applied synthetically is not absorbed by the plants and results in economic loss for the farmers (Only about 1.6% of the total phosphorous is utilized by the plants and remaining are the mineral salts and they remain in the soil for a long time). He also stated the internships offered by his company to our students and shared the challenges he faced on the fields while introducing bio fertilizers. The session was made interactive with a query section. The vote of thanks was given by G. Akshaya of IIIrdB.Sc., Microbiology.

Dr. S. Easwaramoorthy and the student participants





Guest Lecture on Diversity of Mushrooms

Date: 21-02-2019

On 21st February 2019, a Guest Lecture was organized by the department. Dr. Lali Growther Head, PG & Research Department of Microbiology gave the welcome address and introduced our guest of honour Dr. A. Paneerselvam, Associate Professor and Head, Department of Microbiology, AVVM Sri Pushpam college of Arts and Science. He shared his experience in types of Mushroom he has seen throughout his 35 years of experience. He also gleefully shared recipes of mushroom dishes as a fun session. The events of the day were concluded with the National Anthem.



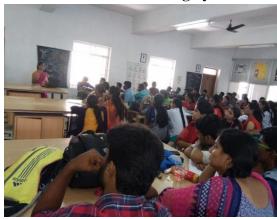
Dr. A. Paneerselvam addressing the students

Guest Lecture on Need for Textile and Food Microbiology in the Current Scenario

Date: 11-01-2019

On 11th of January 2019, a Guest lecture on "Need for textile and food Microbiology in the current scenario" was organized by PG and Research Department of Microbiology. The lecture on Medical Textiles was given by Ms. Agalya Devi K (Technical Manager, Microbiology, SITRA Coimbatore) sharing her field of experience with us throwing light on scope on medical textiles. She also gave a short lecture on food Microbiology and its related fields and the Entrepreneurship opportunities given by SITRA and the vacancies offered by them to young Microbiologists.

Ms. Agalya Devi K addressing the students





Guest Lecture on Unity and Diversity – Explorations and Experience with Microbes

Date: 30.07.2018

The department organized a Guest lecture on 30.07.2018. Dr. Lali Growther, Head, Department of Microbiology welcomed the gathering. Principal Dr. A. Ponnusamy, presided over the function and delivered a talk on Biology in particular about Microbiology. The chief guest for the function was Dr. S.R. Prabagaran, Assistant Professor, Department of Biotechnology, Bharathiar University, Coimbatore. He delivered a lecture on "Unity and diversity- Explorations and experiences with microbes". The speech was much motivative and informative to the students. The Guest lecture was concluded with the vote of thanks by Dr. N. Hemashenpagam, Associate Professor, Department of Microbiology, Hindusthan College of Arts and Science.

Dr. S. Prabagaran, Principal and Head of the Department



POSTER/ MODEL PRESENTATION COMPETITIONS

Date: 28.01.2019

PG and Research Department of Microbiology, Hindusthan College of Arts and Science conducted Poster presentation and Model presentation competitions on 28.01.2019. The topic for poster/ Model presentation was Recent Developments in Microbiology. The poster/ Models presented by students of the department displayed the recent advances in Microbiology. Models were presented by II - B.Sc., Microbiology & III- B.Sc., Microbiology. Posters and Models were evaluated by faculty members of the department and the best posters and modes were awarded.



Faculty Members evaluating Posters presented by students

NATIONAL SCIENCE DAY CELEBRATION

Date: 28-02-2019

On 28th of February 2019, National Science Day was celebrated. The Chief Guest was Dr. P. Ponmurugan (Associate professor, Department of Botany, Bharathiar University, Coimbatore). He discussed various aspects of being an entrepreneur and gave a brief explanation on patents, products and copy rights under biology. He explained about trademarks that are used by companies and also patented music, movie titles, dialogues etc.

As part of National Science Day Celebrations, various competitions were conducted. Students explained concepts and created awareness by Role playing. One of the role plays depicted the treatments available for Tuberculosis. Another group performed a mime on current scenario of agriculture. Then Poster and Paper presentation competitions were conducted in the UG Laboratory.

Dr. P. Ponmurugan addressing the students





Role play and Mime show by students





SEMINAR / CONFERENCE ATTENDED BY STUDENTS

- Priyanka, Anusha. S, Annusha. R, Sangeetha. M, Athira. B.M, Jayasri. S, Dharshini. M.S Students from I – B.Sc., Microbiology, Got second Prize in MIME at Inter College-Cultural meet Talentia – 2019 Conducted by St.Paul's College of Arts and Science for Women, Coimbatore on 25.01.19.
- 2. 27 students from I-B.Sc., Microbiology participated in State level seminar on "Importance of Human Values in the Present Scenario "organized by St.Paul's College of Arts and Science for Women, Coimbatore on 11.12.18.
- 3. K.Sandhiya, T.Yuvanbalaji, R.Yuvashree, R. Arjunan, V.Gnana soundarya from II. B.Sc., participted in the Science Acadiemies lecture workshop on Frontiers in Spectroscopy organized by Department of Chemistry, Kongunadu Arts and Science College, Coimbatore on 11 and 12th October 2018.

- 4. 14 students from I.B.Sc, Microbiology participated in one day workshop on Mushroom cultivation Technology organized by Department of Biochemistry, Kongunadu Arts and Science College, Coimbatore on 9th October 2018.
- 5. 8 students from II. B.Sc., Microbiology participated in "XCENTRA: X Come, Energize, Njoy, The Reverie & Accomplish" under DBT STAR College Scheme, Government of India, New Delhi on 6th March 2018,organised by Department of Biochemistry, PSG College of Arts & Science, Coimbatore.
- 6. 26 students from II.B.Sc, Microbiology participated and presented paper in one day National seminar on Recent Innovations in Biosciences organized by Department of Biotechnology, Dr. R.V. Arts and Science College, Coimbatore on 5th January 2018.

Internships Attended by Students

Sl.No.	Department	Class	Institute/ Industry Number of beneficiaries	Duration
1.	Microbiology	III.B.Sc.,	Green life Biotech Laboratory,	20 days
			Somanur (4 students)	
			Bioline laboratory, Vadakovai (1 student)	15 days
			Asian Institute of Medical Science, Faridabad (1 student)	15 days
			Rajesh Tilak Hospital and Fertility Centre (1 student)	15 days
			Sundaram Arul Raj Hospital (5 students)	15 days
			AMI Bioscience (15 students)	15 days
			Pasteur Institute (1 student)	15 days