

Alumni Association of Biotechnology

School of Studies in Biotechnology

Pt. Ravishankar Shukla University, Raipur 492 010 Chhattisgarh

Cordially invites you to witness

Popular Lectures *cum* Interactive Sessions with our Esteemed Alumni

Title: Recent Advances in RNA Biology

21 July 2023, 11:15 to 11:55 am



Dr. Rohini Nair
Faculty

Gujarat Biotechnology University, Gandhinagar, India



Lecture Link

Offline Lecture

21 July 2023, 12:10-01:30 pm

Title: Habitat Adapted Fungal Endophytes can
Ameliorate Abiotic and Biotic Stress in Melons



Dr. Vineet Meshram

Research Scientist

Department of Plant Pathology & Weed Research
The Volcani Institute, Agricultural Research
Organization, Rishon LeZion, Israel

Venue: Seminar Hall, SoS in Biotechnology

Report on
Popular Lecture cum Interactive Session on the topic
“Habitat-adopted fungal Endophytes can confer Abiotic and Biotic stress tolerance in melon”

21st July 2023

Organized by
Alumni Association of Biotechnology

Supported by
School of Studies in Biotechnology

Pt. Ravishankar Shukla University, Raipur, Chhattisgarh

An amazing lecture cum interactive session has been conducted on **21st July 2023** by the Alumni Association of Biotechnology at the School of Studies in Biotechnology, Pt. Ravishanker Shukla University, Raipur, 492010 (C.G.) in order to spread knowledge about Adapted fungal Endophyte's habitat, Abiotic and Biotic stress, and symbiotic relationships. Our esteemed alumni **Dr. Vineet Meshram**, a Research Scientist, Department of plant pathology and weed research, The Volcani Institute Agricultural Research Organization, Rishon, Lezion, 7528809, Israel.

Our head of the department **Dr. Keshav Kant Sahu** greeted our esteemed alumni Dr. Vineet Meshram and a brief about him and about their works was given by Ms. Shristi Verma. Alumni, Dr. Smriti Adil give a warm welcoming to our guest Dr. Vineet Meshram with a bouquet.

A total of 30 participants including, alumni members, PhD scholars and 27 M. Sc students, had been interactively joined the session.

The lecture begins with the types of plant interactions such as pathogenic, saprophytic, and endophytic interactions. Then he discussed cash crops in Israel like muskmelon and watermelon. Then the lecture falls on the crop muskmelon which experiences biotic and abiotic stress. Biotic stress includes- *Fusarium* wilt (*Fusarium oxysporum* sp. Melon) and charcoal rot disease (*Marcrophomina phaseolina*). Abiotic stress includes – Salinity, Drought, and Heat/cold. After this, he discussed endophytes and their nature as hitch/hikers of intracellular and intercellular. Then the collection of plant samples [*Citrullus colocynthis* and *Eballium elaterium* from Negew (Hazeva and eshet (Paran) reservoir, Monoardica balsa mina from the Arava valley, (Kibbutz yahel)] and isolation of endophytic fungi.

Then he explained to us the steps like the distribution of fungal endophytes, identification of endophytic fungus then its classification through fungal DNA extraction using RAPD, which is an ITS-based sequencing. Screening fungal endophytes for plants growth-promoting activities (Phosphatase activity and IAA production). Then he talked about cell wall degrading enzyme

activity cellulase, protease, and chitinase further on abiotic and biotic stress. He highlighted important points about abiotic stress and biotic stress, the antioxidant enzyme activities, the identification of bioactivity endophytic fungus, and also about the field trials.

Following the lecture, an interactive session was conducted where everyone was open to ask any question or query related to the topic and Dr. Vineet answered the questions amazingly with examples. Then he ended the lecture by providing us with valuable information and knowledge about the topic and the idea about the fellowship, career queries, and further opportunities.

This interactive session was ended by honouring them with a memento as a token of gratitude by **Dr. Nagendra Chandravanshi**. At last Dr. Nagendra Chandravanshi presented a vote of thanks by sharing their experience and their vast amount of knowledge to us.

The session was so amazing and interactive and everyone was overwhelmed by the interactive session.

Glimpses of the day



