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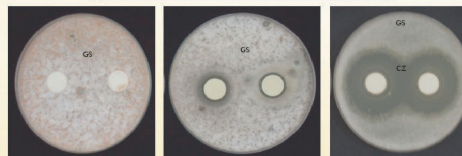
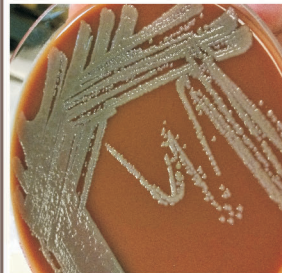
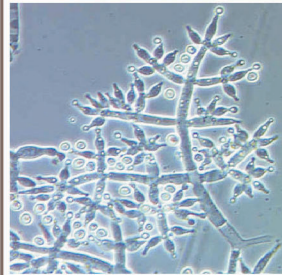
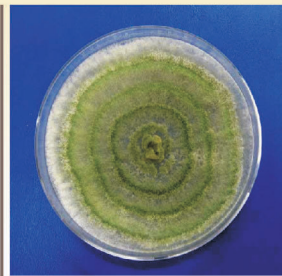
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University of Horticultural Sciences, Bagalkot



ICAR Sponsored Short Course on

## Prospecting Biological Agents for the Management of Diseases in Horticultural Crops

13<sup>th</sup> - 22<sup>nd</sup> November 2017

Course Director

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Organized by

Department of Plant Pathology

College of Horticulture

UHS Campus, GKVK Post, Bengaluru - 560 065

## Background

Horticulture being an important commercial activity providing stable monetary returns, all efforts should be made to develop horticulture on industrial footing. Plant diseases are one of the most important biotic agents that cause serious losses and damages to horticultural crops and products. Plant diseases need to be controlled to ensure food quantitatively and qualitatively. A number of different strategies are employed to manage plant diseases. Beyond good agronomic and cultural practices, growers often rely heavily on chemical pesticide application. These synthetic chemicals will negatively affect the environment, human and animal health. So it is desirable to replace the synthetic pesticides with biological agents that possess high specificity against the targeted plant pathogens, easy degradability after effective usage, low mass production cost. Biological control of plant diseases has been considered a viable alternative method to manage plant diseases.

Biological control of plant pathogens continues to inspire research and developments in many fields. Biocontrol is environmentally safe and in some cases is the only option available to protect the plants against pathogens. The induction of plant resistance using non pathogenic microorganism is also a form of biological control. Interactions that lead to biocontrol can include antibiosis, competition, induction of host resistance and predation. Some of the microbial taxa that have been successfully commercialized and are currently marketed include bacteria belonging to the genera *Agrobacterium*, *Bacillus*, *Pseudomonas* and *Streptomyces* and fungi belonging to the genera *Ampelomyces*, *Candida*, *Coniothyrium* and *Trichoderma*. Screening for the antagonistic activity is a critical step in the development of biocontrol agents. The success of all subsequent stages depends on the ability of a screening procedure to identify an appropriate candidate. Mass-production and formulation of biocontrol agents is the need of the hour to make the products stable, effective, safer and more cost-effective.

## About the course

There will be series of lectures covering above topics. *vis-à-vis* hands-on practical sessions on related techniques. Various techniques *viz.*, isolation of bio agents from soil, efficacy of bio agents against soil borne pathogens, methods relevant to the topics will be covered in practical sessions. Guest faculty from UASB, IHR, NBAIR, Bengaluru, UAS Dharwad, UAHS Shivamogga, TNAU Coimbatore, IISR Khozikode, CPCRI Kasargod and other institutions will be invited to deliver niche specific lectures and to have extended discussion.

## Date and venue

This short course will be for 10 days from 13<sup>th</sup> to 22<sup>nd</sup> November 2017 at College of Horticulture, UHS Campus, GKVK Post, Bengaluru - 560 065, Karnataka, India.

## Eligibility

Participants from State Agriculture and Horticulture Universities / ICAR institutions are invited. The participants with Master's degrees in Agriculture / Horticulture with specialization in Plant Pathology, Microbiology, Plant Nematology, Entomology, Botany, Sericulture not below the rank of Assistant Professor.

## Registration

The interested candidates have to apply online through Capacity Building Programme (CBP) portal at the URL: <http://cbp.icar.gov.in/applyDetails.aspx> . Applicant has to pay non-refundable registration fee of Rs. 50/- in the form of a Demand Draft (DD) or Indian Postal Order drawn in favour of “**The Comptroller, UHS Bagalkot**” payable at Bagalkot. The online filled in application should be printed out and do respective competent authority of the organization approve the same. Duly approved application form along with registration fee should be sent to “**The Course Director**” before the closing date of 30.10.2017. If required, an

advanced copy of the application may be sent to the Course Director. However, their selection will be subjected to receiving approved application only. The selected candidates will be informed by e-mail and they should conform the acceptance through return e-mail within two days.

## Travelling allowance and accommodation

The travel fare to and fro for journey will be provided as per ICAR norms. The reimbursement will be limited to AC II Tier / AC bus by the shortest route for attending the summer school. Travel by air is not permissible. Photocopy of train/bus tickets need to be produced for reimbursement. For out station participants the accommodation will be arranged on twin sharing basis. Meals and refreshments will be provided as per the ICAR rules of the short course. The local participants will be provided with lunch and inter-session tea only.

## Weather in Bengaluru

The weather will be pleasant with average temperature of 26°C during November month.

## How to reach College of Horticulture, UHS campus

The College of Horticulture, UHS campus is situated on the western side of the University of Agricultural Sciences, Bengaluru (UAS-B), GKVK Campus. It is about 14 km away from Bengaluru city railway station / central bus terminal (Majestic) and 21 km from Kempegowda International Airport, Bengaluru with two approach, one on Bengaluru-Hyderabad highway (NH-7) and another on Major Sandeep Unnikrishnan Road on the western side of the campus.

## Important dates

Last date for receiving applications : 20.10.2017  
Intimation of selection : 30.10.2017  
Training : 13.11.2017 to 22.11.2017