

## About ICAR-IISR

The ICAR-Indian Institute of Spices Research (ICAR-IISR), Kozhikode, a constituent body of Indian Council of Agricultural Research (ICAR) is a major Institute devoted to research on spices. In 1976, it started as a Regional Station of the Central Plantation Crops Research Institute (CPCRI), Kasaragod engaged in research on spices. A National Research Centre for Spices was established in 1986 with its headquarters at Kozhikode, Kerala by merging the erstwhile Regional Station of CPCRI at Kozhikode and Cardamom Research Centre at Appangala, Karnataka. Realising the importance of spices research in India this Research Centre was upgraded to Indian Institute of Spices Research on 1 July 1995.

## How to reach

The Institute is located at Chelavoor, 11 km from Kozhikode City on the Kozhikode-Wayanad road (NH 212). Kozhikode is well connected by air, rail and road with all parts of the country. Taxi service can be availed at railway station/airport/bus station to reach ICAR-IISR, Kozhikode. Participants are requested to make their own arrangement of transport to reach ICAR-IISR, Kozhikode.

## Important dates

Last date for submission of application  
**20.12.2021**

Communication of acceptance  
**25.12.2021**

## Program Director

**Dr. J. Rema**

Director (Acting)

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## Course Director

**Dr. Santhosh J. Eapen**

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## Co-ordinators

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## Contact Us

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ICAR Sponsored Short Course

## *Phytophthora*

From Isolation to  
Functional Genomics

January 20-29, 2022



ICAR - Indian Institute of Spices Research

## Background

*Phytophthora* is one among the most devastating phytopathogenic genus widely distributed pan globe with a potential to cause catastrophic damages in numerous economically important horticultural crops. In India, *Phytophthora* incited diseases are the major production constraints in spices, plantation crops, tuber crops, fruits as well as vegetables. With the identification of new species of *Phytophthora* in black pepper and nutmeg, it is evident that the pathogen is evolving and we need to gain more insights into its biology and evolution. In order to generate vital information to design a sustainable and successful management strategy against this pathogen, we need to employ advanced tools like next generation sequencing (NGS), bioinformatics and genome editing in our routine research. However, a thorough knowledge on biology of the pathogen, skill in handling the cultures and protocols pertaining to molecular as well as genome analyses are inevitable to generate holistic knowledge bank of the pathogen.

The short course is, therefore, principally conceived to impart expertise in aspiring faculty and scientists on diverse methodologies associated with *Phytophthora* research by blending hands-on training and expert lectures so as to enable the participants to apply the same in their research programmes.

## Course contents

The course content will broadly cover the following topics:

- Isolation, pure culturing and maintenance
- Morphological and molecular Identification
- Molecular characterization and phylogenetic analysis
- Zoospore induction and pathogenicity
- Screening for resistance and management
- NGS and Bioinformatic tools in *Phytophthora* research
- Host-pathogen interaction and Genome editing

## Date and venue

This short course to be organized by Division of Crop Protection will be for 10 days from 20 to 29 January 2022 at ICAR - Indian Institute of Spices Research, Marikunnu (Post), Kozhikode-673 012, Kerala.

## Eligibility

1. Master's Degree in Plant Pathology / Microbiology / Botany / Biotechnology
2. Working not below the rank of Assistant Professor and equivalent in the concerned subject under Agricultural University/ICAR Institute

## How to apply

The interested candidates have to apply online through Capacity Building Programme (CBP) portal at the URL: <https://cbp.icar.gov.in/applyDetails.asp>. Only 25 participants will be selected for the short course and all the selected participants have to pay ₹50/- as registration fee which can be paid online at <http://spices.res.in/pages/online-payment>.

The candidates shall take print out of the on-line filled in application and get approval of the competent authority of the respective Institute/SAU. The duly filled-in application form along with the transaction details of registration fee should be sent to the Course Director before the closing date of 20.12.2021.

## Travel and accommodation

The lodging, boarding and travel expenses of the selected participants will be reimbursed under the training programme budget as per ICAR guidelines. Participants are required to produce money receipt/tickets in support of their claim. The travel expenses will be restricted to maximum AC-II tier train or bus fare by the shortest route. Air travel is not allowed. Accommodation will be provided at the Institute's guest house. Participants are requested not to bring any family members along with them.