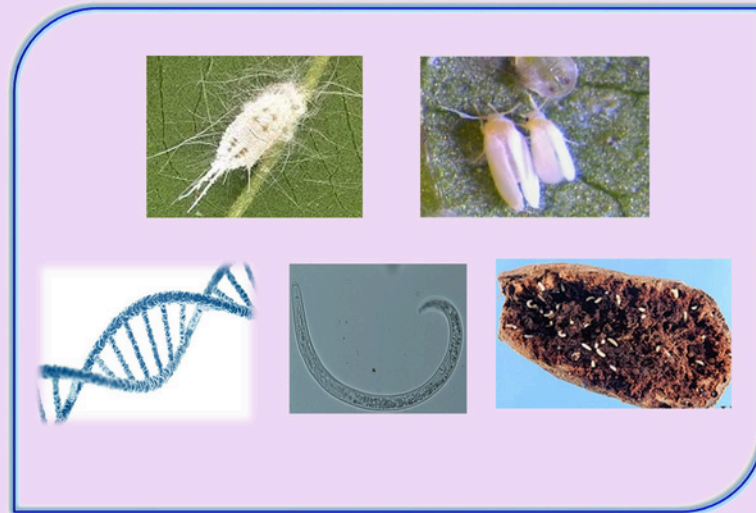


**Training on**  
**Identification of pests of tuber crops and their**  
**innovative management strategies**  
**21-25 October 2024**



**Course Director**  
**Dr. E.R. Harish**

**Course Coordinators**  
**Dr. H. Kesava Kumar**  
**Dr. B.G. Sangeetha**

For registration  
scan QR code



**Organized by**  
Division of Crop Protection  
ICAR - Central Tuber Crops Research Institute  
Sreekariyam, Thiruvananthapuram - 695017, Kerala

## About ICAR-Central Tuber Crops Research Institute

The ICAR-Central Tuber Crops Research Institute (CTCRI), an institute affiliated with the Indian Council of Agricultural Research, was founded in 1963 and includes a Regional Centre located in Bhubaneswar, Odisha. The All India Coordinated Research Project on Tuber Crops (AICRP-TC), operating from the headquarters in Thiruvananthapuram, Kerala, is responsible for the research, development and extension activities related to tropical tuber crops across 18 states and one union territory (Andaman and Nicobar Islands) in India. ICAR- CTCRI holds a unique distinction as the only research organization worldwide exclusively dedicated to the study of tropical tuber crops. These crops encompass major tuber crops such as cassava, sweet potato, yams, aroids (elephant foot yam, taro, and tannia), as well as minor tuber crops like Chinese potato, arrowroot, and yam bean. These tuber crops play a vital role as staple foods in the diets of people in the developing world, with versatile applications in the feed and industrial sectors. During the past six decades, institute has developed numerous sustainable production, protection, and processing technologies have been developed for these crops, and 71 improved varieties have been released. The agri-business incubator and techno-incubation center, situated at both the headquarters and the regional station, actively promote entrepreneurship among farmers and other stakeholders.

## Background

Climate change is causing unexpected negative impacts in agriculture production and various pests are emerging as serious threats causing havocs in the economy. A number of pests like mealybugs, mites, whiteflies, weevils, nematodes etc. are causing serious economic losses in tuber crops cultivation for the last few years. Precise identification is imperative to tackle them. Moreover, eco-friendly alternative approaches with minimum negative impacts to environment and non-target organisms are the need of the hour. Keeping that in mind, this training is designed to meet the requirement of various stakeholders related to tuber crops.

## Objectives

- To convey morphological and molecular identification techniques of tuber crop pests
- To apprise various novel management strategies of pests using innovative strategies



## Course Contents

- Training for identification of tuber crop pests
- Management aspects of pests through chemical, biological approaches
- Important topics on molecular identification of pests viz standardization of DNA isolation protocols, Polymerase Chain Reaction (PCR)
- RNA isolation from pest and infested plant samples
- Identification and gene expression analysis of insect resistant genes in tuber crops
- Identification and management strategies of plant parasitic nematodes (PPN)
- Various modalities under BOLD (Barcode of Life Database) submission
- Pest management using CTCRI developed cassava based biopesticides
- Field demonstration on effectiveness of biopesticides against tuber crop pests

## Duration

Duration of the course is five days from 21-25 October 2024. The outstation participants are expected to arrive latest by the evening of 20 October 2024. The participants are advised to schedule their return journey only after 5.00 PM on 25 October 2024.

## Eligibility

Participant should be students/ staff from ICAR Institutes/ SAUs/ CAU/ Deemed to be Universities/ Colleges/ KVKs, State Departments of Agriculture/ Horticulture, Entrepreneurs etc. Maximum intake of participants to this training programme will be limited to 20 based on first come first serve basis. Interested participants may apply using QR code or by sending their application in the prescribed format by email ([harish.er@icar.gov.in](mailto:harish.er@icar.gov.in)) on or before the last date 15 October 2024 with the details of the training fee remitted through NEFT transfer.

## Training fee

Rs.5000/- plus 18% GST amounting to Rs.5900/- per head

Payments may be made to following account:

Account Name : ICAR UNIT-CTCRI

Account No : 57019705533

Branch : SBI, Kallampally IFSC : SBIN0070288

## Travel, Food and Accommodation

The lodging and boarding expenses are to be borne by the participants. Guest house accommodation will be provided on payment, subject to the availability and on prior intimation (Rs. 300 to 400 per person per day).

## Venue and Location

The programme will be held at ICAR-Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram-695017, Kerala which is about 12 km away from Thiruvananthapuram Central Railway Station/Air port/ bus terminal, and well connected with bus/pre-paid auto facility.

## Dates to remember

Last date of submission of application: 15 October, 2024

Date of training : 21-25 October, 2024

## APPLICATION FORM

Name (in Block letters) :

Designation & Office address :

Gender :

Postal address (In capital letters) :

Date of birth and age :

Nationality :

Educational qualifications :

Experience :

Mobile number :

Email ID :

Whether accommodation is required at ICAR-CTCRI (Yes/No):

### Payment details

Mode of payment :

Transaction ID :

Bank details :

Date of transaction :

Amount : ₹



Scan and apply

Signature of the applicant

Date :

Place :

### Contact

Director

ICAR-CTCRI (0471-2598431)

E-mail: [director.ctcri@icar.gov.in](mailto:director.ctcri@icar.gov.in), Website: <https://www.ctcri.org>

Dr. E.R. Harish (Course Director)

Senior Scientist, Division of Crop Protection

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