

DST-SCIENCE & ENGINEERING RESEARCH BOARD (SERB), NEW DELHI

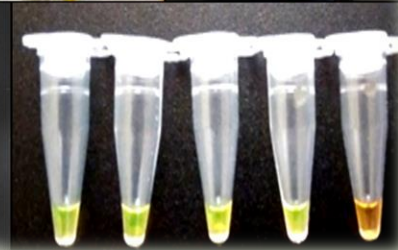
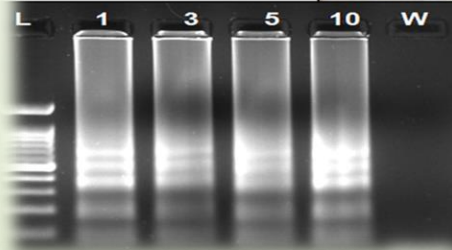
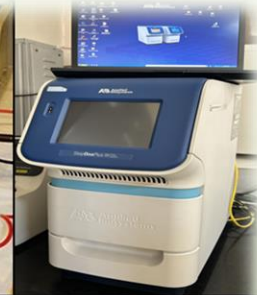
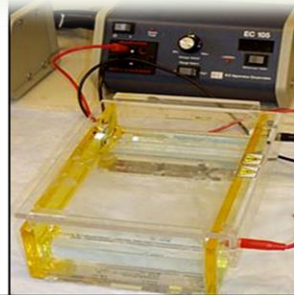
Sponsored

High-End Workshop (KARYASHALA)

On

“SEROLOGICAL AND MOLECULAR DIAGNOSTICS OF POTATO PATHOGENS”

(09- 20 January, 2023)



DIVISION OF PLANT PROTECTION
ICAR-Central Potato Research Institute, Shimla
Himachal Pradesh-171 001

About ICAR-CPRI

Potato, the third most important non-grained food crop globally, reached Indian sub-continent in the beginning of 17th century by Portuguese traders or British missionaries. Indian Council of Agricultural Research (ICAR)-Central Potato Research Institute (CPRI) was established during August 1949 at Patna (Bihar, India) under Govt. of India. The institute was later on, shifted to Shimla, Himachal Pradesh in 1956 in order to facilitate hybridization work in potato breeding and maintain seed potato health. It was transferred to the ICAR in April 1966. ICAR-CPRI, Shimla has six regional stations (Jalandhar, Modipuram, Gwalior, Patna, Ooty and Shillong) which are located across the country to cater the need for location specific potato research and extension activities. Since its inception, ICAR-CPRI has led to harness the actual potential of this versatile crop. Today potato has a major share in total horticultural production in India and has attained a production of 53.03 MT from an area of 2.16 million ha during 2020. The suitable technologies developed by the institute transformed this temperate crop to sub-tropical leading to more than 90 percent acreage in the Indo-Gangetic plains of country as a Rabi crop. Till now, 69 potato varieties of table and processing sectors have been released at National and state level. Potato being a vegetatively propagated crop, quality seed production is adversely affected by viral and other diseases and pests that lead to “seed degeneration”. The Central Potato Research Institute has a long history of pioneering work on potato virus detection and diagnosis and developed seed plot technique that has revolutionized the breeder seed production in the country. The state of art production technologies from quality seed production to value addition with sophisticated instrumentation facility and experienced personnel led to transition of potato to wholesome food crop for potato consumer and as potent source of income to the growers.

Objectives

This high-end workshop will focus on the exposure of participants to the serological and molecular diagnostics of potato pathogens. The 12 days programme will comprise lectures and practical sessions by experienced scientists from ICAR-CPRI, Shimla and external experts. Visits to fields and laboratories have been arranged to acquaint the participants to practical applications. The training specifically aims at developing skilled human resources to take up research challenges in the field of diagnostics of plant pathogens.

Course content

The course is well designed to cover topics related to; (1) Importance of detection and diagnosis in seed health of potato, (2) global scenario of pests and diseases in potato and bio-security issues, (3) Hands on serological (ELISA) and (4) molecular (PCR) based assays e.g. RT PCR, qPCR and (5) rapid assays like Loop-mediated Isothermal Amplification (LAMP), Recombinase Polymerase Amplification (RPA) for detection of different pathogens infecting potato, which will be highly beneficial to students.

Travelling, boarding and lodging facilities

The lodging, boarding and travel expenses of the selected participants will be borne under workshop programme budget as per DST-SERB guidelines. Accommodation will be provided at the Institute's guest house. The travel expenses will be restricted to maximum sleeper class train or state-run bus fare by the shortest route as per GOI norms. Participants are required to produce money receipt/tickets in support of their claim. Air travel is not allowed. The reimbursement will be made as per DST-SERB guidelines. **Participants are requested not to bring any family member along with them.** Weather during January will be very cold. The temperature ranges between 15°C and 6°C at day and 0°C and -5°C at night. **Layer up!!! Don't forget winter clothes and accessories.**

Registration fee

Only 25 participants will be selected for the high-end workshop by a screening committee. Registration will be free of cost-**on a first come-first serve basis** i.e. *"the early bird gets the worm."*

How to reach

Shimla is well connected to neighboring places like New Delhi and Chandigarh through national highways. The journey from Delhi to Shimla by road takes approximately 8-10 hours. ICAR-CPRI is located at Bemloe, Shimla about 5 km from ISBT, Tutikandi-New Bus stand, and about 2-3 km from Shimla railway station/Old bus stand. Taxi can be availed at railway/bus stations to reach ICAR-CPRI, Shimla. Participants are requested to make his/her own arrangement of transport to reach at ICAR- CPRI, Shimla.

Eligibility

The participants pursuing Ph.D. / Master's in Agricultural sciences and other Life science subjects in SAUs/SUs/Universities/ICAR Institutes are eligible for this workshop. The maximum intake of participants will be limited to 25 on the recommendation of screening committee.

How to apply

Interested candidates may apply online by registering at the following link. Subsequently, the applicants can download the application form through link provided below (All links will be remain opened up to 12th December 2022, 12.00 AM). A Duly filled application form should be submitted by following the guidelines through proper channel (recommended by the competent authority) on or before **last date (12th December, 2022)**. After the candidates are intimated about their selection, they should immediately reply to the event organizer with firm acceptance and a travel plan. Cancellation at the last moment for casual reasons after acceptance will be regarded as a breach of ethical conduct since it may deprive other eager candidates who could have availed this opportunity.

Important dates

Last date for submission of Application	12 th December, 2022
Communication to Participants	15 th December, 2022

Event Organizer: Sh. Chandan Maharana (Scientist)

Patrons: Dr Devendra Kumar, Director (A)
Dr Sanjeev Sharma, Head, Division of Plant Protection

Event Coordinators: Dr. Vinay Sagar (Principal Scientist)
Dr. Ravinder Kumar (Senior Scientist)
Dr. Aarti Bairwa (Senior Scientist)
Dr. Kailash Ch. Naga (Scientist)
Dr. Rahul Kumar Tiwari (Scientist)

Registration link: <https://forms.gle/7zZiKxtDMMFZxuQ68>

Application form link:

https://drive.google.com/file/d/1aLpVMZ_tNdLK6FTvfejCmawfJSPFN/view?usp=sharing

All correspondence may be made to event organizer:

Sh. Chandan Maharana

Scientist & Event Organizer

Division of Plant Protection

ICAR-Central Potato Research Institute, Shimla - 171 001, HP

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