



Tarvinder Kaur Kochhar

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Date of Joining: June 1995

June2022-Present : Chief Technical Officer, Division of Plant Protection, ICAR-CPRI Shimla

Details of Education: MSc.(Organic Chemistry) from Meerut University(CCSU)

Award;

- Honored with CPRI “**Best Worker Award**” in Technical category for the year 2015 .

Training/Workshop:

- Attended National Workshop cum Seminar on Advances in Electron Microscopy And Allied Fields from 23-29 September,2011 at Shoolini university
- Participated in a Summer Training programme in Electron Microscopy which was organised by the Electron Microscopy Facility, Department of Anatomy at AIIMS from 16th May to 26th June 2013.
- Attended Online training programme on Gender, Poverty and Employment organized by V V Giri Labour Institute,Noida from 12-16 July,2021.
- Participated in the International Potato E-Conference (New Paradigms in Food Security and Industrial Applications) from November 23-26, 2021 at ICAR-CPRI, Shimla.
- Participated in SERB sponsored Hands on training on Transmission Electron Microscope (TEM) organized by ICAR-National Rice Research Institute Cuttack an Accelerate Vigyan Karyashala DST-SERB sponsored workshop from February 15 to February 22, 2022.

Research Publications:

Papers in Research Journals (National/International

- Baswaraj Raigond, Jeevalatha A, Ravinder Kumar, **Tarvinder Kochhar**, Priyanka Kaundal, Shivani Roach, Rajender Kumar and BP Singh (2016) Gold nanoparticles for improved electron microscopic detection of *Potatovirus M* in potato leaves and tubers. *Potato J* 43(1): 22-29.
- Pinky Raigond, Baswaraj Raigond, **Tarvinder Kochhar**, Ankita Sood and Brajesh Singh (2018). Conversion of Potato Starch and Peel Waste to High Value Nanocrystals. *Potato Research*, 61: 341-351.
- Baswaraj Raigond, Ambika Verma, Shivani Roach, **Tarvinder Kochhar**, Shilpa, Jeevalatha A, Ravinder Kumar, Sanjeev Sharma and SK Chakrabarti (2019). One-step reverse transcription loop-mediated isothermal amplification: A simple, sensitive and rapid assay for detection of Potato Virus X in potato leaves and tubers. *Indian Phytopathology*, 72:321–328. (NAAS Rating: 5.9).
- Baswaraj Raigond, Chauhan Y, Verma G, Jeevalatha A, **Kochhar T**, Sharma S, Singh BP & Chakrabarti SK (2019). Standardization and validation of quantitative RT-PCR technique for specific detection of *Potato virus A*. *Potato Journal*, 46 (2): 91-100 (NAAS Rating: 4.74).
- Baswaraj Raigond, Ambika Verma, Sridhar J, **Tarvinder Kochhar**, Sanjeev Sharma and SK Chakrabarti (2020). Squash Print Reverse Transcription-Loop Mediated Isothermal Amplification assay for detection of *Potato leaf roll virus* in single aphid and in potato. *Potato Research*. 63: 1-14. (NAAS Rating: 6.86).

- Baswaraj Raigond, Ambika V, Shruti P, Sridhar J, **Tarvinder K** and SK Chakrabarti (2020). Development of a reverse transcription loop-mediated isothermal amplification for detection of *Potato virus A* in potato and in insect vector aphids. *Crop Protection*, 137, 105296. (NAAS Rating: 8.38).
- Gaurav Verma, Baswaraj Raigond, Shruti Pathania, **Tarvinder Kochhar**, Kailash Naga (2020). Development and comparison of reverse transcription-loop-mediated isothermal amplification assay (RT-LAMP), RT-PCR and real time PCR for detection of *Potato spindle tuber viroid* in potato". *Eur J Plant Pathol* (2020) 158:951–964. (NAAS Rating: 7.58).
- Raigond, Baswaraj, Shruti Pathania, Ambika Verma, Gaurav Verma, **Tarvinder Kochhar**, and S. K. Chakrabarti. "Recombinase Polymerase Amplification assay for rapid detection of a geminivirus associated with potato apical leaf curl disease." *Journal of Plant Diseases and Protection* 128, no. 4 (2021)

Popular article

- Baswaraj Raigond, A Jeevalatha, BP Singh and **Tarvinder Kochhar** 2013. Electron Microscopic detection of *Potato virus A* using gold nano particles. *Potato J* (2013) 40 (2): 104-108.
- Baswaraj Raigond, BP Singh, Jeevalatha A, **Tarvinder Kochhar** and Rajinder Kumar 2013. Detection of *Potato virus A* by leaf-dip method using EM. *News letter* (Central Potato Research Institute), 51, January-March, Page No. 01.
- Baswaraj Raigond, A Jeevalatha, Ravinder Kumar, **Tarvinder Kochhar**, Priyanka Kaundal, Shivani Roach, Rajinder Kumar and B P Singh (2015). Developed immune gold Electron microscopic technique for detection of *Potato virus M* using gold nano particles. *News Letter* (Central Potato Research Institute), 59, Page No. 1-2.
- Baswaraj Raigond, Ambika Verma, **Tarvinder Kochhar**, Shivani Roach, Sanjeev Sharma & SK Chakrabarti (2017). Development of simplified, cost effective and rapid one-step virus nucleic acid release protocol for RT-PCR based detection of *Potato virus Y*. *CPRI Newsletter*, April-June 2017, 2-3 pp.
- Baswaraj Raigond, Shruti Pathania, Ambika Verma, Gaurav Verma, **Tarvinder Kochhar** and SK Chakrabarti (2018). Recombinase Polymerase Amplification (RPA): A rapid isothermal based molecular assay for detection of DNA virus infecting potato. *News Letter* (Central Potato Research Institute), 72, Page No. 3-4p).
- Pooja Bhardwaj, Baswaraj Raigond*, Pinky Raigond, **Tarvinder Kochhar**, Sanjeev Sharma and Manoj Kumar (2021). Antiviral proteins from plants: A potential source to manage plant viral diseases. *Agriculture Letters*, 2 (2), 43-45
- A book chapter (Baswaraj Raigond, **Tarvinder Kochhar**, Jeevalatha A and Ravinder Kumar) on “**Electron microscopic technique for virus detection**” in book with title “Advances in quality potato production and post-harvest management” by Agrotech Publishing Academy, Udaipur.
- Baswaraj Raigond, Ravinder Kumar, **Tarvinder Kochhar** and Rajinder Kumar. A chapter on “Diagnostic technique for detection of potato viruses” in **International training programme** on “Recent advances in potato breeding & quality seed production” during 31st July to 4th Aug. 2017 which was sponsored by CIP, Lima, Peru and organized by ICAR-CPRI, Shimla.
- Baswaraj Raigond, **Tarvinder Kochhar** and Ravinder Kumar. A chapter on “Electron microscopic in Potato virus diagnosis” in **Summer School** on “Recent Advances in Crop Improvement, Production and Post-Harvest technology in Potato Research” during 18th July to 7th August 2017.