## Curriculum Vitae of Jitender Singh

NAME JITENDER SINGH

POSITION Professor & Head

Name of Department Department of Microbiology, Ch. Charan Singh University, Meerut, Uttar

Pradesh, India-250004

Date of Joining October 03, 2022

Date of Birth APRIL 15, 1980 Fathers Name Shri Brij Pal Singh

Research Interest Microbiology, Molecular Biology, Diagnostics, NGS, Bioinformatics

### **EDUCATION/TRAINING**

INSTITUTION	DEGREE	YEAR(s)	FIELD OF STUDY
M.M PG College, CCS	B.Sc	2000	Biology
M.M PG College, CCS	M.Sc	2002	Botany
Ch. Charan Singh	PhD	2007	Botany [Plant Virology]
University of Queensland, Brisbane, Australia	Visiting Scientist, ICAR, NAIP	2011	Q-PCR

**PhD thesis** on "Molecular Characterization of Citrus Yellow Mosaic and development of nucleic acid based detection technique."

**Research Experience:** Diversity of Citrus yellow mosaic Badnavirus and its potential as genetic engineering tool" under the guidance of Dr.V. K. Baranwal, Head, Advanced Centre for Plant Virology (ACPV), Indian Agricultural Research Institute (IARI) New Delhi-12 from 2002 to 2005

### **Positions and Employment**

October03, 2022- Present: Professor & Head, Department of Microbiology, Chaudhary Charan Singh University, Meerut, Uttar Pradesh, india-250004

March 23, 2016-Present: Associate Professor, Immunology& Defense Mechanism, Bioinformatics Section, College of Biotechnology, Sardar Vallabhbhai Patel University of Agriculture and Technology, Modipuram, Meerut, Uttar Pradesh, India Pin: 250110

March 23, 2005-March 22, 2016: Assistant Professor, Department of Immunology & Defense Mechanism, College of Biotechnology, Sardar Vallabhbhai Patel University of Agriculture and Technology, Modipuram, Meerut, Uttar Pradesh, India Pin: 250110

2002-2005 Senior Research Fellow, Advanced Centre for Plant Virology (ACPV), Division of Plant Pathology, Indian Agricultural Research Institute (IARI) New Delhi-110012

**Current research:** Currently working on Viruses and Phytoplamsas Diseases of Horticultural Crops of western Uttar Pradesh. Biology and molecular biology of members of the following virus groups: Impact of Climate change on Plant Viruses and Recombination detection, analysis White-fly transmitted Geminivirus, thrips-transmitted tospoviruses (Bunyaviridae), plant pararetroviruses (Caulimoviridae), potyviruses (Potyviridae), and potex and carlaviruses (Flexiviridae) and Phytoplasmas. Crops include vegetables, nursery/landscape/ornamentals, and legumes. Genomics and proteomcis of DNA and RNA viruses

pathogenic to horticultural crops. Molecular characterization, gene structure-function relationships; virus-host and virus-virus interactions, molecular evolutionary studies using viral and phytoplasma genes as markers for attribution; molecular studies on plant pararetroviruses that exist as integrants in the host plant genome and use of RNA and DNA viruses of plants as tools for studying virus-host and virus- vector interactions. Specific areas of research encompass both basic and applied components that include:

- Molecular and biotechnological approaches for characterization and control of viral and phytoplasmas diseases of horticultural crops.
- Plant Virome analysis using High throughput data.
- Marker assisted selection, Genomics, proteomics, molecular epidemiology, conventional and transgenic resistance,

### TECHNICAL SKILLS

- ♣ Bioinformatics: BLAST, Phylogenetic analysis, NGS data analysis includes: Transcriptome analysis, De novo assembly, Annotation, DEGs, Gene networking, SSR detection, Protein structure prediction,
- ♣ Molecular Biology: RNA and DNA extraction, PCR amplification (RT-PCR, qPCR), Plasmid Isolation, Electrophoresis, Bacterial Transformation, Cloning, Southern blot analysis and Gene Editing
- Microbiology: Virus Purification, Phytoplasma, Identification of Bacteria using 16srRNA, Metagenomics, Staining, Media preparation, Pouring & Streaking, Pure Culture Isolation & Biochemical Test.
- **↓** Immunology: Antibody Production, DAC and DAS ELISA, Ouctherlony double diffusion, Dot ELISA, Radial Immunodiffusion, Immunoelectrophoretic techniques.

### **Editorial Role:**

**Review editor: Frontiers in Virology** (Section: Viral Disease Investigation)

Frontiers topic editor: Frontiers in Genome Editing

Topic: Emerging Genome Editing Techniques, Next-Generation Plant Bioinformatics, and their use for

Extended Post-Harvest Life of Fruits, Vegetables, and Ornamentals)

Guest Associate Editor: Front. Genet. - Plant Genomics

Research Topic: Harnessing Cytokinin Biology in Crop Biofortification and Enhanced Food Security

## **Professional Memberships**

- A. American Phytopathology Society, Member Id. 185716-Annual Member
- B. British Society of Plant Pathology, Annual Member
- C. World Society for Virology, Life Member
- D. Indian Phytopathology, Life Member
- E. Indian Virological Society, New Delhi, Life Member
- F. Phytopathogenic Mollicutes: Life Member

### Honors

- Selected fellow: Indian Phytopathological Society during International Conference (hybrid mode) on "Plant Pathology: Retrospect and Prospects" at SKN Agricultural University, Johner-Jaipur, Rajasthan, India during March 23-26, 2022
- Awarded Ist Prize in Oral Paper Presentation in International Conference (hybrid mode) on "Plant Pathology: Retrospect and Prospects" at SKN Agricultural University, Johner-Jaipur, Rajasthan, India during March 23-26, 2022
- Awarded Ist Prize in Oral Paper Presentation in National Symposium on "Recent Trends in 2022 Phytopathology to address Emerging Challenges for Achieving Food Security" scheduled to be held on 21-22 Protection Division February, 2022 organized by Crop Krishi ICAR-Vivekananda Parvativa Anusandhan Sansthan Almora - 263601, Uttarakhand, India

- Young Scientist award in the area of Plant Pathology during International Web 2021 Awarded Conference on "Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2021) 13-15 December 2021, Astha Foundation, Meerut in Collaboration with CSAUAT, Kanpur; IGKV, Raipur; 61; UAHS, Shivamogga; BAU Ranchi; SKRAU, Bikaner & SSDAT, Meerut (UP) India Astha Foundation, Meerut (U.P.) INDIA External Member, IBSC Committee, ICAR-DRMR, Bharatpur, Rajasthan 2020
  - External Member, IBSC Committee, Meerut Institute of Engineering and Technology, Meerut
  - External Expert, Interview Committee for the selection of (07) RA/SRFunder World Bank 2020 funded project" Assam Agribusiness and Rural Transformation Project". Interview of shortlisted candidates on 27.06.2020 and on 29.06.2020. For DRMR, Bharatpur, Rajasthan
- Awarded SERS Plant Protection Award-2020 on the occasion if 1st International e-conference in 2020 Innovative Approaches in Agricultural, Applied Sciences and technologies (iCiAsT-2020) jointly Organized by SRS India & KU, Bankok, Thailand during 14-15 December 2020
- Resource Person "International training course on molecular diagnosis of plant diseases" from as 2017 international resource person 2017. Research Institute of Biotechnology and Environment, Nam Nong Lam University, Linh Trung Ward, Thu Duc District, Ho Chi Minh City, Viet Nam from March o6-08, 2017 OJCB Programme
- Young Scientist award: International Conference on Innovative Approaches in Applied Sciences 2017 and Technology (iCiAsT-2017) during 19-23 June, 2017 held at Nanyang Executive Centre, Nanyang Technological University Singapore 639673.
- Awarded ICGEB Grant to attended "Theoretical and Practical Course "Loop-Mediated 2015 Isothermal Amplification (LAMP) Technique for Rapid Detection of Phytoplasmas" from 3 - 12 August 2015 Ho Chi Minh City, Viet Nam Research Institute of Biotechnology and Environment, Nong Lam University, Linh Trung Ward, Thu Duc District, Ho Chi Minh City, Viet Nam
- Awarded International Travel grant by DST, New Delhi to attend and Presented Oral Paper in 2015 3rd International Phytoplasmologist Working Group meeting held at Mauritius January 14 to 17,
- Awarded International Training program by Indian Council of Agriculture Research under 2011 NAIP at the University of Queensland, Brisbane, Australia.
- Awarded first prize for poster paper presentation in Poster paper presented in Zonal Seminar on 2010 Physiological and Molecular Interventions for Yield and Quality Improvement in Crop Plants" Centre of Excellence in Ag Biotechnology, SVPUAT, Meerut, 250110 & ISPP, I.A.R.I, New Delhi-12 17-18 September 2010.

### EXTERNALLY FUNDED PROJECTS

Name of Project	Year of start	Funding agencies	Progress during the year
Establishment of Plant Viruses Diagnostics and Forecasting Referral Laboratory for Horticultural Crops in Western Uttar Pradesh 332 lacs-As PI	2022	Rastriya Krishi Vikas Yojna (RKVY), Lucknow	Sanction letter Fund released is awaited
Institutional Innovation Grant (IG) for Institutional capacity building leading to accreditation of college of biotechnology, 100 lacs SVPUAT, Meerut as CO PI	2020	NAHEP, ICAR	Work in progress
Establishment of referral analytical laboratory for microbial toxins and environmental pollutants/toxicants 356 lacs-As CO PI	2020	Rastriya Krishi Vikas Yojna (RKVY), Lucknow	Work in progress

Establishment of Bioinformatics Infrastructure facility for the promotion of Biology Teaching through Bioinformatics (BTBI) Rs 45.00 LacksAs CoordinatorNow running on Self-sustained basis 2006 to 2011, 2011 to 2013, 2013 to 2016	2017 to 2020	DBT, GOI	HRD Programme and Research on Bioinformatics was conducted during the period. UG/PG teaching was supported.
Centre of Excellence in Agriculture Biotechnology. U.P., CST 0.98 lacs -As Co-Coordinator Now running on a Self-sustained basis 2010-2015	extended to self-finance mode	CST, Lucknow	HRD Programme organised: 10
Molecular, biochemical and Morphological characterization of Lentil Germplasm cultivars for yield improvement under limited water conditions". 6.96; As Co-PI	CST, Lucknow 2008-2010	03 year	
Establishment of Biofertilizer unit at Sardar Vallabh Bhai Patel University of Agriculture and Technology Rs 20.00 Lacks Co-PI	Ministry of Agriculture, GOI	02 years 2007 to 2009	

**Institutional Projects:** 

S.No	Approved field Experiment	Experiment Successfully conducted	Reasons of failure if any
1	Identification and Molecular Characterization of Viruses infecting important crops of western Uttar Pradesh: Presented in RAC 2019 to 2020	Yes	NA
2.	Identification and Molecular Characterization of Phytoplasma infecting important crops of western Uttar Pradesh: Presented in RAC 2019 to 2020	Yes	NA
3.	Identification <i>Garlic virus A</i> infecting Allium sativum L. through next generation sequencing technology	Yes	NA

# **Publication Summary:**

Research paper : 80(02 under review)

Book Chapters/Reviews : 11

Lead Paper/Proceedings : 05 (01 International, 08 with ISBN)

Manuals : 02 Training Manuals : 07

Proceedings/souvenir : 03 (02 with ISBN)

## **Publications**

**Research Articles:** 

S.No	Research Manuscript	IF	NAAS ID	Naas Rating
1.	First report of blackberry virus E (BVE) infecting garlic (Allium sativum L.) in			
	India", to Journal of Plant Pathology. Under Review			
2.	Mukesh Kumar, Ujjwal Sirohi, Sunil Malik, Satendra Kumar, Gaurav Kumar Ahirwar, Veena Chaudhary, Manoj Kumar Yadav, <b>Jitender Singh</b> , Arvind Kumar, Virendra Pal, Satya Prakash (2022). In vitro propagation and factors influencing in vitro efficiency in oil-bearing ornamental tuberose (Polianthes species): A systematic review of recent developments and future prospects Horticulturae_MDPI [under review]	2.93		8.93
3.	Malyaj R Prajapati, <b>Jitender Singh</b> , Pankaj Kumar, Ravindra Kumar and V. K. Baranwal (2022). Discovery of a novel member of the alphaendornavirus genus in <i>Plantago ovata</i> : Revelation by mining of transcriptome dataset ( <i>South African Journal of Botany</i> ) <b>(Under review)</b>	3.11		9.11

4.	Malyaj R Prajapati, Jitender Singh, Pankaj Kumar and V. K. Baranwal (2022). Genome sequence of a papaya ringspot virus from <i>Prosopis cineraria</i> (khejri) transcriptome from India ( <i>Acta Virologica</i> ) ( <b>Accepted</b> )	1.85	A042	7.85
5.	Aakansha Manav, Malyaj R Prajapati, <b>Jitender Singh</b> , Pankaj Kumar, V. K. Baranwal First report of Garlic virus B infecting a Garlic ( <i>Allium sativum</i> L.) cultivar in India. Plant Disease (Indian Phytopathology) ( <b>Under review</b> )		I109	5.95
6.	Imran Ali, Satya Prakash, Arvind Kumar, S.K. Tripathi, R.S. Sengar, Jitender Singh and Upendra Maurya (2022). Effect of different Training System on Growth of Pear ( <i>Pyrus communis</i> L.). Biological Forum — An International Journal, 14(3): 906-910. IBSN: 0975-1130		B084	5.11
7•	Malyaj R Prajapati, Aakansha Manav, Pankhuri Singhal, V. Kavi Sidharthan, Ujjwal Sirohi, Mukesh Kumar, Mahesh Kumar Bharti, <b>Jitender Singh</b> , Pankaj Kumar, Ravindra Kumar, Satya Prakash and V. K. Baranwal (2022). Complete Genomic RNA Sequence of Tuberose Mild Mosaic Virus and Tuberose Mild Mottle Virus acquired by High-Throughput Sequencing. <i>Pathogens</i> , 11(8), 861.	4.53	P027	10.53
8.	Pankhuri Singhal, Virendra Kumar Baranwal, Malyaj R Prajapati, <b>Jitender Singh</b> (2022). Genetic structure studies of turnip mosaic virus black and yellow Mustard in India revealthe emergence of world-B3 pathotype. ( <i>Journal of applied microbiology</i> ) http://doi.org/10.1111/jam.15731	3.06	J070	10.06
9.	N.N. Tiwari, RK Jain, AK Tiwari, Malyaj R Prajapati and <b>Jitender Singh</b> (2021). "Evidence of Mixed infection of phytoplasma and begomovirus associated with <i>Withania somnifera</i> and Capsicum annum plant from Uttar Pradesh, India" The Philippine Agricultural Scientist (PAS) (under review)			
10.	Varun Saxena, Mahesh Bharti, Pankaj Kumar, <b>Jitender Singh</b> (2022). Effect of Zinc uptake on Alcohol Dehydrogenase, protein and mineral contents of hydroponically grown Chickpea ( <i>Cicer arietinum</i> ). Journal of Plant Nutrition (Accepted 2021).	1.71	J440	7.71
11.	Prajapati, Malyaj R., Aakansha Manav, <b>Jitender Singh</b> , Pankaj Kumar, Amit Kumar, Ravindra Kumar, Satya Prakash, and Virendra Kumar Baranwal. "Identification and Characterization of a Garlic Virus E Genome in Garlic (Allium sativum L.) Using High-Throughput Sequencing from India." <i>Plants</i> 11, no. 2 (2022): 224.	4.65	P130	10.65
12.	Manav, A., Prajapati, M. R., <b>Singh, J.</b> , Kumar, P., & Baranwal, V. K. (2022). First report of garlic mite-borne filamentous virus (GarMbFV) infecting garlic (Allium sativum L.) in India. <i>Journal of Plant Pathology</i> , 1-2.	1.73	J442	7.73
13.	Mishra, N., Dwivedi, S. P., Tiwari, A. K., Prajapati, M. R., & <b>Singh, J.</b> (2021). Characterization of phytoplasma associated with sugarcane white leaf disease in Uttar Pradesh, India. Archives of Phytopathology and Plant Protection, 1-9.			_
14.	Manav, A., Prajapati, M. R., <b>Singh, J.</b> , Kumar, A., Kumar, P., Pant, R. P., & Baranwal, V. K. (2021). First report of natural infection by two potyviruses on amaryllis ( <i>Hippeastrum hybridum</i> ) plants from India. <i>VirusDisease</i> , 32(4), 830-833.		Vo38	5.95
15.	Prajapati, M. R., Manav, A., <b>Singh, J.</b> , Singh, M. K., Ranjan, K., Kumar, A., P Kumar, R Kumar & Baranwal, V. K. (2021). Identification of Garlic virus A infecting <i>Allium sativum</i> L. through next-generation sequencing technology. The Journal of Horticultural Science and Biotechnology, 1-10.	1.64	J281	7.64
16.	<b>Singh, J.,</b> Kashyap, P., Kumar, P., Kumar, R., Panwar, A. S., & Baranwal, V. K. (2021). Molecular identification of citrus greening bacterium associated with Kinnow Mandarin in Western Uttar Pradesh, India. <i>Indian Phytopathology</i> , 74(4), 1135-1141.		I109	5.95
17.	Kumar, S., <b>Singh</b> , <b>J.</b> , Baranwal, V. K., & Rao, G. P. (2021). First report of 16SrXI-B subgroup phytoplasma in sapota showing flattened stem disease in India. Journal of Plant Pathology, 103(2), 659-660.	1.73	J442	7.73
18.	Pooja Sharma, <b>Jitender Singh</b> , Pankaj Kumar, Mukesh Kumar, R. Kumar,		Po85	5.41

	Molecular Characterization of Phytoplasma Associated with Sugarcane. Phytopathogenic Mollicutes 10(2);194-202.			
19.	Himanshu Kumar, Surendra Upadhaya, Harshit Verma, Amit Kumar, and <b>Jitender Singh</b> (2020). Studies on Antimicrobial Resistance in E. coli isolates of Poultry Farms in and around Meerut. Bulletin of Environment, pharmacology, and Life Sciences 9(12) 2020.		B180	**
20.	Arvind Kumar, <b>Jeetendra Kumar</b> , Satya Prakash and Vipin Kumar Studies on biochemical parameters of Pomegranate ( <i>Punica granatum</i> L.) with special reference to red aril cultivars DOI: International Journal of Chemical Studies 2020; 8(5): 1453-1457 <a href="https://doi.org/10.22271/chemi.2020.v8.i5t.10506">https://doi.org/10.22271/chemi.2020.v8.i5t.10506</a>		I193	**
21.	Madhuri Gupta, Pushpender Kumar, <b>Jitender Singh</b> , Devendra Kumar, Anil Sirohi, Mukesh Kumar, Mukesh Kumar (2020). Computational analysis of Potato ( <i>Solanum tuberosum</i> ) transcriptomic RNA-seq data quality using CLC Workbench. Journal of Pharmacognosy and Phytochemistry 2020; 9(5): 979-986		J415	**
22.	Shreshtha Saxena, Ravindra Kumar, Akash Tomar, <b>Jitender Singh</b> , Purushottam, B.P. Dhyani (2020). Isolation, Biochemical Characterization and Potassium Solubilization Efficiency of Different Microbial Isolates. Int. J. Curr. Microbiol. App. Sci. 2020. 9(6): 2667-2680 DOI: <a href="https://doi.org/10.20546/ijcmas.2020.906.325">https://doi.org/10.20546/ijcmas.2020.906.325</a>		I207	**
23.	Vishakha Burman, Vaishali, Khyati Lehari, Naresh Pratap Singh, Bijendra Singh, Pooran Chand, <b>Jitender Singh</b> and Sengar, R. S. 2020. Quantification of Total Phenolics and Curcumin Content in Different Turmeric Germplasm. Int.J.Curr.Microbiol.App.Sci. 9(11): 1753-1758. doi: https://doi.org/10.20546/ijcmas.2020.911.207		I207	**
24.	<b>Jitender Singh</b> , Thao Ngoc Truong, Dinh My An, Malyaj R Prajapati, Aakansha Manav, Quoc Nguyen Bao, Koushlesh Ranjan, Amit Kumar, Pankaj Kumar, Ravindra Kumar, and V. K. Baranwal (2020). Complete Genome Sequence and Genetic Organization of a Garlic Virus D Infecting Garlic ( <i>Allium sativum</i> ) from northen India. <u>Acta Virologica</u> 64(4):301-306 doi: 10.4149/av_2020_405	1.16	A042	7.16
25.	Madhuri Gupta, Shivani khanna, Jyoti singh, <b>Jitender Singh</b> , Pankaj Kumar and Anil Sirohi (2020). Identification and Molecular cloning of abiotic stress tolerant gene(s) and stress induced biochemical changes in lentil (Lens culinaris) Plant Cell Biotechnology and Molecular Biology, 21(13-14), 74-85. <a href="http://www.ikprress.org/index.php/PCBMB/article/view/5094">http://www.ikprress.org/index.php/PCBMB/article/view/5094</a>		P100	4.88
26.	Annu Yadav, Himanshi, Shruti, <b>Jitender Singh</b> , Pankaj Kumar, Shivani Khanna, Anil Sirohi (2020). Identification and Expression Analysis of Stress Responsive Genes in Lentil ( <i>Lens culinaris</i> ). Biotechnology Journal International, 24(3), 24-34. <a href="https://doi.org/10.9734/bji/2020/v24i330105">https://doi.org/10.9734/bji/2020/v24i330105</a>		B140	#*
27.	Shambhavi, Ravindra Kumar, Akash Tomar, Purushottam, <b>Jitender Singh</b> and Shishu Pal Singh. 2020. Isolation and Identification of Bacillus Species from Soil for Phosphate, Potassium Solubilisation, and Amylase Production. Int. J. Curr.Microbiol. App.Sci. 9(05): 415- 426. doi: <a href="https://doi.org/10.20546/ijcmas.2020.905.046">https://doi.org/10.20546/ijcmas.2020.905.046</a>		I207	**
28.	Surendra Upadhyay, Anamika Bhordia, Malayaj R. Prajapati, Himanshu Maurya, Karishma Kaushik, Harshit Verma, Amit Kumar, <b>Jitender Singh</b> ,		P176	3.78
	Pankaj Kumar and Ravindra Kumar (2020). Prevalence and antimicrobial resistance pattern of E. coli and <i>Staphylococcus</i> spp isolated from the clinical cases of cattle metritis Progressive Research 15 (1): 55-57 (2020)			
29.	resistance pattern of E. coli and <i>Staphylococcus</i> spp isolated from the clinical	4.31	G026	10.31

	Neetu Singh, R. P. Pant and V.K. Baranwal (2018). First report of Tomato leaf curl Palampur virus infecting bur cucumber ( <i>Sicyos angulatus</i> ) in India. Indian Phytopathology 72:181-184 https://doi.org/10.1007/s42360-018-			
31.	O0107-4.  Arya, S., Kumar, S., Kumar, P., <b>Singh, J.</b> and Sirohi, A., (2018). Pigeonpea ( <i>Cajanus cajan</i> ) urease immobilized on alginate beads, showing improved stability and operational parameters. South Asian Journal of Food Technology and Environment, 4(1): 631-642.		S070	**
32.	Manisha Goyal, <b>Jitender Singh</b> , Pankaj Kumar and Anil Sirohi (2017). Mechanistic insights into longan ( <i>Dimocarpous longan</i> Lour.) transcriptome for physiological characterization for defensive genes and differential gene expression analysis with Longan embryogenic callus transcriptome. POJ 10(05):219-231 doi: 10.21475/poj.10.05.17. pne721.		P114	*
33.	<b>Jitender Singh</b> , Shivani Khanna, Koushlesh Ranjan, R.P. Pant, Pankaj Kumar, Anil Sirohi and V. K. Baranwal (2017). Evidence of Association of Begomovirus with the Yellow vein Disease of an Ornamental Plant Pot Marigold ( <i>Calendula officinalis</i> ) from Western Uttar Pradesh. Journal of Pure and Applied Microbiology. 11(3): 1609-1615		J458	5.05
34.	Sabeen Fatma, <b>Jitender Singh</b> , D.V. Rai, Mohd Uruj Jaleel (2015). Comprehensive EST Based Analysis of Differentially Expressed Stress Genes/Factors in Comparative Mode Among Four Legumes. International Journal of Agricultural Sciences and Natural Resources 2015; 2(4): 113-134			
35.	Shivani Khanna, <b>Jitender Singh</b> , Rupali Singh, Pankaj Kumar, Teena Rani, V.K Baranwal Anil Sirohi and Assunta Berticcina (2015). Evidence of association of a 'Candidatus Phytoplasma cynodontis' with Bermuda grass ( <i>Cynodon dactylon</i> ) and 'Candidatus Phytoplasma asteris' with Periwinkle ( <i>Catharanthus roseus</i> ) from Western Uttar Pradesh, India. Crop Protection 74: 138-144 doi 10.1016/j.cropro.2015.04.017	2.57	C165	8.57
36.	<b>Jitender Singh</b> , Aastha Singh, Pankaj Kumar, Anchal Rani, V. K Baranwal, Anil Sirohi (2015). First report of mixed infection of Phytoplasma and Begomovirus in eggplant ( <i>Solanum melongena</i> ) in India. Phytopathogenic Mollicutes 5 (1-Supplement) S97-S98 doi: 10.5958/2249-4677.2015.00041.9		Po85	5.41
37•	Singh NP, Vaishali, Kumar M, Chand P, Sirohi A, <b>Singh J</b> ., Morphophysiological characterization of wheat ( <i>Triticum aestivum</i> ) for Stay Green trait, Vol:1(9): 28-36, 2015, International Journal of Innovative Research in Technology, ISSN: 2349-6002			
38.	Rani Rosy, <b>Singh Jitender</b> , Kumar Pankaj, Kumar Amit, Rani Anchal, Shukla Pradeep and Misra Pragati (2015). Cloning, In-Silico Characterization and Homology Modelling of Phaseolin gene from Common Bean ( <i>Phaseolus vulgaris</i> ). Research Journal of Biotechnology 10(1):1-10		Ro38	
39.	<b>Jitender Singh</b> , Aastha Singh, Anchal Rani, Pankaj Kumar, V. K Baranwal and Anil Sirohi (2015). Evidence of a mixed infection of Candidatus Phytoplasma trifolii' and a begomovirus in eggplant ( <i>Solanum melongena</i> )" Journal of Pure and Applied Microbiology, 9(1); 663-670		J458	5.05
40.	Neha Singh, Ravindra Kumar, Akash Tomar, Purushoshottam, <b>Jitender Singh</b> & Sanjay Singh (2015). Molecular marker-based genetic diversity analysis of international Rice ( <i>Oryza sativa</i> L.) germplasm. Prog. Agric.15 (1): 142-147		P174	4.21
41.	Anchal Rani, Pragati Misra, <b>Jitender Singh</b> , Pankaj Kumar, Rosy Rani and Pradeep Shukla (2014). Presence of Phytoplasma Infection in Papaya (Carica Papaya L.) Plants in Uttar Pradesh, India. International Journal of Plant Protection 7(2): 401-404 DOI: 10.15740/HAS/IJPP/7.2/401-404		I321	#*
42.	Anchal Rani, Pragati Misra, <b>Jitender Singh</b> , Pankaj Kumar, Rosy Rani and Pradeep Shukla (2014). PCR-based association in Pot Marigold (Calendula officinalis L.) and Guldawari ( <i>Dendranthema grandiflora</i> L.). Asian Journal			

	of Bioscience 9(2): 238-241			
43.	Singh A.K., Kumar, P., <b>Singh, J.</b> , Rani, R., A., Shukla, P. and Mishra, P., (2014). Genetic Diversity analysis of lentil ( <i>Lens culinaris</i> Medik) germplasm using molecular marker. Journal of Cell and Tissue Research14(3) 4531-453		J131	4.39
44.	Amit Kumar Singh, Pankaj Kumar, <b>Jitender Singh</b> , Rosy Rani, Anchal Rani, Pradeep Shukla and Pragati Misra (2014). Biochemical Profiling of Lentil ( <i>Lens culinaris</i> Medik) Germplasm at Different Growth Stages. J. Biol. Engg. Res. & Rev.,1: 01-06			
45.	Rani Rosy, Kumar Pankaj, <b>Singh Jitender</b> , Kumar Amit, Rani Anchal, Shukla Pradeep and Misra Pragati (2014). Blast Analysis of Phaseolin gene from <i>Phaseolus vulgaris</i> (Common Bean). International Journal of Plant Protection Vol. 1(7): 151-153		I321	#*
46.	Kumar Amit, Kumar Pankaj, <b>Singh Jitender</b> , Rani Rosy, Rani Anchal, Shukla Pradeep and Misra Pragati (2014). Diversity analysis of Lentil ( <i>Lens culinaris</i> Medik.) germplasm using morphological markers. Asian Journal of Bio Science 9(1) 39-42.		A312	#*
47•	Gogia Neha, Kumar Pankaj, <b>Singh Jitender</b> , Rani Anchal, Sirohi Anil and Kumar Prasann (2014). Cloning and Molecular characterization of LECASAI lectin Gene from garlic ( <i>Allium Sativum</i> L)". International Journal of Agriculture, Environment and Biotechnology 7(1):1-10		I168	4.54
48.	<b>Jitender Singh</b> , Astha Singh, Pankaj Kumar, Anchal Rani, V. K Baranwal, Anil Sirohi (2013). Evidence of association of a monopartite Tomato Leaf Curl New Delhi Virus with Chilli leaf curl disease in Western Uttar Pradesh, India Vegetos 26 (2), 203-211		Voo8	5.27
49.	Amit Kumar, Pankaj Kumar, <b>Jitender Singh</b> , S. K Bhatanagar, and Pooranchand (2013) Morphological, Biochemical and Molecular Chacterization of <i>Lens culinaris</i> Medik.) Germplasm. Progressive Agriculture 13(1):84-92		P174	4.21
50.	Naveen Kumar, D. Singh, S. Gupta, A. Sirohi, B. Ramesh, Preeti Sirohi, Parul Sirohi, Atar Singh, N. Kumar, A. Kumar, Rajendra Kumar, R. Kumar, J. Singh, P. Kumar, P. Chauhan, Purushottam and S. Chand (2013) Determination and expression of genes for resistance to blast ( <i>Magnaporthe oryza</i> ) in Basmati and non-Basmati indica rices (Oryza sativa L.) African Journal of Biotechnology 12(26), pp. 4098-4104		A080	*
51.	<b>Singh J</b> , Rani A, Kumar P, Baranwal VK, Saroj PL, Sirohi A, 2012. First report of a 16SrII-D phytoplasma 'Candidatus Phytoplasma australasia' associated with a tomato disease in India. New Disease Reports 26, 14. [http://dx.doi.org/10.5197/j.2044-0588.2012.026.014]			
52.	<b>Jitender Singh</b> , Juhi Bhardwaj, Pankaj Kumar, Priya Tomar, Anchal Rani Rosy Rani and Amit Kumar Singh 2014. "In silico Identification and Comparative Analysis of Candidate gene encoding a proline-rich protein in <i>Lens cullineris</i> " Legume Research37(2): 203-211DOI: 10.5958/j.2229-4473.26.2.076	0.59	L014	6.59
53.	<b>Jitender Singh</b> , Anchal Rani, Pankaj Kumar, V K Baranwal, P L Saroj, Anil Sirohi, Amar N. Pandey and Peer M. Schenk (2014) New host record of a 'Candidatus Phytoplasma asteris'-related strain infecting peach in India: <u>Australasian Plant Disease Notes</u> .9:125 doi:10.1007/s13314-014-0125-2			
54.	D. Singh, A. Kumar, Ashok Kumar, P. Chauhan, V. Kumar, N. Kumar, A. Singh, N. Mahajan, P. Sirohi, S. Chand, B. Ramesh, <b>J. Singh</b> , P. Kumar, R. Kumar, R.B. Yadav, and R. K. Naresh Marker-assisted selection and crop management for salt tolerance. African Journal of Biotechnology 10(66): 14694-14698		A080	*
55•	Anupam Singh, Ashwani Kumar Singh, <b>Jitender Singh</b> and Raghvendar Singh (2011). Detection of species-specific milk by using polymerase chain reaction. Asian journal of microbiology, biotechnology & environmental. 13(4): 643-646		A320	5.00

<b>56.</b>	Rai Alok, Singh Sweta, <b>Singh Jitender</b> , Meshram S.U. (2011). Detection and identification of cry1 gene in Bacillus thuringiensis using PCR and on the		P174	4.21
	basis of sequencing. Progressive Agriculture 11(1):138-142			
<b>57</b> •	K. Mehla, S. Chaudhary, A. Kumar, V. Kumar, P. Chauhan, S. Gupta, J. Singh, P. Kumar, V. Kumar, N. Kumar, A. Jindal, S. Kumar, V. Sharma, S. Chand, N. Mahajan, A. Singh, B. Ramesh and D. Singh (2011) Advances in DNA sequencing: Challenges and limitations of personal sequencing African		A078	*
	Journal of Agricultural Research 6(6): 1277-1280			
<b>58.</b>	D. Singh, A. Kumar, A. Sirohi, P. Kumar, <b>J. Singh</b> , V. Kumar, A. Jindal, S. Kumar, N. Kumar, V. Kumar, V. Sharma, S. Gupta and S. Chand (2011) Improvement of basmati rice (Oryza sativa L.) using traditional breeding technology supplemented with molecular markers. African Journal of Biotechnology 10 (04): 499-506		A080	*
59.	Chauhan Poornima, Siddiqui M. Asif, Amir Asad, Goyal Vibhika, <b>Singh Jitender</b> and Singh Raghvendra (2010). Homology Modelling and Active site analysis of Leptin receptor of Homo Sapiens involved in obesity. Journal of Applied Biology and Pharmaceutical Technology 1(3),747-753			
60.	Gupta, K. N., Baranwal, V. K., Prasanna, B. K., <b>Singh</b> , <b>J.</b> , Haq, Q. M. R., & Gopal, K. (2009). Genome sequencing, comparison and phylogenetic analysis of Citrus yellow mosaic virus isolate originating from different citrus species in India. <i>International Journal of Virology</i> , <i>5</i> (4), 143-153.			
61.	Bardia, P. K., Rai, P. K., <b>Singh J.</b> and Kumar V. (2007). Molecular characterization of <i>Fusarium qxysporium</i> f.sp. cimini isolates causing cumin wilt Indian. <i>j. Crop science</i> 2(2): 361-363		A336	*
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64.	Baranwal, V.K., Mazumadar, S., <b>Singh</b> , <b>J</b> ., Suryanarayana V., Gosh D.K. and Ahlawat, Y.S (Sept-2004). PCR Detection of <i>Candidatus Liberibacter asiaticus</i> , the agent of Huanglongbing or greening disease in Citrus. <b>Indian Phytopath</b> . <b>57</b> (2): 164-168		I109	5.95

S.No	Authors/Name of Chapter	
<b>65.</b>	A.K. Tiwari, Jitender Singh, Hema, Smriti Mall, G. Reddy, Amit Yadav, R.K.	<b>C</b> hapter
	Gaur, R. Manimekelai, V.K. Baranwal, and G.P. Rao (2021). Diversity,	
	Distribution, and Status of Phytoplasmas Diseases in India.(Published)	
66.	Malyaj R Prajapati, Aakansha Manav, <b>Jitender Singh</b> , Koushlesh Ranjan, Ajay	Chapter
	Kumar Tiwari, Nguyen Bao Quoc (2022). Viral Metagenomics for the analysis of	
	Begomoviruses genome: Geminivirus: Detection, Diagnosis, and	
	Management (pp.43-56). Elsevier Academic Press (doi.org/10.1016/B978-0-323-	
	90587-9.00011-0)	
67.	Prajapati, M. R., Singh, J., Ranjan, K., Pant, R. P., & Baranwal, V. K. (2021).	Chapter
	Molecular Characterization and Diversity Analysis of Viruses Infecting Orchids	-
	Plants: Global Scenario. In Virus Diseases of Ornamental Plants (pp. 127-149).	
	Springer, Singapore.	
68.	Srivastava, S., Tiwari, N. N., Prajapati, M. R., Jain, R. K., <b>Singh, J.,</b> & Tiwari, A. K.	Chapter
	(2021). Begomovirus on Ornamental Plants: Diversity and Management. In Virus	<b>P</b> ***
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69.	Next-generation sequencing: a boom for the identification of Antimicrobial Resistance: Malyaj R Prajapati, Mrinal Srivastava, Aakansha Manav, Amit Kumar, <b>Jitender Singh</b> and Ravindra Kumar (2021). Newer Approaches to Combat Antimicrobial Resistance. International workshop on Antimicrobial Resistance: Current Scenario and Future Prospects (page no. 46-53).	Chapter
70.	Quarum Sensing: a mechanism involved in the transfer of drug resistance genes. Mrinal Srivastava, Malyaj R Prajapati, Aakansha Manav, Amit Kumar, <b>Jitender Singh</b> and Anil Sirohi (2021). Newer Approaches to Combat Antimicrobial Resistance. International workshop on Antimicrobial Resistance: Current Scenario and Future Prospects (page no. 54-59).	Chapter
71.	Antibiotic Resistance: Harshit Verma, Amit Kumar, Mrinal Srivastava, Surendra Upadhyay, Malyaj R Prajapati and <b>Jitender Singh</b> (2021). Newer Approaches to Combat Antimicrobial Resistance. International workshop on Antimicrobial Resistance: Current Scenario and Future Prospects (page no. 40-45).	Chapter
<b>72.</b>	Ranjan, K., Bharti, M. K., Siddique, R. A., & <b>Singh, J.</b> (2021). Metatranscriptomics in Microbiome Study: A Comprehensive Approach. In Microbial Metatranscriptomics Belowground (pp. 1-36). Springer, Singapore.	Chapter
73.	Yadav, Annu, <b>Jitender Singh</b> , Koushlesh Ranjan, Pankaj Kumar, Shivani Khanna, Madhuri Gupta, Vinay Kumar, Shabir Hussain Wani, and Anil Sirohi. "Heat shock proteins: Master players for heat-stress tolerance in plants during climate change." <i>Heat stress tolerance in plants: physiological, molecular and genetic perspectives</i> (2020): 189-211.	Chapter
74•	Goyal, M., <b>Singh, J.</b> , Kumr, P., & Sirohi, A. (2018). Pulses for human nutritional security. In <i>Pulse Improvement</i> (pp. 1-11). Springer, Cham.	Chapter
75.	Madhuri Gupta, Pankaj Kumar, <b>Jitender Singh</b> , Shivani Khanna and Mini Sharma (2017). Abiotic Stress Management in Pulse Crops Abiotic and Biotic Stress Management in Plants: Volume One Abiotic Stress Chapter 9 1:227-258.	Chapter
76.	Ranjan, K., Siddique, R. A., Bharti, M. K., & Singh, J. (2016). Geminivirus: Indian Scenario. In-Plant Viruses: Evolution and Management (pp. 131-144). Springer, Singapore.	Chapter

## Papers in Proceedings

- 77. **Jitender Singh**, Aastha Singh, Pankaj Kumar, Anchal Rani, V. K Baranwal, Anil Sirohi (2014). First report of mixed infection of Phytoplasma and Begomovirus in eggplant (Solanum melongena) in India. IIPWG-2015, Mauritatus Jan 14-17, 2015 Mollicutes
- **78.** Sandeep Kumar, Pankaj kumar, **Jitender Singh**,lakshaman Prasad and Arvind M. Kayastha (2011). Properties and Immobilizatio of ureases: A Review Published in Proceeding on Advances in Biotechnological Research in Agri-Horticultural Crops fopr sustaining Productivity Quality Improvement & Food Security **ISBN938136135-5** 2011 74-84 published by SV P University of Agri. & Tech. Meerut.
- **79.** Pooran Chand, S.A Kerkhi, Pankaj Kumar, **Jitender Singh**, L.K Gangwar and Atar Singh (2010). Biotechnology in Agriculture in the context of country's Food security: A Review Published in Souvenir and Compendium and abstracts "*Physiological and molecular interventions for yield and quality improvement in crop plants*" Page no. 38-39 published by SV P University of Agri. & Tech. Meerut
- **80.** Devi Singh, Anuj Kumar, Anil Sirohi, Ashok Kumar, **Jitender Singh** and Sachin (2010). Crop Management in salt-affected soils: Molecular intervention and limitations: A visionary view Published in Souvenir and Compendium and Abstracts "*Physiological and molecular interventions for yield and quality improvement in crop plants*" SV P University of Agri. & Tech. Meerut Page no. 32-37 published by SV P University of Agri. & Tech. Meerut.

### **Blogs**

**81.** Malyaj R Prajapati, **Jitender Singh** and Pankaj Kumar (2020). Transcriptome analysis reveals important metabolic pathways of Allium sativum. A BioBam scholarship supported project. October 6, 2020; <a href="https://www.biobam.com/supported-project-pathways-analysis-Allium sativum/">https://www.biobam.com/supported-project-pathways-analysis-Allium sativum/</a>

**Practical / Training Manual/ Books/ Monographs:** 

Name	of publication/ Practical / Training al/ Books/ Monographs	Authors	Year & Number of pages	Publisher
1.	Training Manual on 'Molecular Biology Tools and It's Application in Agriculture & Allied Sciences'	<b>Jitender Singh</b> & Pankaj Kumar	2021	SVP University of Agri. & Tech. Meerut
2.	Training Manual on 'Application of Molecular and Bioinformatic Tools in Agriculture & Allied Sciences'	<b>Jitender Singh</b> & Pankaj Kumar	2021	SVP University of Agri. & Tech. Meerut
3.	Training Manual on 'Application of Molecular and Bioinformatic Tools in Agriculture & Allied Sciences' from December 11, 2020 to December 24, 2020. ISBN 978-93-90573-49-3	<b>Jitender Singh</b> & Pankaj Kumar	2020	SVP University of Agri. & Tech. Meerut
4.	Training Manual on <i>Application of Molecular &amp; Bioinformatics Tools in Agriculture and Allied Sciences (Feb. 10</i> – Feb. 25, 2020) ISBN 978-93-5406-328-2	<b>Jitender Singh</b> & Pankaj Kumar	2020	SVP University of Agri. & Tech. Meerut
5.	Training Manual on <i>Application of Molecular Biology tools and Bioinfromatics in Agriculture</i>	<b>Jitender Singh</b> & Pankaj Kumar	2016/110	SVP University of Agri. & Tech. Meerut
6.	Training Manual on <b>Application of Biotechnology Tools and Bioinformatics in Agriculture</b>	<b>Jitender Singh</b> & Pankaj Kumar	2015/96	SV P University of Agri. & Tech. Meerut
7.	Training Manual on "Application of Molecular biology tools and bioinformatics in Agriculture.	<b>Jitender Singh</b> & Pankaj Kumar	2014/88	SV P University of Agri. & Tech. Meerut
8.	Training Manual on Application of Biotechnology Tools and Bioinformatics in Agriculture	<b>Jitender Singh</b> & Pankaj Kumar	2013/89	SV P University of Agri. & Tech. Meerut
9.	Laboratory Manual on Biochemistry I (BTB 310) Department of Biochem. & Physiol.	<b>Jitender Singh</b> & Pankaj Kumar	2010/56	SV P University of Agri. & Tech. Meerut
10.	Advances in Biotechnological Research in Agri-Horticultural Crops for sustaining Productivity Quality Improvement & Food Security. ISBN 938136135-5	Pankaj Kumar,  Jitender Singh, Anil Sirohi, Sandeep Kumar, Rajendra Singh, Amit Kr. Singh	2011/240	SV P University of Agri. & Tech. Meerut
11.	Souvenir and Compendium of Abstracts  "Advances in Biotechnological Research in Agri-Horticultural Crops for sustaining Productivity Quality Improvement & Food Security. ISBN 938136136-3	Pankaj Kumar,  Jitender Singh, Sandeep Kumar, Amit Kumar Singh	2011/152	SV P University of Agri. & Tech. Meerut
12.	Souvenir and Compendium of Abstracts "Physiological and molecular Interventation for yield and Quality Improvement in Crop Plants"	Pankaj Kumar, <i>Jitender Singh</i> and Amit Kumar Singh	2010/237	SV P University of Agri. & Tech. Meerut

# **Teaching: Course Taught:**

Semester	Course No. & Course Name	Credits	Name(s) of teacher (s)
Under Gra	aduate		
1st	BTI-325: Molecular Diagnostics	2+1	Dr. Jitender Singh
1st	BTI-311: Immunology	2+1	Dr. Jitender Singh
IInd	BTI- 326: Molecular Virology and Vaccine Production	2+1	Dr. Jitender Singh
1st	BES-421: Student READY	0+20	Dr. Jitender Singh
IInd	BES-422: Student READY	0+10	Dr Jitender Singh
IInd	BES-421: Student READY	0+10	Dr. Jitender Singh
IInd	BES-422: Student READY	0+20	Dr. Jitender Singh
Post Grad	uate		-
1st	BTI-510: Immunology and Molecular Diagnostics	2+1	Dr. Jitender Singh
1st	BTI-512 Introduction to Bioinformatics	2-0	Dr Jitender Singh
PhD			
Ist	BTA- 510 PG ATB: Advance Techniques in	4	Dr. Jitender Singh
	Biotechnology		
llnd	Advance Bioinformatics	0+3	Dr. Jitender Singh
llnd	BTI-510: Immunology and Molecular Diagnostics	2+1	Dr. Jitender Singh

Participation in Training Programs:

International Train	ings attended:	
12 -23 June 2022	Centre of Biotechnology of Sfax (CBS), Tunisia	ICGEB course "Genomics/Metagenomics and NGS approaches for discovering new enzymes useful for industrial applications".
August 03 – 12, 2015	Research Institute of Biotechnology and Environment, Nong Lam University, Linh Trung Ward, Thu Duc District, Ho Chi Minh City, Viet Nam	Training on "Theoretical and Practical Course "Loop-Mediated Isothermal Amplification (LAMP) Technique for Rapid Detection of Phytoplasmas".
March 15-June 14, 2011	School of Agriculture and Food Technology, The University of Queensland, Brisbane, QLD 4072, Australia	Training on "Molecular characterization and diagnostics of viruses infecting horticultural crops through Real time PCR and Microarray".
<b>National Trainings</b>	attended:	
22-24th February,2021	ICAR-NAHEP innovation grant College of Biotechnology, SVPUAT, Meerut by ICAR-NAARM, Hyderabad	Online Training Programme on Advanced Bioinformatics Tools and its Applications in Agriculture
November 18 to 22, 2019	National Institute of Plant Genome Research (NIPGR), New Delhi.	Five days training on Gene Editing and Plant Tissue culture
3 weeks' online course. May, 2020	Wellcome genome campus advanced courses and scientific conferences	Bacterial genomes: accessing and analysing microbial genome data
March 22 to 28, 2021	organized by IDP-NAHEP and Sher-e Kashmir university of Science and Technology, Kashmir, Jammu and Kashmir	Online Training programme on Essential of Bioinformatics
February 22-24, 2021	Organized by ICAR-NAARM, Hyderabad	Attended "Advance Bioinformatics Tools and its application in Agriculture"

January 21, 2014 – February 10, 2014	At Center for Agriculture Bioinformatics (CABin), I.A.S.R.I, New Delhi-12	CAFT programme on "Computational and Statistical Advances in Bioinformatics for 'omics' Data". 21 days
Feb 20- March 13,2009	Division of Plant Pathology, IARI, New Delhi-12	Training on "Molecular Diagnostics for Fastidious Prokaryotes, viruses and Viroids.

Revenue Generated: 15.0 Lacs through HRD Programme

# **HUMAN RESOURCE DEVELOPMENT** [~450 students/faculties trained]

# Capacity building training programs organized as Course Coordinator/Director

Faculty/ Student Training or Workshops	Sponsoring agency	Period From	То
Two weeks faculty training on "Molecular Biology Tools and It's Application in Agriculture & Allied Sciences"  Course Director	CST, UP DBT & SVPUAT	September 08, 2022	September 21, 2022
Two weeks faculty training on "Molecular Biology Tools and It's Application in Agriculture & Allied Sciences"  Course Director	CST, UP DBT & SVPUAT	December 01, 2021	December 14, 2021
Two weeks faculty training on "Application of Molecular and Bioinformatic Tools in Agriculture and Allied Sciences" Course Director	CST, UP DBT & SVPUAT	July 07, 2021	July 20, 2021
Two weeks faculty training on "Application of Molecular and Bioinformatic Tools in Agriculture and Allied Sciences"  Course Director	CST, UP DBT & SVPUAT	December 11, 2020	December 24, 2020
Two weeks faculty training on "Application of Molecular and Bioinformatic Tools in Agriculture & Allied Sciences"  Course Director	CST, UP DBT & SVPUAT	Febuary12, 2020	February 25, 2020
Students Training One month training programme entitled "Application of Molecular BiologyTechniques & Bioinformatics in Agriculture.Course Director	CST, UP DBT & SVPUAT	June 17, 2019	July 16, 2019
DBT Sponsored Training Workshop on <i>Bioinformatics Tools and Techniques in Agriculture" Course Director</i>	DBT, Govt. of India	March 25, 2019	March 27, 2019
Twenty-one days FACULTY TRAINING programme on "Application of Molecular Biology Tools & Bioinformatics in Agriculture" Course Coordinator	CST, UP DBT & SVPUAT	August 19, 2016	September 08, 2016
Twenty-one days FACULTY TRAINING programme on 'Application of Biotechnological Tools and Bioinformatics in Agriculture" Course Coordinator	CST, UP DBT & SVPUAT	February 04, 2015	February 24, 2015
Twenty-one days FACULTY TRAINING programme on 'Application of Molecular Biology Tools and Bioinformatics in Agriculture' Course Coordinator	CST, UP DBT & SVPUAT	February 05, 2014	February 25, 2014.
Twenty-one days "Hands on training on Molecular Biology Tools and Their Application in Agriculture"  Course Coordinator	CST, UP DBT & SVPUAT	November 21, 2012	December 11, 2012
Students Training One month training programme entitled "Application of Molecular Biology Techniques & Bioinformatics in Agriculture" Course Coordinator	CST, UP DBT & SVPUAT	June 25, 2012	July 24, 2012

One month training programme entitled "Hand on Training on Molecular Biology Tools & Their Application in Agriculture" Course Coordinator	CST, UP DBT & SVPUAT	June 15, 2011	July 14, 2011
Twenty-one days "Application of Molecular Biology and Advanced Biochemical Techniques in Agriculture" Course Coordinator	CST, UP DBT & SVPUAT	June 21, 2010	July 03, 2010
Immuno Molecular diagnostics and Characterization of Biomolecules by using Bioinformatics and Biotechnological Tool, BIF DBT funded project June 07 – June 28, 2010 Course Coordinator	BIF DBT funded project	June 16 , 2009	July 15, 2009

Name of the program organized	Sponsoring	Year	Per	riod
	agency		From	То
"Application of Fluorescence Microscopy in Plant and Animal Sciences "organized by College of Biotechnology, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, India during 17-18th June 2021. <i>Organizing Secretary</i>	SVPUAT	2021	17 June, 2021	18th June, 2021
"Antimicrobial drug resistance: current scenario and future prospects "organized by College of Biotechnology, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, India	NAHEP-IG Grant	2021	18.03.2021	18.03.2021.
Awareness Campaign cum workshop on Role of Immunology in Societal Health on the occasion of World Immunology Day (April 29, 2019): Indian Immunology Society (IIS), All India Institute of Medical Sciences, New Delhi, India Organizing Secretary	Indian Immunology Society (IIS), AIIMS	2019	April 29, 2019	April 29, 2019

### SEMINAR/SYMPOSIA ORGANIZED

- Two days MID EASTERN ZONE ZONAL SYMPOSIUM on "Plant Health for Sustainable Agriculture" scheduled to be held from December 27-28, 2022 under the aegis of Indian Phytopathology Society: as Organizing Secretary
- ❖ A Zonal Seminar on "Physiological and Molecular Interventions for Yield and Quality Improvement in Crop Plants" September 17-18, 2010 by the Centre under the aegis of Indian Society for Plant Physiology, IARI, New Delhi which was sponsored by NHB, DBT, CSIR and DRDO.
- ❖ A National Symposium entitled "Advances in Biotechnological Research in Agri-Horticultural Crops for Sustaining Productivity, Quality Improvement & Food Security" organized by the Centre w.e.f., September 14-16, 2011 which was sponsored by DBT, CSIR, NHB, NABARD, Min. of Earth Sciences, DRDO and Monsanto India Ltd.

**Sequences Submitted to GenBank with accession nos.:** 

SN	Definition	Acc. Number
1.	Near to complete genome Garlic virus A	MT731489, MT731490
2.	Near to complete genome Leek yellow stripe virus	MT731491, MT731492
3.	Near to complete genome Onion yellow dwarf virus	MT731493, MT731494, MT731495
4.	Near to complete genome Garlic common latent virus	MT731496
5.	Near to complete genome Shallot latent virus	MT731497
6.	Near to complete genome Garlic virus X	MT731498, MT731499

7•	CP gene of OYDV in garlic	MZ322662
8.	Near to complete genome Garlic virus D	MT731500MT731501
9.	Garlic virus B isolate GarV-B replicase gene	MT919304, MW074890, MW074887, W074889, MW074888
10.	Shigella sonnei strain SVPUAT-AK 16S ribosomal RNA gene	MW697089
11.	Escherichia coli strain SVPUAT 16S ribosomal RNA gene	MW65410
12.	Escherichia fergusonii strain SVPUAT-AK 16S ribosomal RNA gene	MW653953
13.	Klebsiella pneumonia strain K3 16S ribosomal RNA gene	MW346043, MW346044
14.	Complete genome of Garlic virus E	MW925710
15.	Partial CP/NABP gene of E	MW925695
16.	CP gene of OYDV in Amaryllis	MZ203479, MZ203480, MZ203481, MZ203482
	CP gene of LYSV in Amaryllis	MZ203474, MZ203475, MZ203476, MZ203477, MZ203478
18.	Complete coat protein of Garlic virus B	MW925694
19.	Plantago ovata alphaendornavirus	BK059207, MZ514136
20.	Plantago yellows virus	BK059206
21.	Near to complete genome Leek yellow stripe virus	MT731491, MT731492
22.	Near to complete genome Onion yellow dwarf virus	MT731493, MT731494, MT731495
23.	Near to complete genome Garlic common latent virus	MT731496
24.	Near to complete genome Shallot latent virus	MT731497
25.	Near to complete genome Garlic virus X	MT731498
26.	Near to complete genome Garlic virus X	MT731499
27.	Klebsiella pneumoniae strain K3 16S ribosomal RNA (BM)	MW346043, MW346044
28.	E. coli buffalo milk	MW353603, MW353604
29.	Candidatus Phytoplasma	AB858361,
_	Candidatus Phytoplasma asteris' (Group 16SrI) Infecting Peach (Prunus persicae)	HM988985, AB858360'
	16SrIX (witches' broom) phytoplasma associated with toria (Brassica rapa cv. toria) phyllody Pigeon pea disease	HM988986
	Sesamun Phyllody Phytoplasma	JF706215
33.	'Candidatus Phytoplasma australasia' associated with a tomato disease	. JX104335
34.	'Candidatus Phytoplasma Trifolia' associated with Brinjal.	. JX104336

- HM030725, FJ617224, KC513743, JX193616, KC513743, DQ875213, EU708316, EU708317, KF437510, KF234574, KF234573, KF234572, KF234571, KF234570, KF723593 **1.** *Tomato* Leaf Curl New Delhi Virus (ToLCNDV) accession no. AB976105, AB976104 and KT833850
- 2. Acc. No. KF308290 Phaseolin gene
- **3.** Acc. No. JX561228 Lectin gene FROM Allium Cepa
- **4.** Acc. No. JX564851 *Proline rich* region from *Lens cularnis 250 bp*
- **5.** Acc. No. KF310527 *Proline rich* region from *Lens cularnis 750 bp*
- **6.** GenBank Accession No. HM988985 'Candidatus Phytoplasma asteris' (Group 16SrI) Infecting Peach (Prunus persicae)
- 7. GenBank Accession No. HM988986 16SrIX (witches' broom) phytoplasma associated with toria (Brassica rapa cv. toria) phyllody Pigeon pea disease
- 8. GenBank Accession No. JF706215 Sesamun Phyllody Phytoplasma
- 9. GenBank Accession No. JX104335 'Candidatus Phytoplasma australasia' associated with a tomato disease
- 10. GenBank Accession No. JX104336 'Candidatus Phytoplasma Trifolia' associated with Brinjal.

## International Visiting Scientists in the lab under: AIRTF fellowship

2018-2019

Nguyễn Chuyên Thuận

Sugarcane Research Institute Add: Phu An, Ben Cat, Binh Duong, Vietnam 2019-2020 Truong Ngoc Thao

Department of Biotechnology, Nong Lam University Ho Chi Minh City, Vietnam 2019-2020 An Dinh

Department of Biotechnology, Nong Lam University Ho Chi Minh City, Vietnam

(JITENDER SINGH)

### **Reviewer Assignment for International Journals**

Plant Disease, Plos, New Disease Reports, Australian Journal of crop Science, Journal of General Plant Pathology, Indian Phytopathology, Plant Omics, Cell Stress and Chaperones, Journal of Integrative Agriculture, HELIYON, Vegetos, Frontiers.

Declaration: I hereby declare that all the above-provided information is true to the best of my knowledge and belief.

**Date:** October 16, 2022

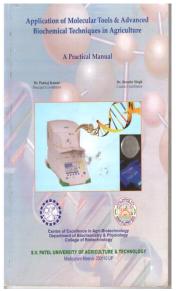
METHODS IN IMMUNOLOGY A Laboratory Manual

A Laboratory Manual

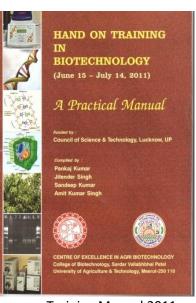
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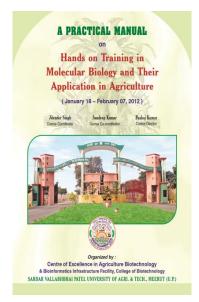
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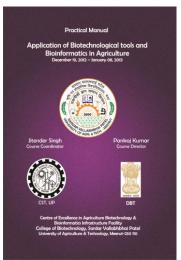


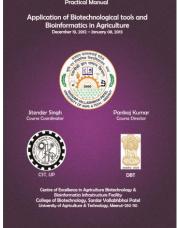


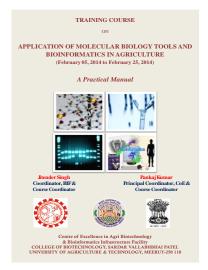
Training Manual 2011



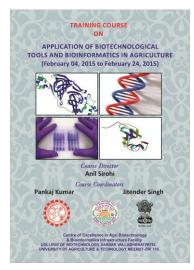
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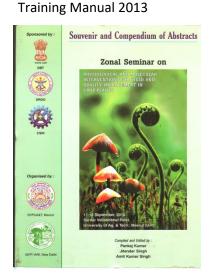




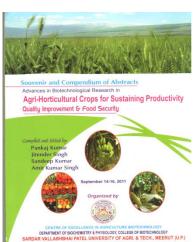
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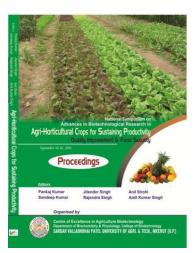
**Training Manual 2015** 



Zonal Seminar 2010



National Seminar 2011 ISBBN938136136-3



Proceedings 2011 ISBBN93-81361-35-