

Curriculum -Vitae

Titla	Dr.	First	Suman	Lact	Lakhannaul		Dhotograph	
nue		FIISL	Juman	LdSL	Lakhanpaul		Photograph	
Desie		Drofessor		Name				
Designation Profess Address EG-119,		EG-119,UGF,	or UGF, Inder Puri, New Delhi-110012			WA		
Phone	e No Office	011 2700 690	0 6900					
	Residence	011-2583334	33341				and the second se	
	Mobile	9868375756					Station and a second	
Email		Sumanlp200	o2001@yahoo.com					
Web-I	Page							
Educa	tional Qualificatio	ns						
Degre	e	Institution					Year	
Ph.D.		Delhi Univer	sity				1989	
M.Phil.	/ M.Tech.	Delhi Univer	sity				1983	
PG		Delhi Univer	sity				1981	
UG		Delhi Univer	sity		1979		1979	
Any other qualification								
Caree	I PIUIIIe							
Delhi	University, Botany	/ Pro	fessor	20	06-Till date	Tead	ching and Research	
Depar	tment							
Delhi University, Botany		/ Rea	der	20	02-2005	Teaching and research		
Depar	tment							
NRC on DNA Fingerprinting, NBPGR, Pusa Campus, New Delhi-110012		ting, Ser	ior Scientis	t 19	98-2002	Tead	ching and research	
		New						
National Bureau of Plant Genetic Resources, Pusa		t Scie a sca	entist (Seni le)	or 19	92-1998	Research		
Campus, New Delhi-110012								
National Bureau of Plant Genetic Resources, Pusa		t Scie	entist S-1	19	87-1992	Research		
		a						

Administrative Assignments

1. Chairman, Meritorius Award committee of Science Faculty, Governing body member and Chairperson of a DU college,

2. Coordinator, Student Teacher Interaction committee of the Department

3. Member of several Committees of the Department such as Purchase Committee, Antiragging, Student Orientation and Mentoring, Committee of Courses, Syllabus revision for M.Sc and Ph.D. etc,

4. VC nominee for selection committees of research Projects and DRC of other Department

5.

Areas of Interest / Specialization

Plant molecular genetics, Crop Genetics, Molecular analysis of biological diversity, Multipartner (plant-insectendosymbionts) interactions

Subjects Taught during the last Semester

S.No.	Subject	Days	Time	Classroom
1				
2,	Plant Developmental Biology (CC6)	Monday (Theory)	3.30pm -5.30 pm	Room no 37
3.	Advance Genetics and Plant Breeding (BOT 404)	Thursday (Theory and Practical)	Theory 8.45 AM-10.35 AM Practical 10.35 AM- 2.15 PM	Theory # 208 (New Block) Practical #22
4.	Dissertation (BOT 409)	Thursday Friday Saturday	Thursday 2.15 PM-5.00 PM Friday 2.15 PM-5.00 PM Saturday 8.45 AM-5.00 PM	Room # 202
5.	M.Phil./Ph.D. Coursework RM1: Research Methodology EL06:Genetic markers and mapping	Wednesday (Theory and Practical)	Theory 11.30-1.30 PM Practical 2.30-5.30 PM	Theory # BioInformatics Room Practical as per the location of instrument

Genetics, Molecular Genetics, Plant Anatomy, Genetics and Biotechnology of Crop plants, Biotechnology in management of Plant Genetic Resources

Research Guidance

List against each head

- 1. Supervision of awarded Doctoral Thesis- 10
- 2. Supervision of Doctoral Thesis, under progress-4
- 3. Supervision of awarded M.Phil dissertations- 9
- 4. Supervision of M.Phil dissertations, under progress-nil

Publications Profile

List against each head(If applicable) (as Illustrated with examples)

- 1. Books/Monographs (Authored/Edited)
- 2. Research papers published in Refereed/Peer Reviewed Journals

RESEARCH PAPERS PUBLISHED IN REFEREED/PEER REVIEWED JOURNALS

(Last 10 years only)

1. Other publications (Edited works, Book reviews, Festschrift volumes, etc.)

Conference Organization/ Presentations (in the last three years)

List against each head(If applicable)

Participation as Paper/Poster Presenter (Last five years only)

- Bhardwaj D, Lakhanpaul S and Tuteja N. (2012) wide range of interacting partners of pisum sativum gβ subunit suggests its significant multirole in signal transduction pathway. presented at International Conference on Plant Biotechnology for food security: New Frontiers held at NASC complex, Pusa Campus, during February 21-24,2012.
- Kumar S., Singh V. and Lakhanpaul S. (2014) Putative roles of selected OY-M phytoplasma effector proteins in plant hosts: A bioinformatics approach. Presented at International Symposium on Plant Signaling and Behavior, March 7-10, Department of

Botany, University of Delhi, Delhi.

- Bhardwaj D., Lakhanpaul S., Sharma S., Narayanan L. and Tuteja N. (2014) *Pisum* sativum G-protein beta subunit interacts with small pathogenesis-related cysteine rich protein to regulate stomatal functions. Presented at International Symposium on Plant Signaling and Behavior, March 7-10, Department of Botany, University of Delhi, Delhi.
- Lakhanpaul, S., Singh, V. and Kumar, S. (2014) Understanding plant development from a new teacher-Phytoplasma: A bacterial pathogen that causes genetic reprogramming in plants. Presented at Botany 2014: New Frontiers in Botany, July 22-30, 2014, Boise, Idaho, USA
- Mann N., Uniyal, P.L. and Lakhanpaul, S. (2014) Study on floral biology and phylogenetic analysis of *Viola* L. (Violaceae) presented at III Global Congress "Plant Reproductive biology, conservation and crop improvement held during December 15-17th, 2014, Agra, India.
- Lakhanpaul, S., Singh, V. and Kumar, S. (2014) Understanding plant development from a new teacher-Phytoplasma: A bacterial pathogen that causes genetic reprogramming in plants. Presented at Botany 2014: New Frontiers in Botany, July 22-30, 2014, Boise, Idaho, USA.
- Malik S. and S. Lakhanpaul (2016) The need for resolving taxonomic ambiguities and the study of genetic diversity in *Barleria* - an underexploited medicinally important genus. Presented at National conference on Agrotechnology, Commerce and Sustainable use of medicinal and aromatic plants held during February 6-7, 2016 at NAASC, IARI, New Delhi.
- A. Singh, R. Khongbantabam, V. Singh, S. Kumar and S. Lakhanpaul (2016) Diverse phytoplasma strain are associated with sesame (*Sesamum indicum*) phyllody in India. Presented at IPS 6th International Conference on Plant Pathogens and People, ICAR, New Delhi, held during 23-27 February, 2016.
- S. Kumar, V. Singh and S. Lakhanpaul (2016) Differential ability of two nested-PCR primers (R16F2/R2n & fu5/rU3) for phytoplasma detection - A critical assessment. Presented at IPS 6th International Conference on Plant Pathogens and People, ICAR, New Delhi, held during 23-27 February, 2016.

- Lakhanpaul, S. (2016) Unraveling Dawkins extended phenotype- Molecular mechanism for Phytoplasma induced developmental alterations in host plants. Invited talk IPS 6th International Conference on Plant Pathogens and People, ICAR, New Delhi, held during 23-27 February, 2016.
- 11. Vibhuti Singh, Sachin Kumar, Suman Lakhanpaul (2017) Investigations on the fastidious endophytic bacterial flora of Catharanthus roseus L. using PPLO culture method presented at International Conference and Outreach Program on "Environment & Ecology: Sustainability and challenges" 4–6 January, 2017 held at Delhi University.
- Sandeep Kaushik, Amit Vashishtha and Suman Lakhanpaul (2017) MLST profiling of Wolbachia associated with *Kerria lacca* (Kerr.) presented at International Conference and Outreach Program on "Environment & Ecology: Sustainability and challenges" 4 – 6 January, 2017 held at Delhi University.

Amrita Singh, Neetu Tyagi, KV Bhat and Suman Lakhanpaul (2017) Occurrence and distribution of G-quadruplexes in the genomes of four phytoplasmas <u>In</u> INSCR International Conference – 2017 (IIC-2017) Theme: "Role of Microbe-Plant-Animal Interactions in Human Health" 26th -28th September, 2017, Delhi University.

14. Delivered invited talk entitled "Delineating the phytoplasma associated retrograde metamorphosis in host plants with special emphasis on Sesame (*Sesamum indicum* L.) phyllody" in International Conference on Human, animal and plant Mycoplasmas Dec 3-4th, 2019, Pune, NCMR, NCCS, Pune-411 021.

Research Projects (Major Grants/Research Collaboration)						
Sl.	Title of Project	Funding Agency	Duration	No. of		
No.				Scientists/ Associates		
1.	Studies on the genetic stability	Department of	1987-1996	Seven		

	of cryopreserved germless under the Megaproject on "In vitro conservation and cryopreservation of important agri-horticultural crops"	Biotechnology (DBT), Govt. of India	1006 2002	Thursd
2.	DNA fingerprinting of pulses, oilseeds and fibre crops	Agricultural Research (ICAR), Govt. of India	1996 – 2002	Inree
3.	Development of molecular markers for assessment of genetic diversity studies in sesame	Department of Science nad Technology (DST), Govt. of India	1997-2000	One
4.	Validation of core collection of sesame using molecular markers	NationalAgriculturalTechnolgyProgram(NATP)/ICAR	1999 – 2002	Three
5.	Genetic enhancement of crop species with particular reference to sesame and mungbean	NATP/ICAR	1999 – 2002	Five
6.	Biochemical and molecular characterization of the Lac insect host relationship	Department of Biotechnology (DBT), Govt. of India	2003 -2007	Two
7.	Program support on Restoration Ecology	Department of Biotechnology (DBT), Govt. of India	2005-2012	Four
8.	To understand the nature of diversity in lac insect and the nature of insect X host plant interaction	World Bank through National Agricultural Innovative Project (Indian Council for Agricultural Research)	2009- 2013	Four
9	Relationship of Phytoplasma with its host plant and insect vectors	National Fund for Research in Basic , Strategicand Frontier Research,ICAR	2013-2016	Two
10.	Detection and characterization	Extra mural Research	2016-2017	Two

	of Phytoplasma affecting major floricultural crops of	Funding, Indian Council of Agricultural Research				
11.	India Characterization and Epidemiology of Phytoplasmas Infecting Major Horticultural Crops	Extra mural Research Funding, Indian Council of Agricultural Research	2016-2017	Two		
12.	'Delineating the effector biology of phytoplasma affecting selected crop taxa in India with special emphasis on sesame (<i>Sesamum indicum</i> L.)'	National Agricultural Science Fund	2019-2022	Two		
Award	ds and Distinctions					
Awarded NSTS (National Science Talent Search Scholar) Fellowship and availed the fellowship for the entire education period i.e. upto Ph.D. Secured 1st Position in college in B.Sc. Secured 2 nd position at All India level in ARS (Agricultural Research Services) Examination (1985) held by UPSC (Union Public Service Commission), Govt. of India in the specialization- Genetics and Cytogenetics. Judged as Excellent Teacher and nominated for the Award of Best Teacher in IARI, (Deemed University)						
Assoc	Association With Professional Bodies					
Meml	bership or fellowship of professiona	I /Academic bodies, Societies	etc.			
Indian Society of Plant Genetic Resources (Founder Member)						
Indian Society of Genetics and Plant Breeding						
Society for Plant Biochemistry and Biotechnology (Founder Member)						
Interr	International society of Plant Morphologists					
Indian Society for Root Crops						
India	Indian Association of Mycoplasmologists (Secretary, w.e.f, Dec 3, 2019)					
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Delhi University Botanical society

Society for Ecological research and Natural Resource Management (Vice- President)

Member, Special Committee for drug standardization of Central Council for Research in Homoeopathy (CCRH) w.e.f 31.1.19

Punarnava, AADOB (Alumni Association of Department of Botany, Delhi University (Secretary)

Other Activities

- 1. Resource person in the Training program on *"In vitro* and Cryopreservation Technology for Gene bank" organized by INDO-USAID during 10-29, October. 1994.
- 2. Resource person in the "**Regional Training Course on Seed Genebank Management**" sponsored jointly by the International Plant Genetic Resource Institute (IPGRI), Indian Council of Agricultural Research (ICAR), the Food and Agriculture Organization (FAO), the International Rice Research Institute (IRRI) and International Crop research Institute for Semi- Arid Tropics (ICRISAT) and organized by IPGRI in collaboration with NBPGR during 8-22 December, 1996.
- 3. Organized and conducted training course on "Biochemical and Molecular Techniques for Characterization of Plant Genetic Resources", sponsored by USAID and ICAR, March 12-22, 1996, National Bureau of Plant Genetic Resources, New Delhi-110 012, India.
- 4. Organized and conducted training programme "Molecular Marker Techniques for DNA fingerprinting" at NRC on DNA Fingerprinting, NBPGR, Nov 22-Dec. 18, 1999.
- Resource person for "Molecular genetic tools for analysis of genetic diversity in plant genetic resources." International training program on "In vitro conservation and cryopreservation of plant germplasm, Principles and Practices". Sponsored by IPGRI, ICAR and FAO. October 12-25, 2000. NBPGR, New Delhi.
- 6. Resource person for "National symposium on Intellectual Property Rights and Indian Germplasm Resources: Emerging Challenges" organized by Department of Biosciences, Jamia Millia Islamia, New Delhi, October 20-21, 2000.
- Resource person for the "Biotechnology & Intellectual Property Rights (IPR)" in the Orientation cum Workshop on Plant Genetic Resources Management under the HRD component of NATP – Sustainable Management of Plant Biodiversity, NBPGR, Feb 27.2.2001 to 1.3.2001.
- 8. External faculty "Molecular Genetics of Plant Biodiversity Assessment" in the Workshop on Plant Biosystematics organized at Centre for Environmental Management of Degraded Ecosystems, School of Environment Studies. Delhi University, March. 2001.
- 9. Resource person "Molecular Markers in characterization of Plant Genetic Resources" in the Trainers Training on PGR management under the HRD component of NATP Sustainable

Management of Plant Biodiversity, NBPGR, March 2-21, 2001.

- 10. Co-course coordinator for training programme on **"PCR based techniques for plant DNA fingerprinting**" at NRC on DNA Fingerprinting, New Delhi.
- 11. Panelist and resource person in the **"Trainers Training program under HRD component of NATP subproject on sustainable Management of Plant Biodiversity"** held from 8-25 January, 2002 for the lecture "Importance of DNA fingerprinting in changing IPR scenario".
- 12. Resource person for **Workshop on Biosystematics and conservation of plant diversity** held at CEMDE, Delhi University from January 15-24^{th,} 2003.
- 13. Resource person for Workshop on Biosystematics and conservation of plant diversity held at CEMDE, Delhi University from March 1-10, 2004.
- 14. Resource person for **Workshop on Biosystematics** held at CEMDE, Delhi University from November 28th to December 13th, January 15-24th. 2004.
- Member organizing Committee of 4th International Food Legume Research Conference (IFLRC-IV) held in Indian Agricultural Research Institute (IARI) from October 18-22,2005.
- 16. Resource person for **Workshop on Taxonomy and Bioprospecting** held at CEMDE, Delhi University from January 28th to February 6th, 2008.
- 17. Resource person for **Workshop on Taxonomy, reproductive Biology and Conservation** held at CEMDE, Delhi University from Februaty 18-27th, 2009.
- 18. Resource person for **Workshop on Taxonomy, Ecology and Conservation** held at CEMDE, Delhi University from December 29th to January 7th, 2010.
- 19. Resource person in UGC sponsored 3-weeks "Refresher Course on Environmental Studies Emerging Trends in Sustainable Development" held during January 7-28, 2013.

20. Resource person in **Refresher course in life Sciences organised by CPDHA, UGC –HRDC,** University of Delhi held during July17-Aug, 2018.

21. Member, Organising Committee 3rd National Conference of Seabuckthorn Association of India.Seabuckthorn: Translating Research into Sustainable Utilization and Conservation 19th-20th December, 2019,Department of Botany, University of Delhi, Delhi-110007, India

22. Session Convenor, Comprehensive policies for research and sustainable utilization. In 3rd National Conference of Seabuckthorn Association of India, Seabuckthorn: Translating Research into Sustainable Utilization and Conservation 19th-20th December, 2019, Department of Botany, University of Delhi, Delhi-110007, India

23. Attended 14th Meeting of Special Committee of Drug Standardization on dated Dec 2019 as expert member Special Committee for drug standardization of Central Council for Research in Homoeopathy (CCRH)

Other academicavtivities:

Other administrative activities and responsibilities:

1. External Member- Research Advisory Committee, Microbial Technology Centre, Amity University NOIDA

2. Expert Member, Special Committee for drug standardization of Central Council for Research in Homoeopathy (CCRH), AYUSH, Government of India

3. Thesis examiner for Universities such as Indian Agricultural Research Institute (Deemed University), Pondicherry University, Central University, Hyderabad, IIT, Kharagpur, Banasthali Vidyapeeth, Jamia Millia Islamia, Amity University etc.

4. Extrenal Member, Doctoral Research Committee, Amity Institute of Microbial Technology, Amity University, NOIDA

Signature of Faculty Member