To work in an environment, which fosters performance based continuous growth and learning.

Personal Details



Name:	Dr. Munish Sharma
Designation:	Assistant Professor
Address:	Department of Plant Sciences, School of Life Sciences,
	Central University of Himachal Pradesh, Shahpur Parisar, Kangra-176206
Telephone (M):	06005209699, 09469219538
E-mail:	munish.plant@hpcu.ac.in, munishptc@gmail.com
Citizenship	Indian

Educational Qualifications

S.No	Degree	Subject/Title of Thesis	University	Year of Passing
1	Ph.D.	In vitro studies on selected genotype of Bacopa monnieri (L.) Wettst for the production of bacosides	Shri Mata Vaishno Devi University, Kakryal, Katra (JKUT)	2014
2	M.Sc.	Biotechnology with specialization in plant micropropagation <u>Dissertation Title:</u> <i>In vitro</i> Propagation of <i>Cymbidium</i>	Career College, Dept. of Life Sciences, BHEL, Govindpura, Bhopal [Barkatullah University, Bhopal (M.P)]	2004
		pendulum Sw a rare and endangered orchid of North-East India		
3	B.Sc.	Botany, Zoology, Chemistry, English	G.G.M Science College, University of Jammu, Jammu (JKUT)	2001

Areas of Specialization

Plant Tissue Culture / Plant Metabolic Engineering / Modulation of secondary metabolite production in potential medicinal and aromatic plants through advanced approaches

Experience

Teaching Experience					
S.No	Designation	Department/Centre	Institution		
1	Assistant Professor	Department of Plant	Central University of Himachal		
		Sciences	Pradesh, Dharamshala		

Research Experience

S.No	Designation	Department/Centre	Institution	Area of Research
1	Research Associate	School of Biotechnology	University of Jammu, Jammu (JKUT)	Functional Genomics approaches in Saffron
2	Research Associate (T)	Plant Tissue Culture and Molecular Biology	The Energy and Resources Institute (TERI), Darbari Seth Block, IHC Complex , Lodhi Road, New Delhi	Survey, Collection and molecular studies in Jatropha plants

3	Junior	Advanced Centre of Hill	CSK-HPKV, Palampur	Molecular
	Research	Bioresource and		Characterization of
	Fellow	Biotechnology		Hill Maize inbreds
4	Project	Plant Tissue Culture Unit	Indian Institute of Integrative	Micropropagation and
	Assistant		Medicine, (Formerly, Regional	Bioreactor cultivation
			Research laboratory) (CSIR)	studies in Swertia
			Canal Road, Jammu (JKUT)	Chirayita

Publications & Patents

Papers Published in UGC / Peer Reviewed Journals

S.No	Title	Name of the authors as per the order in paper	Journal Name	Vol., Issue Page Nos.	Year
1	Ethnobotany, Phytochemistry, Pharmacology and Nutritional potential of medicinal plants from Asteraceae family	Munish Sharma Munish Sharma , Navneet Bithal and Munit Sharma	Journal of Mountain Research	17(2), 67-83	2022
2	A Case report on Walnut (<i>Juglans regia</i> L.) from Jammu & Kashmir	Munish Sharma, Deepak Sharma and Munish Sharma	Journal of Biotechnology and Bioresearch	4(3), 541- 543	2022
3	A comprehensive review on ethnobotanical, medicinal and nutritional potential of walnut (<i>Juglans</i> <i>regia</i> L.)	Munish Sharma, Munit Sharma and Munish Sharma	Proc. Indian Natl. Sci. Acad.	88, 601– 616	2022
4	Down-regulation of RdRp complex and activated immune response due to increased arsenic level leads to decreased corona virus replication	Ranjit Kumar, Disha Chauhan, Geetika Saini, Rakesh Kumar, Sunil Kumar, Dixit Sharma, Munish Sharma, Vijay Kumar Bharti, Arun Kumar, Ashok Ghosh	Current Research in Microbial Sciences	3,1001 62	2022
5	Hairy root culture: a promising alternative for enhancing the production of biologically active compounds	Shilpa, Munish Sharma	Journal of Innovative Agriculture	8(1), 1-10	2021
6	Exploration of Therapeutic Potential of Bacopa monnieri Using in silico Approach and Optimization of Culture Conditions for Bacoside Production	Koul A, Sharma M , Sharma S, Sharma J, Verma V, Mallubhotla S	Journal of Proteomics and Bioinformatics	14, 536.	2021
7	Phytoremediation-a green technology adapted to eradication of harmful heavy toxic metals from contaminated soil	Neha thakur, Munish Sharma , Munish Sharma	Journal of Innovative Agriculture	8(1), 26-31	2021
8	Reactive oxygen and Nitrogen species: key players in plant response to stress.	Koul, Anuja, Munish Sharma , Mahima Sharma, Malvika Mehta, Sharada Mallubhotla and Indu Bhushan	Plant cell biotechnology and molecular biology	21(15- 16), 34-43	2020
9	Suitability of bench scale bioreactor system for shoot biomass production and bacoside biosynthesis from Bacopa monnieri (L.)	Munish Sharma , Anuja Koul, Ashok Ahuja and Sharada Mallubhotla	Engineering in Life Sciences	19(8), 584- 590.	2019
10	Transcript profiling of carotenoid / apocarotenoid biosynthesis genes during saffron (<i>Crocus sativus</i> L.) corm development.	Munish Sharma, Sanjana Kaul and Manoj K. Dhar	Protoplasma	256(1) , 249- 260	2018
11	Functional genomics of	Manoj K. Dhar, Munish Sharma ,	Briefings in	16(6):	2017

	apocarotenoids in Saffron: insights from chemistry, molecular biology and therapeutic applications	Archana Bhat, Nikhil K. Chrungoo and Sanjana Kaul	Functional Genomics	336- 347.	
12	Applications of Bioreactor System for high throughput propagation of plants of Medicinal importance – Some Case Studies	Ashok Ahuja, Munish Sharma, Sharada Mallubhotla, M.K. Tripathi and S.P. Singh	Frontiers in Crop Improvement	5(1):7- 11	2017
13	Bacoside biosynthesis during <i>in vitro</i> shoot multiplication in <i>Bacopa</i> <i>monnieri</i> (L.) Wettst. grown in Growtek and air lift bioreactor	Munish Sharma, Rajinder Gupta, Ravi Kant Khajuria, Sharada Mallubhotla and Ashok Ahuja	Indian Journal of Biotechnology	14(4): 547- 551	2015
14	Enhanced bacoside production in shoot cultures of <i>Bacopa monnieri</i> under the influence of abiotic elicitors	Munish Sharma , Ashok Ahuja, Rajinder Gupta and Sharada Mallubhotla	Natural Product Research	29(8): 745- 749	2014
15	Annual variation in bacoside content of <i>Bacopa monnieri</i> (L.) Wettst. plants	Munish Sharma, Ravi Kant Khajuria and Sharada Mallubhotla	International Journal of Pharma and BioSciences	4(4): 266- 271	2013
16	Synthetic seeds a viable approach for conservation and propagation of phytoremediant herb - <i>Bacopa</i> <i>monnieri</i> (L.) Wettst	Sharma Munish, Raina Himani, Verma Vijeshwar, Mallubhotla Sharada and Ahuja Ashok	Journal of Environmental Research and Development	7(1A), 399- 404	2012
17	Molecular characterization of Hill Maize Inbreds using RAPD markers	Jai Dev, Samuel Jeberson M, Munish Sharma , R Rathour and SR Thakur	Indian Journal of Plant Genetic Resources	20(1): 48-53	2007

Paper Published in Conference Proceedings

S.No.	Title	Name of the authors as per the order in paper	Details of Conference Publication	Page Nos.	Year
1	Functional and Structural characterization of Apocarotenoid biosynthesis genes in saffron (<i>Crocus sativus</i> L.)	Munish Sharma , Archana Bhat, Sanjana Kaul and Manoj K. Dhar	Proceedings of the Indian Ecological Society: International Conference held at Sher-e Kashmir University of Agricultural Sciences and Technology, Jammu (J&K)	337	2016
2	Modulation of Plant Metabolite Production Through Elicitation: Production of Bacosides from <i>Bacopa monnieri</i>	Sharada M. Potukuchi, Surbhi Dubey, Imteyaz Ahmed, Munish Sharma and Ashok Ahuja	Proceedings of International Colloquium on Biotechnology (DBT, DST, UGC & CSIR Sponsored) DAV College, Jalandhar, Punjab	16-31	2009
3	Genetic diversity among maize Inbreds adapted to North Western Himalayan region of India revealed by functional SSR markers	Jai Dev, Munish Sharma, R Rathour and H K Chaudhary	Proceedings of 3 rd Asian Chromosome Colloquium held at Osaka, Japan	146-147	2008

Books & Book Chapters

Chapters in Books

S.No.	Title of the Chapters	Name of the Authors	Title of the Book	Publishers	Year	ISBN No.
1	Recent Strategies to Engineer Alkaloid Biosynthesis in Medicinal Plants	Sakshi Bhushan, Deepak Sharma, Rakshant, Sanjana Kaul, Manoj K. Dhar and Munish Sharma	Medicinal Plants	Springer	2023	978-981-19- 5611-9 (Online)
2	A Brief Review of Plant Cell Transfection, Gene Transcript Expression, and Genotypic Integration for Enhancing Compound Production.	Munish Sharma, Sakshi Bhushan, Deepak Sharma, Sanjana Kaul, Manoj K. Dhar	Gene, Drug, and Tissue Engineering	Springer	2022	978-1-0716- 2716-7 (eBook)
3	A Review on Phytoremediation - An Ecofriendly Technology	Neha Thakur, Munish Sharma, Munish Sharma	Current Research & Innovations in Life Sciences	JPS Scientific Publications	2021	978-81-950475- 3-6
4	Metabolic Engineering Strategies for Enhancing the Production of Bioactive Compounds from Medicinal Plants	Munish Sharma, Archana Koul, Deepak Sharma, Sanjana Kaul, Mallappa Kumara Swamy and Manoj K. Dhar	Natural Bioactive Compounds - Biotechnology, Bioengineering, and Molecular Approaches	Springer	2019	978-981-13- 7438-8 (eBook) •

Total Conference Abstracts: 34

Research	Guidance
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Ph.D. Supervision:	4 (Pursuing)
M.Sc Dissertation:	22 (Completed), 8 (On - going)

Conferences/Workshop/Trainings

Faculty Development Programs / Training Attended / Workshop Attended

S. No	Name of the Trainings	Organizer	Duration	Nature of participation
1	Online one-week course "How to Create your own MOOCS"	Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and	28 May - 03 June 2022	Attended

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		Teaching		
2	Online two - week interdisciplinary refresher Course/faculty development programme on "Advanced Research Methodology"	Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching	20 August – 03 September, 2021	Attended
3	One Day Regional Workshop on " Forestry Research, sustainable Forest Management and Livelihood"	HFRI, Shimla sponsored by NABARD, Shimla	March, 2021	Attended
4	4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education"	Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching	10 th December 2020 – 08 th January 2021	Attended
5	Two days "SPARC-INDO-US Immunology Workshop" (Online)	IIT, Ropar and George Washington University, USA	12-13 June, 2020	Attended
6	Hands on training on Bioreactor systems for cultivation of plant tissue and organ cultures	Plant Tissue Culture Group, Indian Institute of Integrative Medicine, CSIR (Formerly RRL), Jammu	2 nd Feb. – 30 th April, 2012	Attended
7	Workshop on Hands-on Training in Bioinformatics	BCS - In Silico Biology (BCS-ISB) and School of Biotechnology, SMVDU	30 th Aug 4 th Sept., 2011	Attended
8	Training on operation and maintenance of HPLC system and techniques such as extraction, Column, Flash Chromatography used for isolation and purification of natural products	Analytical Chemistry Division, Indian Institute of Integrative Medicine (Formerly RRL, CSIR), Jammu	18 th - 29 th July, 2011	Attended
9	Training on 'Handling of Analytical Instruments and Laboratory Techniques'	Environmental Research Laboratory, Bhopal	29 th April - 11 th May, 2004	Attended
10	Training in 'Recombinant DNA technology & PCR'	Bangalore Genei Pvt.Ltd., Bangalore	7 th - 10 th Jan., 2003	Attended

Seminar /Conference/Symposium / Webinars Attended - 54

Invited Talks

S.No.	Title	Seminar/Conference/Workshop	Organised by	Duration
1	Green Technology - An	National Level Seminar	NSS Club of	01 day
	Effective way for Healthy		Government College of	(05-05-2021)
	and Clean Environment		Engineering and	. ,
			Technology Jammu	
			(JKUT)	

S.No.	Name of the Body/Society	Nature of Affiliation	Year
1	Himalayan Life Science Society, Central University of Himachal Pradesh, Dharamshala	Founding and Life Member	2021
2	Indian Science Congress Association (ISCA), Kolkata, India.	Life Member	2016
3	The Orchid Society of India (TOSI), Chandigarh, India	Life Member	2015

Membership of Scientific/Academic Societies

I assure that the information given above is true to the best of my knowledge and belief.

(Munish Sharma)