## **BIODATA**

1. Name and full correspondence address Ritu Gill,

Associate Professor,

220, Centre for Biotechnology, Maharshi Dayanand University, Rohtak - 124001, Haryana, India

2. Email and contact number

Phone: 09034127458

Email: ritu\_gill@hotmail.com; ritu\_gill@mdurohtak.ac.in

3. Institution Maharshi Dayanand University, Rohtak

4. Date of Birth **07-07-1981** 

5. Gender Female

6. Category Gen/SC/ST/OBC Gen

7. Whether differently abled (Yes/No) No

8. Academic Qualification

	Degree	Year	Subject	University/institution
1	B.Sc.	2001	Botany, Chemistry, Zoology	Kurukshetra University, Kurukshetra (KUK)
2	M.Sc.	2003	Biotechnology	KUK
3	Ph.D.	2008	Biotechnology- Malaria Molecular Biology	Defence Research and Development establishment, Gwalior

9. Work experience

S.	Positions held	Name of the	From	To	Pay Scale
No		Institute			
1.	Assistant	Centre for Biotechnology,	March	Till	Rs. 15600-
	Professor	Maharshi Dayanand University,	2010	date	39100
	(Associate	Rohtak			
	Professor due				
	March 2010)				
2.	Postdoctoral	International Centre for Genetic	2008	2010	Rs. 26000/-
	Fellow	Engineering and			
		Biotechnology, N. Delhi			
3.	Lecturer	Deptt of Biotechnology,	2003	2004	Rs. 13000/-
		Kurukshetra University,			
		Kurukshetra and			
		Deptt of Biotechnology, Ch.			
		Devilal University, Sirsa			

10. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

	None of Assessed	, , , , , , , , , , , , , , , , , , , ,	
S.No.	Name of Award	Awarding Agency	Year
1.	Young Investigator award for attending 18 <sup>th</sup>	ISID, USA	2018
	ICID, Buenos Aires, Argentina.		
2.	Best Oral Presentation award	CMBT, MDU, Rohtak	2016
3.	Invited talk	Centre for Bioinformatics,	2016
		MDU, Rohtak	
2.	16 <sup>th</sup> ICID Scholarship	ISID, USA	2014
3.	ICMR travel award to attend 16th ICID,	ICMR	2014
	Cape town		
4.	Young Scientist Award-DST	DST	2014
5.	YOUNG SCIENTIST AWARD for best	THE INDIAN SOCIETY	2008
	paper presentation	FOR PARASITOLOGY	
6.	Post doctoral fellowship	ICGEB, New Delhi	2008-
	•		10
7.	JRF	Defence Research and	2005-
		development Organization	07
		(DRDE, Gwalior)	
8	SRF	-do-	2007-
			08
9.	NET	CSIR-UGC	2003,
			2004
10.	JRF	ICMR	2004
11.	ASRB-NET	AGRICULTURE SCIENTIST	2004
10	CATE	RECRUITMENT BOARD AICTE	2004
12.	GATE	-	2004
13.	2 <sup>nd</sup> prize -University level science quiz	Kurukshetra University,	2003
	competition	Kurukshetra	

# **Total Publication List**

Sr. No	Paper Title with volume No, Page Nos and Year/Date of publication and ISSN	Title of the Journal	Foreig n/ Indian	Listed journa Is	Impact Factor as per Thomson Routers List
1	Yadav P, Nehra A, Kalwan G, Bhardwaj D, Yasheshwar, Rani V, Agarwala N, Tuteja N, Gill R, Ansari MW, Gill SS (2024) Harnessing jasmonate, salicylate, and microbe synergy for abiotic stress resilience in crop plants	Plant Growth Regulation	Foreig n	Peer review ed	4.2
2	Sharaya R, Tuteja N, Gill R, SS Gill (2023) Reactive oxygen species (ROS) scavenging and methylglyoxal (MG) detoxification confers salinity tolerance in mustard cultivars inoculated with Piriformospora (Serendipita) indica.	South African Journal of Botany	Foreig n	Peer review ed	3.11
4	Naeem M, Gill R, Gill SS, Singh K, Sofo A, Tuteja N (2023) Editorial: Emerging	Front. Plant Sci.	Foreig n	Peer review	5.2

	contaminants and their effect on agricultural			ed	
	crops				2.11
5	Sharaya R, Gill R, Kalwan G, Naeem M, Tuteja N, SS Gill* (2023) Plant-microbe interaction	South African	Foreig	Peer review	3.11
	mediated salinity stress tolerance for	Journal of	n	ed	
	sustainable crop production	Botany		eu	
	sustainable drop production	Botany			
6	Sharaya R, Gill R, Tuteja N, SS Gill* (2023)	South	Foreig	Peer	3.11
	Exploring Salt Tolerance in Indian mustard	African	n	review	
	(Brassica juncea L. Czern. & Coss.) Genotypes:	Journal of		ed	
	A Physiological and Biochemical Perspective	Botany			
7	Kundu P, Nehra A, <b>Gill R</b> , Tuteja N, Gill SS	South	Foreig	Peer	3.11
	(2022) Genomic collation revealed the	African	n	review	
	significance of <i>Piriformospora indica</i>	Journal of		ed	
	(Serendipita indica) PiEF-hand protein in	Botany			
	vesicle trafficking and fungal hyphal growth.				
8	Punam Kundu, Ashima Nehra, <b>Ritu Gill</b> ,	South	Foreig	Peer	3.11
	Narendra Tuteja, Sarvajeet Singh Gill.	African	n	review	
	Unraveling the importance of EF-hand mediated calcium signaling in plants. 2022	Journal of Botany		ed	
	ISSN 0254-629	botany			
9	Nehra A, Kundu P, Ahlawat K, Chhikara A,	South	Foreig	Peer	3.11
	Agarwala N, Tuteja N, Gill SS, <b>Gill R</b> .	African	n	review	
	Comprehensive genomic insight deciphers	Journal of		ed	
	significance of EF-hand gene family in foxtail	Botany			
	millet [Setaria italica (L.) P. Beauv.] (in press)				
10	ISSN: 0254-6299  Verma N, Giri KS, Singh G, <b>Gill R</b> , Kumar A.	Plant Gene	Foreig	Peer	
10	Epigenetic regulation of heat and cold stress	Tiurie Gene	n	review	
	responses in crop plants. (in press) ISSN: 0981-			ed	
	9428				
11	Gill SS, Chahar P, Macovei A, Yadav S, Ansari	Journal of	Foreig	Peer	3.307
	AA, Tuteja N, Gill R. Comparative genomic	Biotechnolo	n	review	
	analysis reveals evolutionary and structural	gy		ed	
	attributes of MCM gene family in Arabidopsis thaliana and Oryza sativa. 2021 Feb				
	10;327:117-132. ISSN: 0168-1656 (print);				
	1873-4863 (web)				
12	Kaushik M, Nehra A, Gill SS & <b>Gill R</b> .	3 Biotech	Foreig	Peer	2.406
	Unraveling CAF-1 family in Plasmodium		n	review	
	falciparum: comparative genome-wide			ed	
	identification and phylogenetic analysis among				
	eukaryotes, expression profiling and protein—				
	protein interaction studies. 10, 1-19 (2020) 3 Biotech ISSN-2190-572X (Print) 2190-5738				
	(Online)				
13	Kaushik M, Nehra A, Gakhar SK, Gill SS, <b>Gill R</b> .	Parasitology	Foreig	Peer	2.289
	The multifaceted histone chaperone	Research	n	review	
	RbAp46/48 in <i>Plasmodium falciparum</i> :			ed	
	structural insights, production, and				

	characterization 2020 l.m.440/C\.4752 4765				
	characterization. 2020 Jun;119(6):1753-1765.				
	E-ISSN:1432-1955 P-ISSN:0932-0113			_	
14	Kaushik M, Chahar P, Nehra A, Kumar N, <b>Gill R</b> .	Journal of	Indian	Peer	
	Genomic Glimpse of the Chromatin Modifier	Communica		review	
	SET Domain family in <i>Plasmodium falciparum</i> .	ble Diseases		ed	
	2019. 51(4): 29-40. E-ISSN: 2581-351X & P-				
	ISSN: 0019-5138				
15	Jakhar R, <b>Gill R</b> , Gakhar SK. Genome-wide	Journal of	Indian	Peer	
	analysis of various paralogs of Aminopeptidase	Applied		review	
	N (APN) gene in Anopheles gambiae (Diptera:	Biology and		ed	
	Culicidae). 2019; 7(6): 15-24. p-ISSN :2455-	Biotechnolo			
	7005, e-ISSN :2347-212X	gy			
16	Kaushik M, Nehra A, Gill SS & <b>Gill R</b> .	Internation	Foreig	Peer	3.6
	Unraveling the multifaceted histone	al Journal of	n	review	
	chaperone RbAp46/48 in Plasmodium	Infectious		ed	
	falciparum. 2020.Volume 101, S 1, 423 ISSN:	Diseases			
	1201-9712				
17	Yadav Sandeep, Sarvajeet S. Gill, Nishat	Plant Gene	Foreig	Peer	
	Passricha, <b>Ritu Gill</b> , Parul Badhwar, Naser A.		n	review	
	Anjum, Jiménez-Bremont Juan Francisco, and			ed	
	Narendra Tuteja. Genome-wide analysis and				
	transcriptional expression pattern-assessment				
	of superoxide dismutase (SOD) in rice and				
	Arabidopsis under abiotic stresses. 17, 100165				
	(2018). ISSN: 2352-4073				
18	Sarvajeet S Gill , <b>Ritu Gill</b> , Dipesh K Trivedi,	Frontiers in	Foreig	Peer	5.6
	Naser A Anjum , Krishna K Sharma,	Microbiolog	n	review	
	Mohammed W Ansari, Abid A Ansari, Atul K	У		ed	
	Johri, Ram Prasad, Eduarda Pereira, Ajit				
	Varma, Narendra Tuteja Piriformospora indica:				
	Potential and Significance in Plant Stress				
	Tolerance. 2016 Mar 22;7:332.			_	
19	Kaushik M., Gill S S, & Gill R. Comparative		Foreig	Peer	3.6
	genome-wide analysis, expression profiling	al Journal of	n	review	
	and interaction networks of different Zn finger	Infectious		ed	
	families in Plasmodium falciparum provide	Diseases			
	new insights.73, 94 (2018). ISSN: 1201-9712			_	
20	Chahar, Priyanka, Manjeri Kaushik, Sarvajeet	PloS One	Foreig	Peer	3.2
	Singh Gill, Surendra Kumar Gakhar, Natrajan		n	review	
	Gopalan, Manish Datt, Amit Sharma, and Ritu			ed	
	Gill. Genome-wide collation of the				
	Plasmodium falciparum WDR protein				
	superfamily reveals malarial parasite-specific				
	features.10, 0128507(2015). ISSN=1932-6203		_		
21	Chahar P, Gill S, Gill R (2016). Molecular	Internation	Foreig	Peer	3.6
	cloning and production of type III Hsp40	al Journal of	n	review	
	protein co-chaperone <i>Pf</i> ZRF1 of human	Infectious		ed	
	malaria parasite <i>Plasmodium falciparum</i> . ISSN:	Diseases			
	1201-9712				
	https://doi.org/10.1016/j.ijid.2016.02.765			_	
22	Gill, Sarvajeet Singh, Naser A. Anjum, Ritu Gill,	Environmen	Foreig	Peer	4.2

	Sandeep Yadav, Mirza Hasanuzzaman,	tal science	n	review	
	Masayuki Fujita, Panchanand Mishra, Surendra C. Sabat, and Narendra Tuteja. Superoxide dismutase—mentor of abiotic stress tolerance in crop plants. 22, 10375- 10394 (2015). ISSN: 1614-7499 (Print 0944-	and pollution research		ed	
	1344)				
23	Anjum, Naser A., <b>Ritu Gill</b> , Manjeri Kaushik, Mirza Hasanuzzaman, Eduarda Pereira, Iqbal Ahmad, Narendra Tuteja, and Sarvajeet S. Gill. ATP-sulfurylase, sulfur-compounds, and plant stress tolerance. 6,210 (2015). ISSN: 1664-462X	Frontiers in Plant Science	Foreig n	Peer review ed	5.7
24	Gill, Sarvajeet S., Naser A. Anjum, <b>Ritu Gill</b> , Manoranjan Jha, and Narendra Tuteja. DNA damage and repair in plants under ultraviolet and ionizing radiations. 2015,11 (2015). ISSN=(Print 2356-6140) (Web 1537-744X)	The Scientific World Journal	Foreig n	Peer review ed	
25	Gill, Sarvajeet Singh, <b>Ritu Gill</b> , Renu Tuteja, and Narendra Tuteja. Genetic engineering of crops: a ray of hope for enhanced food security. 9,e28545 (2014). ISSN= 1559-2316	Plant signaling & behaviour	Foreig n	Peer review ed	2.247
26	Anjum, Naser A., Sarvajeet S. Gill, <b>Ritu Gill</b> , Mirza Hasanuzzaman, Armando C. Duarte, Eduarda Pereira, Iqbal Ahmad, Renu Tuteja, and Narendra Tuteja. Metal/metalloid stress tolerance in plants: role of ascorbate, its redox couple, and associated enzymes. 251, 1265-1283 (2014). ISSN= (Print 0033-183X) (Online 1615-6102)	Protoplasm a	Foreig n	Peer review ed	3.356
27	Gill, S.S., Anjum, N.A., Hasanuzzaman, M., Gill, R., Trivedi, D.K., Ahmad, I., Pereira, E. and Tuteja, N., Glutathione and glutathione reductase: a boon in disguise for plant abiotic stress defense operations. 70, pp.204-212. 3 June 2013 ISSN: 0981-9428	Plant Physiology and Biochemistr y	Foreig n	Peer review ed	4.270
28	Bhatt TK, Yogavel M, Wydau S, <b>Berwal R</b> , Sharma A. Ligand-bound structures provide atomic snapshots for the catalytic mechanism of D-amino-acid deacylase. 2010, 285(8) 5917-30. ISSN: 0021-9258 (print); 1083-351X (web)	Journal of Biological Chemistry	Foreig n	Peer review ed	5.157
29	<b>Berwal R.</b> , Gopalan N., Chandel K., Prasad G.B.K.S, ShriPrakash. "Enhanced soluble expression, purification and biochemical characterization of lactate dehydrogenase from Plasmodium falciparum". 2008, 120: 135-141. ISSN: 0014-4894 (print); 1090-2449 (web)	Experiment al Parasitology	Foreig n	Peer review ed	2.001
30	<b>Berwal R.,</b> Gopalan N., Chandel K., Shri Prakash, Sekhar K. "Amplification of LDH gene from Plasmodium vivax Indian Strain". 2006, 43: 109-114.	Journal of Vector Borne Diseases	Nation al	Peer review ed	1.68

31	Berwal R., Gupta V., Gopalan N., Prasad H. K.,	Internation	Foreig	Peer	3.623
	Shri Prakash. Three Different Strategies to	al Journal of	n	review	
	Generate Plasmodium vivax Specific	Infectious		ed	
	Monoclonal Antibodies and Development of	Diseases			
	Diagnostic System. 2008, 12(S1): e309 ISSN:				
	1201-9712				
32	Saini V., <b>Berwal R.</b> , Sharma J., Singh A.	Pollution	Nation	Peer	
	Biofertilizers: Current Status and Perspectives	Research	al	review	
	in Agriculture. 2004, 23 (4): 665-676 ISSN:			ed	
	0257-8050				

### Publication (Other than research paper) Books/Monograph/Chapter in book Published

Sr.No.	Book /Mono graph/Chapter	Book Title, Editor, Publisher Year, Page Numbers	Whether contributed to edited/knowledge based	ISBN/ ASIN No, if any
1	Book	Phytoremediation Management of Environmental Contaminants, Volume 6; Ansari AA, Gill SS, Gill R, Lanza GR, Newman L; Springer International Publishing Switzerland; 2018; XV-476	Edited/knowledge based volume published by International Publisher	978-3-319-99651-6
2	Book	Phytoremediation Management of Environmental Contaminants, Volume 5; Ansari AA, Gill SS, Gill R, Lanza GR, Newman L; Springer International Publishing Switzerland; 2017; XV-514	Edited/knowledge based volume published by International Publisher	978-3-319-52381-1
3	Book	Phytoremediation Management of Environmental Contaminants, Volume 4; Ansari AA, Gill SS, Gill R, Lanza GR, Newman L; Springer International Publishing Switzerland; 2016; XV-409	Edited/knowledge based volume published by International Publisher	978-3-319-41811-7
4	Book	Phytoremediation Management of Environmental Contaminants, Volume 3; Ansari AA, Gill SS, Gill R, Lanza GR, Newman L;	Edited/knowledge based volume published by International Publisher	978-3-319-40148-5

		Springer International Publishing Switzerland; 2016; XV-576		
5	Book	Phytoremediation Management of Environmental Contaminants, Volume 2; Ansari AA, Gill SS, Gill R, Lanza GR, Newman L; Springer International Publishing Switzerland; 2015; XV, 366	Edited/knowledge based volume published by International Publisher	978-3-319-10969-5
6	Book	Phytoremediation Management of Environmental Contaminants, Volume 1; Ansari AA, Gill SS, Gill R, Lanza GR, Newman L; Springer International Publishing Switzerland; 2015; Pages XV-348	Edited/knowledge based volume published by International Publisher	978-3-319-10395-2
7	Book	Plant Adaptation to environmental Change: Significance of Amino Acids and their derivative; Anjum NA, Gill SS, Gill R; CABI International, UK; 2014; Pages 317	Edited/knowledge based volume published by International Publisher	9781780642734

Sr. No.	Book /Mono graph/ Chapter	Author name with title of book chapter	Book Title, Editor, Publisher Year, Page Numbers	Whether contributed to edited/knowledg e based	ISBN/ ASIN No, if any
1	Chapter	Nehra A, Kalwan G, Gill R, Nehra K, Agarwala N, Jain P, Naeem M, Tuteja N, Pudake RN, Gill SS (2024) Status of impact of abiotic stresses on global agriculture	Nanotechnology for Abiotic Stress Tolerance and Management in Crop Plants	Contributed to edited/knowledg e based volume published by International Publisher	9780443185007
2	Chapter	Nehra A, Deepa, Shah AH, Tuteja N, Pudake RN, Gill R, Gill SS (2024) Recent advances in the field of plant nano nutrition	Nanotechnology for Abiotic Stress Tolerance and Management in Crop Plants	Contributed to edited/knowledg e based volume published by International Publisher	9780443185007
3	Chapter	Jha P, Sharaya R,	Nanotechnology	Contributed to	9780443185007

		Nehra A, Pudake RN, Tuteja N, Gill R, Gill SS (2024) Importance of Serendipita (Piriformospora) indica and nanoparticles for abiotic stress tolerance in crop plants	for Abiotic Stress Tolerance and Management in Crop Plants	edited/knowledg e based volume published by International Publisher	
4	Chapter	Gill R, Kalwan G, Nehra A, Shah AH, Tuteja N, Pudake RN, Gill SS (2024) Conclusion and future perspective on the role of nanotechnology in abiotic stress tolerance in global agriculture	Nanotechnology for Abiotic Stress Tolerance and Management in Crop Plants	Contributed to edited/knowledg e based volume published by International Publisher	9780443185007
5	Chapter	Sharaya R, Deepa, Nehra A, Kalwan G, Agarwala N, Khan NA, Tuteja N, Gill R, Gill SS (2023) Piriformospora indica (Serendipita indica): potential tool for alleviation of heavy metal toxicity in plants	Biostimulants in Alleviation of Metal Toxicity in Plants: Emerging Trends and Opportunities	Contributed to edited/knowledg e based volume published by International Publisher	9780323996006
6	Chapter	Deepa, Sharaya R, Nehra A, Agarwala N, Khan NA, Tuteja N, Gill R, Gill SS (2023) Biostimulants in the alleviation of metal toxicity: An overview	Biostimulants in Alleviation of Metal Toxicity in Plants: Emerging Trends and Opportunities	Contributed to edited/knowledg e based volume published by International Publisher	9780323996006
7	Chapter	Deepa, Kundu P, Nehra A, Kalwan G, Agarwala N, Khan NA, Tuteja N, Gill R, Gill SS (2023) Exogenous application of bio- stimulants and commercial	Biostimulants in Alleviation of Metal Toxicity in Plants: Emerging Trends and Opportunities	Contributed to edited/knowledg e based volume published by International Publisher	9780323996006

		utilization			
8	Chapter	Gill R, Nehra A, Agarwala N, Khan NA, Tuteja N, Gill SS (2023) Biostimulants in the alleviation of metal toxicity: Conclusion and Future Perspective	Biostimulants in Alleviation of Metal Toxicity in Plants: Emerging Trends and Opportunities	Contributed to edited/knowledg e based volume published by International Publisher	9780323996006
9	Chapter	Deepa, Nehra A, Kalwan G, Gill R, Chauhan NS, Gill SS (2023) Impact of nanoparticles on agriculture and soil: an introduction	The Impact of Nanoparticles on Agriculture and Soil: Nanomaterial- Plant Interactions, Academic Press, Elsevier Inc	Contributed to edited/knowledg e based volume published by International Publisher	978-0-323- 91703-2
10	Chapter	Deepa, Kundu P, Kalwan G, Gill R, Chauhan NS, Gill SS (2023) Effects of nanoparticles on the plant growth under salinity stress conditions	The Impact of Nanoparticles on Agriculture and Soil: Nanomaterial- Plant Interactions, Academic Press, Elsevier Inc	Contributed to edited/knowledg e based volume published by International Publisher	978-0-323- 91703-2
11	Chapter	Gill R, Naeem M, Ansari AA, Kumar A, Kumar A, Chilar A, Bremont JFJ, Tuteja N, Gill SS (2022) Agrochemicals in Soil and Environment: An Overview. (Accepted-In Press)	Agrochemicals in Soil and Environmen t: Impacts and R emediation Springer Nature Singapore Pte Lt d	Contributed to edited/knowledg e based volume published by International Publisher	
12	Chapter	Giri SK, Verma N, Singh G, Gill R, Kumar A (2022) Impact of Agrochemicals on Soil Microbiota (Accepted-In Press)	Agrochemicals in Soil and Environmen t: Impacts and R emediation Springer Nature Singapore Pte Lt d	Contributed to edited/knowledg e based volume published by International Publisher	
13	Chapter	Gill R, Naeem M, Ansari AA, Chilara A, Bremont JFJ, Tuteja N, Gill SS	Agrochemicals in Soil and Environmen t: Impacts and R	Contributed to edited/knowledg e based volume published by	

		(2022)	emediation	International	
		(2022)			
		Agrochemicals in	Springer Nature	Publisher	
		Soil and	Singapore Pte Lt		
		Environment:	d		
		Conclusions and			
		Future Perspectives			
	61 .	(Accepted-In Press)		0	070000015005
14	Chapter	Ansari AA, Gill SS,	Hazardous and	Contributed to	9780323916325
		Aftab T, Parwez R,	Trace Materials	edited/knowledg	
		Gill R, Naeem M	in Soil and	e based volume	
		(2022) An Overview	Plants: Sources,	published by	
		of the Hazardous	Effects and	International	
		and Trace	Management,	Publisher	
		Materials in Soil	Elsevier,		
		and Plants	Academic Press,		
		(Accepted-In Press)	USA		
15	Chapter	Verma N, Gill R,	Hazardous and	Contributed to	9780323916325
		Priya K, Kumar A	Trace Materials	edited/knowledg	
		(2022) Plants and	in Soil and	e based volume	
		microbes assisted	Plants: Sources,	published by	
		remediation of	Effects and	International	
		cadmium	Management,	Publisher	
		contaminated soil	Elsevier,		
		(Accepted-In Press)	Academic Press,		
			USA		
16	Chapter	Perwaiz R, Naeem	Hazardous and	Contributed to	9780323916325
		M, Aftab T, Ansari	Trace Materials	edited/knowledg	
		AA, Gill SS, Gill R	in Soil and	e based volume	
		(2022) Heavy	Plants: Sources,	published by	
		metals tolerance	Effects and	International	
		mechanism in	Management,	Publisher	
		medicinal legumes:	Elsevier,		
		A review	Academic Press,		
47	Chart	(Accepted-In Press)	USA	Cambrilla Lada	070026762756
17	Chapter	Jha P, Sharaya R,	Jasmonates and	Contributed to	9780367627560
		Kundu P, ChhikarA,	Brassinosteroids	edited/knowledg	
		KaushikS, Sidhu A,	in Plants:	e based volume	
		Sirhindi G, Naeem	Metabolism,	published by	
		M, Gill R, Gill SS	Signaling,	International	
		(2022)	Biotechnological	Publisher	
		Understanding the	Applications,		
		role of Jasmonic	Ramakrishnan		
		acid in growth,	A, Sirhindi G,		
		development and	Taylor &		
		stress regulation in	Francis, CRC		
		plants (Accepted-In Press)	Press, USA		
18	Chapter	Kundu P, Gill R,	Advancement in	Contributed to	9780128185810
		Nehra A, Sharma	Crop	edited/knowledg	
		KK, Hasanuzzaman	Improvement	e based volume	
	1	INN, HasaHuzzaHidii	miprovement	E Daseu Volullie	1

		M, Prasad R, Tuteja N, Gill SS, Reactive oxygen species (ROS) management in engineered plants for abiotic stress tolerance	Techniques 1st Edition; Tuteja N; Tuteja R; Passricha N; Saifi SK; Elsevier, Woodhead Publishing; 2020; 241-262	published by International Publisher	
19	Chapter	Kundu, P., Gill, R., Ahlawat, S., Anjum, N.A., Sharma, K.K., Ansari, A.A., Hasanuzzaman, M., Ramakrishna, A., Chauhan, N., Tuteja, N. and Gill, S.S., Targeting the redox regulatory mechanisms for abiotic stress tolerance in crops	Biochemical, physiological and molecular avenues for combating abiotic stress tolerance in plants; Wani SH; Academic Press, USA; 2018; 151- 220	Contributed to edited/knowledg e based volume published by International Publisher	9780128130667
20	Chapter	Gill, S.S., Anjum, N.A., Gill, R. and Tuteja, N., Abiotic Stress signaling in plants—an overview	Abiotic stress response in plants; Tuteja N, Gill SS; Wiley-VCH Verlag GmbH & Co. KGaA; 2016; 1-12	Contributed to edited/knowledg e based volume published by International Publisher	9783527339181
21	Chapter	Gill, S.S., Anjum, N.A., Gill, R., Mahajan, M. and Tuteja, N., Abiotic stress tolerance and sustainable agriculture: a functional genomics perspective	Elucidation of Abiotic Stress Signaling in Plants Springer, Pandey GK; Springer Science+Busines s Media New York, NY; 2015; 439-472	Contributed to edited/knowledg e based volume published by International Publisher	978-1-4939- 2211-6
22	Chapter	Anjum, N. A. Gill, S. S. Khan, I. Gill, R. Environmental change, and plant amino acids and	Plant adaptation to environmental change: significance of	Contributed to edited/knowledg e based volume published by International	978-1780642734

23	Chapter	their derivatives - an introduction.  Anjum, N.A., Gill,	amino acids and their derivatives; Anjum, Gill SS, Gill R; CAB International, UK; 2014; 1-17	Publisher  Contributed to	978-1780642734
25	Спарсе	S.S. and Gill, R., Cysteine–jack of all glutathione-based plant stress defense trades	adaptation to environmental change: significance of amino acids and their derivatives; Anjum, Gill SS, Gill R; CAB International, UK; 2014; 35-52	edited/knowledg e based volume published by International Publisher	376-1760042734
24	Chapter	Gill SS, Ritu Gill, Anjum NA (2014) Target Osmoprotectants for Abiotic Stress Tolerance in Crop Plants – Glycine Betaine and Proline.	Plant adaptation to environmental change: significance of amino acids and their derivatives; Anjum, Gill SS, Gill R; CAB International, UK; 2014; 97- 108		
25		Anjum NA, Gill SS, Ritu Gill (2014) Plant Adaptation to Environmental Change, and Significance of Amino Acids and their Derivatives – Appraisal and Perspectives.	Plant adaptation to environmental change: significance of amino acids and their derivatives; Anjum, Gill SS, Gill R; CAB International, UK; 2014; 317- 318		
26	Chapter	Ahmed, F., Arshi, N., Kumar, S., Gill, S.S., Gill, R., Tuteja, N. and Koo, B.H.,	Crop Improvement under Adverse Conditions;	Contributed to edited/knowledg e based volume published by	978-1-4614- 4633-0

		Nanobiotechnology : scope and potential for crop improvement	Tuteja N, Gill SS; Springer Science+Busines s Media New York, NY; 2013; 245-269	International Publisher	
27	Chapter	SS Gill, Anjum NA, Ritu Gill, Hasanuzzaman M, Sharma P, Tuteja N (2013) Mechanism of Cadmium Toxicity and Tolerance in Crop Plants	Crop Improvement under Adverse Conditions, Tuteja N & Gill SS (Eds.), Springer Science+Busines s Media New York, pp 361- 385.	Contributed to edited/knowledg e based volume published by International Publisher	978-1-4614- 4633-0
28	Chapter	Gill, S.S., Peter Singh, L., Gill, R. and Tuteja, N., Generation and scavenging of reactive oxygen species in plants under stress	Improving Crop Resistance to Abiotic Stress; Tuteja N, Gill SS, Tiburcio AF, Tuteja R; Wiley-VCH Verlag GmbH & Co. KGaA; 2012; 49-70	Contributed to edited/knowledg e based volume published by International Publisher	9783527632930
29	Chapter	Tuteja, N., Peter Singh, L., Gill, S.S., Gill, R. and Tuteja, R., Salinity stress: a major constraint in crop production	Improving crop resistance to abiotic stress; Tuteja N, Gill SS, Tiburcio AF, Tuteja R; Wiley-VCH Verlag GmbH & Co. KGaA; 2012; 71-96	Contributed to edited/knowledg e based volume published by International Publisher	9783527632930
30	Chapter	Gill, S.S., Gill, R., Kumar, G., Pareek, A., Sharma, P.C., Anjum, N.A. and Tuteja, N., Mustard: approaches for crop improvement and abiotic stress	Improving crop resistance to abiotic stress; Tuteja N, Gill SS, Tiburcio AF, Tuteja R; Wiley-VCH Verlag GmbH & Co. KGaA; 2012;	Contributed to edited/knowledg e based volume published by International Publisher	9783527632930

		tolerance	1351-1368		
31	Chapter	Peter Singh, L., Gill, S.S., Gill, R. and Tuteja, N., Mechanism of sulfur dioxide toxicity and tolerance in crop plants	Improving Crop Resistance to Abiotic Stress; Tuteja N, Gill SS, Tiburcio AF, Tuteja R; Wiley-VCH Verlag GmbH & Co. KGaA; 2012; 133-163	Contributed to edited/knowledg e based volume published by International Publisher	9783527632930
32	Chapter	Gill SS, Anjum NA, Gill R, Target Osmoprotectants for Abiotic Stress Tolerance in Crop Plants – Glycine Betaine and Proline	Plant adaptation to environmental change: Significance of amino acids and their derivatives; Anjum NA, Gill SS, Gill R; CABI International, UK; 2014; 97- 108	Contributed to edited/knowledg e based volume published by International Publisher	9781780642734
33	Chapter	Berwal R, Saini V and Sharma J, Ribozymes: RNA Acting as a catalyst	Advances in Biotechnology; Trivedi PC; Agro Bios, Jodhpur; 2005; 395-414	Contributed to edited/knowledg e based volume published by National Publisher	8177542362
34	Chapter	Saini V, Berwal R, Sharma J, Singh A, Transgenic Plants: The Genetically Modified Food for Thought	Advances in Biotechnology; Trivedi PC; Agro Bios, Jodhpur; 2005; 81-97	Contributed to edited/knowledg e based volume published by National Publisher	8177542362

#### **Papers Presented in Conferences**

1) Gill R and Chahar P. Collation of genomic and molecular analysis of *Plasmodium falciparum* Zuotin related factor-1. The world malaria date symposium 2022. 25 April, 2022, John Hopkins malaria Research Institute, USA.

- 2) Gill R and Nehra A. Evolutionary prospective of SARS-Cov-2 International conference on Technological transformation and preparedness in the Post COVID World, DCRUST, Murthal. March 22-23, 2021
- 3) Gill R and Gill SS. Unraveling MiniChromosome Maintenance (MCM) gene family. International Symposium on Advances in Plant Biotechnology and Genome Editing and 42nd ANNUAL MEETING OF PLANT TISSUECULTURE ASSOCIATION INDIA by ICAR-Indian Institute of Agricultural Biotechnology, Ranchi. April 8-10, 2021
- **4)** Gill R, Kaushik M, Gill SS.The Multifaceted Histone Chaperone Rbap46/48 in *Plasmodium falciparum*. National conference on Recent Advancements in Protein Bioinformatics cum Workshop on Protein Modeling and assessment organized by centre for Bioinformatics, MD University, Rohtak. Feb 24-25, 2020
- 5) Kaushik M, Gill SS, Gill R. Comparative genome-wide analysis, expression profiling and interaction networks of different Zn finger families in *Plasmodium falciparum* provide new insight. 18<sup>th</sup> International Congress on Infectious Diseases, Buenos Aires, Argentina organized by International society of Infectious Diseases (ISID), USA. March 1-4, 2018 (Oral Presentation).
- 6) Gill R, Chahar P, Yadav S, Tuteja N, Gill SS. Genome-wide association study of the mini chromosome maintenance proteins (MCM) in Arabidopsis thaliana and Oryza sativa: comprehensive gene expression analysis under stress conditions. International Conference on Technological Advancement for Sustainable Agriculture & Rural Development (TASARD-India, 2017), New Delhi being organized by Society for Plant Research (VEGETOS), African-Asian Rural Development Organization (AARDO) and Amity University, UP, during 20th 22nd February, 2017. (Poster presentation).
- **7)** Saini L, Sharaya R, Gill SS, Gill R. Genome mining and functional classification of transmembrane proteins of human malarial parasite *Plasmodium falciparum*. Emerging trends in Biochemistry (ETIB-2017), organized by Department of Biochemistry, MD University, Sept 15-16, 2017. (Poster presentation).
- **8)** Gill R. Genomic glimpse of the *Plasmodium falciparum* Tryptophan Aspartate Repeat superfamily. National Seminar on Frontiers in Genetics and Genomics, Centre for Medical Biotechnology, MDU, Rohtak, Nov 22 2016.
- 9) Kaushik M, Gill SS, Gill R. Genome wide collation of zinc finger family in P. falciparum. 17<sup>th</sup> International Congress on Infectious Diseases, Hyderabad, India, organized by ISID USA. March 2-5, 2016.
- **10)** Gill R, Kaushik M, Chahar P. Comprehensive genome-wide analysis of WDR superfamily of *Plasmodium falciparum*, cloning and production of *Pf*WDR protein involved in chromatin remodeling 16<sup>th</sup> International congress on infectious diseases, Cape Town, South Africa April 2-5, 2014 (oral presentation)
- **11)** Gill R, Kaushik M, Chahar P. and Gopalan N. Design and synthesis of multiple antigenic peptides from *Pv*LDH and evaluation of their potential for generation of species specific antibodies. Biosciences and Health Engineering: Current Scenario BHE 2014, Pune Jan 16-17, 2014.

- **12)** Gill R, Chahar P, Kaushik M. Plasmodium falciparum: A detailed genome-wide analysis of WD40 superfamily and Cloning and expression of WD40 protein involved in chromatin assembly. 54<sup>th</sup> Annual Conference of microbiologists of India (AMI-2013), MDU Rohtak. Nov 17-20. 2013
- **13)** Chahar P., Kaushik M, Gill R. *Plasmodium falciparum*: Genomic glimpse of Bromodomain (BRD) Family, Cloning, Expression and Purification of Apicomplexan specific *Pf*BRD. 7<sup>th</sup> Annual Convention of ABAP & International Conference on Plant Biotechnology, Molecular Medicine & Human Health, Delhi Oct 18-20, 2013.
- **14)** Kaushik M., Chahar P., Gill R. Bioinformatics analysis, molecular cloning and soluble expression of chromatin assembly factor 1 protein of human malaria parasite *Plasmodium falciparum*7<sup>th</sup> Annual Convention of ABAP & International Conference on Plant Biotechnology, Molecular Medicine & Human Health, Delhi Oct 18-20, 2013.
- **15)** Gill R. and Divya. Bioinformatics based analysis, cloning, expression and purification of bromodomain containing protein. National symposium on Fight against Malaria Prospects and Perspectives. MD University, Rohtak.March 9, 2013.
- **16)** Berwal R., Sharma A. Functional and Structural Characterization of Chromatin Remodeling Proteins in *P. falciparum*. National Conference on Medical Biotechnology, MD University, Rohtak. (April16-18, 2010)
- 17) Berwal R., Gopalan N. Generation and characterization of Plasmodium vivax specific monoclonal antibodies. National Conference on Medical Biotechnology, Rohtak. (April16-18, 2010)
- **18)** Berwal R., Sharma A. Molecular tools in Parasitology. 20<sup>th</sup> National Congress of Parasitology, Shillong. (Nov. 3-5, 2008).
- **19)** Berwal R., Gopalan N. "Generation of Plasmodium vivax specific monoclonal antibodies and development of diagnostic system" 20<sup>th</sup> National Congress of Parasitology, Shillong. (Nov. 3-5, 2008). (Young Scientist Award-2008, Indian society of parasitology)
- **20)** Berwal R., Gupta V., Gopalan N., Prasad H. K., Shri Prakash. "Three different strategies to generate Plasmodium vivax specific monoclonal antibodies and development of diagnostic system." 13th International Congress on Infectious Disease, Kuala Lumpur, Malaysia. (June 19-22, 2008). (International Development Grant for Young Woman (ISID, USA))
- **21)** Berwal R., Gopalan N., Chandel K., Prasad G.B.K.S, Shri Prakash. "High level soluble expression of PvLDH, its biochemical characterization and generation of antibodies." IX International Symposium on Vectors & Vector Borne Diseases, Puri, India. (Feb. 15-17, 2008)
- **22)** Berwal R., Gopalan N., ShriPrakash, Sekhar K. "Antibodies generated against C- terminal domain of PvLDH are specific to *Plasmodium* species." 33<sup>rd</sup> Indian Immunology Society Conference, AIIMS, New Delhi. (Jan 26-31, 2007)
- **23)** Berwal R., Gopalan N., Chandel K., Shri Prakash, Sekhar K. "Amplification of LDH gene from Plasmodium vivax Indian Strain." International Conference on Malaria, New Delhi. (Nov. 4-6, 2005).

#### PERSONAL DETAILS

Name : Ritu Gill

Nationality : INDIAN

Date of Birth : 07 July, 1981 Gender: Female

Marital Status : Married

Designation : Professor (Asstt., Senior Grade)

Department : Centre for Biotechnology

University : Maharshi Dayanand University

Address : Professor (Asstt. Stage III) Biotechnology,

221, Malaria Molecular Biology Lab, Centre for Biotechnology, MD University,

Rohtak - 124001, Haryana, India Email: ritu\_gill@mdurohtak.ac.in

Place: Rohtak (Haryana), INDIA (Ritu Gill)

Dated: 30-12-2023