Humira Sonah
Ramalingaswami Fellow (equivalent to Scientist D)
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Ph. No.: 6239715281

Professional Experience

Ramalingaswami Fellow Central University of Haryana, Mahendragarh, India	**From March 2023 –till date**
Ramalingaswami Fellow National Agri-Food Biotechnology Institute (NABI) Mohali, India	**From May 2018-March 2023**
Visiting Professor University Laval, Quebec (QC) Canada	**Feb 2016 to Apr 2018**
Post-doctoral Fellow University Laval, Quebec (QC) Canada	**Dec 2014 to Feb 2016**
Post-doctoral Fellow University of Missouri, Columbia, USA	**Feb 2014 to Nov 2014**
Post-doctoral Fellow University Laval, Quebec (QC) Canada	**Jul 2011 to Feb 2014**

Academic Pursuit

Ph.D. (Biotechnology) Banasthali University, Jaipur, Rajasthan	**March 2011**
M.Sc. Agriculture (Biotechnology) Indira Gandhi. Agriculture University Raipur (CG)	**December 2004**
B.Sc. Agriculture (4 years) Purvanchal University, Jaunpur, UP, India	**June 2002**

Awards and Fellowships

- **Featured in 75 under 50, Scientist shaping today's India-2022** published by Vigyan Prasar, Government of India and released by Union minister Dr. Jitendra Singh on National Science Day
- **Featured in the list of world's top 2% researchers** published by Stanford University (2022, 2023)
- **Awarded women scientist of the year by Biotech park for women (2023)**

- Fellow of Indian Society of Genetics and Plant Breeding (FISGPB-2021)
- Ramalingaswami Fellowship by Ministry of Science & Technology Department of Biotechnology Government of India (November 2017)
- PhytoSciences award in the grant of $20,000 CAD by Sherbrooke University for the year 2015-2016.
- Faculté des sciences de l'agriculture et de l'alimentation (FSAA) award by FSAA Laval University, Quebec (QC) Canada for the year 2011 to 2012.
- Awarded research excellence award for postdoctoral by FSAA Laval University, Quebec (QC) Canada for the Year 2015 to 2016

Research Projects and Funding

S. No	Title of the project	Total cost	Agency	Present status	Role (PI/CI)
1.	Improvement of seed oil, protein content, and nutritional quality in soybean (Glycine max (L.)	103.60 lakhs	DBT	5th year	**Sole PI**
2.	Understanding the molecular basis of selective transport of silicon and arsenic by modulating Nodulin 26-like Intrinsic protein 2-1 (NIP2-1) in rice (Oryza sativa)	37 lakhs	SERB	Completed	Co-PI
3.	Imparting sheath blight disease tolerance in rice	59 lakhs	DBT	Completed	PI
4.	Development of superior haplotype based near isogenic lines (Haplo-NILs) for enhanced genetic gain in rice	75 lakhs	DBT	3rd year	Co-PI
5.	Developing food-grade soybean using CRISPR/Cas9 mediated multiplex genome editing	35 lakhs (83 Lakhs)	DBT	1st year	PI **Coordinator** Multi-institutional project
6.	Genotyping by Sequencing, Genome-wide Association Study, and Genomic Selection Approaches for the Complex Trait like Stress-tolerance and Yield in Soybean	78 lakhs	SPARC	completed	Co-PI

Teaching

S. No	Subject	Degree	University/Institute
1.	Basic Bioinformatics	Ph.D.	NABI
2.	Fundamentals of Molecular and Cell Biology	Ph.D.	NABI
3.	Fundamentals of Genomics	Ph.D.	NABI
4.	Bioinformatics	Ph.D.	Panjab University

Ph.D. Supervisor accreditation

Accreditation as Ph.D. and M.Sc. supervisor by Panjab University, Chandigarh, India

Accreditation as Ph.D. supervisor by Swami Keshwanand Rajasthan Agricultural University, Rajasthan

Patents Published

1. Methods and tools for plant pathogen assessment" Publication Number WO/2019/241883 (2019) -International
2. A Composition of culture medium for producing viable flowers and method for producing viable flowers in culture medium-Application number-202321015532 (2023)-National

Technology development

1. The article describing the GBS method is highly cited - **Sonah, Humira**, et al. "An improved genotyping by sequencing (GBS) approach offering increased versatility and efficiency of SNP discovery and genotyping." *PloS one* 8.1 (2013): e54603. **Total Citations 460**
2. The pipeline for effector identification is widely used with a total Citation of 116

Supervisor of Ph.D. Students

S. No	Student Name	Thesis Title	Year	Degree
1.	Nitika Rana	Understanding expression dynamics and sequence variability of genes regulating nutritional and cooking quality-related traits in rice (*Oryza sativa*)	2022	Awarded
2.	Virender Kumar	Identification of loci governing seed oil content in soybean (*Glycine max* L.)	2023	Awarded
3.	Rushil Mandlik	Understanding Aquaporins regulation defining mediated metalloids uptake in legume species	2023	Submitted

4.	Sreeja Sudhakaran	Understanding Tonoplast intrinsic proteins (TIP3) evolution and its role in seed development in plants.	2023	Submitted
5.	Gunashri Pandalker	Identification and characterization of genes regulating off-flavor in Soybean (*Glycine max* L.)	4th year	Ongoing

Organization of the scientific conference

1. Contributed as Organizing Secretary for SPARC-MHRD sponsored International Workshop on the plant genomics from 25th Feb to 5th March, 2020
2. Contributed as Chairman for a session in Kosambi International Webinar series on 31 July 2020 - Organized by Savitribai Phule Pune University, Pune, India
3. Contributed as Chairman for a session in International Conference on Pulse Research on 10 Feb 2022 - Organized by Society for Plant and Agricultural Sciences, Pune, India

Editorial experience

- Editor in BMC Plant Science
- Editor in Frontier in Plant Sciences
- Editor in Plant Nano Biology
- Review Editor of Frontiers in Ecology and Evolution journal
- Topic Editor for Biomolecules
- Guest Associate Editor of Plant Physiology and Biochemistry
- Reviewer for - Molecular Breeding; Genome; Scientific Reports; Frontiers in Plant Science; PlosOne; Plants, BMC plant biology, Plants, IJMS, 3Biotech, Gene, Critical Reviews in Biotechnology, Journal of advanced research, Plant Genome etc
  - https://publons.com/dashboard/records/review/

Member of Academic Societies

1. Member Crop Science Society America (CSSA)
2. Life member of Indian Society of Biochemistry and Biotechnology
3. Life member of Indian Society of Genetics and Plant Breeding
4. Member of Canadian Society of Biochemistry and Molecular and Cellular Biology, Canada

Books

1. Sharma TR, Deshmukh R**, Sonah H** (2020) Advances in Agri-Food Biotechnology. Springer Nature Singapore, eBook ISBN 978-981-15-2874-3, Hardcover ISBN 978-981-15-2873-6

2. **Sonah H**, Goyal V, Shiva SM, Deshmukh R (2022) Genotype by sequencing for crop improvement, John Wiley & Sons, ISBN 1119745675, 9781119745679

3. Deshmukh R, Nadaf A, Ansari WA, Singh K, **Sonah H** (2023) Biofortification in cereals-Progress and Prospects. Springer Singapore, eBook ISBN-978-981-19-4308-9

Book Chapters

Shivaraj SM, Dhakate P, **Sonah H**, Vuong T, Nguyen HT, Deshmukh R (2019) Progress Toward Development of Climate-Smart Flax: A Perspective on Omics-Assisted Breeding. In Genomic Designing of Climate-Smart Oilseed Crops (pp. 239-274). Springer, Cham.

Chaudhary J, Shivaraj SM, Khatri P, Ye H, Zhou L, Klepadlo M, Dhakate P, Kumawat G, Patil G, **Sonah H**, Ratnaparkhe M, Deshmukh R, Nguyen H (2019) Approaches, Applicability, and Challenges for Development of Climate-Smart Soybean. In Genomic Designing of Climate-Smart Oilseed Crops (pp. 1-74). Springer, Cham.

Rana N, Bansal R, Sharma S, Sharma Y, **Sonah H**, Deshmukh R, Sharma TR (2020). Global Perspectives on Agriculture: Food Security and Nutrition. InAdvances in Agri-Food Biotechnology (pp. 1-27). Springer, Singapore.

Vasupalli N, Koramutla MK, Aminedi R, Kumar V, Borah P, Negi M, Ali A, **Sonah H,** Deshmukh R (2020). Omics Approaches and Biotechnological Perspectives of Arsenic Stress and Detoxification in Plants. Metalloids in Plants: Advances and Future Prospect (pp. 249-73) John Wiley & Sons.

Chaudhary J, Bhat JA, Ram H, Rana N, Khatri P, Agarwal G, Kumar V, **Sonah H**, Deshmukh R (2020). Distribution of Metals and Metalloids in Plants: Tools and Techniques for Efficient Imaging and Quantification. Metalloids in Plants: Advances and Future Prospects. (pp.125-47) John Wiley & Sons.

Khatri P, Agarwal G, Kumar V, **Sonah H**, Deshmukh R (2020). Distribution of Metals and Metalloids in Plants. Metalloids in Plants: Advances and Future Prospects (pp 120-125) John Wiley & Sons.

Rahim, M.S., Bhandawat, A., Rana, N., Sharma, H., Parveen, A., Kumar, P., Madhawan, A., Bisht, A., **Sonah, H**., Sharma, T.R. and Roy, J., 2020. Genomic selection in cereal crops: methods and applications. In Accelerated Plant Breeding, Volume 1 (pp. 51-88). Springer, Cham.

Publication

S. No.	Title of Research Paper(s)/ Articles	Publications of Journal	Publication year of publication, volume, no. & page nos.	ISSN No.	Level (Int./ Nat./ State)	Impact Factor & Agency of Impact Factor
1.	Structural assessment of OsNIP2; 1 highlighted critical residues defining solute specificity and functionality of NIP class aquaporins	Journal of Advanced Research, Egypt	2023, https://doi.org/10.1016/j.jare.2023.04.020	2090-1224	Int.	12.822

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2.	Reference Guided De Novo Genome Assembly of Transformation Pliable Solanum lycopersicum cv. Pusa Ruby	Genes, Basel, Switzerland	2023, 14, 570	2073-4425	Int.	4.14
3.	Genome-Transcriptome Transition Approaches to Characterize Anthocyanin Biosynthesis Pathway Genes in Blue, Black and Purple Wheat	Genes, Basel, Switzerland	2023, 14, 809	2073-4425	Int.	4.14
4.	Pinpointing Genomic Regions and Candidate Genes Associated with Seed Oil and Protein Content in Soybean through an Integrative Transcriptomic and QTL Meta-Analysis	Cells, Basel, Switzerland	2022,12, 97	2073-4409	Int.	7.666
5.	Necessity and challenges for exploration of nutritional potential of staple-food grade soybean	Journal of Food Composition and Analysis, Amsterdam, The Netherlands	2022,117,105093	1096-0481	Int.	4.52
6.	Progress and prospectus in genetics and genomics of Phytophthora root and stem rot resistance in soybean (Glycine max L.).	Frontiers in Genetics, Switzerland	2022,13, 939182	1664-8021	Int.	4.772
7.	Genomic Landscape Highlights Molecular Mechanisms Involved in Silicate Solubilization, Stress Tolerance, and Potential Growth-Promoting Activity of Bacterium Enterobacter sp. LR6.	Cells, Basel, Switzerland	2022,11, 3622	2073-4409	Int.	7.666
8.	Understanding the Dynamics of Blast Resistance in Rice-Magnaporthe oryzae Interactions	Journal of Fungi	2022,8,584	2309-608X	Int.	5.724

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9.	Understanding aquaporins regulation and silicon uptake in carrot (Daucus carota)	Journal of Biochemistry and Biotechnology	2023, 32, 51–62	0974-1275	Int.	1.525
10.	Outstanding questions on the beneficial role of silicon in crop plants	Plant and Cell Physiology	2022,63, 43191	1471-9053	Int.	4.94
11.	Nanoparticles as a potential protective agent for arsenic toxicity alleviation in plants	Environmental Pollution	2022,300,118887	0269-7491	Int.	9.988
12.	Unexplored nutritive potential of tomato to combat global malnutrition	Critical Reviews in Food Science and Nutrition	2022,62, 1003-1034	1549-7852	Int.	11.2
13.	Evolution of Bcl-2 Anthogenes (BAG) as the Regulators of Cell Death in Wild and Cultivated Oryza Species	Journal of Plant Growth Regulation	2022, 42, 348–364	1435-8107	Int.	4.64
14.	Speed Breeding Opportunities and Challenges for Crop Improvement	Journal of Plant Growth Regulation	2022, 42, 46–59	1435-8107	Int.	4.64
15.	Understanding aquaporin regulation defining silicon uptake and role in arsenic, antimony and germanium stress in pigeonpea (Cajanus cajan)	Environmental Pollution	2022,294,118606	0269-7491	Int.	9.988
16.	Identification of genomic loci governing pericarp colour through GWAS in rice (Oryza sativa L.).	Indian Journal of Genetics and Plant Breeding	2022,82, 45078	0975-6906	Nat./	0.4
17.	Deciphering Haplotypic Variation and Gene Expression Dynamics Associated with Nutritional and Cooking Quality in Rice	Cells, Basel, Switzerland	2022,11, 1144	2073-4409	Int.	7.666

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18.	Role of silicon under contrasting biotic and abiotic stress conditions provides benefits for climate smart cropping	Environmental and Experimental Botany, Netherlands	2021,189,104545	0098-8472	Int.	6.028
19.	Targeting aquaporins to alleviate hazardous metal (loid) s imposed stress in plants	Journal of Hazardous Materials	2021,408,124910	0394-3894	Int.	14.224
20.	Development of chloroplast microsatellite markers in Capsicum: Insight into evolution of Bhut Jolokia-a clad of ghost chilli landraces.	Indian Journal of Genetics and Plant Breeding	2021,81, .93-100	0975-6906	Nat./	0.4
21.	Role of silicon in elevating resistance against sheath blight and blast diseases in rice (Oryza sativa L.)	Plant Physiology and Biochemistry	2021,166,128-139	0981-9428	Int.	5.437
22.	Understanding the role of SWEET genes in fruit development and abiotic stress in pomegranate (Punica granatum L.)	Molecular Biology Reports	2021,49, 1329-1339	1573-4978	Int.	2.742
23.	Identification of aquaporins and deciphering their role under salinity stress in pomegranate (Punica granatum)	Journal of Plant Biochemistry and Biotechnology	2021,30, 930-942	0974-1275	Int.	1.525
24.	Dynamic role of aquaporin transport system under drought stress in plants	Environmental and Experimental Botany, Netherlands	2021,184,104367	0098-8472	Int.	6.028
25.	Decoding the genome of superior chapatti quality Indian wheat variety ‘C 306’unravelled novel genomic	Genomics	2021,113,1919-1929	0888-7543	Int.	4.31

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	variants for chapatti and nutrition quality related genes					
26.	Omics advances and integrative approaches for the simultaneous improvement of seed oil and protein content in soybean (Glycine max L.)	Critical Reviews in Plant Sciences	2021,40, 398-421	1549-7836	Int.	6.289
27.	Reference gene identification for gene expression analysis in rice under different metal stress	Journal of Biotechnology	2021,332,83-93	0168-1656	Int.	3.595
28.	Soybean transporter database: A comprehensive database for identification and exploration of natural variants in soybean transporter genes	Physiologia Plantarum	2021,171,756-770	1399-3054	Int.	5.08
29.	Identification and molecular characterization of rice bran-specific lipases	Plant Cell Reports	2021,40, 1215–1228	1432-203X	Int.	4.964
30.	Silicon Nanoparticles (SiNPs) in Sustainable Agriculture: Major Emphasis on the Practicality, Efficacy and Concerns	Nanoscale Advances	2021,3,4019-4028	2516-0230	Int.	5.598
31.	Significance of solute specificity, expression, and gating mechanism of tonoplast intrinsic protein during development and stress response in plants	Physiologia Plantarum	2021,172,258-274	1399-3054	Int.	5.08
32.	Identification of genomic loci conferring broad-spectrum resistance to multiple nematode species in exotic soybean accession PI 567305.	Theoretical and Applied Genetics	2021,134,3379-3395	1432-2242	Int.	5.6
33.	Genotyping-by-sequencing based QTL mapping identified a novel waxy allele contributing to high amylose starch in wheat	Euphytica	2021,217,41640	1573-5060	Int.	2.185

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34.	Dissecting the nutrient partitioning mechanism in rice grain using spatially resolved gene expression profiling	Journal of Experimental Botany	2021,72, 2212-2230	1460-2431	Int.	7.298
35.	Understanding aquaporin transport system, silicon and other metalloids uptake and deposition in bottle gourd (Lagenaria siceraria)	Journal of Hazardous Materials	2021,409,124598	0304-3894	Int.	14.224
36.	Genome-wide identification and characterization of Heat Shock Protein Family reveals role in development and stress conditions in Triticum aestivum L.	Scientific reports	2020,10, 45261	2045-2322	Int.	4.99
37.	Whole genome re-sequencing of soybean accession EC241780 providing genomic landscape of candidate genes involved in rust resistance	Current Genomics	2020,21, 504-511	1875-5488	Int.	2.689
38.	Understanding aquaporin transport system in highly stress-tolerant and medicinal plant species Jujube (Ziziphus jujuba Mill.)	Journal of Biotechnology	2020,324,103-111	0168-1656	Int.	3.595
39.	Effector Biology of Biotrophic Plant Fungal Pathogens: Current Advances and Future Prospective	Microbiological Research	2020,241,126567	1618-0623	Int.	5.07
40.	New evidence defining the evolutionary path of aquaporins regulating silicon uptake in land plants	Journal of Experimetal Botany	2020,71, 6775-6788	1460-2431	Int.	7.298
41.	Significance of silicon uptake, transport, and deposition in plants	Journal of Experimetal Botany	2020,71, 6703-6718	1460-2431	Int.	7.298
42.	Evolutionary understanding of aquaporin transport system in the basal eudicot model species Aquilegia coerulea	Plants, Basel, Switzerland	2020,9,799	2223-7747	Int.	4.658

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43.	Genome editing in cereals: approaches, applications and challenges	International Journal of Molecular Sciences	2020,21, 4040	1422-0067	Int.	6.208
44.	Spatio-temporal distribution of micronutrients in rice grains and its regulation	Critical Reviews in Biotechnology	2020,40, 490-507	1549-7801	Int.	9.08
45.	Nitric oxide and hydrogen sulfide crosstalk during heavy metal stress in plants	Physiologia Plantarum	2020,168,437-455	1399-3054	Int.	5.08
46.	Discriminant haplotypes of avirulence genes of Phytophthora sojae lead to a molecular assay to predict phenotypes.	Molecular Plant Pathology	2019,21, 318-329	1364-3703	Int.	5.52
47.	Advances in omics approaches for abiotic stress tolerance in tomato	Biology, Basel, Switzerland	2019,8,90	2079-7737	Int.	5.168
48.	Integrated QTL mapping, gene expression and nucleotide variation analyses to investigate complex quantitative traits: a case study with the soybean-Phytophthora sojae interaction	Plant Biotechnology Journal	2019,18, 1492-1494	1467-7652	Int.	13.26
49.	Applications and challenges for efficient exploration of omics interventions for the enhancement of nutritional quality in rice (Oryza sativa L.)	Critical Reviews in Food Science and Nutrition	2019,60, 3304-3320	1549-7852	Int.	11.2
50.	Genome editing in plants: exploration of technological advancements and challenges	Cells, Basel, Switzerland	2019,8,1386	2073-4409	Int.	7.666
51.	Understanding the Effect of Structural Diversity in WRKY Transcription Factors on DNA Binding Efficiency	Biology, Basel, Switzerland	2019,8,83	2079-7737	Int.	5.168

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	through Molecular Dynamics Simulation					
52.	Mutagenesis Approaches and Their Role in Crop Improvement	Plants, Basel, Switzerland	2019,8,467	2223-7747	Int.	4.658
53.	Role of silicon in mitigation of heavy metal stresses in crop plants	Plants, Basel, Switzerland	2019,8,71	2223-7747	Int.	4.658
54.	Silicon uptake and localisation in date palm (Phoenix dactylifera)-a unique association with sclerenchyma	Frontiers in Plant Science	2019,10, 988	1664-462X	Int.	6.627
55.	Understanding the role of the WRKY gene family under stress conditions in pigeonpea (Cajanus Cajan L.)	Plants, Basel, Switzerland	2019,8,214	2223-7747	Int.	4.658
56.	Expanding avenue of fast neutron mediated mutagenesis for crop improvement	Plants, Basel, Switzerland	2019,8,164	2223-7747	Int.	4.658
57.	Identification of the aquaporin gene family in Cannabis sativa and evidence for the accumulation of silicon in its tissues	Plant Science	2019,287,11016	0168-9452	Int.	5.363
58.	Molecular characterization and expression dynamics of MTP genes under various spatio-temporal stages and metal stress conditions in rice	Plos One	2019,14, e02173	1932-6203	Int.	3.58
59.	Evolutionary Understanding of Metacaspase Genes in Cultivated and Wild Oryza Species and Its Role in Disease Resistance Mechanism in Rice	Genes, Basel, Switzerland	2019,11, 1412	2073-4425	Int.	4.141
60.	A genome-wide resource of intron spanning primers compatible for quantitative PCR and intron length polymorphism in rice	Indian Journal of Genetics and Plant Breeding	2019,79, 499-502	0975-6906	Nat./	0.4
61.	Mutation breeding in tomato: advances, applicability and challenges	Plants, Basel, Switzerland	2019,8,128	2223-7747	Int.	4.658

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62.	Identification and characterization of aquaporin genes in Arachis duranensis and Arachis ipaensis genomes, the diploid progenitors of peanut	BMC Genomics	2019,20, 222	1471-2164	Int.	4.56
63.	In defence of the selective transport and role of silicon in plants	New Phytologist	2019,223,514-516	1469-8137	Int.	10.323
64.	Si permeability of a deficient Lsi1 aquaporin in tobacco can be enhanced through a conserved residue substitution	Plant Direct	2019,3,e00163	2475-4455	Int.	3.369
65.	The controversies of silicon's role in plant biology	New Phytologist	2018,221,67-85	1469-8137	Int.	10.323
66.	Stable predictive markers for Phytophthora sojae avirulence genes that impair infection of soybean uncovered by whole genome	BMC Biology	2018,16, 42370	1741-7007	Int.	7.364
67.	Silicon protects soybean plants against Phytophthora sojae by interfering with effector-receptor expression	BMC Plant Biology	2018,18, 97	1471-2229	Int.	5.26
68.	Genome-wide association study for resistance to the southern root-knot nematode (Meloidogyne incognita) in soybean	Molecular Breeding	2017,37, 45231	1572-9788	Int.	3.297
69.	Understanding Aquaporin Transport System in Eelgrass (Zostera marina L.), an Aquatic Plant Species	Frontiers in Plant Science	2017,8,1334	1664-462X	Int.	6.627
70.	Analysis of aquaporins in Brassicaceae species reveals high-level of conservation and dynamic role against biotic and abiotic stress in canola	Scientific reports	2017,7,2771	2045-2322	Int.	4.99
71.	Functional characterization of novel chitinase genes present in the sheath	Frontiers in Plant Science	2016,7,244	1664-462X	Int.	6.627

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	blight resistance QTL: qSBR11-1 in rice line tetep.					
72.	Plant Aquaporins: genome-wide identification, transcriptomics, proteomics, and advanced analytical tools	Frontiers in Plant Science	2016,7,1896	1664-462X	Int.	6.627
73.	Comparative transcriptomic analysis of virulence factors in Leptosphaeria maculans during compatible and incompatible interactions with canola	Frontiers in Plant Science	2016,7,1784	1664-462X	Int.	6.627
74.	Genome-wide identification and characterization of Xylanase Inhibitor Protein (XIP) genes in cereals	Indian Journal of Genetics and Plant Breeding	2016,76, 159-166	0975-6906	Int.	0.47
75.	Computational Prediction of Effector Proteins in Fungi: Opportunities and Challenges	Frontiers in Plant Science	2016,7,126	1664-462X	Int.	6.627
76.	Intron gain, a dominant evolutionary process supporting high levels of gene expression in rice	Journal of Plant Biochemistry and Biotechnology	2016,25, 142-146	0974-1275	Int.	1.525
77.	A precise spacing between the NPA domains of aquaporins is essential for silicon permeability in plants	The Plant Journal	2015,83, 489-500	1365-313X	Int.	6.41
78.	Expanding omics resources for improvement of soybean seed composition traits	Frontiers in Plant Science	2015,6,1021	1664-462X	Int.	6.627
79.	Genetic architecture of cyst nematode resistance revealed by genome-wide association study in soybean	BMC Genomics	2015,16, 593	1471-2164	Int.	4.56
80.	Soybean (Glycine max) SWEET gene family: insights through comparative	BMC Genomics	2015,16, 42370	1471-2164	Int.	4.56

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	genomics, transcriptome profiling and whole genome re-sequence analysis					
81.	Identification and characterization of microsatellites in ESTs of Rosa species: Insight in development of SSR markers	Indian Journal of Agricultural Sciences	2015,85, 429-433	0019-5022	Nat./	0.37
82.	Recent advances in molecular marker techniques: insight into QTL mapping, GWAS and genomic selection in plant	Journal of crop science and biotechnology	2015,18, 293-308	2005-8278	Int.	1.67
83.	Association mapping of QTLs for sclerotinia stem rot resistance in a collection of soybean plant introductions using a genotyping by sequencing (GBS) approach	BMC Plant Biology	2015,15, 45261	1471-2229	Int.	5.26
84.	Identification of loci governing eight agronomic traits using a GBS-GWAS approach and validation by QTL mapping in soya bean	Plant Biotechnology Journal	2015,13, 211-221	1467-7652	Int.	13.26
85.	Molecular mapping of black rot resistance locus X ca1bo on chromosome 3 in Indian cauliflower (B rassica oleracea var. botrytis L.).	Plant Breeding	2014,133,268-274	1439-0523	Int.	2.536
86.	Rapid identification of alleles at the soybean maturity gene E3 using genotyping by sequencing and a haplotype-based approach	The Plant Genome	2014,7,45170	1940-3372	Int.	4.219
87.	Integrating omic approaches for abiotic stress tolerance in soybean	Frontiers in Plant Science	2014,5,244	1664-462X	Int.	6.627
88.	Genome wide association mapping of Sclerotinia sclerotiorum resistance in soybean with a genotyping-by-sequencing approach	The Plant Genome	2014,7,41275	1940-3372	Int.	4.219

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89.	Genetic diversity analysis of marigold (Tagetes sp) genotypes using RAPD and ISSR markers	Indian Journal of Agricultural Sciences	2013,83, 484	0019-5022	Nat./	0
90.	Identification and functional characterization of silicon transporters in soybean using comparative genomics of major intrinsic proteins in Arabidopsis and rice	Plant Molecular Biology	2013,83, 303-315	0167-4412	Int.	4.335
91.	An improved genotyping by sequencing (GBS) approach offering increased versatility and efficiency of SNP discovery and genotyping	Plos One	2013,8,e 54603	1932-6203	Int.	3.58
92.	Identification of meta quantitative trait loci for agronomical traits in rice (Oryza sativa).	Indian Journal of Genetics and Plant Breeding	2012,72, 264-270	0975-6906	Nat./	1.339
93.	Fungicidal Interference during Infection Related Developmental Stages in Magnaporthe grisea	International Journal of Phytopathology	2012,1,49-55	2312-9344	Int.	0
94.	Molecular mapping of quantitative trait loci for flag leaf length and other agronomic traits in rice (Oryza sativa)	Cereal Research Communication	2012,40, 362-372	1788-9170	Int.	1.24
95.	Genome-Wide Distribution and Organization of Microsatellites in Plants: An Insight into Marker Development in Brachypodium	Plos One	2011,6,e 21298	1932-6203	Int.	3.58
96.	Genomic resources in horticultural crops: Status, utility and challenges	Biotechnolgy Advances	2011,29, 199-209	0734-9750	Int.	17.681
97.	Comperative analysis and EST mining reveals high degree of conservation among five Brassicaceae species	International Journal of Genomics, UK	2010,2010,13	2314-4378	Int.	2.758

S. No.	Title of Research Paper(s)/ Articles	Publications of Journal	Publication year of publication, volume, no. & page nos.	ISSN No.	Level (Int./ Nat./ State)	Impact Factor & Agency of Impact Factor
98.	Molecular analysis of QTLs associated with resistance to brown spot in rice (Oryza sativa L.).	Indian Journal of Genetics and Plant Breeding	2010,70, 17-21	0975-6906	Nat./	0.4
99.	Identification of major quantitative trait loci qSBR11-1 for sheath blight resistance in rice	Molecular Breeding	2010,25, 155-166	1380-3743	Int.	3.297
100.	Morphological and genetic variation among different isolates of Magnaporthe grisea collected from Chhattisgarh.	Indian Phytopathology	2009,62, 469	2248-9800	Nat./	0

Total research publications**:** More than 100 research papers published in reputed journals since 2010 and the details can be found at Google scholar with the link:

https://scholar.google.co.in/citations?user=DgTFPHoAAAAJ&hl=en

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(**Humira Sonah**)