NAME: Dr. Somnath Bhattacharyya

DESIGNATION: Professor in Genetics and Plant Breeding

CONTACTS:

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4. **ORCID ID:** https://orcid.org/0000-0002-9261-6931

5. **GOOGLE SCHOLAR PROFILE:**
   https://scholar.google.com/citations?user=39AxyQ4AAAAJ&hl=en

6. **RESEARCHGATE PROFILE:** https://www.researchgate.net/profile/Somnath-Bhattacharyya-4

7. **DATE OF BIRTH:** 03.02.1966

8. **DATE OF JOINING TO THE UNIVERSITY:** 31.10.1995

9. **ACADEMIC PROFILE:**

LEVEL	NAME OF THE DEGREE WITH DISCIPLINE/ DEPARTMENT	INSTITUTE	YEAR OF PASSING
DOCTORAL	Ph D (Ag) Genetics and Plant Breeding	Biochemistry Department, Bose Institute, CU	1999
MASTER'S	M Sc (Ag) Genetics and Plant Breeding	BCKV	1990
BACHELOR'S	B. Sc (Ag) Hons	BCKV	1988

10. EMPLOYMENT HISTORY: (Starting from present position)

POSITION	ORGANIZATION	PERIOD	
		From (Date)	To (Date)
Lecturer	BCKV	31.10.1995	20.09.99
Post Doctoral Research Associate	University of Kentucky, USA	21.9.1999	20.11.2001
Lecturer	BCKV	21.10.2001	30.10.2004
Reader/Associate Professor	BCKV	31.10.2004	30.10.2010
Professor	BCKV	31.10.2010	Continuing

11. ADMINISTRATIVE POST(S)/ RESPONSIBILITY(IES) (IF ANY): Yes

SL. NO.	NAME OF THE POST(S)/ RESPONSIBILITY(IES)	PERIOD	
		From (Date)	To (Date)
1	Officer in Charge, Crop Research Unit	2005	Continuing
2	Head, Department of Genetics	2013	2016

3	Convenor, Technical Committee for purchasing equipment and books	2019	Continuing
4	Centre in Charge, Regional Nuclear Agricultural Research Centre (RNARC)	2017	Continuing
5	Member, Germplasm and varietal Identification committee	2024	Continuing

12. AREA OF RESEARCH: (Bulleted list)

- Development of biotic and abiotic stress-tolerant rice and lentil varieties suitable for West Bengal.
- Identify and validate molecular markers/haplotypes linked with biotic and abiotic stress tolerance genes/QTLs and their utilisation in MAS for rice and pulse improvement.
- Haplotyping of source-improving genes and their use in rice and pulse variety development.
- Rice and Lentil Germplasm maintenance and characterisation

13. COURSES ASSOCIATED WITH:

LEVEL	COURSE NO.	COURSE TITLE	CREDIT
UNDERGRADUATE	GPB156	Fundamentals of Genetics	2+1
	ECGPB363	Commercial Plant Breeding	2+1
POSTGRADUATE	GPB501, GPB 502 GPB503, GPB506	Principles of Genetics Principles of Cytogenetics, Principles of Quantitative Genetics Molecular Breeding and Bioinformatics	2+1 1+1 2+1 2+1
Ph.D.	GPB 703	Genomics in Plant Breeding	3+0
	GPB706	Advances in Quantitative Genetics	3+0
		Seminar 1 & II	2+0

14. NUMBER OF STUDENTS SUPERVISED:

Master's._ 31_____Doctoral 12

15. PROJECT ACTIVITIES (Last Five years)

SL. NO.	TITLE OF THE PROJECT	FUNDING AGENCY	ONGOING/ COMPLETED	PI/ Co-PI
1	Study of rice yield under lowlight intensity using genomic approach	ICAR-Incentivizing Scheme	Ongoing	PI
2	Genome analysis of a Lentil mutant to unravel genetic factors conferring multi-fungal disease resistance	DAE-BRNS	Ongoing	PI
3	Identification and genetic analysis Lentil mutant for Stemphyllium Blight Resistance with Adaptive Plasticity.	FAO-IAEA, Vienna	Concluded 2025	PI
4	Development and validation of markers for novel alleles of candidate genes enhancing yield and low accumulation of arsenic from native rice germplasm	ICAR-Niche Area of Excellence	Concluded in 2019	PI

16. CAPACITY BUILDING/FACULTY DEVELOPMENT PROGRAMME ORGANIZED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
1	Short-term hands-on Training program organized on 'Recent Advances in Mutation Breeding for Crop Improvement	3 weeks, 2019	BCKV	Coordinator
2	Summer training for PG students of Biotechnology, Genetics, Microbiology of neighboring Universities	2-3 months (2 students/year in the last 15 years)	BCKV	Coordinator

17. SEMINAR/ SYMPOSIUM/ WORKSHOP etc

A. ORGANIZED

SL.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
1	Workshop cum review meeting on 'Development and validation of markers for novel alleles of candidate genes enhancing yield and low accumulation of arsenic from native rice germplasm'	June 28-29 2019	BCKV-FACC, Kalyani	**PI**

18. PATENTS/ HONOURS/ AWARDS/ RECOGNITION (Bulleted list):

- US-Patent on "Methods and composition for expressing multiple genes in plants by alternate splicing of a polycistronic message"; [US 7,052,905 B1 dated May 30, 2006].
- Fellow and Council Member: West Bengal Academy of Science and Technology since 2008 and 2023.
- Member, R&D expert committee, Biological Science and Biotechnology, WBDST&BT, 2017-2026.
- Member, Technical Advisory Committee, Biological Science Division, ISI, Kolkata. 2024-26.
- Member, Research Advisory Committee, Central Sericulture Research and Training Institute, Berhampore (2016-2023).
- Member of Research Advisory Committee, National Tea Research Foundation. (2018-Contd).
- External expert for Nehru Full Bright Fellowship Scheme, ASRB, ICAR-CRIJAF, ICAR-NRRI and several state Universities.

19. INTERNATIONAL COLLABORATIONS/ INVOLVEMENT, IF ANY (Bulleted list):

1	Identification and genetic analysis Lentil mutant for Stemphyllium Blight Resistance with Adaptive Plasticity.	Funded by FAO-IAEA, Vienna	Ongoing Research	PI
2	Development of high yielding, early maturing and small-seeded lentil varieties with resistance to key biotic	ICARDA	Concluded	Co-PI

	and abiotic stresses, suitable to short-season environment			

20. PUBLICATIONS

A. Variety Released

i. Variety released and developed (Last five years):

Bidhan Suruchi (IET25701), a new high-yielding rice variety, was released in 2019 via CVRC gazette notification on 02.08.2019.

ii. Bidhan lentil 16 is a small-seeded terminal heat-tolerant lentil variety released vide CVRC Gazette notifications vide S.O. 4065(E) of 31.08.2022.

iii. Mangala (IET29940/Bdhan 24): Based on the proceedings of the Variety Identification Committee (Rice) meeting held on 26th May 2025, it is identified for release as a variety in four major rice-growing zones (II, III, V, and VII) comprising 17 states (Waiting for CVRC release).

B. RESEARCH PAPERS (Best 10 of last 5 years as the corresponding author)

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1. Saha, S., Mahapatra, N.S., Bhattacharya, K.… Bhattacharyya S. The Ratio of A_{400}/A_{1800} Mapping Identifies Chromosomal Regions Containing Known Photoprotection Recovery-Related Genes in Rice. ***Rice*** **17**, 62 (2024). https://doi.org/10.1186/s12284-024-00739-3

2. Ganguly, S., Nimitha, K., Saha, S.… Bhattacharyya S. Identification and analysis of low light responsive yield enhancing QTLs in rice. ***Sci Rep*** **14**, 21011 (2024). https://doi.org/10.1038/s41598-024-71593-y

3. Sen, P., Purkaystha, S., & Bhattacharyya, S. (2024). Evaluation of indica-type DEP1 mutant allele for rice (Oryza sativa) yield improvement and development of allele-specific co-dominant marker. ***Plant Breeding***, e13195. https://doi.org/10.1111/pbr.13195.

4. Adhikari B, Roy A, Reddy H, Roy D, Das C, Ghosh D, Das S, Mondal S, Nath R, Bhattacharyya PK, Jambulkar SK & Bhattacharyya S (2024): Identification and analysis of gamma-irradiation-induced Stemphylium blight tolerant lentil (*Lens culinaris*) mutant, ***International Journal of Radiation Biology***, DOI: 10.1080/09553002.2024.2409667.

5. Roy A, Sahu PK …. Bhattacharyya S (2023) Conventional and New-Breeding Technologies for Improving Disease Resistance in Lentil (Lens Culinaris L. Medik) ***Frontiers in Plant Science*** doi: 10.3389/fpls.2022.1001682.

6. Roy A, Reddy HK……. Bhattacharyya S (2023) A mis-splicing *early flowering 3* (*elf3*) allele of lentil is associated with yield enhancement under terminal heat stress. ***Journal of Applied Genetics*** doi:10.1007/s13353-023-00753-z.

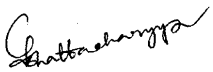
7. Saha S, Purkayastha, Nimitha K …… Bhattacharyya (2022) Rice (Oryza sativa) alleviates photosynthesis and yield loss by limiting specific leaf weight under low light intensity. ***Functional Plant Biology*** https://doi.org/10.1071/FP22241.

8. Das, D. Sen, P. Purkayastha, S. Saha, A. Roy, A. Rai, P. Sen, S. Saha, S. Senapati, B K. Biswas, T. and Bhattacharyya, S., (2021). A perfect PCR based co-dominant marker for low grain-arsenic accumulation genotyping in rice. ***Ecotoxicology and Environmental Safety***. 212: 111960.

9. Ganguly S, Roy A, Murmu SK, Sagolsem D, Sarkar M, Sen S, Das D, Das C, Chakraborty P, Bhattacharyya PK, Nath R, Tripathi K, Sarker A, Bhattacharya S (2021) Variation in P-

acquisition ability and acid phosphatase activity at the early vegetative stage of lentil and their validation on P-deficiency field. ***Acta Physiol Planta*** 43:109.

10. Sen P, Purkayastha S, Das D, Goswami J, Rai P, Sen S, Biswas T, Bhattacharyya PK, Bhattacharyya S (2021) Yield-enhancing SPIKE allele from the aus-subtype indica rice and its allele specific codominant marker. ***J Genetics*** 100:36.



May 30 2025