BARASAT GOVERNMENT COLLEGE

TEACHER'S PROFILE

DR KALYAN MAHAPATRA, DEPARTMENT OF BOTANY

DESIGNATION	:	Assistant Professor (Stage1)
QUALIFICATION	:	M.Sc., Ph.D.
DATE OF JOINING THE SERVICE	:	Jan 2, 2025
DATE OF JOINING THE INSTITUTION	:	Jan 2, 2025
ADDRESS FOR COMMUNICATION	:	Department of Botany, Barasat Govt. College, 10, K.N.C Road, Barasat, Kolkata, West Bengal 700124
PHONE NO	:	8348085488
EMAIL ADDRESS	:	mahapatra.kalyan@gmail.com
SPECIALIZATION	:	Microbiology and Microbial Biotechnology, Plant Molecular Biology, Plant Developmental Biology, DNA damage response mechanisms in plants
TEACHING EXPERIENCE	:	UG Course from 02.01.2025- till date PG Course from 02.01.2025-till date
COLLEGE SERVED	:	(1) Barasat Govt. College (From 02.01.2025-till date)

ACADEMIC AND ADMINISTRATIVE EXPERIENCE	:	I have started teaching various areas of Botany at the Undergraduate and Postgraduate levels at Barasat Govt. College from January 2025. During my Doctoral and Post-doctoral research, I was actively involved in M.Sc. practical Classes and guided students in their Dissertation work.
TOPICS TAUGHT	:	UG: Microbiology (Viruses, Bacteria, Industrial and Environmental Microbiology, Microbes and quality of environment), Palynology; PG: Plant Viruses and Bacteria, Plant Virology
AREA OF RESEARCH & INTEREST	:	I am highly motivated to work in the field of Plant Molecular Biology, especially the molecular mechanism involved in various aspects of plant development. I have carried out my Ph.D. research under the guidance of Dr. Sujit Roy, Assistant Professor, Department of Botany, The University of Burdwan. During my graduate work, I developed an interest in investigating the molecular mechanism of DNA damage response in plants under various abiotic and genotoxic stress conditions. My Ph.D. research focuses on transcriptional regulation of DNA repair mechanisms in plants using the model Arabidopsis thaliana model system. In addition, during my doctoral research, I have also actively participated and contributed to other research projects involving the study of small metal complex mediated oxidative and genotoxic stress response in plant genomes and investigating the impact of some common pesticides in non-target crop plants, when used in elevated concentrations. During my post-doctoral training under the mentorship of Prof. Sourav Datta at IISER Bhopal, I tried to find the possible interaction between Light, ABA-signaling, and DNA damage response pathways during early seedling development. In addition, I was also curious about how the genome maintenance mechanisms in plants work during seed germination and seedling establishment.
ONGOING PROJECT DETAILS	:	None
AWARD RECEIVED	:	1. DBT-Research Associateship (RA) in 2024 2. ANRF- National Post-Doctoral Fellowship (NPDF) in 2024
PATENT DETAILS	:	None
EXTRACURRICULAR ACTIVITIES	:	None
CAREER PROFILE	:	I am currently working as an Assistant Professor of Botany at Barasat Government College affiliated with West Bengal State University. Before joining Barasat Govt. College, I worked as an Institutional Post-Doctoral Fellow (March 2023- March 2024) and ANRF-National Post-Doctoral Fellow (April 2024-December 2024) at the Indian Institute of Science Education and Research (IISER) Bhopal. I received my Ph.D. in Botany from The University of Burdwan in 2022. I completed my M.Sc. in Botany with a specialization in Microbiology from the Department of Botany, The University of Burdwan in 2015 and qualified for the CSIR-NET(JRF) in June 2016. Before that, I did my B.Sc. at Bankura Christian College with honours In Botany. Till now, I have published more than 10 papers in various peer-reviewed international journals. I have also contributed to two book chapters on mitochondrial genome maintenance and heavy metal-mediated phytotoxicity, in the book “Handbook of Mitochondrial Dysfunction” (Taylor and Francis/CRC Press) and “Nanotechnology in the Life Sciences” (Springer), respectively.
ACADEMIC LINK	:	Google Scholar Id: https://scholar.google.co.in/citations?user=TqmQ158AAAAJ&hl=en

PUBLICATION

JOURNAL PUBLICATION :

(MAXIMUM TEN BEST PUBLICATION)

(1) Kalyan Mahapatra, Shubhi Dwivedi, Arpan Mukherjee, Ajar Anupam Pradhan, Kavuri Venkateswara Rao, Deeksha Singh, Lavanya Bhagavatula, Sourav Datta, 'Interplay of Light and ABA signaling to modulate plant development', Journal of Experimental Botany, Oxford University Press, April, 2024, 1460-2431

(2) Deeksha Singh, Oihik Mitra, Kalyan Mahapatra, Akshat Singh Raghuvanshi, Rucha Kulkarni, Sourav Datta, 'REPRESSOR OF UV-B PHOTOMORPHOGENESIS proteins target ABSCISIC ACID INSENSITIVE 5 for degradation to promote early plant development', Plant Physiology, Oxford University Press, December, 2024, 1532-2548

(3) Kalyan Mahapatra, 'Unveiling the structure and interactions of SOG1, a NAC domain transcription factor: An in-silico perspective', Journal of Genetic Engineering and Biotechnology, Elsevier, March, 2024, 2090-5920

(4) Kalyan Mahapatra, Arpan Mukherjee, Shikha Suyal, Mansoor Ali Dar, Lavanya Bhagavatula, Sourav Datta, 'Regulation of chloroplast biogenesis, development, and signaling by endogenous and exogenous cues', Physiology and Molecular Biology of Plants, Springer India, February, 2024, 0974-0430

(5) Kalyan Mahapatra, Samrat Banerjee, Sayanti De, Mehali Mitra, Pinaki Roy, Sujit Roy, 'An insight into the mechanism of plant organelle genome maintenance and implications of organelle genome in crop improvement: an update', Frontiers in Cell and Developmental Biology, Frontiers Media SA, August, 2021, 2296-634X

(6) Kalyan Mahapatra, Sujit Roy, 'An insight into the folding and stability of Arabidopsis thaliana SOG1 transcription factor under salinity stress in vitro', Biochemical and biophysical research communications, Academic Press, August, 2019, 1090-2104

(7) Kalyan Mahapatra, Sujit Roy, 'An insight into the mechanism of DNA damage response in plants-role of SUPPRESSOR OF GAMMA RESPONSE 1: An overview', Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis, Elsevier , January, 2020, 1873-135X

(8) Pallab Kumar Ghosh, Krishnendu Pramanik, Kalyan Mahapatra, Sayanta Mondal, Sudip Kumar Ghosh, Antara Ghosh, Tushar Kanti Maiti, 'Plant growth-promoting Bacillus cereus MCC3402 facilitates rice seedling growth under arsenic-spiked soil', Biocatalysis and Agricultural Biotechnology, Elsevier, October, 2024, 1878-8181

BOOK PUBLICATION :

(MAXIMUM FIVE BEST PUBLICATION)

(1) Kalyan Mahapatra, Sayanti De, Sujit Roy, 'Mitochondrial Genome Damage, Dysfunction and Repair', Handbook of Mitochondrial Dysfunction, CRC Press, May, 2025, 9780429443336

(2) Kalyan Mahapatra, Samrat Banerjee, Sujit Roy, 'The hows and whys of heavy metal-mediated phytotoxicity: an insight', Cellular and molecular phytotoxicity of heavy metals, Springer International Publishing, October, 2020, 978-3-030-45974-1