


<b>Name:</b>	Dr. Bikram Saha	
<b>Designation in (subject):</b>	Assistant Professor in Botany	
<b>Highest qualification:</b>	Ph.D	
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<b>Date of joining to this institution*:</b>	6 <sup>th</sup> August, 2021	
<b>Date of joining W.B.E.S.:</b>	6 <sup>th</sup> August, 2021	
<b>Previous position(s) held/ Additional charges (if any):</b>	<ul style="list-style-type: none"> <li>• 19<sup>th</sup> April, 2023 – till date, Member of the Board of Under-Graduate Studies in Botany, NBU</li> <li>• 6<sup>th</sup> August, 2021- till date, Assistant Professor (Stage I), Botany, Darjeeling Govt. College, Darjeeling</li> <li>• 1<sup>st</sup> July, 2017- 5<sup>th</sup> August, 2021, Assistant Professor, Botany, North Bengal St. Xavier's College, Jalpaiguri</li> <li>• 25<sup>th</sup> July, 2016- 30<sup>th</sup> June, 2017, Assistant Professor, Beinstein College of Science, Guwahati, Assam</li> <li>• 14<sup>th</sup> September, 2014-24<sup>th</sup> July, 2016, Guest Faculty, P.D</li> </ul>	

	<p>Women's College, Jalpaiguri</p> <ul style="list-style-type: none"> <li>• 13<sup>th</sup> August, 2013- 14<sup>th</sup> August, 2014, Research Fellow in DBT funded Research Project, IARI, New Delhi</li> <li>• 27<sup>th</sup> March, 2008- 31<sup>st</sup> March, 2013, UGC Research Fellow in Science for Meritorious Students</li> </ul>
<b>Teaching experience in years &amp; months:</b>	09 years and 08 month
<b>Fellowship, Awards, Recognition and Honours (if any):</b>	<ul style="list-style-type: none"> <li>• 'Outstanding Paper' in Botany, at 6<sup>th</sup> Regional Science &amp; Technology Congress 2023-24. Govt. of West Bengal</li> <li>• 'Outstanding Paper' in 31<sup>st</sup> West Bengal State Science &amp; Technology Congress, Govt. of West Bengal</li> <li>• Best Oral Presentation (Technical Session) presented at Interdisciplinary National Seminar on "Vistas in Life Science Research" organized by Department of Biotechnology, Department of Microbiology, Department of Tea Science and Department of Bioinformatics, University of North Bengal, Siliguri 734013, West Bengal (March 29, 2019).</li> <li>• Best poster presentation award presented at the national symposium organized by Central Rainfed Upland Research Station (CRRI, ICAR) at Jharkhand, India on 24-25 October, 2013 was adjusted best poster paper.</li> <li>• K.S. Bilgrami best paper presentation award presented at the Annual Conferences of Indian Society of Mycology and Plant Pathology at Junagadh on 24th November 2010 was adjusted second for poster paper presentation.</li> <li>• UGC Research Fellow in Science for Meritorious Students</li> </ul>
<b>Courses taught:</b>	Under Graduate (Honours and Program) and Post Graduate (Botany)

<b>Research area/ interest:</b>	Host-Pathogen interaction and Plant virology
<b>List of publications-</b> <b>*Peer reviewed journals:</b>	<ul style="list-style-type: none"> <li>• Palchoudhury S., <b>Saha B.</b>, Das S., Biswas M. K., Biswas K. K. (2019) An improved and efficient organogenic regeneration protocol using epicotyl segment of in vitro grown kagzilime (<i>Citrus aurantifolia</i>) seedling. <i>Journal of Plant Development Sciences</i> 11 (7), 389-395 (ISSN: 0974-6382).</li> <li>• Kajal K. Biswas, Supratik Palchoudhury, Susheel K. Sharma, <b>Bikram Saha</b>, Shruti Godara, Dilip K. Ghosh, Manjunath L. Keremane (2018) Analyses of 3' half genome of citrus tristeza virus reveal existence of distinct virus genotypes in citrus growing regions of India. <i>Virus Disease</i> 29(3):308–315. [ISSN: 2347-3584 (Print) 2347-3517 (Online)] (Impact Factor-0.364)</li> <li>• Chakraborty P., Das S., <b>Saha B.</b>, Karmakar A., Saha D. and Saha A. (2017) Rose rosette virus: An emerging pathogen of garden roses in India. <i>Australasian Plant Pathology</i> 46(3): 223–226 [ISSN: 0815-3191 (Print) 1448-6032 (Online)] (Impact Factor-1.026)</li> <li>• Saha Aniruddha, Das Lopamudra, <b>Saha Bikram</b> and Saha Dipanwita (2016) Identification of tea seed mycoflora and pathogenicity of <i>Rhizoctonia solani</i>. <i>Ann. Pl. Protec. Sci.</i> 24(2): 353-359. (ISSN 0971-3573, Online ISSN: 0974-0163)</li> <li>• Saha, A., Das, S., Chakraborty, P., <b>Saha, B.</b>, Saha, D. and Saha, A. (2016) Two New Bottle Gourd Fruit Rot Causing Pathogens from Sub-Himalayan West Bengal. <i>Journal of Agricultural Technology</i> 12(2): 321-332. (ISSN 1686-9141)</li> <li>• Chakraborty P., Das S., <b>Saha B.</b>, Sarkar P., Karmakar A., Saha A., Saha D. and Saha A. (2015) Phylogeny and</li> </ul>

	<p>synonymous codon usage pattern of Papaya ring spot virus coat protein gene in sub-Himalayan region of north-east India. <i>Canadian Journal of Microbiology</i> 61(8): 555-64. (ISSN 0008-4166, Online ISSN: 1480-3275) (Impact Factor -1.182)</p> <ul style="list-style-type: none"> <li>• Vikash Chandra, Shruti Godara, Ashwini Kumar, <b>Bikram Saha</b> and Kajal K Biswas (2015) Genetic variations of ORF 11 suppressor gene of Citrus tristeza virus and development of gene construct for transformation of citrus plant. <i>Mycopathological Research</i> 53(1): 25-29. (ISSN 0971-3719)</li> <li>• Shruti Godara, <b>Bikram Saha</b>, C. Chattopadhyay and Kajal Kumar Biswas (2014). Lack of resistance in mungbean genotypes against urdbean leaf crinkle disease complex. <i>Indian Phytopathology</i> 67(4): 426-427. (Print ISSN: 0367-973X; Online ISSN: 2248-9800).</li> <li>• Aniruddha Saha, <b>Bikram Saha</b>, Shibu Das, Prosenjit Chakraborty, Piyali Sarkar and Dipanwita Saha (2014) Molecular Detection and Diversity Analysis of Some Potyviruses Associated with Mosaic Diseases of Papaya, Common Bean and Potato Growing in Sub-Himalayan West Bengal. <i>Vegetos</i> 27 (2): 338-346. (ISSN: 2229-4473) (Impact Factor -0.04)</li> <li>• Aniruddha Saha, <b>Bikram Saha</b> and Dipanwita Saha (2014) Molecular detection and partial characterization of a begomovirus causing leaf curl disease of potato in sub-Himalayan West Bengal, India. <i>Journal of Environmental Biology</i> 35: 601-606. (ISSN: 0254-8704) (Impact Factor -0.55)</li> <li>• <b>Bikram Saha</b>, Dipanwita Saha, Kajal Kumar Biswas and Aniruddha Saha (2014) Distribution and molecular characterization of begomoviruses infecting tomato in sub-Himalayan Tarai region of West Bengal and</li> </ul>
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	<p>Brahmaputra valley of Assam in northeast India. Indian Phytopathology 67 (1): 92-96. (Print ISSN: 0367-973X; Online ISSN: 2248-9800).</p> <ul style="list-style-type: none"> <li>• Aniruddha Saha, Lopamudra Das, <b>Bikram Saha</b> and Dipanwita Saha (2014) Effect of culture media and environmental factors on mycelial growth and sclerotia formation of <i>Rhizoctonia solani</i>, a seed borne pathogen of tea. Journal of Plant Disease Sciences 9(1): 48-54 (Print ISSN: 0973-7456; Online ISSN: 0976-2388).</li> <li>• <b>Bikram Saha</b>, Dipanwita Saha and Aniruddha Saha (2013) Begomovirus causing leaf curl disease in tomato (<i>Lycopersicon esculentum</i> L.) in sub-Himalayan West Bengal, India. NBU Journal of Plant Sciences 7(1): 35-41 (ISSN 2076-5061).</li> <li>• Aniruddha Saha, <b>Bikram Saha</b>, Prosenjit Chakraborty and Dipanwita Saha (2013) Identification of begomovirus-infected mosaic diseases from uncultivated crops of sub-Himalayan plains of East India. International Journal of Agricultural Technology 9(5): 1241-1252. (ISSN 1686-9141).</li> <li>• A. Saha, <b>B. Saha</b> and D. Saha (2010). Major plant viruses: an overview. NBU Journal of Plant Science 4:5-10. (ISSN 2076-5061)</li> </ul>
<p><b>*Books/chapters in books etc. (if any):</b></p>	<ul style="list-style-type: none"> <li>• <b>Saha B.</b> and Thami B. (2024). Efficacy of some ethnobotanically important plants of Darjeeling hill against an isolated fungal pathogen of chayote [<i>Sechium edule</i> (Jacq) Swartz]. In Sakar, A.K. and Roy, G.C. (Eds.) Natural Resources. Akinik Publication, New Delhi, India. pp. XX-XY.</li> <li>• Jeyalakshmi C., Renuka R., Manoranjitham S. K., Sendhilvel V. <b>Saha B.</b> and Saha A. (2024) Concepts of plant disease in relation to modern time. In: Concepts of Plant Pathology and Disease Management. Biswas K. K.</li> </ul>

(Eds). Indian Phytopathological Society. New Delhi. ISBN: 978-93-94678-98-9. **pp.** 11-26

- Chakraborty P., **Saha B.**, Tamang S., Sarkar T., Karmakar A., Das S., Saha D. and Saha A. (2023) Management of bottle gourd leaf curl disease caused by Papaya ringspot virus using chemical inducers and phytoextracts. In: Research in emerging fields of biological science (Multidisciplinary aspect). Misra T. K. (Ed). Astiva Prakashan. Chhattisgarh. ISBN 978-93-5838-000-2. **pp.** 130-145.
- Dasgupta S., Dhar Purkayastha G., **Saha B.** (2023) Redefining the relevance and efficacy of microbial biocontrol agents against phytopathogens. In: Research in mycology vol-II. B. Singh et al. (Eds). Blue Duck Publications Srinagar, J&K. ISBN: 978-93-93996-47-3. **pp.** 40-53.
- Thami B., Prasad R., Saha A. and **Saha B.** (2023) Isolation and in-vitro control of *Aspergillus* sp. infecting common beans growing in Darjeeling Hills. In: International Conference on Advance on Plants, Microbes and Agricultural Sciences. Chowdhury M. et al. (Eds). ISBN: 978-93-5786-344-5. p. 104.
- **Saha, B.** (2020). Mass Spectrometry, an efficient tool in protein analysis. In "Organism and Environment" Ed. A. K. Sarkar. Education Publication, New Delhi. ISBN: 978-93-89808-99-5. pp. 251-256.
- **B. Saha**, D. Saha and A. Saha (2013). Detection of Tomato leaf curl virus in cultivated varieties of tomato and other plants of sub-Himalayan West Bengal. In "Microbial Wealth and Plant Health" Eds. B. N. Chakraborty and U. Chakraborty. International Books and Periodicals Supply Services, New Delhi. ISBN 978-93-81226-39-1. Pp. 263-275.

	<ul style="list-style-type: none"> <li>• Saha, <b>B. Saha</b> and D. Saha (2012) Important begomoviruses of some economically important horticultural crops and associated plants of Sub-Himalayan West Bengal and Brahmaputra valley of Assam. <i>In</i> “Biology of Plants and Microbes” Eds. S. Roy and D. Bose. Sarat Impression Ltd. Kolkata. ISBN: 978-93-80663-63-0. <b>pp.</b> 162-171.</li> </ul>
<p><b>Google Scholar link/ ResearchGate link/ ORCID ID ((if any) :</b></p>	<ul style="list-style-type: none"> <li>• <a href="https://scholar.google.com/citations?user=6pUBv3sAAA&amp;hl=en">https://scholar.google.com/citations?user=6pUBv3sAAA&amp;hl=en</a></li> <li>• <a href="https://www.researchgate.net/profile/Bikram-Saha">https://www.researchgate.net/profile/Bikram-Saha</a></li> <li>• <a href="https://orcid.org/0009-0006-1579-5653">https://orcid.org/0009-0006-1579-5653</a></li> </ul>
<p><b>Presentations/ attended in conferences/ workshops/seminars/symposium etc:</b></p>	<ul style="list-style-type: none"> <li>• <b>Saha B.</b>, Saha D. and Saha A. (2019) Use of rolling circle amplification for the detection of tomato leaf curl virus (TLCV), a major threat of tomato cultivation in North East India.. National Seminar on “Mitigating Biotic Stresses in Agriculture for 21st Century: Changing Market Paradigm” organized by Uttar banga Krishi Viswavidyalaya Pundibari, Coochbehar , West Bengal, pp.07.</li> <li>• <b>Saha B.</b>, Saha D. and Saha A. (2019) Application of botanicals for the management of Tomato leaf curl disease. National Seminar on “Vistas in Life Science Research” organized by Department of Biotechnology, Department of Microbiology, Department of Tea Science and Department of Bioinformatics, University of North Bengal, p.14.</li> <li>• <b>Saha B.</b>, Choudhury S. P., Godara S. and Biswas K. K. (2014) Development of gene construct targeting coat protein and suppressor gene of Citrus tristeza virus gene and transformation of citrus plant. National symposium on “Advance in Plant and Microbial Research” organized by DRS-Department of Botany, University of North</li> </ul>

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- Das L., **Saha B.**, Saha D. and Saha A. (2013) Studies on tea seed mycoflora and pathogenicity of *Rhizoctonia solani*. National symposium on “Recent Trends in Plant and Microbial Research” organized by DRS-Department of Botany, University of North Bengal, p. 28.
- **Saha B.**, Saha A. and Saha D. (2012) Identification of begomoviruses infecting cultivated crops and associated plants in sub-Himalayan north-east Indian plains. Oral presentation. 3<sup>rd</sup> Global Conference on “Plant Pathology and Food Security”. Organized by Indian Society of Mycology and Plant Pathology and Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan, p. 45.
- Saha A., **Saha B.**, and Saha D. (2011) Molecular detection and partial characterization of geminiviruses and potyviruses of four horticultural plants of sub-Himalayan north east India. Oral presentation. National symposium on “Advance in Abiotic and Biotic Stress Management of plants” organized by DRS-Department of Botany, University of North Bengal, p. 21.
- **Saha B.**, Saha A. and Saha D. (2010) Molecular detection and identification of *Tobacco curly shoot virus* isolate causing leaf curl disease in tomato (*Lycopersicon esculentum* L.) in sub-Himalayan West Bengal, India. Poster presentation. National symposium on “Innovations in Plant Pathology Research and Human Resource Development” organized by Junagadh Agricultural University, Gujarat, p 31.
- **Saha B.**, Dasgupta S., Saha D. and Saha A. (2008). Screening of some viral diseases of crops on the basis of symptoms and transmission studies of Coochbehar, India. Poster presentation. National symposium on “Diversity



and functionality of plants and microbes” organized by DRS-Department of Botany, University of North Bengal, p. 34.

#### **Participation In Trainings/Workshops**

- A Two-Day Workshop on “Data Analysis Using SPSS” organized by IQAC and Department of Commerce and Management, North Bengal St. Xavier’s College, Jalpaiguri, West Bengal from 13<sup>th</sup> May to 14<sup>th</sup> May, 2019
- A One-Day Workshop on “Intellectual Property Rights (IPR)” organized by North Bengal St. Xavier’s College, Jalpaiguri, West Bengal on 6<sup>th</sup> May, 2019.
- Hands on training in “Basic Biotechnological Techniques” sponsored by Department of Biotechnology, Govt. of India, New Delhi organized by Department of Biotechnology, St. Edmund’s College, Shillong from August 21-25, 2012.
- UGC sponsored research scholars’ training programme “Research Methodology” from June 30 to July 1, 2011
- National workshop on “Bioinformatics” organized by the NBU Bioinformatics Facility, North Bengal University from 7<sup>th</sup> to 9<sup>th</sup> March 2008.
- Training workshop on “Cultivation of medicinal plants” jointly organized by the Dept of Adult, Continuing Education, Extension & Field Outreach and Dept of Botany, University of North Bengal from 8<sup>th</sup> to 9<sup>th</sup> March, 2007.
- Training course in “Chromosome analysis: Microscopic to Molecular” organized by Centre of advance study in cell and chromosome research, Dept of Botany, University of Calcutta from 19<sup>th</sup> to 24<sup>th</sup> Dec, 2005.
- Training programme on “Mushroom cultivation” organized by Uttar Banga Krishi Viswavidyalaya, Coochbehar from 29<sup>th</sup> Dec to 21<sup>st</sup> Jan, 2004.

	<p style="text-align: center;"><b>Participated as Resource Person</b></p> <ul style="list-style-type: none"> <li>• <i>In:</i> Add-ON COURSE and Faculty Exchange Programme on ‘Climate Change and Plant’s Behaviour’ on 17<sup>th</sup> September, 2022 organized by Department of Botany. Tufanganj Mahavidyalaya, Coochbehar.</li> <li>• <i>In:</i> a workshop entitled “Recombinant DNA Technology” on 11<sup>th</sup> -13<sup>th</sup> February, 2019 at North Bengal St. Xavier’s College organized by Dept. of Microbiology and Zoology.</li> <li>• <i>In:</i> a training programme entitled “<i>Bioinformatics in Plant Genomic research</i>” on 14<sup>th</sup> March, 2015 at Bioinformatics Sub-DISC, Sikkim State Council of Science and Technology with the support of DBT, GOI, New Delhi.</li> </ul>
<p><b>Details regarding participation in FIP/OP/RC:</b></p>	<ul style="list-style-type: none"> <li>• 12<sup>th</sup> Faculty Induction Programme from January 03, 2023 to February 06, 2023 organized by Human Resource Development, University of North Bengal.</li> <li>• Refresher course on Emerging Dimension in Biological Sciences from November 24, 2023 to December, 08, 2023 organized by Malaviya mission Teacher Training Centre, University of North Bengal.</li> </ul>