Dr. Bhaskar Sarma

1. General Information with academic and Professional qualifications

Name : DR. BHASKAR SARMA Father's Name : BHUBAN CH. SARMA

Department : BOTANY

Educational Qualification : M.Sc., B.Ed., Ph.D.
Current Designation : Assistant Professor

Marital status : Married Mobile No. 7576064835

Email ID : bhaskarsarma252@gmail.com, bhaskarsarma@dhemajicollege.in

2. Academic and Professional Profile

Academic Profile

H.S.L.C, B.R.P.L. Vidyalaya, Dhaligaon, SEBA (2003).

H.S, Patacharkuchi Vidyapith HS School, Patacharkuchi, AHSEC (2005).

B.Sc. (Botany Major), Bajali College, Bajali, Gauhati University (2008).

M.Sc. in Botany with specialization in Cytology, Genetics and Plant Breeding, Gauhati University (2010).

B.Ed. Gauhati University (2012).

Ph.D. in Botany, Gauhati University (2015)

SLET in Life Science, SLET Commission, Assam (2017)

Professional Profile

Junior Research Fellow, Department of Biotechnology, Govt. of India (2012–2014).

Guest Lecturer, Department of Botany, Bajali College, Bajali (2013-2014)

Guest Assistant Professor, Department of Botany, Bodoland University, Kokrajhar (2015-2016)

Assistant Professor, Department of Botany, Anundoram Borooah Academy Degree College (Affiliated to

Bodoland University), Pathsala (2017-31st January, 2019)

Assistant Professor, Department of Botany, Dhemaji College, Dhemaji (6th March, 2019- onwards)

3. Publications

Research Articles in Journals

- 1. Bhattacharyya, P.N., Sarmah, S.R., Roy, S., **Sarma, B.**, Nath, B. C. & Bhattacharyya, L. H. (2022). Perspectives of *Beauveria bassiana*, an entomopathogenic fungus for the control of insect-pests in tea [*Camellia sinensis* (L.) O. Kuntze]: opportunities and challenges. *International Journal of Tropical Insect Science*, . https://doi.org/10.1007/s42690-022-00932-1
- 2. Bhattacharya, P. N., Sarmah, S. R., **Sarma, B.**, Madhab, M., Tanti, A. & Borgohain, K. (2022). Zinc-Solubilization Potential of Putative Microorganisms Isolated from Tea [Camellia sinensis (L.) O. Kuntze] Rhizosphere. *Research Journal of Microbiology*, 17(1): 1-13. https://doi.org/10.17311/rjm.2022.1.13
- 3. Bhattacharyya, P.N. & **Sarma, B.** (2022). Proximate analysis and ecological niche modeling of macrofungi in ecologically significant North-East India. *Journal of Applied Sciences*, 22: 127-138. https://doi.org/10.3923/jas.2022.127.138
- 4. **Sarma, B.** & Tanti, B. (2022). Ecological niche modeling for reintroducton and conservaton of Aristolochia cathcarti Hook.f. & Thomson (Aristolochiaceae), a threatened endemic plant in Assam, India. *Journal of Threatened Taxa*, 14(2): 20597–20605. https://doi.org/10.11609/jott.6999.14.2.20597-20605
- 5. **Sarma, B.** & Deka, U. (2021). *In-vivo* propagation of *Aristolochia tagala-* A rare medicinal plant species of Assam, India. *International Journal of Botany Studies*, 6(3):679-683.
- 6. Hasnu, S., Saikia, D., **Sarma, B** & Tanti, B. (2020). Karyotype analysis of Vanilla borneensis Rolfe- a critically endangered orchid of Assam, India. *Journal of Advanced Plant Sciences*, 10(2): 24-30.
- 7. Baruah, P. S., Deka, K., Lahkar, L., **Sarma, B**., Borthakur, S. K. & Tanti, B. (2019). Habitat distribution modelling and reinforcement of *Elaeocarpus serratus* L.- A threatened tree species of Assam, India for improvement of its conservation status. *Acta Ecologica Sinica*, 39(1):42-49. https://doi.org/10.1016/j.chnaes.2018.06.002
- 8. **Sarma, B.**, Baruah, P. S. & Tanti, B. (2018). Habitat distribution modelling for reintroduction and conservation of *Aristolochia indica* Linn.-a threatened medicinal plant of Assam, India. *Journal of Threatened Taxa*, 10(11):12531-12537. https://doi.org/10.11609/jott.3600.10.11.12531-12537
- 9. Borthakur, S. K., Baruah, P. S., Deka, K., Das, P., **Sarma, B.**, Adhikari, D. & Tanti, B. (2018). Habitat distribution modeling for improving conservation status of Brucea mollis Wall. ex Kurz.- An endangered potential medicinal plant of Northeast India. *Journal for Nature Conservation*, 43: 104-110. https://doi.org/10.1016/j.jnc.2018.02.010

- Sarma, B. & Tanti, B. (2017). Analysis of Genetic Diversity of Certain Species of Aristolochia using ISSR-Based Molecular Markers. *Current Life Sciences*, 3(4):47-53. http://dx.doi.org/10.5281/zenodo.883637
- 11. **Sarma, B**. & Tanti, B. (2017). *In vitro* regeneration of plantlets from nodal explants of *Aristolochia saccata* and *Arsitolochia cathcartii*. *European Journal of Biological Research*, 7(3): 191-201. http://dx.doi.org/10.5281/zenodo.825746
- 12. Baruah, P. S., Deka, K., **Sarma, B.**, Das, P., Borthakur, S. K. & Tanti, B. (2017). Assessment of few unexplored RET plant wealth of Assam, India. *Journal of Advanced Plant Sciences*, 9(2):10-15.
- 13. Deka, K., Baruah, P. S., **Sarma, B.**, Borthakur, S. K. & Tanti, B. (2017). Preventing extinction and improving conservation status of *Vanilla borneensis* Rolfe—A rare, endemic and threatened orchid of Assam, India. *Journal for Nature Conservation*, 37:39-46. https://doi.org/10.1016/j.jnc.2017.03.001
- 14. **Sarma, B.**, Kapil, D. & Tanti, B. (2017). Cytotoxic effect of naphthalene on root meristem of Allium cepa L. *Annals of Plant Sciences*, 6(3):1579-1584. https://doi.org/10.21746/aps.2017.03.001
- 15. **Sarma, B**. & Kalita, N. (2017). Karyomorphological Study Of *Aristolochia tagala* Cham.-A Rare Medicinal Plant From Assam, India. *International Journal of Plant, Animal and Environmental Sciences*, 7(1):87-93. http://dx.doi.org/10.21276/ijpaes
- 16. **Sarma, B.**, Basumatary, N. R. & Tanti, B. (2016). Effect of drought stress on Morpho-Physiological Traits in some traditional rice cultivars of Kokrajhar District, Assam, India. *Annals of Plant Sciences*, 5(8):1402-1408. https://doi.org/10.21746/aps.2016.08.003
- 17. **Sarma, B**. & Tanti, B. (2015). Karyomorphology of three species of *Aristolochia* Rare and Endemic Medicinal Plants of Assam, India. *Caryologia*, 68(2):154-158. https://doi.org/10.1080/00087114.2015.1032604
- 18. Sarma, B., Baruah, S. & Tanti, B. (2015). Macropropagation of *Aristolochia indica* Linn. (Aristolochiaceae An Endangered Medicinal Plant of Assam, India. *Bio-Science Letters*, 1(1):42-46.
- 19. Sarma, B. & Tanti, B. (2014). Karyomorphological Study of Stephania hernandifolia A Rare Medicinal Plant from Assam, India. *Annals of Plant Sciences*. 3(11):869-872.

Books

- 1. **Bhaskar Sarma**, Kishor Deka, Nilakshi Kalita (2017). Economically Important Plants of Assam.Purbayon Publication (Assam). (ISBN No. 978-81-92955-0)
- 2. **Bhaskar Sarma,** Amit Pradhan, Nilakshi Kalita (2020). Advanced Laboratory Manual of Biological Sciences. Lambert Academic Publishing (Mauritius). (ISBN No. 978-620-2-51604-4)
- 3. Pranab Paul, **Bhaskar Sarma** (2022). Molecular Biology with Practical (As per B.Sc. fourth semester Botany honours syllabus). Mahaveer Publications (Dibrugarh, Assam). ISBN No. 978-93-94095-35-9

Book Chapter

Bhaskar Sarma, Puspita Hore and Bhaben Tanti (2016). Karyomorphological Study of *Cissampelos pareira* Linn-A Rare Medicinal Plant of Assam, India, *Compendium of Botanical Research in Eastern India*. EBH (India) Publication. (ISBN No. 978-93-86302-23-6)

4. Corporate Life:

- i. Member of Red Cross Society
- ii. Member of Botanical Society of Assam
- iii. Member of North East Biotechnological Association (NEBA)

5. Academic activities

Average Teaching Hours/ day	Classes	\$	Others
6 to 6.50 Hours	Higher Seconda (Major and Generic	•	 i. Preparation of Individual teaching plan. ii. Preparation of departmental class routine on the basis ofcollege general class routine. iii. Internal examiner of the Department. iv. Examiner in final examinations conducted by the University. v. Assistant officer-in charge in final examinations conducted by the University. vi. Acted as Coordinator in the Webinar entitled "Biotechniques" held on 20th June, 2020. vii. Acted as Convenor in the International Webinar organized on the occasion of "World Soil Day, 2022" viii. Trained up students with modern biological tools andtechniques

<u>Academic Staff College: Orientation Programme (OP) / Refresher Course (RC) / Summer School (SSS) / any other course attended:</u>

- i. Seven Day Faculty Development Programme (FDP) in Online Mode for University and College Teachers on Preparation of Self-Learning Materials for University and College Learners organized by Dibrugarh University (12th May 18th May, 2020).
- ii. Online Foundation Course on "Biostatistics in R" organized by Department of Botany, Gauhati University (27th May 29th May, 2020).
- iii. National Level Faculty Development Programme on Aspects of Pedagogical Re-design and Online Teaching-Learning Process organized by IQAC, Dhemaji College in association with IQAC, Dibrugarh University (15th July 21st July, 2020).
- iv. UGC-Sponsored 30th Orientation Course (Online) organized by HRDC, Mizoram University (28th July-17th August, 2020).
- v. Online Interdisciplinary Refresher Course on Changing Perspectives in Pedagogy Organized by

- Teaching Learning Centre (Under PMMMNMTT Scheme, Ministry of Education) Tezpur University (8th October 22nd October, 2020).
- vi. Faculty Development Programme on "Recent Trends in Educational Technology" Organized by Internal Quality Assurance Cell (IQAC), College of Basic Science and Humanities, Odisha University of Agriculture and Technology, Bhubaneswar, Odisha, India (24th 28th September, 2021)
- vii. AICTE -Training and Learning (ATAL) Academy sponsored Online Faculty Development Programme (FDP) On "Biowaste to Bioenergy: A future sustainable energy source" Organized by Department of Biotechnology, Motilal Nehru National Institute of Technology (MNNIT), Allahabad, Prayagraj, Uttar Pradesh, India (14th 18th December, 2021)
- viii. Online Interdisciplinary Refresher Course on "Advanced Research Methodology" Organized by Teaching Learning Centre (Under PMMMNMTT Scheme, Ministry of Education) Ramanujan College, Delhi University (22nd March 5th April, 2022).

6. Others

Research Papers Presented in Conferences, Seminars, Workshops, Symposia

Sl.	Titled of the Paper	Title of Workshop /	Organized by	Year
No.	Presented	Seminar/ Symposia	Organizea Sy	1001
1	Habitat distribution modeling for reintroduction and conservation of Aristolochia cathcartii Hook. f. & Thomson (Aristolochiaceae)- a threatened endemic plant in Assam, India	International e-Poster Conference on Current Outlook in Material Science and Engineering (COMSE-2k20)	Bodoland University in Association with Tripura University, ADP College, Nagaon & MIT Aurangabad.	2020
2	Effect of drought stress on Morpho-Physiological Traits in some traditional rice cultivars of Kokrajhar District, Assam, India.	International Symposium on Plant Biotechnology for Crop Improvement, 2017	Indian Institute of Technology, Guwahati, Assam, India	2017
3	Karyomorphology of two species of Aristolochia Linn. from Assam, India	International Conference on Harnessing Natural Resources for Sustainable Development: Global Trends, 2014	Cotton College, Guwahati, Assam, India	2014
4	Taxonomic study and Habitat distribution modeling for reintroduction of Smilax glabraRoxb., a critically rare species of North East India	International Conference on Green Energy and Smart Materials through Science, Technology and Management (GESM' 14)	Gauhati University (GU) and University of South Africa (UNISA), South Africa.	2014
5	Karyomorphological study of Stephaniaharnandifolia – a rare medicinal plant from Assam, India	UGC SponsoredNational Seminar on Environmental Degradation and its Impact on Germplasm with special reference	D. K. College, Mirza, Kamrup,Assam, India	2014

		to North East India		
6	Ecological Niche Modeling of Bruceamollis Wall – an endemic endangered plant	The National Seminar on RET Plants of NE India and their	Gauhati University, Guwahati, Assam, India	2014
	species of Assam, India	Conservation Strategies		
7	Plant Tissue Culture - methodology and its application	Biotechnology : A New Avenue of Research	Institutional Biotech Hub, Bajali College, Pathsala, Assam, India	2014
8	Habitat distribution modeling and Karyomorphological study of Aristolochia indica Linn.	National Seminar on Plant Resources of NE Region and their Bioprospecting	Gauhati University, Guwahati, Assam, India	2013
9	Micro Algal Diversity in Bajali Sub-Division of Barpeta District, Assam.	National Seminar on Biodiversity- its Conservation, Management and Sustainable Utilization with special reference to North-East India	Assam Science Society, Bajali Branch, Pathsala, Assam, India	2007

Seminars / workshop / conference etc. attended

Sl. No	Title of Workshop / Seminar/ Symposia	Organized by	Year
1	"57 th Annual Conference of Association of Microbiologists of India and International	Department of Botany, Gauhati University and The Institute of	2016
	Symposium on "Microbes and Biosphere: What's New What's Next"	Advanced Study in Science and Technology (IASST), Guwahati.	
2	National seminar on Sustainable Utilization of Plant Resources of North East India	Jointly organized by Dept. of Botany, Gauhati University and	2015
		Dept. of Botany, University of Science and Technology, Meghalaya.	
3	Seminar on Biotechnology for human welfare and Hands on training on plant tissue culture	Biotech Hub, Bajali College, Pathsala, Assam,	2014
4	National Symposium on Microorganisms and Plant Health and 24 th Annual General Meeting of Indian Phytopathological Society (Eastern Zone), 2011	Dept. of Botany, Gauhati University, Guwahati, Assam, India.	2011
5	Training program on Molecular Biology and Plant Tissue Culture: Tools, Techniques and Technological Interventions	Organized by The Energy and Resources Institute, New Delhi. Sponsored by DBT, Govt. of India.	11 th July- 23 rd July, 2011
6	Carrier oriented programme on Floriculture and Gardening	Organized by Bajali College, Pathsala. Sponsored by UGC.	2006-2007