

## Faculty Details

**Name:** DR. DEBJYOTI BHATTACHARYYA

**Designation:** Assistant Professor

**Department:** Life Science & Bioinformatics

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**Year of Joining:** 2008

**Areas of Interest/Specialization:** Plant Taxonomy and Biosystematics

**Experience:** (in year) 12 years

### Career Profile

**Educational qualification:** M.Sc., Ph.D. (University of Calcutta)

**Post-doctoral research:** Have been awarded DBT-NER Overseas Associateship (Short term). Worked in the laboratory of Department of Botany, Palacky University in Olomouc, Czech Republic for about three months from 2<sup>nd</sup> September 2014 to 28<sup>th</sup> November 2014.

**Ph.D.:** University of Calcutta [Ph.D. research was carried out in Central National Herbarium (CAL), Botanical Survey of India, Howrah]

**M.Phil.:** – X

**M. Sc.:** University of Calcutta

**Honours/Awards (National/ International):**

<b>Name of the awarding body</b>	<b>Name of Award/Honor</b>	<b>Date</b>	<b>Level</b>
Indian Association for Angiosperm Taxonomy (IAAT)	S. R. Yadav Award	2007-11-21	<b>National</b>
In National Seminar on Conservation and Sustainable Use of Medicinal and Aromatic Plants	IIIrd Best Oral Presentation Award	2018-09-14	<b>National</b>
Fellow of Indian Association for Angiosperm Taxonomy (IAAT)	IAAT	2017-11-12	<b>National</b>

**Research Projects:****Ongoing projects:** NIL

<b>SL</b>	<b>Title</b>	<b>Sponsored</b>	<b>Start date</b>	<b>End date</b>	<b>Fund</b>

**Completed projects: 01**

<b>SL</b>	<b>Title</b>	<b>Sponsored</b>	<b>Start date</b>	<b>End date</b>	<b>Fund</b>
<b>1.</b>	A study on the diversity of angiosperms in Barail Wildlife Sanctuary, Assam with special reference to assessment of rare, endangered and threatened (RET) taxa	University Grants Commission, New Delhi	01.07.2011	31.12.2014	10.76 Lakh

**Patents (if any):** No**International Collaboration/Consultancy:** No

**Research group:**

Sl. No.	Name of the Scholar	Degree for which enrolled	Current Status	Title of the Thesis
1.	Lalawmkima Darlong	Ph.D.	Awarded	Morpho-taxonomic studies on lianas in Tripura with special reference to reproductive attributes of some threatened taxa
2.	Moonmee Devi	Ph.D.	Awarded	Morpho-taxonomic studies on the family Gramineae in Southern Assam with particular reference to their cuticular structures
3.	Kangjam Tilotama Devi	Ph.D.	Awarded	Morpho-taxonomic studies on the family Gramineae Juss. in the valley districts of Manipur, India with special reference to caryopsis ultrastructure of some selected taxa
4.	Arpita Bora	Ph.D.	Awarded	Morpho-taxonomic studies on the arboreal angiosperms and lianas in Barail Wildlife Sanctuary, Assam
5.	Hidangmayum Bishwajit Sharma	Ph.D.	Awarded	Taxonomic studies on the genus <i>Dendrobium</i> Sw. (Orchidaceae) in Manipur, India with reference to comparative morphology, anatomy and cytology
6.	Longjam Malemnganbee Chanu	Ph.D.	Submitted	Morpho-taxonomic studies on Lianas in Manipur and mode of their seed dispersal
7.	Sampa Ghosh	Ph.D.	Working	Morpho-taxonomic studies on the family Gramineae in Tripura, India
8.	Shital Kumari Laishram	M.Phil.	Awarded	Studies on the pteridophytic flora of Barail Wildlife Sanctuary, Assam
9.	Kangkan Kumar Das	M.Phil.	Awarded	Palyno-taxonomic studies on the family Acanthaceae in Barak Valley, Assam

### Best Peer Reviewed Publications (up to 5):

1. Devi, M. & **D. Bhattacharyya** (2014). Recent flowering of six species of bamboos (Poaceae: Bambusoideae) in northeastern India with identification keys. *Rheedea* 24(1): 29 – 45. ISSN 0971–2313.
2. Devi, M. & **D. Bhattacharyya** (2015). Rediscovery of the red-listed grass *Isachne dimyloides* (Poaceae: Micrairoideae) 130 years after type collection. *Phytotaxa* 221(1): 093–096. ISSN 1179-3155 (print edition); ISSN 1179-3163 (online edition). DOI 10.11646/phytotaxa.221.1.11.
3. Smýkal, P., I. Hradilová, O. Trněný, J. Brus, A. Rathore, M. Bariotakis, R. R. Das, **D. Bhattacharyya**, C. Richards, C. J. Coyne & S. Pirintsos (2017). Genomic diversity and macroecology of the crop wild relatives of domesticated pea. *Scientific Reports* 7: 17384. Page 1 – 12. DOI: 10.1038/s41598-017-17623-4. [www.nature.com/scientificreports](http://www.nature.com/scientificreports).
4. Smýkal, P., O. Trněný, J. Brus, P. HanaĀček, A. Rathore, R. R. Das, V. Pechanec, M. Duchoslav, **D. Bhattacharyya**, M. Bariotakis, S. Pirintsos, J. Berger & C. Toker (2018). Genetic structure of wild pea (*Pisum sativum* subsp.*elatius*) populations in the northern part of the Fertile Crescent reflects moderate cross-pollination and strong effect of geographic but not environmental distance. *PLoS ONE* 13(3): e0194056. Page 1 – 22. <https://doi.org/10.1371/journal.pone.0194056>
5. **Bhattacharyya, D.**, A. Uddin, S. Das & S. Chakraborty (2019). Mutation pressure and natural selection on codon usage in chloroplast genes of two species in *Pisum* L. (Fabaceae: Faboideae). *Mitochondrial DNA Part A* 30(4): 664– 673. DOI: 10.1080/24701394.2019.1616701

## List of Publications:

1. **Bhattacharya, D.**, N. Paria & M. S. Mondal (1996). Pollen Morphology of Some Herbaceous Flora of Salt Lake City, West Bengal. *Bull. Bot. Surv. India* 38 (1- 4): 111 - 129.
2. **Bhattacharyya, D.** (2003). A note on the distribution and rarity of the state tree of Sikkim ----- *Rhododendron niveum* Hook. f. (Ericaceae). *Envis Newsletter* 9.
3. **Bhattacharyya, D.** & M. Sanjappa (2008). *Rhododendron* habitats in India. *Journal American Rhododendron Society* 62(1): 14 - 18.
4. **Bhattacharyya, D.** & M. Sanjappa (2008). *Rhododendron callimorphum* Balf. f. & W. W. Sm. (Ericaceae) - An addition to the Flora of India. *Indian J. Forest.* 31(4): 625 - 628.
5. **Bhattacharyya, D.** (2009). Diversity of Rhododendrons in India. *Phytotaxonomy* 9: 122 - 134.
6. **Bhattacharyya, D.** (2011). *Rhododendron* species and their uses with special reference to Himalayas: A Review. *Assam University Journal of Science & Technology (Biological & Environmental Science)* 7: 161 - 167.
7. Das Bhattacharyya, S., **D. Bhattacharyya** & G. D. Sharma (2011). Disjunct distributional record of an endemic liverwort *Chiloscyphus campanulatus* Steph. from Assam in Indo-Burma biodiversity hotspot. *Curr. Sci.* 101(7): 825 - 827. (Impact Factor - 0.935).
8. Darlong, L. & **D. Bhattacharyya** (2011). *Globba orixensis* Roxb. (Zingiberaceae) - A New Record for the Flora of Assam, India. *J. Bombay Nat. Hist. Soc.* 108 (2): 153 - 154.
9. Darlong, L. & **D. Bhattacharyya** (2012). Some lianas in Tripura, India, demand urgent conservation efforts. *Curr. Sci.* 102 (9): 1246. (Impact Factor - 0.935).
10. **Bhattacharyya, D.** & L. Darlong (2013). A Nomenclatural Note on *Bidaria inodora* and *B. tingens* (Apocynaceae: Asclepiadoideae). *Journal of the Botanical Research Institute of Texas* 7(2): 743 - 744. ISSN 1934-5259.
11. Devi, M. & **D. Bhattacharyya** (2013). Flowering occurrences of *Bambusa cacharensis* in Barak Valley, Assam, India since its type collection: a note. *Bamboo Science & Culture (The Journal of the American Bamboo Society)* 26: 41 - 44. ISSN 0197-3789.
12. Devi, M. & **D. Bhattacharyya** (2013). *Panicum laxum* (Poaceae): An addition to flora of India. *Rheedea* 23(2): 128 - 131. ISSN 0971-2313.
13. Darlong, L., S. Das & **D. Bhattacharyya** (2013). *Drosera burmanni* Vahl (Droseraceae): A common species suffering rapid declines in Barak Valley, Assam. *Nebio* 4(5): 6 - 8. ISSN 2278-2281 (Online Version) & 0976-3597 (Print Version).

14. Devi, M. & **D. Bhattacharyya** (2013). Gregarious flowering and mast seeding of a climbing bamboo *Melocalamus compactiflorus* in Barak Valley, Assam. *Nebio* 4(5): 41 - 43. ISSN 2278-2281 (Online Version) & 0976-3597 (Print Version).
15. Devi, M., L. Darlong & **D. Bhattacharyya** (2014). *Dendrocalamus longispatus* (Poaceae: Bambusoideae) in sporadic bloom in Tripura, India. *Nebio* 5 (1): 88 - 89. ISSN 2278-2281 (Online Version) & 0976-3597 (Print Version).
16. Darlong, L. & **D. Bhattacharyya** (2014). Four new additions of angiospermic liana for the state flora of Tripura, India. *Pleione* 8(1): 188 - 192.
17. Devi, K. T., H. B. Sharma, P. K. Singh & **D. Bhattacharyya** (2014). Flowering of *Schizostachyum pergracile* (Munro) R. B. Majumdar in Manipur. *Indian Forester* 140 (6): 633 - 635.
18. M. Devi & **D. Bhattacharyya** (2014). Recent flowering of six species of bamboos (Poaceae: Bambusoideae) in northeastern India with identification keys. *Rheedea* 24(1): 29 - 45. ISSN 0971-2313.
19. Darlong, L. & **D. Bhattacharyya** (2014). *Phanera jampuiensis* (Leguminosae: Caesalpinioideae: Cercideae), a new species from Tripura, India. *Kew Bulletin* (2014) 69: 9534. ISSN: 0075-5974 (print); ISSN: 1874-933X (electronic). DOI 10.1007/S12225-014-9534-9.
20. Darlong, L. & **D. Bhattacharyya** (2014). Diversity and field status of lianas in Tripura, India. *Journal of Threatened Taxa* 6(14): 6703-6710. ISSN 0974-7907 (Online); ISSN 0974-7893 (Print). DOI 10.11609/JoTT.o3575.6703-10.
21. Devi, K. T., P. K. Singh & **D. Bhattacharyya** (2014). *Digitaria radicata* (J. Presl) Miq. and *Pennisetum purpureum* Schumacher. - Additions to the Grass (Poaceae) Flora of Manipur, India. *J. Bombay Nat. Hist. Soc.* 111(2): 153. DOI 10.17087/jbnhs/2014/v111i2/72254.
22. Devi, K. T., P. K. Singh & **D. Bhattacharyya** (2015). *Arthraxon hispidus* (Thunberg) Makino [Poaceae]: a new record for the flora of Manipur, India. *Pleione* 9(1): 251 - 254. ISSN: 0973-9467.
23. M. Devi & **D. Bhattacharyya** (2015). Rediscovery of the red-listed grass *Isachne dimyloides* (Poaceae: Micrairoideae) 130 years after type collection. *Phytotaxa* 221(1): 093-096. ISSN 1179-3155 (print edition); ISSN 1179-3163 (online edition). DOI 10.11646/phytotaxa.221.1.11.
24. Das, S., L. Darlong & **D. Bhattacharyya** (2015). A remarkable taxon *Jackiella javanica* Schiffner variety *cordifolia* Schiffner proclaims its first occurrence in northeastern India. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* DOI 10.1007/s40011-015-0563-4 (Published in ONLINE FIRST).

25. Devi, M. & **D. Bhattacharyya** (2016). *Themeda quadrivalvis* (L.) Kuntze (Poaceae): A new record for Assam, India. *Indian Forester* 142(3): 302 – 303. ISSN: 0019-4816 (Print), ISSN: 2321-094X (Online).
26. Darlong, L. & **D. Bhattacharyya** (2016). Five new additions of lianas to the state flora of Tripura, India. *Indian Forester* 143(12): 1230 – 1233. ISSN: 0019-4816 (Print), ISSN: 2321-094X (Online).
27. Devi, K. T., P. K. Singh & **D. Bhattacharyya** (2016). Three new additions to the grass (Poaceae) flora of Manipur, India. *Plant Science Today* 3(3): 272 – 281. ISSN: 2348-1900 (Online)
28. Smýkal, P., I. Hradilová, O. Trněný, J. Brus, A. Rathore, M. Bariotakis, R. R. Das, **D. Bhattacharyya**, C. Richards, C. J. Coyne & S. Pirintsos (2017). Genomic diversity and macroecology of the crop wild relatives of domesticated pea. *Scientific Reports* 7: 17384. Page 1 – 12. DOI: 10.1038/s41598-017-17623-4. [www.nature.com/scientificreports](http://www.nature.com/scientificreports).
29. Bora, A. & **D. Bhattacharyya** (2017). Phytodiversity of Barail Wildlife Sanctuary, Assam, India: field-based observations – I. Trees and lianas. *Check List* 13 (6): 1037–1053. <https://doi.org/10.15560/13.6.1037>
30. Bora, A. & **D. Bhattacharyya** (2017). Angiosperm diversity in Barail Wildlife Sanctuary and its adjacent areas, Assam, India: An overview. *NeBIO* 8 (4): 226 – 240. ISSN 2278-2281(Online Version).
31. **Chanu, L. M. & D. Bhattacharyya** (2017). *Trachelospermum asiaticum* (Siebold & Zucc.) Nakai(Apocynaceae): a new record to the flora of Manipur, India. *Pleione* 11(2): 532 – 536. DOI:10.26679/Pleione.11.2.2017.532-536
32. Bora, A., M. Devi & **D. Bhattacharyya** (2017). Grasses and bamboos of Barail Wildlife Sanctuary in Assam, India. *Pleione* 11(2): 440 – 454. DOI:10.26679/Pleione.11.2.2017.440-454
33. Smýkal, P., O. Trněný, J. Brus, P. Hanačková, A. Rathore, R. R. Das, V. Pechanec, M. Duchoslav, **D. Bhattacharyya**, M. Bariotakis, S. Pirintsos, J. Berger, C. Toker (2018). Genetic structure of wild pea (*Pisum sativum* subsp.*elatius*) populations in the northern part of the Fertile Crescent reflects moderate cross-pollination and strong effect of geographic but not environmental distance. *PLoS ONE* 13(3): e0194056. Page 1 – 22. <https://doi.org/10.1371/journal.pone.0194056>
34. Ghosh, S. & **D. Bhattacharyya** (2018). Five new additions to the grass flora of Tripura State, India. *Journal of Threatened Taxa* 10(3): 11484 – 11492. DOI: <http://doi.org/10.11609/jot.3461.10.3.11484-11492>
35. Das, S., A. Uddin, **D. Bhattacharyya** & S. Chakraborty (2018). Transcript free energy positively correlates with codon usage bias in mitochondrial genes of *Calypogeia* species (Calypogeiaceae, Marchantiophyta). *Mitochondrial DNA Part A* 30(2): 201 – 213. DOI: 10.1080/24701394.2018.1472772

36. Bora, A. & **D. Bhattacharyya** (2018). A Newly Recorded Phenomenon of Viviparous Germination in *Ophiorrhiza succirubra* King ex Hook.f. (Rubiaceae). *Indian Forester* 144 (12): 1230 – 1231. ISSN No. 0019-4816 (Print) ISSN No. 2321-094X (Online).
37. **Bhattacharyya, D.**, A. Uddin, S. Das & S. Chakraborty (2019). Mutation pressure and natural selection on codon usage in chloroplast genes of two species in *Pisum* L. (Fabaceae: Faboideae). *Mitochondrial DNA Part A* 30(4): 664 – 673. DOI: 10.1080/24701394.2019.1616701
38. Sharma, H. B. & **D. Bhattacharyya** (2019). Foliar anatomical studies of some selected species of *Dendrobium* Sw. (Orchidaceae) in Manipur, India. *Pleione* 13(1): 108 – 121. DOI:10.26679/Pleione.13.1.2019.108-121
39. **Chanu, L. M. & D. Bhattacharyya** (2020). Additions of woody climbers (Lianas) to the flora of Manipur, India. *Journal of Threatened Taxa* 12(4): 15522 – 15529. DOI: <https://doi.org/10.11609/jott.48024>
40. Ghosh, S. & **D. Bhattacharyya** (2020). New generic records of grasses from Tripura, India. *Plant Science Today* 7(3): 319 – 332. <https://doi.org/10.14719/pst.2020.7.3.763>
41. Ghosh, S. & **D. Bhattacharyya** (2020). Pseudovivipary in two Panicoid Grasses (Poaceae) from Tripura, India. *Indian Forester* 146 (7): 665 – 667. DOI: 10.36808/if/2020/v146i7/147640

#### Book Chapters:

1. **Bhattacharyya D.** & M. Sanjappa (2014). *Rhododendron*. In Sanjappa, M. & A. R. K. Sastry (eds.) Fascicles of Flora of India (Fascicle 25 Ericaceae). Botanical Survey of India, Kolkata. ISBN: 81-8177-014-5. pp 9 – 157.
2. Devi, M. & **Debjoyoti Bhattacharyya** (2018). Morpho-taxonomic and foliar epidermal studies of the genus *Paspalum* L. (Poaceae) in BarakValley, Assam. In: Borthakur, S.K., A. Bawri, N. Nath (eds.) Advances in Botanical Research in North East India. ISBN: 978 93 86302 52 6.
3. Sharma, H. B., A. N. Rao & **D. Bhattacharyya** (2019). Wild Ornamental species of *Dendrobium* Sw. (Orchidaceae) in Manipur, India: Documentation, Cultivation and their prospects in Horticulture. In: Khurajam, J. S. (ed.) Wild Ornamental Plants of India. Daya Publishing House, New Delhi. Pp. 55 – 74. ISBN: 978-93-88173-81-0 (HB).