

CURRICULUM VITAE

1. **NAME:** DR. DIPU SAMANTA
2. **DESIGNATION:** STATE AIDED COLLEGE TEACHER- 1
3. **DEPARTMENT:** BOTANY
4. **EMAIL ID:** dipusamanta2010@gmail.com
botany2020kbc@gmail.com
5. **DATE OF JOINING IN THIS COLLEGE:** 06.12.2017 (As Guest Lecturer)
Redesignated as SACT on and from 01.01.2020

6. ACADEMIC QUALIFICATION:

COURSE	SUBJECT	UNIVERSITY
B.Sc.	Botany	University of Calcutta
M.Sc.	Botany (Special Paper: Plant Cell and Tissue Culture)	University of Calcutta
Ph.D.	Botany	University of Calcutta

7. TEACHING EXPERIENCE:

INSTITUTION	COURSE	DURATION
Dr. Kanailal Bhattacharyya College	UG	06.12.2017 to till date
Lady Brabourne College	PG (as visiting faculty)	16.02.2018 to till date
Jogesh Chandra Chaudhuri College	UG	01.08.2016 - 13.12.2019

8. RESEARCH EXPERIENCE: From August, 2010 to till date.

INSTITUTION	DURATION
University of Calcutta (As Research Scholar)	August, 2010 – November, 2017
Lady Brabourne College (As Honorary)	February, 2018 – till date
Presidency University (As Honorary)	June, 2022 - till date

A) Research area:

- Micropropagation, *in vitro* callus culture, somatic embryogenesis and organogenesis of medicinally important plants, determination of clonal fidelity

- Cytomorphological analysis
- Estimation of 4C Nuclear DNA content using Cytophotometer
- Molecular analysis- using RAPD, ISSR, ITS primers, Spectrophotometric analysis
- Biochemical analysis- Protein, Isozyme assay, HPLC analysis, secondary metabolites assay
- Transcriptome analysis
- Statistical analysis and Phylogenetic study

B) Title of the Thesis:

“Analysis of Different Species and Varieties of *Tabernaemontana* using Chromosomal, Biochemical and Molecular Parameters”.

9. PAPER PUBLISHED IN JOURNAL (22)

Sl no.	Title of Paper	Journal	Year	ISSN Number	Journal/ article Link
1.	Effects of cytokinin <i>in vitro</i> shoot bud multiplication and subsequent plant regeneration of <i>Solanum melongena</i> L.	Journal of the Botanical Society of Bengal	2011	0971 - 2976 (Print)	https://connectjournal.s.com/subscription_info.php?bookmark=CJ-000258 (Published in print version only)
2.	Karyomorphological analysis of different varieties of <i>Tabernaemontana coronaria</i> .	Cytologia	2015	0011 - 4545	https://www.jstage.jst.go.jp/article/cytologia/80/1/80_67/_pdf
3.	A review on <i>in vitro</i> propagation of <i>Centella asiatica</i> L.: an important medicinal herb	Journal of the Botanical Society of Bengal	2015	0971 - 2976 (Print)	https://connectjournals.com/subscription_info.php?bookmark=CJ-000258 (Published in print version only)
4.	Cytomorphological analysis and <i>in situ</i> 4C nuclear DNA estimation in species and varieties of <i>Tabernaemontana</i> (fam. Apocynaceae)	Nucleus	2016	(ONLINE ISSN 0976-7975, PRINT ISSN 0029-568X)	https://link.springer.com/article/10.1007/s13237-016-0166-3

5.	Genome analysis of <i>Tabernaemontana</i> utilizing cyto-morphological and nuclear DNA parameters	Journal of the Botanical Society of Bengal	2016	0971-2976 (Print)	https://connectjournals.com/subscription_info.php?bookmark=CJ-000258 (Published in print version only)
6.	Morphological characterization and somatic chromosome number determination in five populations of <i>Sphagneticola calendulacea</i> (L.) Pruski.	Journal of the Botanical Society of Bengal	2017	0971 - 2976 (Print)	https://connectjournals.com/subscription_info.php?bookmark=CJ-000258 (Published in print version only)
7.	Protein and isozyme analysis in different species, varieties and populations of <i>Tabernaemontana</i>	International Journal of Botany Studies	2018	2455 - 541X	https://www.botanyjournals.com/archives/2018/vol3/issue1/2-6-62
8.	<i>In vitro</i> stable plantlet regeneration from callus culture of <i>Cicer arietinum</i> L.	International Journal of Pharmacy and Biological Sciences	2018	2230-7605 (Online) 2321-3272 (Print)	https://www.ijpbs.com/ijpbsadmin/upload/ijpbs_5b98be44180ee.pdf
9.	Analysis of different varieties of <i>Tabernaemontana coronaria</i> using ISSR and ITS markers.	Journal of the Botanical Society of Bengal	2018	0971 - 2976 (Print)	https://connectjournals.com/subscription_info.php?bookmark=CJ-000258 (Published in print version only)
10.	<i>In vitro</i> clonal propagation, organogenesis and somatic embryogenesis in <i>Bacopa monnieri</i> (L.) Wettst	Plant Science Today	2019	2348 - 1900	https://horizonpublishing.com/journals/index.php/PST/article/view/600
11.	Augmentation of antioxidative potential of <i>in vitro</i> propagated <i>Mentha</i>	Indian Journal of Experimental Biology	2020	0975 - 1009	http://op.niscpr.res.in/index.php/IJEB/article/view/65344/465481146

	<i>piperita</i> L.			(Online), 0019-5189 (Print)	
12.	Insights into the phytochemical potential of <i>Lawsonia inermis</i> L. for future small molecule based therapeutic applications	International Research Journal of Plant Science	2020	2141 - 5447	https://www.interesjournals.org/articles/insights-into-the-phytochemical-potential-of-lawsonia-inermis-l-for-future-small-molecule-based-therapeutic-applications.pdf
13.	Influence of the home cooking practices on the bioactive components of two important edible herbs- <i>Amaranthus viridis</i> and <i>Amaranthus tricolor</i>	International Journal of Pharmaceutical Investigation	2021	2230-9713 (Online), 2230 - 973X (Print)	https://jpionline.org/storage/2023/05/IntJPharmaInvestig-11-1-027.pdf
14.	A review on the potential of Bacoside as therapeutic lead molecules	International Research Journal of Plant Science	2021	2141 - 5447	https://www.interesjournals.org/articles/a-review-on-the-potential-of-bacosides-as-therapeutic-lead-molecules.pdf
15.	<i>In vitro</i> stable regeneration of an important medicinal herb <i>Bacopa monnieri</i> (L.) Pennell- a way of conservation	International journal of integrated research and development	2021	2278 - 8670	https://www.ijird.org/ (Published in print version only)
16.	Role of plants in mitigating pollution: A case study	Indian Journal of Applied & Pure Biology	2021	0970 - 2091	Indian Journal of Applied & Pure Biology Role of plants in mitigating

		(Special Volume)			pollution: A case study (biology-journal.org)
17.	Mangrove and molluscs association in Indian Sundarbans	Journal of the Botanical Society of Bengal	2021	0971 - 2976 (Print)	https://connectjournals.com/subscription_info.php?bookmark=CJ-000258 (Published in print version only)
18.	Plants for Soil pollution Control: A Review	Indian journal of applied and pure biology (Special Volume)	2021	0970 - 2091	https://biology-journal.org/journal/volume2/issue2/ijapb2s-2-17.html
19.	Phytochemical and molecular profiling of tissue culture derived Bacopa monnieri (L.) Wettst clones against field grown plants	International Journal of Botany Studies	2022	2455 - 541X	https://www.botanyjournals.com/assets/archives/2022/vol7issue4/7-4-20-377.pdf
20.	Cytokinin and abiotic stress tolerance- what has been accomplished and the way forward?	Frontiers in Genetics	2022	1664 - 8021	https://www.frontiersin.org/articles/10.3389/fgene.2022.943025/full
21.	Traditional uses, phytochemistry, pharmacology and toxicology of garlic (Allium sativum), a storehouse of diverse phytochemicals: A review of research from the last decade focusing on health and nutritional implications	Frontiers in Nutrition	2022	229 6861 X	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9650110/

22.	Transcriptome analysis reveals upregulated secondary metabolite pathways in micropropagated <i>Lawsonia inermis</i> L.	Vegetos	2023	0970 - 4078	https://link.springer.com/article/10.1007/s42535-023-00613-5
23.	Biotechnology of <i>Passifora edulis</i> : role of <i>Agrobacterium</i> and endophytic microbes	Applied Microbiology and Biotechnology	2023	1432-0614	https://link.springer.com/article/10.1007/s00253-023-12667-1

10. BOOK/ BOOK CHAPTER PUBLISHED: (09)

Sl. No.	Title of the book/chapter published	Title of the paper	Year of publication	ISBN/ISSN number of the proceeding	Name of the publisher
1	Frontiers In Life Science	Invitro Clonal Propagation In <i>Centella asiatica</i>	2021	978-81-953600-5-5	Bhumi Publishing
2	Fundamentals on Plant And Soil Microbial Interactions (Theory And Practice)	A Review Of Organic Farming	2021	978-93-91681-08-1	Bharati publications
3	Biodiversity and Sustainable Resource Management (Basic to Research)	Ecological Significance of Estuarine Molluscs	2021	978-93-91681-28-9	Bharati publications
4	Biodiversity and Sustainable Resource Management (Basic to Research)	Indian Sundarbans: A Harbour Of Molluscs in Association with Mangroves	2021	978-93-91681-28-9	Bharati publications

5	Plant Tissue Culture-A Lab Manual		2022	Online- 978-93-5547-248-9, Print- 978-93-5547-240-3,	BP International
6	New Visions in Biological Science vol.9	A Manifestation on The Phytoplankton Dynamics of Sundarbans Ecoregion	2022	Online- 978-93-5547-582-2, Print- 978-93-5547-523-7,	BP International
7	Environmental Management	Environmental Degradation: Causes, Its Impact on Living Organisms and Mitigation	2022	978-93-91550-73-8	NB Publications
8	Environment and Sustainable Development: Problems, Prospects and Mitigation	<i>In vitro</i> Regeneration of <i>Glycyrrhiza glabra</i> L.	September 2022	978-93-94779-43-3	Bharti Publications
9	Birds around us	A Review on Role of Birds in Agriculture and Forestry	November, 2022	978-93-94779-62-4	Bharti Publications

11. PAPER PUBLISHED IN PROCEEDINGS (01)

SL NO.	NAME OF THE PROCEEDINGS	ORGANIZED BY	TITLE OF PAPER	YEAR
1.	Proceedings of Botanicals in Integrated Health Care	Agri Horticultural Society of India.	Stable Plant Regeneration through Somatic Embryogenesis in two species of <i>Allium</i> .	2010 (Print version only)

12. PAPER/ POSTER PRESENTED IN SEMINAR/ CONFERENCE/ SYMPOSIUM: (16)

SL NO.	INTERNATIONAL/ NATIONAL/ STATE/ LOCAL	ORGANIZED BY	TITLE OF PRESENTATION	DATE
1.	International	Agri Horticultural Society of India.	Stable Plant Regeneration through Somatic Embryogenesis in two species of <i>Allium</i> . (Poster presentation)	26 th - 28 th December, 2010
2.	National	Indian Science Congress Association	Cyto-morphological study of species and varieties of <i>Calathea</i> . (Poster presentation)	3 rd – 7 th January, 2013
3.	International	University of Calcutta	Genome analysis of varieties of <i>Tabernaemontana divaricata</i> using chromosomal and molecular markers. (Poster presentation)	15 th -16 th February, 2014
4.	National	West Bengal Academy of Science & Technology	Cytological study of <i>Tabernaemontana coronaria</i> . (Poster presentation)	27 th - 29 th November, 2014,
5.	National	All India Congress of Cytology and Genomics	Chromosome analysis and <i>in situ</i> 4C nuclear DNA estimation in <i>Tabernaemontana</i> . (Poster presentation)	22 nd - 24 th December, 2015,
6.	International	University of Calcutta	Karyological, biochemical and molecular investigations on <i>Tabernaemontana</i> . (Poster presentation)	21 st - 23 rd December, 2016
7.	National	University of Calcutta	Genome characterization of different species, varieties and populations of <i>Tabernaemontana</i> using protein and molecular markers. (Poster presentation)	29 th and 30 th March, 2018

8.	International	St. Xavier's College in collaboration with The Blue Patch and The Biome	A study on biochemical characterization and micropropagation of <i>Lawsonia inermis</i> .	20 th December, 2019
9.	National	Bidhannagar College	Micropropagation as a tool for meeting the challenge of manipulation and conservation of two species of <i>Mentha</i> . (Poster presentation)	22 nd and 23 rd February, 2020
10.	National	Seva Bharti Mahavidyalaya, Lalgarh College in collaboration with Dristicon organization	<i>In vitro</i> stable regeneration of an important medicinal herb <i>Bacopa monnieri</i> (L.) Pennell- a way of conservation. (Oral presentation)	28 th to 30 th July, 2021
11.	International	St. Aloysius College	A review on the role of natural immunomodulators in respect to the COVID- 19 outbreak (Oral presentation)	27 th and 28 th August, 2021
12.	International	Seva Bharti Mahavidyalaya, Lalgarh College in collaboration with Avinashilingam Institute for Home Science and Higher Education for Women	<i>In vitro</i> regeneration of <i>Glycyrrhiza glabra</i> L. (Oral presentation)	25 th - 27 th November, 2021
13.	International	Seva Bharti Mahavidyalaya, Lalgarh College in collaboration with Avinashilingam Institute for Home Science and Higher Education for Women	Role of plants in mitigating pollution: A case study (Oral presentation)	25 th - 27 th November, 2021
14.	National	Seva Bharti Mahavidyalaya, Lalgarh College in collaboration with Avinashilingam	Plants for soil pollution control: A review(Oral presentation)	22 nd – 23 rd December, 2021

		Institute for Home Science and Higher Education for Women		
15.	National	Department of Botany, Siksha- Bhavana, Visva-Bharati, Santiniketan & Department of Botany, Raidighi College	Rapid <i>in vitro</i> stable regeneration of <i>Bacopa monnieri</i> (L.) Wettst (Oral presentation)	22 nd and 23 rd January, 2022
16.	National	GGDC Lalgarh	Traditional herbs: A Remedy for Hypertension (Oral presentation)	25 th and 26 th November, 2022

13. SPEAKER/ RESOURCE PERSON: (02)

SL NO.	INTERNATIONAL/ NATIONAL/ STATE/ LOCAL	ORGANIZED BY	TITLE OF PRESENTATION	DATE
1.	International	Reignite Innovative Conferences- 2 nd edition of Global Biotechnology Conference	<i>In vitro</i> studies of an important medicinal herb <i>Bacopa monnieri</i> with reference to chromosome and biochemical analysis.	18 th and 19 th March, 2021
2.	Local	Lalgarh College, Seva Bharti Mahavidyalaya in collaboration with Dristicon organization	Plant cell and tissue culture: a way of plant propagation.	25 th September, 2021

14. WORKSHOP/FDP/SHORT TERM COURSE ATTENDED (32)

Academic Session	Sl no.	Course	Topic	Organized by	Date
2018-19	1	Workshop	B.Sc. Practical syllabus(Algae and Fungi)	Prabir Chatterjee Research Foundation in collaboration with CAS, Dept. of Botany, University of Calcutta	1 st August, 2018
	2	National Workshop	Vascular Plant Taxonomy: Field skills, Plant identification & Plant nomenclature	Taxonomy Research & Training Centre (AICOPTAX, MoEF & CC, Govt. of India) & CAS, Dept. of Botany, University of Calcutta	5 th to 12 th December, 2018
	3	National Workshop	Cryptogam Taxonomy: Field to Laboratory	Taxonomy Research & Training Centre (AICOPTAX, MoEF & CC, Govt. of India) & CAS, Dept. of Botany, University of Calcutta	29 th January to 5 th February, 2019
2019-20	1	Local Workshop (Summer School)	Computational biology and <i>in silico</i> data analysis	The Biome Research Facility	10 th – 16 th August, 2019
	2	National Workshop	Translational approach of the Botanical Code	Taxonomy Research & Training Centre (AICOPTAX, MoEF & CC, Govt. of India) & CAS, Dept. of	10 th to 12 th February, 2020

				Botany, University of Calcutta	
	3	Workshop	B.Sc. Practical Syllabus (Plant Geography, Ecology and Evolution, Economic Botany, Genetics)	Prabir Chatterjee Research Foundation in collaboration with CAS, Dept. of Botany, University of Calcutta	4 th to 6 th March, 2020.
	4	5-days Online International Faculty Development Programme	Teaching, learning & evaluation in HEIs in pandemic & post pandemic India- Issues & Challenges	Indian Academic Researchers Association in association with Barrackpore Rastraguru Surendranath College & Panihati Mahavidyalaya	25 th to 29 th June, 2020
2020-21	1	2-days e- Workshop	Online Teaching, Learning and Evaluation	New Alipore College and K. K. Das College	18 th and 19 th July, 2020
	2	Faculty Development Programme	Outcome Based Education	Rai University, Pune	22 nd to 24 th July, 2020
	3	2- days Professional Development Programme	Application of ICT in the 'New Normal' Teaching & Learning	Barrackpore Rastraguru Surendranath College	29 th and 30 th July, 2020
	4	One week Faculty Development Programme	Art of effective teaching	Vidya Jyothi Institute of Technology	3 rd to 8 th August, 2020

	5	7-days International Workshop/ STC	Challenges and opportunities of e-learning in special context to educational philosophy	KGK College, Moradabad	7 th to 13 th August, 2020
	6	Workshop	Aquaculture and Fisheries: Development and Sustainability	Guru Nanak College (Autonomous)	13 th to 19 th August, 2020
	7	2-days e-Workshop: e-Adhyayan	Online Teaching, learning and evaluation	Uluberia College and K. K. Das College	16 th and 17 th August, 2020
	8	5-days Online Faculty Development Programme	An Insight into Research Methodology in Social Science	Barasat College	24 th to 28 th August, 2020
	9	2-days National Workshop	Online Teaching-Learning in Present Scenario	Department of Education, Kidderpore College in collaboration with IQAC, Kidderpore College	26 th and 27 th August, 2020
	10	National Online Professional Development Programme	The open way of virtual learning and issues of plagiarism	Karimpur Pannadevi College	30 th August, 2020
	11	National online Faculty Development Programme	Online Teaching and Learning Tools	St. Mary's College (Autonomous)	6 th to 8 th November, 2020

	12	Faculty Development Programme	Emerging Trends in Plant Sciences Topic III – Intellectual Property Rights: Powerhouse for Innovation	Department of Botany, Vivekananda College, Tiruvedakam West, Madurai	1 st March, 2021
	13	Faculty Development Programme	Emerging Trends in Plant Sciences Topic VI – An Insight into the Biology of Arbuscular Mycorrhizal Symbiosis	Department of Botany, Vivekananda College, Tiruvedakam West, Madurai	26 th March, 2021
	14	National e-Workshop	Modern angiospermic taxonomy: Concept, Tools and Techniques	Dev Samaj College for Women, Ferozepur	4 th May, 2021
	15	One week FDP Webinar	Digital skills for smart teaching	Don Bosco College (Autonomous), Manipur	14 th to 19 th June, 2021
	16	Online Faculty Development Workshop	How to Use ICT in Teaching, Learning & Administrative Practices in Higher Education Institutions	IQAC, Surendranath College	18 th to 20 th June, 2021
2021-22	1	Online Faculty Development Programme	Biopharmaceutical Technology & Probiotics	St. Aloysius College (Autonomous), Jabalpur, (M. P.), INDIA	8 th - 14 th November 2021
	2	FDP (online)	St. Mary's College (Autonomous), Thoothukudi	Nanomaterials	23 rd - 27 th November 2021

	3	Online Faculty Development Programme	Data Analytics for Business & Research	St. Xavier's College (Autonomous), Kolkata	4th December, 2021
	4	UGC Stride Sponsored Training Programme	Avinashilingam Institute for Home Science and Higher Education for Women	Environmental Sustainability and Research Ethics	21 st – 26 th March, 2022
	5	Workshop (online)	Department of Life Sciences, Sanjivani Arts Commerce and Science College	Bioinformatics	8 th & 9 th April, 2022
2022-23	1	Workshop	A.P.J. Abdul Kalam Government College in collaboration with Central National Herbarium & ENVIS Resource Partner on Biodiversity-Botanical Survey of India	Identification and Nomenclature of plants including Lower Groups	6 th -7 th September, 2022
	2	Workshop	University Of Calcutta	Mushroom cultivation, microalgae cultivation and biomolecules separation	8 th -10 th September, 2022
	3	Workshop	City College, Kolkata	Basic Cell Biology Techniques	25 th - & 26 th November, 2022
	4	Workshop	Kolkata Bidhannagar Society For Academic Advancement Jointly With Vidyanagar College.	Research Methodology	24 th – 25 th June, 2023

2023-24	1	Workshop	Udaan Educational Services	Academic Integrity and Prevention of Plagiarism	16 th - 18 th July, 2023
	2	Workshop	Udaan Educational Services	Reference Management	25 th - 27 th September, 2023

15. ANY OTHER INFORMATION: -

- Reviewer of a Journal (Scopus indexed, Web of Science UGC care list II journal) (April, 2020 to till date).
- Coordinator of Science Fair and Organizing committee member of 1st Botanical congress organized by Botanical society of Bengal and University of Calcutta, held on 23.3.23 to 25.3.23.
- Executive Council member of Botanical Society of Bengal (July, 2022 to till date).

16. LIFE MEMBERSHIP: -

Botanical Society of Bengal

Prabir Chatterjee Research Foundation