

**DURGA PRASAD BARIK, Ph.D., PDF****Professor & Former Head**

Department of Botany & Biotechnology,

Ravenshaw University (**NAAC A<sup>++</sup>**), Cuttack-753 003, Odisha, India

Tel. (off.): +91-671-2513268, Cell: +91-9437160129 & 9853316200

E-mail: dpbarik@ravenshawuniversity.ac.in, barikdp@yahoo.com, barikdp@gmail.com

Webpage: <http://www.ravenshawuniversity.ac.in>

Linkedin: <https://www.linkedin.com/in/durga-prasad-barik-a481b1227/>

Researchgate: <https://www.researchgate.net/profile/Durga-Barik/stats/report/weekly/2021-11-28>

[https://orcid.org/ 0000-0002-0319-968X](https://orcid.org/0000-0002-0319-968X)

**1. PRESENT WORKING STATUS:** Professor & Former HOD from August, 2022 to 2024

- : BOS, DRC, RAC Member of Botany RU, other Govt. Colleges and CRRI; VC nominee for Zoology; Subject expert of Odisha Biodiversity Board (OBB)
- : NEP-2020 Coordinator & Member of Tender Committee, RU; Prof. I/C Ravenshaw Convention Centre, Skill Centre, Heritage hall, Guest house etc.
- : Deputy Controller of Examination from 2016-2022 (3 terms)
- : Nodal Officer for NDML from Dec. 2020
- : Dy. Warden Lalitgiri hostel; June, 2017 to July, 2018
- : Visiting examiner for ICSE Board, New Delhi from 2004

**2. AREA OF RESEARCH INTEREST:** Hairy root induction and multiplication using *Agrobacterium rhizogenes* in medicinal plants; Molecular & biochemical analysis of rhizoclones; Plant Cell, Tissue and Organ Culture; Molecular analysis i.e. Flow cytometry, RAPD, AFLP, SSR, ISSR etc.; *Agrobacterium*-mediated genetic transformation; Multi-elemental analysis by EDXRF techniques; Extraction of secondary metabolites; Analysis of bio-active molecules by TLC, HPLC, HPTLC and NMR.**3. AWARDS AND ACHIEVEMENTS:** (i) SERB-Fast Track Young Scientist, DST, Govt. of India in 2007

- (ii) Dr. P.D. Sethi memorial Annual National Award 2018
- (iii) Best record of publication from Ravenshaw University on 15<sup>th</sup> Nov. 2019
- (iv) Organized 04 National Seminars as Treasurer (2012), Organizing Secretary (2019), Organizing Secretary Finance (ETPSR-2020) and Co-convenor (ETPSR-2025); As Organising secretary international online seminar in 2021.
- (V) RU achieved '**NAAC A<sup>++</sup>**' during my HOD in 2022, DBT star college in 2023 & FIST II
- (vi) Reviewer of different international Journals such as PMBP, PNASI, ICP, JPRI, Discover plants (Springer Nature), Elsevier, Plant Science, International Journal of Secondary Metabolite, Plant Science Research
- (vii) The EBSCO Training for e-Book, Journals, Generative AI (GenAI) in Scientific Writing and Scholarly Publishing and ScienceDirect for ONOS

**4. RESEARCH PROJECTS:****a. Title of Project:** *Agrobacterium*-transformed hairy root cultures of some important medicinal plants of Orissa as a source of pharmaceutical compounds.

Funding Agency: DST Govt. of INDIA, Total Amount Sanctioned: 13,48,800/- (2007-2010)

**b. Title of the project:** Development of efficient *in vitro* plant regeneration protocols for conservation of *Hedychium coronarium* J. Koenig and *Symplocos racemosa* Roxb: two threatened medicinal medicinal plants of Odisha”  
 Funding Agency: DST Govt. of Odisha, Total Amount Sanctioned: 8,64,000/- (2014-2017)

**c. Title of the project:** *Agrobacterium*-mediated hairy root culture of two important medicinal plants of Odisha for production of bio-active compounds, PI, Amount : 9,96,000/- (2019-2022)  
 Funding Agency: DST Govt. of Odisha.

**d. One research proposal submitted to ANRF-ARG-2025 of Rs. 48 lakhs, proposal has been accepted for technical evaluation on 06-08-2025**

**5. PROFESSIONAL MEMBERSHIP :**

- (a) Life member of Bigyan Prachar Samiti in 2024
- (b) Institutional Bio-safety Committee (IBSC) for 2015-2018, Ravenshaw University
- (c) Life Member of Indian Science Congress Association (ISCA)
- (d) Life Member of Orissa Botanical Society (OBS)
- (e) Life Member of Botanist Association of Ravenshaw College (BARC)
- (f) Life Member of Old Student association of Botany, Utkal University

**6. TEACHING EXPERIENCES:** Seven (07) years as temporary (M. Sc. Bot., Biotech. & + 2 Botany)  
 Fifteen (15) years in UGC scale (B.Sc. Bot., M.Sc. Bot. & Biotech.)

POST HELD	INSTITUTION	PERIOD	
		From	To
Assistant professor of Botany, 12 years	Department of Botany & Biotechnology, School of Life Sciences, Ravenshaw University, Cuttack – 753003, Odisha, India	8 <sup>th</sup> Feb. 2010	Cont....
SERC Fast Track Young Scientist, DST, Govt. of India, (03 years)	Post-Graduate Dept. of Botany, Utkal University, Bhubaneswar-751 004, ORISSA	29 <sup>th</sup> Nov. 2007	8 <sup>th</sup> Feb., 2010
Faculty cum Lab Technical Associate for Four (04) years	M. Sc. Biotechnology, Dept. of BOTANY, Ravenshaw University, Cuttack, Orissa	20 <sup>th</sup> Oct. 2003	29 <sup>th</sup> Nov. 2007
Research Scholar for Six (06) months	Regional Plant Resource Center, Nayapali, Bhubaneswar	1 <sup>st</sup> May, 2003	19 <sup>th</sup> Oct. 2003
Research Scholar for Five (05) years	Post-Graduate Dept. of Botany, Utkal University, Bhubaneswar, Orissa, INDIA	1 <sup>st</sup> June, 1999	19 <sup>th</sup> Oct., 2003
Research Associate (RA) for One (01) Year	In I.C.A.R ad-hoc scheme on “Exploitation of hybrid vigor in sesame” ( <i>Mutation Breeding</i> ) Orissa University of Agriculture (OUAT), Bhubaneswar, Orissa, INDIA	7 <sup>th</sup> April, 1998	31 <sup>st</sup> May, 1999

**7. STUDENTS SUPERVISION:** Ph. D.-07 awarded, 02-Submitted, 04-in progress, M. Phil. -12 awarded, M.Sc. Projects (Biotech & Botany) – 36 awarded, 02-continuing

Ph.D. STUDENTS			
SL. No.	NAME & ROLL NO.	TOPIC	NOTIFICATION NO.
1	Deepak Kumar Nayak, 13PH-BT-008	Pyramiding of bacterial blight resistant genes into popular deep water rice variety, Jalmagna through marker assisted back crossing	No. 554/12-2016
2	Arpita Moharana, (BPRF)11PHBT-004	Secondary metabolites production through <i>in vitro</i> regenerated plants of <i>Lawsonia inermis</i> L.: a multipurpose plant	No. 276/05-2018
3	Biswa Ranjan Behera, (RGNF)11PH BT-006	<i>In vitro</i> studies on <i>Paederia foetida</i> L. – A valuable medicinal plant	No. 639/09-2018

4	Aradhana Das, (JRF)14PH-BT-006	Phytochemical and molecular profiling of ginger from different agro climatic regions of Odisha	No. 911/12-2018
,			
5	Sanjukta Badhai (JRF) 12PH-BO-004	Effective delivery of phytosterol based drugs against colon cancer	No. 1134 dt. 03-12-2021
6	Sanjay Kumar Madkami (RGNF) 15PH-BO-001	Plant regeneration and assessment of genetic fidelity using molecular markers of <i>Mucuna gigantea</i> (Willd.) DC.-An endangered medicinal mangrove plant.	No.482 dt.26-07-23
7	Sudhansu Sekhar Bhuyan (NRRI, JRF) 20PH-BT-001	Double haploid breeding strategies for multiple traits introg-reession: Efficiency in development of climate resilient rice ( <i>O. sativa</i> L.)	No. 454 dt. 28-11-2024
8	Srushti P. Mohanty (BPRF) 20PH-BO-006	Assessment of clonal fidelity and comparative study of secondary metabolites of <i>Uvaria hamiltonii</i> Hook.	Thesis under preparation
9	Bhaswatimayee Mahakur (PF) (21-PH-BT-001)	A comparative study of secondary metabolites in transformed and non-transformed rhizoclones of <i>Vitex negundo</i> L. using <i>Agrobacterium rhizogenes</i>	Thesis submitted on 25-09-25
10	Pramod K. Jena (Raiganj University) 010114170222308	Study of surface water quality in respect to microbial community of river	Thesis submitted
11	Aryaputri Bedaprabha (JRF) 21PH-BO-001	<i>Agrobacterium rhizogenes</i> mediated transformed rhizoclones for secondary metabolite production and comparison in <i>Lawsonia inermis</i>	Work started
12	Sandeep K. Mohanta (JRF)22 PH-BO-003	<i>In vitro</i> propagation, phytochemical and pharmacological studies on <i>Lasiococca comberi</i> haines: an endemic threatened plant of eastern ghats"	Work started
13	Sarmistha Rout (JRF) 23PH BO-006	Editing of dense erect pride 1 (DEP 1) gene for regulatory yield and nitrogen use efficiency in rice ( <i>Oryza sativa</i> L.)	Work started
<b>M. Phil. STUDENTS</b>			
1	Sushree Sasmita Sahoo, M10-006	Studies in micropropagation and antimicrobial activities of elite medicinal plant <i>Aloe vera</i> L	2010
2	Nupur Naik, L10/BO-005	Plant regeneration from callus cultures of <i>Paederia foetida</i> L.	2011
3	Sarita Parida, L11/BOT 005	Direct multiple shoot proliferation from various explant of <i>L. inermis</i> L.	2012
4	Banani Tripathy, L12BT-003	Comparative studies on <i>in vivo</i> and <i>in vitro</i> callus cultures and antimicrobial activities of <i>Lawsonia inermis</i> L."	2013
5	Narayani Dash, 13L/BO-002	Clonal fidelity assessment of <i>in vitro</i> regenerated plants of <i>Lawsonia inermis</i> L. using RAPD markers.	2014
6	Ardhendu Sekhar Dwibedy, 14LLIF-009	Synthetic Seed Production of <i>Lawsonia inermis</i> L.	2016
7	Abhipsa Panda, 14LBO-009	Cotyledonary node based micropropagation of <i>Mucuna gigantean</i> (Willd.) DC.	2016
8	Bhagyeswari Behera, 15LBO-006	Comparative antibacterial and phytochemical studies of <i>in vivo</i> and <i>in vitro</i> plant parts of <i>Mucuna gigantea</i> (Willd.) DC. - An endangered medicinal plant of Odisha	2016
9	Anupama Behera, 16LBO-003	Cotyledonary Node Based Plant Regeneration of <i>Canavalia gladiata</i> (Jacq) DC. : An Underutilised Legume	2017
10	Prasanta Kumar Senapati, 17LBO-01	Plant regeneration .....underutilised legume	2018

11	Bhagyashree Dash, 18LBO-004	Effect of auxins..... ( <i>Daucus carota L.</i> )	2019
12	Gyatri Parida 21 LBO 001	Hairy root culture of <i>Paderia foetida</i>	2023
<b>M.S.C. STUDENTS</b>			
1	Elora Pryadarshini Behera	USE of EDXRF techniques for comparative multi-elemental analysis of <i>in vivo</i> and <i>in vitro</i> roots of <i>Andrographis paniculata</i> (Burm.f.) Wall. Ex Nees- A medicinal herb.	2007
2	Archana Mohanty	<i>In vitro</i> clonal propagation of physic nut ( <i>Jatropha curcas L.</i> ) as source of Bio-diesel.	2007
3	Rajalaxmi Behera	Studies on <i>in vitro</i> cultures and catalase activity of <i>Withania somnifera</i> (L.) Dunal.	2008
4	Sushree Sangita Dash	Synseeds of <i>Catharanthus roseus</i> (L.) G. DON	2008
5	Mousumi Das	Nutrient-alginate encapsulated nodal explants of butterfly pea ( <i>Clitoria ternatea</i> L.) as synseeds for germplasm conservation and exchange.	2008
6	Smruti Smit Bhuyan	<i>In vitro</i> clonal propagation & antibacterial activity of <i>Aloe vera</i> .	2009
7	Sameer Kumar	<i>In vitro</i> plant regeneration from cotyledonary node of <i>Withania somnifera</i> (L.) Dunal.: A medicinal plant	2011
8	Ardhendu S Dwibedy	Comparative antibacterial studies..... medicinal plants of Odisha	2014
9	Manisha panda	Comparative antibacterial studies.....medicinal legume	2019
10	Abha Shalini Lakra	Comparative phytochemical studies.....medicinal legume	2019
11	Pratiks Priyadarshini	Synthetic seed production ..... underutilised legume".	2019
12	Apabruta Rath	Effect of copper toxic.....and yield of <i>Vigna radiata</i> L.	2020
13	Pratisruti Pradhan	Comparative antibacterial ..... of family Apocynaceae	2020
14	Reetwik Patel	Hairy root induction in <i>Paederia</i> .... <i>Agrobacterium rhizogene</i>	2020
15	Srushti Pr. Mohanty	Comparative phytochemical.....family Apocynaceae	2020
16	Ranjeeta Sahoo:	A review on preliminary phytochemical analysis of <i>Vitex negundo</i>	2021
17	Rupali Hansdah	A systematic review on antimicrobial properties of <i>Vitex negundo</i> L."	2021
18	Pullikar Raita	Adventitious propagation of <i>Canavalia gladiata</i> (Jacq.) DC	2021
19	Rajeshwari Behera	A review on Synthetic seed in Fabaceae	2021
20	Neharika Mallick	The fascinating herb <i>Mucuna pruriens</i>	2021
21	Aparna Aparajeeta	Micropropagation of some .... Rubiaceae family and hairy root culture	2021
22	Bishnupriya Panigrahi	Clonal fidelity assessment of <i>Canavalia gladiat</i>	2022
23	Shreeya Mohapatra	Micropropagation of <i>Vitex negundo</i> using cotyledonary node.	2022
24	Atmadarshine Sahoo	Hairy root culture of <i>Plumbago auriculata</i>	2022
25	Bandana Mohapatra	Micropropagation of <i>Uvaria hamiltonii</i>	2022
26	Monalisha Moharana	Analysis of phytochemicals of <i>Muccuna gigantia</i>	2022
27	Tapaswini Kundu	Comparative phytochemical analysis of <i>in vivo</i> and <i>in vitro</i> plant parts of <i>Uvaria hamiltonii</i> Hook. f. & Thomson"	2023
28	Sangeeta Biswal	<i>Callus mediated plant propagation of Vitex negundo L.</i>	2023
29	Prajukta Priyadarshini Bhuyan	Hairy root induction in <i>Plumbago auriculata</i> Lam. using <i>Agrobacterium rhizogenes</i>	2023
30	Sanyasi Das Baba	<i>Agrobacterium</i> mediated hairy root induction in <i>in-vivo</i> internodes of <i>P. foetida</i>	2023
31	Susmita Nandi (BU)	Study of microbial community and their antibiogram of river Daya	2023
32	Perish Darshan Meher	Isolation, general characterization, antibiotic resistance and gene profiling of an unknown bacteria isolated from water samples of Kulik River	2024

33	Lina Rani Swain	Qualitative analysis of phytochemicals and antibacterial assay of leaves of <i>Cordia macleodii</i> Hook. f. & Thomson	2024
34	Soumyashree Mohanty	Qualitative analysis of phytochemicals and antibacterial assay of leaves of <i>Cryptocarya amygdalina</i> Nees	2024
35	Pratit Kumar Tripathy	Isolation, general characterization, antibiotic resistance and gene profiling of an unknown bacteria isolated from water of Kulik River	2024
36	Prasamita Samantaray (RDWU)	Isolation, general characterization and gene profiling of an unknown bacteria isolated from water sample of river Daya	2024
37	Susmita P Pradhan PG23BOT013, SBWC	QUALITATIVE ANALYSIS OF PHYTOCHEMICALS AND ANTIBACTERIAL SCREENING OF <i>Ocimum gratissimum</i> L.	2025
38	ABHARANI PANDA 23MBO-014, RU	Qualitative Analysis of Phytochemicals and Antimicrobial assay of Leaves of <i>Ocimum africanum</i> L.	2025

## 8. PUBLICATIONS: Google Scholar Citations: 1223, h-index-21, i10-index 27

Research Patent – 01, Research papers -72 (International – 59; National – 13); Commu.– 05 Proceedings published -11, Popular articles -10, Review article -02 (under progress), Book chapters published- 03, Book-01 (under preparation)

### PATENT:

Badhai Sanjukta, Mallick Bairagi C. & Barik Durga P (2021). Effective delivery of phytosterol based drugs against colon cancer Innovation patent, Australian Govt., IP Australia Patent number: 2021103494

### LIST OF PUBLICATIONS

#### A. RESEARCH PAPERS

1. Swain N, Sahoo RK, Parameswaran C, Jeughale KP, Sarkar S, **Barik DP** and Samantaray S (2025). Clade specific divergence, cumulative haplo-pheno analysis, and genomic prediction of cytokinin oxidase (CKX) gene family under drought stress in rice. **Plant Molecular Biology**, 115:112 <https://doi.org/10.1007/s11103-025-01640-3>
2. Mahakur B, Bedaprabha A, Mohanta SK, Madkami SK, Mitra D, Moharana A, Swain SS and **Barik DP** (2025). An improved protocol for inducing hairy roots in *Vitex negundo* using *Agrobacterium rhizogenes*. **Botanica**, 31(3): 95–103. <https://doi.org/10.35513/Botlit.2025.3.1>
3. Mohanta SK, Mahakur B, Bedaprabha A, Madkami SK and **Barik DP** (2025). Endangered ethno medicinal plant, *Cordia macleodii* (Griff.) Hook. F. and Thomson-A brief review. **International Journal of Pharmaceutical Sciences and Research**, 16(5): 1000-07.
4. Mohanty SP, Das PK, Achary L, Pand PC and **Barik DP** (2025). An efficient micropropagation protocol, establishment of genetic and biochemical fidelity of a rare medicinal plant, *Uvaria hamiltonii* Hook.f.& Thomson. **South African Journal of Botany**, 179: 389-399. <https://doi.org/10.1016/j.sajb.2025.02.024>
5. Bedaprabha A, Mahakur B and **Barik DP** (2024). Preliminary Hairy Root Induction in *Lawsonia inermis* Using In-Vivo Explants: **Plant Science Research**, 46 (1&2) : 15-21.
6. Moharana A, Dwebedi AS, Rout KD, Naik SK, and **Barik DP** (2024). Non-embryogenic synthetic seed production of *Lawsonia inermis* L. and HPTLC analysis of lawsone. **Vegetos** (<https://doi.org/10.1007/s42535-024-01023-x>).
7. Mahakur B, Moharana A, Madkami SK , Naik SK, and **Barik DP** (2024). Optimization of factors affecting *Agrobacterium*-mediated hairy root induction in *Vitex negundo* L. **International Journal of Secondary Metabolite** 11 (2): 244–254.
8. Bhuyan SS, **Barik DP**, Dash B, Rout P, Pattnaik SS, Ramlakhan Verma R, Katara JL, Parameswaran C, Devanna BN, Sahoo RK, Mishra A, Sabarinathan S and Samantaray S. (2023). Assessment of genetic diversity in androgenic-based doubled haploid-derived improved restorer lines of *indica* rice. **Journal of Crop Science and Biotechnology** <https://doi.org/10.1007/s12892-023-00224-1>.

9. Mohanty SP, Barik DP and Moharana A (2023). A comprehensive review on *Uvaria* species: conservation status, ethnobotanical uses and pharmacological activities. **Drug and Pharmaceutical Science Archives**, 3 (3), 56-67.
10. Jena PK, Rahaman SM, Das Mohapatra PK, **Barik DP** and Patra DS (2023). Surface Water Quality Assessment, Prediction, and Modeling of the River Daya in Odisha. **Journal of Water Management Modeling** 31: C508. <https://doi.org/10.14796/JWMM.C508> www.chijournal.org ISSN: 2292-6062.
11. Jena PK, Rahaman SM, Das Mohapatra PK and **Barik DP** (2023). Ground Water Quality Assessment for Sustainable Drinking Purpose International Journal of Oceanography & Aquaculture Jena PK, et al. Ground Water Quality Assessment for Sustainable Drinking Purpose. **Int J. Oceanogr Aquac**, 7(4): 000-280.
12. Senapati PK, **Barik DP** and Moharana A (2023). Plant regeneration through axillary shoot proliferation of *Canavalia gladiata* (jacq) . Dc., an economically important underutilized legume- a step forward for the reduction of anti-nutritional factors (anfs). **Plant Archives** Vol. 23, No. 1, 2023 pp.135-143.
13. Jena PK, Rahaman SM, Das Mohapatra PK, **Barik DP** and Patra DS (2023). Surface water quality assessment by Random Forest. **Water Practice & Technology** Vol 18 No 1, 201 doi: 10.2166/wpt.2022.156.
14. Madkam SK, Moharana A, Mishra RC and Barik DP (2022). Rapid *In Vitro* Plant Regeneration From Nodal Explant of *Mucuna gigantea*—An Endangered Medicinal Legume. **International Journal of Pharma and Bio Sciences** 1doi ijpbs.2022.13.4.b1-8
15. Behera B, Behera S, Shasmita, **Barik DP** and Naik SK (2021). Regeneration of plants from alginate-encapsulated axenic nodal segments of *Paederia foetida* L. - A medicinally important and vulnerable plant species. **Journal of Plant Biotechnolog**, 48:255–263.
16. Madkami SK, Moharana A and **Barik DP** (2021). Rapid micropropagation protocol of *Mucuna pruriens* var. *utilis* using cotyledonary node explant: A cultivated medicinal edible legume. **Legume Research**. 46 (2) : 243-250. DOI: 10.18805/LR-4419
17. Patel R, Mahakur B, Mitra D and **Barik DP** (2021). Preliminary hairy root induction in aerial plant parts of *Paederia foetida* using *Agrobacterium rhizogenes*. Accepted in **International Journal of Botany Studies**, 6 (3): 135-138
18. Mahakur B, Begum RR and **Barik DP** (2021). Biotechnological approaches for in-vitro propagation of a valuable medicinal plant - *Vitex negundo* L. Accepted in **International Journal of Pharma and Bio sciences**. doi 10.22376/ijpbs.2021.12.3.B126-132
19. Mitra D, Djebaili R, Pellegrini M, Mahakur B, Sarker A, Chaudhary P, Khoshru B, Gallo DM, Kitouni M, **Barik DP**, Panneerselvam P & Das Mohapatra PK (2021). Arbuscular mycorrhizal symbiosis: plant growth improvement and induction of resistance under stressful conditions. **Journal of Plant Nutrition**, <https://doi.org/10.1080/01904167.2021.1881552>.
20. Mohanty SP, Mahakur B, Debasis Mitra, Rout SK and **Barik DP** (2021). Comparative phytochemical screening of two valuable medicinal plants of family Apocynaceae (*Catharanthus roseus* (L.) G.don. and *Alstonia scholaris* (L.) R.br. **International Journal of Research in Ayurveda and Pharmacy**, 12 (2):42-45
21. Mitra D, Verma D, Mahakur B, Kamboj A, Srivastava R, Gupta S, Pandey A, Arora B, Kumud Pant K, Panneerselvam P, Ghosh A, **Barik DP** and Das Mohapatra PK (2021). Molecular docking and simulation studies of natural compounds of *Vitex negundo* L. against papain-like protease (PLpro) of SARS CoV-2 (coronavirus) to conquer the pandemic situation in the world. **Journal of Biomolecular Structure and Dynamics**, <https://doi.org/10.1080/07391102.2021.1873185>. IF-3.31
22. Mahakur B and **Barik DP** (2020). Hairy root culture through the intervention of *Rhizobium rhizogenes* in different medicinal plants: a review. **Global journal of Bio-science & biotechnology (GJBB)**, Vol. 10[3]: Not assigned.
23. Behera A, Moharana A and **Barik DP** (2020). Cotyledonary node-based propagation protocol of *Canavalia gladiata* (Jacq) DC.- An underutilized legume or lesser-known legume. **International Journal of Botany Studies**. 5 (4): 260-267.
24. Das A, Sahoo RK, **Barik DP** and Subudhi E (2020). Duplicates in Ginger germplasm collection from Odisha using morphological and molecular characterization. **Proceedings of the National Academy of Sciences, India Section B: Biological Sciences**. <https://doi.org/10.1007/s40011-020-01178-y>.

25. Badhai S, **Barik D** and Mallick BC (2020). Anticancer efficacy of  $\beta$ -Sitosterol loaded Hydroxyapatite-alginate on colon cancer cell *In Vivo*. **Research Journal of Pharmacy and Technology**, 13(3): 1-5.
26. Behera S, Kar SK, Rout KK, **Barik DP**, Panda PC and Naik SK (2019). Assessment of genetic and biochemical fidelity of field-established *Hedychium coronarium* J. Koenig regenerated from axenic cotyledonary node on *meta-topolin* supplemented medium. Ind. **Industrial Crops & Products**, 134: 206–215. **IF-3.84**
27. Behera S, Kamil PK, Rout KK, **Barik DP**, Panda PC and Naik SK (2018). An efficient plant regeneration protocol of an industrially important plant, *Hedychium coronarium* J. Koenig and establishment of genetic & biochemical fidelity of the regenerants. **Industrial Crops & Products**, 126:58–68.
28. Moharana A, **Barik DP**, Naik SK and Rout KK (2018). Comparative thin-layer chromatographic studies and development of a high-performance thin-layer chromatography method for the quantification of lawsone in natural and micropropagated plant parts of *Lawsonia inermis* L. **JPC-Journal of Planar Chromatography-Modern TLC**, 31 (2):155-162.
29. Behera B, Sinha P, Gouda S, Rath SK, **Barik DP**, Jena PK, Panda PC and Naik SK (2018). *In vitro* propagation by axillary shoot proliferation, assessment of antioxidant activity, and genetic fidelity of micropropagated *Paederia foetida* L.. **Journal of Applied Biology & Biotechnology**, 6(2): 41-49
30. Moharana A, Das A, Subudhi E, Naik SK and **Barik DP** (2018). Assessment of genetic fidelity using random amplified polymorphic DNA and inter-simple sequence repeats markers of *Lawsonia inermis* L. plants regenerated by axillary shoot proliferation. **Proceedings of the National Academy of Sciences, India Section B:Biological Sciences**, 88 (1):133-141.
31. Behera B, Madkami S, Swain S S, Moharana A and **Barik DP** (2017) Comparative study of antibacterial potential of *in vivo* and *in vitro* root extracts of *Mucuna gigantea* (Willd.) DC.-An endangered medicinal plant of Odisha. **Indian Journal of Biological Sciences** (ISSN No. 0972-8503), 23 : 71-77.
32. Moharana A, Das A, Subudhi E, Naik SK and **Barik DP** (2017). High frequency shoot proliferation from cotyledonary node of *Lawsonia inermis* L. and validation of their molecular finger printing. **Journal of Crop Science and Biotechnology**, 20 (5):405-416
33. Behera B, Behera S, Jena PK, **Barik DP** and Naik SK (2017). Adventitious shoot organogenesis and plant regeneration from internode explants of *Paederia foetida* L.:a valuable medicinal plant. **Biosciences Biotechnology Research Asia**, 14(3): 1-8
34. Behera S, **Barik DP** and Naik SK (2017) Micropropagation of *Symplocos racemosa* Roxb., a threatened medicinal tree of India, **Current Science**, 113 (4) : 555 -557.
35. Das A, Gaur M, **Barik DP** and Subudhi E (2017). Genetic diversity analysis of 60 ginger germplasm core accessions using ISSR and SSR markers. **Plant Biosystems**, 151 (5): 822-832.
36. Badhai S, **Barik D** and Mallick BC (2016). *In-vitro* Assays to Show the Antioxidant Potential of  $\beta$ -sitosterol from *Lawsonia inermis* Leaves. **International Journal of Science and Research (ISSN: 2319-7064)**, 05 (02):2127-2130
37. Pradhan SK, Nayak DK, Pandit E, Behera L, Anandan A, Mukherjee AK, Lenka S and **Barik DP** (2016). Incorporation of bacterial blight resistance genes into lowland rice cultivar through marker-assisted backcross breeding. **Phytopathology**, 106: 710-718.
38. Behera S, Behera B, **Barik DP** and Naik SK (2016). Phytochemical analysis of the leaf, flower, and bark of a medicinal plant, *Crataeva magna* (Lour.) DC. **Asian Journal of Pharmaceutical and Clinical Research**, 9 (1): 1-2.
39. Nayak DK, Pandit E, Mohanty S, **Barik DP** and Pradhan SK (2015). Marker-assisted selection in backcross progenies for transfer of bacterial leaf blight resistance genes into a popular lowland Rice cultivar. **Oryza**, 52 (3): 163-172.
40. Dwibedy AS, Moharana A, Kumar S, Naik SK and **Barik DP** (2015). Qualitative estimation of bioactive compounds and evaluation of antimicrobial activity of *Strychnos nux-vomica* L. leaf extracts. **Plant Science Research**, 37 (1&2): 60-65.
41. Behera S, Nayak N, Shasmita, **Barik DP** and Naik SK (2015). An efficient micropropagation protocol of *Bacopa monnieri* (L.) Pennell through two-stage culture of nodal segments and *ex vitro* acclimatization. **Journal of Applied Biology & Biotechnology**, 3 (03): 016-021.

42. Moharana A, Kumar S, Jena PK, Naik SK, Bal S and **Barik DP (2014)**. Comparative antibacterial studies of *in vivo* and *in vitro* leaves of *Lawsonia inermis* L.- A multipurpose medicinal plant. **Plant Science Research**, 36 (1&2): 53-56.
43. Behera S, **Barik DP** and Naik SK (2014). Phytochemical analysis of *in vivo* and *in vitro* plants of *Hedychium coronarium* (J.) Koenig: a preliminary report. **Plant Science Research**, 36 (1&2): 91-94.
44. Mohanty P, Behera S, Swain SS, **Barik DP** and Naik SK. (2013). Micropropagation of *Hedychium coronarium* J. Koenig through rhizome bud. **Physiology Molecular Biology of Plants**, 19 (4): 605-610.
45. Naik N, Behera BR, Naik, SK and **Barik DP** (2013). Callus mediated shoot proliferation from internode explant of *Paederia foetida* L. **Plant Science Research**, 35 (1 & 2): 44-48.
46. Nayak SA, Kumar S, Satapathy K, Moharana A, Behera B, **Barik DP**, Acharya L., Mohapatra PK, Jena PK, Naik SK (2013). *In vitro* plant regeneration from cotyledonary nodes of *Withania somnifera* (L.) Dunal and Assessment of clonal fidelity using RAPD and ISSR markers. **Acta Physiol. Plant.** 35:195–203
47. Rout KK, Singh RK, **Barik DP** & Mishra SK (2012). Thin-Layer Chromatographic Separation and Validated HPTLC Method for Quantification of Ursolic Acid in Various *Ocimum* Species. **Journal of Food and Drug Analysis**, 20 (4): 865-871
48. Swain SS, Sahu L, Pal A, **Barik DP**, Pradhan C and Chand PK (2012). Hairy root cultures of butterfly pea (*Clitoria ternatea* L.):*Agrobacterium* x plant factors influencing transformation. **World J. Microbiol Biotechnol.**, 28: 729–739.
49. Behera PR, Nayak P, **Barik DP**, RautrayTR, Thirunavoukkarasu M and Chand PK (2010). ED-XRF spectrometric analysis of comparative elemental composition of *in vivo* and *in vitro* roots of *Andrographis paniculata* (Burm.f.) Wall. ex Nees-a multi-medicinal herb. **Applied Radiation and Isotopes**, 68 (12): 2229 – 2236.
50. Swain SS, Pal A, Sahu L, Pradhan C, **Barik DP** and Chand PK. (2010). Nutrient-alginate encapsulated nodal explants of butterfly pea (*Clitoria ternatea* L.) as synseeds for germplasm conservation and exchange. **Plant Sci. Res.** 32:48-55.
51. Swain SS, Sahu L, **Barik DP** and Chand PK (2010). *Agrobacterium* x Plant Factors Influencing Transformation of 'Joseph's coat' (*Amaranthus tricolor* L.). **Scientia Horticulturae**, 125: 461-468.
52. Bal S, **Barik DP**, Dhal NK, Rout NC and Sethy AK (2009) .Observations on Folklore Plants Among the Tribes of Deogarh District, Orissa, India. **Hamard Medicus**, 52 (3): 100-11
53. Mohapatra M, **Barik DP** & Rath SP (2008). *In vitro* regeneration of medicinal plant *Centella asiatica*. **Biologia Plantarum**, 52 (2): 339-342.
54. **Barik DP**, Acharya L, Mukherjee AK & Chand PK (2007) Analysis of genetic diversity among the selected grasspea (*Lathyrus sativus* L.) genotypes using RAPD markers. **Zeitschrift fur Naturforschung**, 62c: 869-874.
55. **Barik DP**, Naik SK, Mudgal A & Chand PK (2007). Rapid plant regeneration through *in vitro* axillary shoot proliferation of butterfly pea (*Clitoria ternatea* L.) – a twining legume. **In vitro Cellular and Dev. Biology-Plant**, 43: 144-148.
56. **Barik DP**, Mohapatra U and Chand PK (2006). Direct shoot regeneration from epicotyl explants of grasspea (*Lathyrus sativus* L.). **Australian J. of Botany**, 54: 505-508.
57. **Barik DP**, Mohapatra U and Chand PK (2005). Transgenic grasspea (*Lathyrus sativus* L.): Factors influencing *Agrobacterium*-mediated transformation and regeneration. **Plant Cell Reports**, 24: 523 - 531.
58. **Barik DP** and Kar UC (2005). Callus mediated shoot organogenesis from stem explant of grasspea (*Lathyrus sativus* L.). **The Indian Journal of Genetics and Plant Breeding**, Vol. 65 (4): 321-322.
59. **Barik DP**, Mohapatra U and Chand PK (2005). High frequency *in vitro* regeneration of *Lathyrus sativus* L. **Biologia Plantarum**, Vol. 49 (4): 637-639.
60. **Barik DP**, Naik SK, Mohapatra U and Chand PK (2004). High frequency plant regeneration by *in vitro* shoot proliferation in cotyledonary node explants of grasspea (*Lathyrus sativus* L.). **In Vitro Cellular and Developmental Biology-Plant**, Vol. 40 (5): 467-470.
61. Mohapatra UB and **Barik DP** (2004). Crop improvement through microbes. **Role of Microbes in Agriculture, Industries and Mines**, PP. 199-206.

62. Kar UC, Swain D, **Barik DP** and Patnaik SN (2001). Mutagenic frequency, effectiveness and efficiency of EMS, NG, Gamma Rays and their Combinations in Sesame (*Sesamum indicum*). **Indian J. of Oilseeds Research**, (ISSN: 0970-2776). Vol. 18(2): 154-157.

63. **Barik DP**, Mohapatra S, Mohapatra U and. Chand PK (2001). Callus induction and plant regeneration in grasspea (*Lathyrus sativus L.*) cv. Nayagarh local. **Plant Science Research** (ISSN: 0972-8546), Vol. 23 (1&2): 10-16.

#### **Proceedings & Book Chapters**

64. Mahakur B, Bedaprabha A, **Barik DP**, Gupta S, Kumar R, Mitra D and Verma D (2025). Hairy Root Culture An Effective Method for Production of Plant Bioactive Compounds. **Genetic Improvement and Conservation Practices of Medicinal Plants**. DOI: 10.1201/9781003482659-7, Taylor & Francis

65. **Barik DP** (2023). Factors Influencing *Agrobacterium*-Mediated Transformation Efficiency in Plants: A Case Study. Bioprospecting of Tropical Medicinal Plants The Author (s), under exclusive license to Springer Nature Switzerland AG 2023. [https://doi.org/10.1007/978-3-031-28780-0\\_1905](https://doi.org/10.1007/978-3-031-28780-0_1905)

66. Mahanto A, Susant K. Rout SK and **Barik DP** (2022). Phytochemical and pharmacological activity of genus Curcuma- a review. Indigenous Traditional Knowledge and Advancement in Medicinal Plants Research, ISBN: 978-81-955847-2-7 as Author and Editor of the book.

67. Mitra D, Chaudhary P, Mahakur B, **Barik DP**, Khoshru B and Das Mohapatra PK (2020). Interaction of rhizome-bacteria & Fungi in plants. In Mitra, Mahakur, Khoshru and Mohapatra Eds. Microorganisms, Biofertilizers and Sustainable Agriculture (Book Chapter -2). Part A, Scholar's Press, Baznicas iela 13-17, Riga, LV-1010 Latvia, European Union

68. Mahakur B, **Barik DP**, Mitra D and Das Mohapatra PK (2020). Bio-control activity of rhizo microbes for plant growth promotion and protection. In Mitra, Mahakur, Khoshru and Mohapatra Eds. Micro-organisms, Biofertilizers and Sustainable Agriculture (Book Chapter -3). Part A, Scholar's Press, Baznicas iela 13-17, Riga, LV-1010 Latvia, European Union

69. Behera S, **Barik DP**, Jena PK and Naik SK (2013) *In vitro* plantlet regeneration from cotyledonary node of *Pongamia pinnata* (L.) Pierre: a multipurpose tree species. Proceedings of the P. Parija Memorial National Conference (PMNC) on Recent Advances in Plant Biotechnology. Department of Botany, Ravenshaw University, Cuttack. PP 62-69.

70. S. S. Swain, L. Sahu, **D. P. Barik** and P. K. Chand (2009). Genetic transformation of *Amaranthus tricolor* L. using Ri plasmid vectors. Proceedings of National Seminar on "Recent trends in monitoring and bioremediation of mine and industrial environment" January 10-11, 2009, P.G. Department of Botany North Orissa University, Baripada: 109-116

71. H. Mohapatra, **D. P. Barik** & S. P. Rath (2008). Chapter-30: An attempt to conserve *Centella asiatic* (L.): A highly essential medicinal plant through *in vitro* nodal segment culture. Proceeding: "Wildlife Biodiversity Conservation", Editor: Mallapureddi Vikram Reddy, Publisher: Daya Publishing House, New Delhi, **INDIA**. PP. 300-304 (ISBN13 978-81-7035-529-8).

72. **D. P. Barik**, P. K. Chand and U. Mohapatra (2004). Suppression of the neurotoxic amino acid in seed storage protein of *Lathyrus sativus* L. via mutation techniques and gene transfer. Genetic improvement of under-utilized and neglected crops in low-income food deficit countries through irradiation and related techniques (IAEA-TECDOC-1426, ISBN-92-0-113604-8, ISSN-1011-4289). **Proceedings of FAO and IAEA, AUSTRIA**. PP. 57-72.

#### **Communicated**

1. Genetic uniformity validation of rapid & stable micropropagated plants of *Mucuna gigantea* (Willd.) DC. using cotyledonary node explant
2. Hairy root culture as an effective method for production of plant bioactive compounds: A case study
3. Environmental Factors Shaping Microbial Communities: Insights from Bacterial Isolation in the Kulik River.
4. Medicinal properties of *Cordia macleoidii* (Griff) Hook. F. & Thomas: An endangered medicinal plant
5. Antibiotic Resistance in Aquatic Environments: A Case Study of the Kulik River

#### **Popular articles**

- 1) Biodiversity in Simlipal: Driving into the Future (2025). Odisha Review. Vol. LXXXI (6), 92-98.

- 2) Bamboo: The green gold of India (2024) **Sabujima (ISSN 0972-8562)** Plant Lovers'Association, Bhubaneswar. Vol. 32: 12-15.
- 3) Wetlands: Nature's Treasure Trove (2023). **Sabujima (ISSN 0972-8562)** Plant Lovers'Association, Bhubaneswar. Vol. 31: 91-94.
- 4) L-3, 4-dihydroxy phenylalanine (L-DOPA) of *Mucuna* Sp.: acts as precursor for the neurotransmitter dopamine, used in the treatment of Parkinson's disease (2021). **Everyman's Science**.
- 5) L-DOPA (L-3, 4-dihydroxy phenylalanine) of *Mucuna* Sp. used in the treatment of Parkinson disease (2021). **Sabujima (ISSN 0972-8562)** Plant Lovers'Association, Bhubaneswar. Vol. 29: 37-39.
- 6) Aquaponics: The Biomimic of A Functioning Ecosystem (2015). **Sabujima (ISSN 0972-8562)** Plant Lovers'Association, Bhubaneswar. Vol. 23: 33-38.
- 7) Henna a multipurpose herb- from traditional use to scientific assessment (2014). **Sabujima (ISSN 0972-8562)** Plant Lovers'Association, Bhubaneswar. Vol. 22: 25-29.
- 8) Grasspea: An alternative protein source for human beings (2012). **Sabujima (ISSN 0972-8562)** Plant Lovers'Association, Bhubaneswar. Vol. 20: 38-40.
- 9) *Agrobacterium*-mediated transformation of grasspea (*Lathyrus sativus* L.) (2010). **Grain legume magazine. (GLM)** is being prepared by the European Grain Legume Association (AEP), Spain, 54: 14.
- 10) Somatic Embryogenesis (1996). **Parijatak**, Department of Botany, Utkal University, Bhubaneswar, Orissa. Vol. 27: 16-19.

**Review article:** Under Progress 'Biotechnology of grasspea (*Lathyrus sativus* L.): A review

#### **9. CONFERENCE ATTENDED & PRESENTED: 43 (Inter.-14, Nat.-29), INVITED TALK -06, CHIEF SPEAKER-02**

Sl. No.	Name of the Seminar/ conference/ Symposia	Name of the sponsoring agency	Country and Date	Paper contributed	Remarks
0	Krushi Agro Expo-2024, 12-15, September, 2024	FNCCI, Koshi Province, Nepal	NEPAL	Plant tissue culture..... medicinal plants	Resource person
1	International Conference on Agriculture for Sustainable Future (Agri Vision-2022)	Agri Vision & Ravenshaw University	India & 03 days, 06-08 March, 2022	Hairy root production as a future pharmaceutical source	Oral
2	Work shop on Soilless hydroponic cultivation of plants for organic farming	Dept. of Botany, Ravenshaw University	India & 04 days; 07-10 April, 2022	Physical	Organizer
3	International webinar Contemporary Plant Sciences: Opportunities and Challenges	Dept. of Botany, Ravenshaw University	India & 03 days; 28-30 October, 2021	Online	Program coordinator
4	Food chemical and nanomaterials toxicity	Kerala Academy of Sciences & CU Kerala	26-28 Nov., 2020	Qualitative phyto.... .....( <i>C. roseus</i> and <i>A. scholaris</i> )	Oral online
5	Biotechnology, Bioinformatics and Natural products in Health care	Sambalpur University, Jyoti Vihar, Odisha	29th June to 5th July, 2020	Attended	Discussed
6	Covid-19 & It's preventive measure	NSS unit, Midnapore college, WB	2 <sup>nd</sup> and 3 <sup>rd</sup> June, 2020	Attended	Discussed
7	National webinar series Ravenshaw University	Dept. of Education	28-05-2020	Attended	Discussed
8	National seminar "Emerging Trends in Plant Science Research (ETPSR-2020)	DBT, DST, CSIR, SERB, Ravenshaw University etc.	India & 01-03, March 2020	Garlic: a multipurpose medicinal plant as like our Padan Sir	Popular article

9	National seminar "Emerging Trends in Plant Science Research (ETPSR-2020)	DBT, DST, CSIR, SERB, Ravenshaw University etc.	India & 01-03, March 2020	Revitalization of nutrient.....sustainable crop production (C115)	Oral
10	National seminar "Emerging Trends in Plant Science Research (ETPSR-2020)	DBT, DST, CSIR, SERB, Ravenshaw University etc.	India & 01-03, March 2020	Plant regeneration ..... <i>Mucuna gigantean</i> (Willd.) DC (PB 03)	Poster
11	National seminar & 44 <sup>th</sup> annual conference of OBS	NOU & OBS	India & 22-23, January, 2020	Cotyledonary node based ..... edible legume	Oral
12	Indian Science Congress Association BBSR Chapter	KIIT, Bhubaneswar	India & 13-14, Dec. 2019	An efficient.....: An underutilized legume	Oral
13	National seminar "Recent advances in plant sciences: Strategies and applications"	Ravenshaw University	India & Feb. 23, 2019	Released the abstract volume as "Organising Secretary"	Organising Secretary
14	Departmental Inaugural seminar	Head, Dept. of Botany and Principal of the college	India (UN Auto..College & 11-09-2018	Plant tissue culture	As Resource person
15	Perspectives of human health, microbial biotechnology & innovations	Vidyasagar University Midnapore, WB	27-29 <sup>th</sup> , March-2018	Cost effective <i>in vitro</i> plant..... underutilized legume	Invited Oral
16	Inaugural seminar	NSMC, Cuttack	15-02-2018	Plant cell culture..... bone of biotechnology	As Chief Guest
17	International Conference on BSDSF	UGC, APSI, NC college, Jajpur	India & Jan. 29-30, 2019	A micropropagation..... of Odisha	Oral
18	National seminar & 43 <sup>rd</sup> annual conference of OBS	Centurion University & OBS, UU	India & Dec. 23-24, 2018	An useful ... <i>Canavalia gladiata</i> (Jacq) DC.- An underutilized legume	Oral
19	20 <sup>th</sup> Odisha Bigyan 'O' Paribesh Congress	NISER, Khordha & OES, BBSR	India & Nov. 17-18, 2018	Comparative antibact .....mangrove Odisha	Oral
20	Annual day Celebration	G. Sc. College, Athgarh	15-12-2017	Plant tissue culture... ..... a back bone of biotechnology	As Resource person
17	ISCA Bhubaneswar chapter	KIIT University, Bhubaneswar	India, 17-18, Dec., 2017	Comparative TLC... of <i>Lawsonia inermis</i> L.	Poster
18	National symposium on plant Biotech.... PTCA (India)	CSIR-IICB, Kolkata	3- 5, March, 2017	Analysis of genetic homogeneity..... . of <i>Lawsonia inermis</i> L.	Oral
19	ISCA Bhubaneswar chapter	KIIT University, Bhubaneswar	12-13, Dec., 2016	Influence of explant ..... cash crop	Poster
20	National symposium, on plant Biotech.... PTCA (India)	PTCA of India & NBRI, Lucknow	25-27 Feb., 2016	Phytochemical screening ..... - a multipurpose plant	
21	40 <sup>th</sup> Annual conference of OBS	FM University & UGC	9-10 Feb., 2016	Qualitative estimation..... leaf extract	Poster

22	ISCA Bhubaneswar chapter	ISCA & KIIT University	9-11 Dec., 2015	Antibacterial activity study ..... A multipurpose plant	Oral
23.	19th Annual Convention and 2 <sup>nd</sup> International Conference of Society of Pharmacognosy- 2015 (ICSP-2015) hosted by A. U. College of Pharmaceutical Sciences, Andhra University, Visakhapatnam from 20th March to 22nd March, 2015 and presented a paper (Oral).				
24.	39 <sup>th</sup> Annual Conference of “The Orissa Botanical Society (OBS)” held at Regional Plant Resource Centre (RPRC), Bhubaneswar, Odisha during February 22-23, 2015 and presented a paper (Poster).				
25.	II National Conference on “Recent Advances in Biological Sciences”, Raipur, India organized by School of Life Sciences, Pt. Ravishankar Shukla University, Raipur from November 25-27, 2013 and presented a paper (Oral).				
26.	37 <sup>th</sup> Annual Conference of “The Orissa Botanical Society (OBS)” held at Ravenshaw University, Cuttack, Odisha during December 22-23, 2012 and presented a paper (Poster).				
27.	99 <sup>th</sup> Indian Science Congress Association (ISCA) held at KIIT University, Bhubaneswar from 3-7, January, 2012 and presented a paper (Poster).				
28.	XXXII Annual meet of Plant Tissue Culture Association (India) and National Symposium on “Recent advance in plant tissue culture and biotechnological research in India” held at M.N. Institute of applied science, Bikaner, Rajasthan from 04-06, February 2011 and presented a paper (Poster).				
29.	Thirty Fifth Annual Conference of “The Orissa Botanical Society (OBS)” held at Christ College, Cuttack, Odisha during December 29-30, 2010 and presented a paper (Poster).				
30.	Thirty third Annual Conference of “The Orissa Botanical Society (OBS)” held at P.G. Dept. of Botany, North Orissa University, Baripada, Orissa during January 10-11, 2009 and presented a paper (Oral).				
31.	Eleventh “Orissa Bigyan Congress” held at KIIT University, Bhubaneswar, Orissa on 23 <sup>rd</sup> & 24 <sup>th</sup> December, 2008.				
32.	Thirty-first annual conference of India Botanical Society (I.B.S) and International symposium on “Plant Biology and Environment: Changing Scenario” held at University of Allahabad, Allahabad on December 17-19, 2008 and presented abstract (Oral).				
33.	National seminar on emerging trends in plant sciences: “Morphology to Biotechnology”, Organized by Department of Botany, Ravenshaw College (Autonomous), Cuttack, Orissa on 29-30 <sup>th</sup> October, 2006				
34.	“National seminar on wildlife biodiversity conservation” Organized by Department of Ecology & Environmental Sciences, School of Life Sciences, Pondicherry University, Pondicherry on 13-15 <sup>th</sup> October, 2006.				
35.	Twenty-Ninth Annual Conference of “The Orissa Botanical Society (OBS)” held at Ravenshaw (Autonomous) College, Cuttack, Orissa on December 18-19, 2004 (Oral).				
36.	Twenty Eighth Annual Conference of “The Orissa Botanical Society (OBS)” held at College of Basic Science and Humanities, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, Orissa on January 10-11, 2004.				
37.	Seventh “Orissa Bigyan Congress” held at Post-Graduate Dept. of Botany, Utkal University, Bhubaneswar, Orissa on November 9 <sup>th</sup> , 2003.				
38.	National Seminar on “Stress management in oil seeds for attaining self reliance in vegetable oils” held at Hyderabad on January 28-30, 2003 and presented the poster.				
39.	Twenty-Seventh Annual Conference of “The Orissa Botanical Society (OBS)” held at Regional Research Laboratory, Bhubaneswar on December 28-29, 2002.				
40.	“National Seminar on Biotechnology”: Microbes to Man on March 30-31, 2002 at School of Life Science, Utkal University, Bhubaneswar, Orissa.				

41. Annual Conference of "The Orissa Botanical Society (OBS)" held at P.G. Dept of Botany, Utkal University, Bhubaneswar in the year 1999 and participated for young scientist award (Oral).

42. Twenty-Second all India Botanical Conference of Indian Botanical Society (I.B.S) and national symposium on "Recent Advances in Plant Sciences" held at Mithibai College, Bombay (Mumbai) on October 23-25, 1999 and presented abstract (Oral).

#### 10. TRAINING PROGRAMME PARTICIPATED:

Name of Course	Diploma/ Degree	Name of University	Subjects with specialization	Duration/ Year	Marks/Grad e Obtained
Capitalization of Androgenic based double haploid technology in <i>indica</i> Rice	FDP	ICAR-NRRI, Cuttack	Biotechnology	21 days, 2024	Awarded
Design & Dev. Of contents and proposals for SWAYAM	Training program	RU with CEMCA, ND	Medical Diagnostics	5-6 April, 2022	Participated
Author workshop: understanding research metrics & Elsiver's science direct	workshop	By Elsevier,	At OSHEC	25 <sup>th</sup> Feb. 2022	Attended
Online Refresher Course in "Management of Natural Resources (IDC)	Refresher Course	UGC-HRDC, Sambalpur University	All subjects	09 to 22. March, 2022.	Grade A
Two-days work shop for youth on gender & gender based violence	workshop	Dept. of Botany, RU	SWATI with US consulate Gen. Hyderabad	10-11th Dec., 2021	Participated
Advances in agripreneurship and skill development for reshaping the future of Indian Agriculture	Training cum work shop	By AEEFWS & Just Agriculture, Punjab	MSME, Govt of India	01-15 <sup>th</sup> Aug, 2021	Awarded
Biotechnology, Bioinformatics and Natural products in Health care	Int. Webinar by UGC	Sambalpur University	Biotechnology	29th June to 5th July, 2020	Pass
Innovative Teaching Pedagogy and Igniting Students Interest through Virtual Mode for Higher Education Institutions	Int. Faculty Dev. Pro. (IFDP)	DYPEF'SDr. D.Y. Patil Institute of Mang., Pune	Teaching Pedagogy	30 <sup>th</sup> May to 05 June 2020	Pass
National seminar on "Emerging Trends in Plant Science Research (ETPSR-2020)"	DBT, DST, CSIR, SERB, RU, DST Odisha	Ravenshaw University, Cuttack, Odisha	Joint Organizing Secretary	01-03, March 2020	Successfully Organised
DAE, BRNS & IANCAS sponsored 2 days workshop on " Radiochemistry ..... radioisotopes"	Workshop	Dept. of Chemistry, Ravenshaw University	Mutation works	August 24-25, 2018	NA

#### 11. ACADEMIC RECORDS:

- ❖ **PDF in Biotechnology**-2007 -*Agrobacterium*-mediated hairy root culture in medicinal plants, (Field: Biotechnology), Dept. of Botany, Utkal University, Bhubaneswar, Odisha, India
- ❖ **Ph.D. in Botany**-2004, (Field: Biotechnology), Utkal University, Bhubaneswar, Odisha, India

**Thesis entitled:** "Studies on plant regeneration from *in vitro* cultures and *Agrobacterium*- mediated genetic transformation of grasspea (*Lathyrus sativus* L.)"

- ❖ **M.Sc. in Botany**-1997, Subject-Botany (Sp.P.-Cytogenetics), First division (69.40%), Utkal University
- ❖ **+3 Science**-1995, Sub-Chemistry, Zoology & Botany (Hon.), First class Distin. (65.30%), UU, BBSR
- ❖ **+2 Science**-1992, Sub-Phy., Chem., Math., Biol., First division (68.30%), CHSE, Bhubaneswar
- ❖ **10<sup>th</sup> Std.** -1990, Sub- Oriya, English, Sank., Math., Sco-Sci., G. Sci., Opt-math, First division (83.0%), BSE, Cuttack, Orissa

## 12. PERSONAL INFORMATION:

<b>Father's Name</b>	: Late Natabar Barik
<b>Date &amp; Place of Birth</b>	: 5 <sup>th</sup> July, 1975 & Bhubaneswar
<b>Category</b>	: General (S.E.B.C)
<b>Sex</b>	: Male
<b>Marital Status</b>	: Married
<b>Nationality</b>	: Indian
<b>Religion</b>	: Hindu
<b>Language Known:</b>	: English, Oriya & Hindi

### PRESENT ADDRESS

Plot # 1658,  
Road # 8, Unit # 9,  
P.O - Bohi Nagar,  
Bhubaneswar-751 022  
Dist -Kurdha, Odisha.

### PERMANENT ADDRESS

At/Po- Pahanga,  
Via- Niali,  
Dist- Cuttack  
Pin – 754 004  
State- Odisha, INDIA

## 13. REFERENCES

- ✓ **Dr. Pradipta K. Mohapatra**, *Retd. Prof. of Botany*, Dept. of Botany, Ravenshaw University, Cuttack-753003, Odisha, India. E-mail: pradiptamoha@yahoo.com
- ✓ **Dr. Pradeep K. Chand**, *Retd. Professor of Botany & Former Vice chancellor*, North Orissa University, Baripada, Odisha, India, E-mail: pkchanduubot@rediffmail.com
- ✓ **Dr. Arup K. Mukherjee**, *Senior Scientist*, NRRI, Cuttack, Odisha, India, E-mail: arupmukherjee@yahoo.com
- ✓ **Dr. Sitakanta Pattnaik**, *Scientist 1*, Kentucky Tobacco Research & Development Center, University of Kentucky, Lexington, KY 40546, E-mail: sk\_pattnaik@yahoo.com.

**(DURGA PRASAD BARIK)**