

PROFILE



Name: Dr. Indrani Chandra
Designation: Assistant Professor and Teacher In-Charge
Address: Dept. of Biotechnology, B.U., Golapbag, Burdwan, 713104
Date of Joining: 18.11.2004

Educational

Qualification: M.Sc. (Botany), B.Ed., Ph.D
B.Sc.in Botany (Hons.): Hooghly Mohsin College, B.U.
M.Sc.in Botany: Burdwan University
Area of Specialization in M.Sc: Cytogenetics and Plant Breeding
Ph.D. in Botany: Burdwan University, 2001
Title of Thesis: **Tissue Culture and Cytology of *Coccinia grandis* (L.)Voigt and *Flacourtia jangomas* (Lour.) Raeusch**

Award obtained
1) National Scholarship at B.Sc.
2) GATE, 1990 (obtained UGC JRF)

Research Experience: 16 years
No. of Publication: 34 (including Full Papers and Abstracts)
Full paper: 12 in National and International Journals; Books
Abstract: 22 in International Seminar and National Seminar
Teaching Experience: 20 years
Area of Teaching: Cell Biology, Developmental Biology and Plant Biotechnology
Area of Research: Plant Tissue Culture, Cytology and Molecular Biology
No. of Research Scholar: 2
No. of Project Assistant: 1
Additional Information: a) One Refresher Course (UGC) in Life Science, 2007

- b) One 'Summer School' (UGC) Program in Science, 2013
- c) 1st Refresher Course in Biological Sciences, 2014

Papers published in National/ International Journals:

1. Indrani Chandra and P.Bhanja. Study of organogenesis *in vitro* from callus tissue of *Flacourtia jangomas* (Lour.) Raeusch through Scanning Electron Microscopy. Current Science, 83(4): 476-479,2002, Peer Reviewed, ISSN No.0011-3891, Impact Factor - 0.897
2. J Das, I Chandra and P Roy. *In vitro* regeneration of hairy root of *Brassica nigra* in response to different PGRs. Asian Journal of Plant Sciences 9(5): 271-275, 2010, ISSN No.1682-3974
3. Indrani Chandra and Sutapa Patra. Optimization of NaCl tolerance on *in vitro* shoot multiplication of *Brassica juncea* (L.) Plant Cell Biology and Molecular Biology , 13,(1&2) : 35-40,2012, ISSN No.0972-2025
4. Indrani Chandra and P Bhanja. Karyomorphological Study of *Flacourtia jangomas* (Lour.)Raeusch.International Journal of Research in Plant Science,2(4):74-75,2012, Peer Reviewed, ISSN No.2249-9717
5. Indrani Chandra and P.Bhanja. *In vitro* Shoot Multiplication of *Flacourtia jangomas*(Lour.) Raeusch.Annals of Plant Sciences,02(03): 92-95,2013,Peer Reviewed, ISSN No.2287-688X,Impact Factor(Index Copernicus) - 2.5
6. Indrani Chandra, Priyanka Singh, Arijit Bhattacharya, Priya singh, Sana Javed and Autashi Singh Mahapatra.*In vitro* callus induction, regeneration and micropropagation of *Solanum lycopersicum*. International Journal of Current Microbiology and Applied Sciences (2013). 2(12):192-197, ISSN: 2319-7706,Impact Factor-1.594.
7. Sabyasachi Chatterjee, Aparna Banerjee and Indrani Chandra. *Hemidesmus indicus*:A Rich Source of Herbal Medicine. Medicinal & Aromatic Plants,3(4):1000e155,ISSN:2167-0412
8. Mousumi Chatterjee, Indrani Chandra, Sabyasachi Chatterjee (2015). *Flacourtia indica* (Burm.f.) Merr. – An Ethnopharmacologically valuable plant (Review Paper). International Journal of Herbo Medica. 2 (1):26-27.
9. Chatterjee S, Bhakat M, Keshri JP, Chandra I (2015). Medicinal Plants: Old wine in a new bottle (Editorial article). Med Aromat Plants. 4(3): <http://dx.doi.org/10.4172/2167-0412.1000e160>. [IF-2.02]

10. Budhaditya Ghosh, Sabyasachi Chatterjee, Indrani Chandra (2015). Fenugreek (*Trigonella foenum-gracum*L.) and its necessity (A Review paper). Fire Journal of Engineering and Technology. 1(1):60-67.
11. Sultana KW, Chatterjee S, Roy A and Chandra I (2015). An overview on Ethnopharmacological and Phytochemical properties of *Thunbergia* sp. [Review paper]. Medicinal and Aromatic plants. 4:5 <http://dx.doi.org/10.4172/2167-0412.1000217>. [IF-2.02]
12. Chandra I, Sarkar S, Ganguly U and Ghosh B. Effects of heavy metal chromium (VI) on root tip of *Allium cepa* L. and it's cytological study through compound and fluorescence microscope. Int. J. of Green & Herbal Chemistry, 2016, 5(1) A: 010-013. ISSN: 2278-3229.

Paper presented in Seminars/Conferences:

1. Indrani Chandra and P.Bhanja Micromorphogenetic Responses of callus tissues of *Coccinia grandis* and *Flacourtia jangomas* to Plant Growth Regulators.NationalConferences on Recent Trends of Researches in Microbiology and Plant Physiology in India,Sept.26-27,1997,Dept. of Botany,SAP(UGC),The University of Burdwan
2. Indrani Chandra and P.Bhanja. Micropropagation of *Flacourtia jangomas* (Lour.) Raeusch NationalConference on Plant,Microbes and Enviornment, March11-12,2000,Dept. of Botany,SAP(UGC),The University of Burdwan,Burdwan
3. Indrani Chandra and P.Bhanja. Study of karyomorphological behaviour of *in vitro* grown callus tissue of *Coccinia grandis* (L.) Voigt, National Conference on Plant Microbes and Environment, Issues & Challenges, March 11-12, 2004, Dept. of Botany, SAP (UGC), The University of Burdwan, Burdwan.
4. Indrani Chandra and P.Bhanja. Study of regeneration behavior from different explants of *Coccinia grandis* (L.) Voigt, National Conference on Current Researches in Plants and Microbial Sciences, Nov.26-27, 2005. Dept. of Botany, SAP (UGC), The University of Burdwan.
5. Indrani Chandra and P.Bhanja. Study of *in vitro* regeneration of *Coccinia grandis* (L.) Voigt by using SEM as well as Fluorescence microscope. National Seminar on Medicinal Plants: Aspects & Prospects, March 15-16, 2008, UGC, CAS, Dept. of Botany, The University of Burdwan.
6. Indrani Chandra, Sandip Mukherjee, Sudip Mondal and Somenath Mukherjee. Standardization of plant growth regulator for the micropropagation of *Centella asiatica*-

A Panacea drug. National Seminar on Medicinal Plants: Aspects & Prospects, March 15-16, 2008, Dept. of Botany, UGC, CAS, The University of Burdwan.

7. Ramanuj Banerjee, Rakesh Chatterjee and Indrani Chandra. Effect of various organic addenda on callus growth of *Daucas carota* and estimation of chlorophyll-A from it. National Seminar on Medicinal Plants: Aspects & Prospects, March 15-16, 2008, Dept. of Botany, UGC, CAS, The University of Burdwan.
8. Indrani Chandra. Direct shoot multiplication in *Flacourtia jangomonas* (Lour.) Raeusch UGC Sponsored National Seminar on Plants, Microbes and Forestry Research for Sustainable Development. March 28-29, 2008, Dept. of Botany and Forestry, Vidyasagar University, Midnapore.
9. Jayita Das, Indrani Chandra and Pranab Roy. Effect of different inic concentration on shoot multiplication of *Enhydra fluctuans*. National Symposium on Plant Cell Tissue and organ culture. The Present Scenario & XXXI Annual Meeting of Plant Tissue Culture Association (India), 3-5th March, 2010, CAS, Dept. of Botany, University of Calcutta, Kolkata.
10. Jayita Das, Indrani Chandra and Pranab Roy. A comparative study of *in vitro* shoot multiplication of Brassicaseae. National Seminar on Recent Trends in Biotechnology, March 11-12th, 2010. Dept. of Biotechnology, The University of Burdwan.
11. Ishita Chatterjee, Priyanka Debnath, Samrat Ghosh, Parthasarathi Mishra and Indrani Chandra. A comparative study of protein profiles between undifferentiated and differentiated callus of *Daucas carota*. National Seminar on Recent Trends in Biotechnology, March 11-12th, 2010. Dept. of Biotechnology, The University of Burdwan.
12. Jayita Das, Indrani Chandra and Pranab Roy. *In vitro* Micropropagation of *Enhydra fluctuans* (Lour). Golden Jubilee Symposium on Contemporary Trends in Plant and Microbial Sciences. March 19-20th, 2010, Dept. of Botany, UGC, CAS, The University of Burdwan, Burdwan.
13. Jayita Das, Indrani Chandra and Pranab Roy. A Comparative study on different Morphological responses of *in vitro* grown *Brassica nigra* and *Brassica juncea* and their protein profiles, 28th Feb-1st March, 2009, 16th W.B. State Science & Technology Congress, p.562. The University of Burdwan, Burdwan.
14. Budhaditya Ghosh and Indrani Chandra Micropropagation of *Flacourtia indica* DST sponsored National Seminar on New Horizons in Biotechnology, 30-31 Aug., 2013, HIT, Midnapur, ISBN No. 978-81-927768-0-4.
15. 15. Indrani Chandra, Soumyadip Dutta, Rifat Nawaj Ul Islam, Shilpi Mishra, Joydeep Chakraborty, Arindam Sarkar. *In vitro* propagation of *Mentha spicata* L. XXIth W.B. State Science and Technology, 20-21 Feb., 2014, The University of Burdwan, Burdwan.

16. Indrani Chandra and Deepjyoti Das . Study of Regeneration Potential in *Bacopa monnieri* (L.) International Symposium on Genetic Analysis: Translational and developmental. 22-24 Nov.2014, Dept. of Zoology, B.U., Burdwan.
17. Aparna Banerjee, Mousumi Chatterjee, Sabyasachi Chatterjee and Indrani Chandra Study of callus induction and antimicrobial activities of *Hemidesmus indicus* R.BR.National Seminar on"Oppertunities in Medicinal Plant Research"Nov.29-30,2014, J.U. Kolkata
18. Mousumi Chatterjee, Aparna Banerjee, Indrani Chandra and Sabyasachi Chatterjee Invitro shoot multiplicationand study of antimicrobial properties of *Flacourtia indica* (BURM.F)MERR.
19. National Seminar on"Oppertunities in Medicinal Plant Research"Nov.29-30,2014, J.U. Kolkata
20. S. Rajpoot,S. Rani, P.Mukherjee, I Chandra and S. Chatterjee Isolation and Characterization of Arsenic Resistant Microorganism from Raghunathganj block of Murshidabad District, W. B.,International Conference on Mother Earth, Dec 10-12,2014, Dept. of Enviornmental Science, B.U. ,Burdwan
21. M Chatterjee, I Chandra and S Chatterjee. *In vitro* shoot multiplication and micropropagation of *Enhydra fluctuans* Lour. An important medicinal plant. National symposium on Modern approaches of Biotechnology in Globalization. March 18th 2016, Department of Biotechnology, The University of Burdwan.
22. B Ghosh, I Chandra and S Chatterjee. *In vitro* propagation of *Trigonella foenum-graecum* L. National symposium on Modern approaches of Biotechnology in Globalization. March 18th 2016, Department of Biotechnology, The University of Burdwan.

Paper published in Book:

1. Indrani Chandra and P. Bhanja. Micropropagation of Plants through Tissue culture, *Coccinia grandis*.A Case Study. In Contemporary Thoughts in Plant Sciences, Ed. By P.K.Pal.pp.133-136, Academic Staff College, B.U.,April,1996
2. Indrani Chandra. *Aloe vera* – An important Medicinal Plant, PETALS,(ISSN-2321-5070) Pub. by Dept. of Botany, B.U.,2013