



ENLIGHTENMENT TO PERFECTION

UNIVERSITY OF NORTH BENGAL

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Raja Rammohunpur, Dist- Darjeeling, West Bengal, Pin-734013, India.

Department of Botany

Print

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Subject Specialization: Plant Biochemistry and Molecular Biology**Areas of Research Interest:** Stress Physiology, Food Biochemistry**No. of Ph.D. students: (a) Supervised: Nil (b) Ongoing: 02****No. of M.Phil. students: (a) Supervised: Nil (b) Ongoing: Nil****No. of Publications: (a) Journal(s): 14 (b) Book(s): Nil (c) Book chapter(s): 02****Achievement and Awards:**University Medal for securing 1st Class 1st in B.Sc. (Hons.) (Botany) Examination, 2006 conducted by the University of North Bengal.University Medal for securing 1st Class 2nd in M.Sc. (Botany) Examination, 2008 conducted by the University of North Bengal.

Post-Graduate Merit Scholarship for University Rank Holder - Awarded by Ministry of HRD and UGC (2006-2008).

CSIR Junior Research Fellowship – Awarded by CSIR-UGC (2008).

Professional Experiences

- UG Teaching - 6 Years 4 Months (2010 - 2016) at Kurseong College, Kurseong.
- PG Teaching - 2 Years 5 Months (2016-2018) at University of Gour Banga, Malda. 11.12.2018 to till date at University of North Bengal.

List of Publications:**Books Chapters:**

- Usha Chakraborty, **Swarnendu Roy**, Bishwanath Chakraborty: *Microorganisms Aiding Existence and Efficiency of Plants in Saline Environment: What We Know and What to Expect*. In: Microorganisms in Saline Environments: Strategies and Functions, 07/2019; pages 211-235; , ISBN: 978-3-030-18974-7, DOI:10.1007/978-3-030-18975-4_9
- Usha Chakraborty, Biswanath Chakraborty, **Swarnendu Roy**, Pannalal Dey, Arka Pratim Chakraborty: *Isolation, Biochemical and Molecular characterization of salt tolerant bacteria from rhizosphere of Cynodon dactylon - a facultative halophyte*. Microbial resources for crop improvement, Edited by B.N.Chakraborty, U.Chakraborty, 01/2013; Satish publishing house.

Publications:

- Rakhi Chakraborty, Debjani Pal, **Swarnendu Roy**: *Characterization of Leucas aspera and evaluation of antioxidant activities before and after being subjected to digestion enzymes*. International Journal of Vegetable Science 06/2019; DOI:10.1080/19315260.2019.1630540
- Rakhi Chakraborty, **Swarnendu Roy**: *Evaluation of the diversity and phylogenetic implications of NAC transcription factor members of four reference species from the different embryophytic plant groups*. Physiology and Molecular Biology of Plants 03/2019; 25(2):347-359., DOI:10.1007/s12298-018-0581-9

- Prajesh Dutta, Anamika Karmakar, Sukanta Majumdar, **Swarnendu Roy**: *Klebsiella pneumoniae (HRI) assisted alleviation of Cd(II) toxicity in Vigna mungo: a case study of biosorption of heavy metal by an endophytic bacterium coupled with plant growth promotion.*
- Rakhi Chakraborty, **Swarnendu Roy**: *Exploration of the diversity and associated health benefits of traditional pickles from the Himalayan and adjacent hilly regions of Indian subcontinent.* Journal of Food Science and Technology -Mysore- 05/2018; 55(5):1599- 1613., DOI:10.1007/s13197-018-3080-7
- **Swarnendu Roy**, Usha Chakraborty: *Role of sodium ion transporters and osmotic adjustments in stress alleviation of Cynodon dactylon under NaCl treatment: a parallel investigation with rice.* Protoplasma 01/2018; 255(1):175-191., DOI:10.1007/s00709-017-1138-4
- **Swarnendu Roy**, Usha Chakraborty: *Screening of salt-tolerance potential of some native forage grasses from the eastern part of Terai-Duar grasslands in India.* Tropical Grasslands- Forrajes Tropicales 09/2017; 5(3):129-142., DOI:10.17138/tgft(5)129-142
- Jayanta Choudhury, Sukanta Majumdar, **Swarnendu Roy**, Usha Chakraborty: *Antioxidant Activity and Phytochemical Screening of Two Edible Wetland Peridophytes Diplazium esculentum (Retz) Sw and Marsilea minuta L.–A Comparative Study.*
- Rakhi Chakraborty, **Swarnendu Roy**, Vivekananda Mandal: *Assessment of traditional knowledge of the antidiabetic plants of Darjeeling and Sikkim Himalayas in the context of recent phytochemical and pharmacological advances.* Journal of integrative medicine 09/2016; 14(5):336-358., DOI:10.1016/S2095-4964(16)60267-4
- **Swarnendu Roy**, Usha Chakraborty: *Cross-generic studies with rice indicate that ion homeostasis and antioxidant defense is associated with superior salinity tolerance in Cynodon dactylon (L.) Pers..* Indian Journal of Plant Physiology 03/2015; 20(1):14-22., DOI:10.1007/s40502-014-0129-0
- **Swarnendu Roy**, Sukanta Majumdar: *Antioxidative properties of the leaves of Daphniphyllum chartaceum Rosenthal.* Journal of medicinal plant research 05/2014; 7(18):1239-1243.
- **Swarnendu Roy**, Usha Chakraborty: *Salt tolerance mechanisms in Salt Tolerant Grasses (STGs) and their prospects in cereal crop improvement.* Botanical Studies 03/2014; 55(1):31., DOI:10.1186/1999-3110-55-31
- **Swarnendu Roy**, Usha Chakraborty: *Structural and functional role of salt glands of cogon grass (Imperata cylindrica (L.) Raeuschel) under salinity stress.*
- Sukanta Majumdar, **Swarnendu Roy**: *Antibacterial and antioxidative activity of the leaves of Daphniphyllum himalense(Benth.) Muell. Arg. growing in Darjeeling hills.*
- Usha Chakraborty, **Swarnendu Roy**, Arka Pratim Chakraborty, Pannalal Dey, Bishwanath Chakraborty: *Plant Growth Promotion and Amelioration of Salinity Stress in Crop Plants by a Salt-Tolerant Bacterium.*