

Personal details:

Name : BHUMIKA PRADHAN
Father's Name : CHANDRA KUMAR PRADHAN
Mother's Name : LAXMI PRADHAN
Sex : FEMALE
Date of Birth : 17.04.1984
Nationality : INDIAN
Language Proficiency: English, Hindi, Nepali and Bengali (All Read, Speak, and Write)

Educational Qualifications:

| Degree | Year | Board / University | Class/Division | Subjects Taken |
|--|------|---|----------------------------|--|
| Ph.D. Degree | 2015 | University of North Bengal, Siliguri, Darjeeling | NA | Botany |
| Ph. D. Course work Examination | 2015 | -do- | I st Division | Botany |
| M.A./M.Sc. | 2006 | University of North Bengal, Siliguri, Darjeeling | 1st Division, (Gold Medal) | Botany (Plant Physiology & Plant Biochemistry) |
| B.A./B.Sc. Hons. | 2004 | St. Josephs College, Darjeeling, University of North Bengal | II nd | Botany (Hons.), Zoology, Chemistry, English. Alternative English |
| Higher Secondary (Class 12 th) | 2001 | Kendriya Vidyalaya, Bengdubi, Siliguri | I st | Biology, Physics, Chemistry, Mathematics, English |
| Madhyamik Pariksha (Class 10 th) | 1999 | -do- | I st Division | Mathematics, Science, Social Science, English, Hindi |

Current Status:

Assistant Professor & Head
Department of Botany
Netaji Nagar Day College
Netaji Nagar, Kolkata 700092

Awards/Achievements:

Class 10 topper, MSc (Gold Medal), Best Poster Award

Computer Skills:

Basic Working Knowledge

Teaching Experience: (One and half year), Joined on 21st Dec., 2016, in Netaji Nagar Day College

Subjects Taught in College (Year Wise Detail):

Year 2016: Plant Physiology, Biochemistry, Plant Biotechnology, Plant Tissue Culture, Plant Breeding, Bryophytes, Algae, Taxonomy, Morphology, , Plant Nomenclature, etc. (Includes, Theory, Practical and Excursions)

Year 2017: Plant Physiology, Biochemistry, Plant Biotechnology, Plant Tissue Culture, Plant Breeding, Bryophytes, Algae, Taxonomy, Morphology, , Plant Nomenclature, etc. (Includes, Theory, Practical and Excursions)

Year 2018: Plant Physiology, Biochemistry, Plant Biotechnology, Plant Tissue Culture, Plant Breeding, Bryophytes, Algae, Taxonomy, Morphology, , Plant Nomenclature, etc. (Includes, Theory, Practical and Excursions)

Research Experience:

1. Six years of research experience during PhD, with UGC Meritorious Fellowship
2. 1 year research experience as Project Assistant, ICAR, Kalimpong

Area of Research: Plant Physiology and Plant Biochemistry, Molecular Biology, Stress Biology

Research Oriented Publications in Journals/Books/Chapter of Books:

List of Publications:

1. Usha Chakraborty, **Bhumika Pradhan**, and Rohini Lama (2014) Metabolome analyses for understanding abiotic stress responses in plants to evolve management strategies. Climate change and plant abiotic stress tolerance. Wiley Blackwell. 2:727-754.
2. S. Moktan, P.C. Lama and **B. Pradhan** (2014) Role of Effective Microorganism (EM) in improving seed longevity and viability under adverse storage conditions. Indian journal of advanced life sciences.7(1): 119-127, 2014.
3. **Pradhan B** and Chakraborty U (2013). Drought and salinity stress responses in wheat (*Triticum aestivum* L.): activation of antioxidative defense and accumulation of stress responsive metabolites. International Journal of Bio-Resource and stress management. 4(3): 424-430.
4. Chakraborty U and **Pradhan B** (2012) Oxidative stress in five wheat varieties (*Triticum aestivum* L.) exposed to water stress and study of their antioxidant enzyme defense system, water stress responsive metabolites and H₂O₂ accumulation. Brazilian Journal of Plant Physiology.24 (2): 117-130, 2012.

5. **Pradhan B** and Chakraborty U (2012) ROS production, H₂O₂ detection and biochemical characterization of water stressed wheat (*Triticum aestivum* L.) varieties. North Bengal University Journal of Plant Science, 6(1):63-70.
6. Chakraborty U and **Pradhan B** (2011) Drought stress-induced oxidative stress and antioxidative responses in four wheat (*Triticum aestivum* L.) varieties. Archives of Agronomy and Soil Science. 58 (6):617-630.
7. Chakraborty U, Pradhan D, Lama R, **Pradhan B**, De U and Chakraborty BN (2013) Abiotic stress induced biochemical response in cereals and legumes and associated changes in arbuscular mycorrhizal population. Microbial resources for crop improvement. Satish Serial Publishing house. ISBN 978-93-81226-39-1.183-198.
8. D.R. Chhetri, **Bhumika Pradhan**, S.C. Roy and A.K. Mukherjee (2008) Isolation and Biochemical Characterization of L-myo-Inositol-1-phosphate synthase from *Swertia bimaculata* Hook. f. & Thoms. Journal of Hill Research. 21(2): 59-66.
9. **Pradhan B** and Chakraborty U (2017) Antioxidative Activities and Metabolomic Profiling of Common Indian Wheat Cultivars for Determining Resistance Against Elevated Salinity Stress. Agricultural Sciences. INTERNATIONAL CONFERENCE On Contemporary Issues in Integrating Climate-The Emerging Area of Agriculture, Horticulture, Biodiversity, Forestry; Engineering Technology, Applied Science and Business Management for Sustainable Development (AGROTECH-2017) Organized by Himalayan Scientific Society for Fundamental and Applied Research In Collaboration with: Kalimpong Science Center , Kalimpong and Krishi Sanskriti, New Delhi Supported by: Regional Research Station (Hill Zone) UBKV On Date 11-12 May, 2017.

List of Abstracts Published:

1. Chakraborty U, Lama R and **Pradhan B** (2009) Impact of water stress on biochemical metabolism of different maize and wheat varieties. Silver Jubilee National Symposium on “*Sustainable Utilization of Plant and Microbial Resources*”, Feb28-March01, pp-21; organized by DRS Department of Botany, University of North Bengal.
2. Chakraborty U, Pradhan D, Lama R, **Pradhan B**, De U and Chakraborty BN (2009) “Abiotic stress induced biochemical response in Cereals and legumes and associated changes in arbuscular mycorrhizal population”. Abstract: 31st Annual Conference & Symposium on “*Microbial Wealth- Plant Health*”, October 23-25, pp-54; organized by Indian Society of Mycology and Plant Pathology and DRS- Department of Botany, University of North Bengal.
3. **Pradhan B** and Chakraborty U (2011) “Influence of water stress on accumulation of water stress responsive metabolites and antioxidants, lipid peroxidation, antioxidant enzymes and *in-situ* detection of H₂O₂ in sensitive and tolerant wheat (*Triticum aestivum* L.) varieties”. Abstract: *National Symposium on Advances in Abiotic and Biotic Stress Management of Plants*” September 23-24, pp-12; organized by DRS-Department of Botany, University of North Bengal.
4. Chakraborty AP, Chakraborty BN, **Pradhan B** and Chakraborty U (2011) Growth improvement of wheat plants by halo-tolerant PGPR under saline stress condition and associated changes in anti-oxidative and defense enzyme activities. “*National Symposium on Advances in Abiotic and Biotic Stress Management of Plants*” September 23-24, pp-42; organized by DRS-Department of Botany, University of North Bengal, abstract published.

5. **Pradhan B** and Chakraborty U (2012) Biochemical responses of different wheat (*Triticum aestivum* L.) cultivars to salinity stress. “*National Symposium on Biotic and Abiotic Stresses in Plants under Changing Climate Scenario*”, November 29-30, 2012, pp-25; organized by Indian Society of Mycology and Plant Pathology and Dept of Plant Pathology, U BKV, Pundibari.
6. **Pradhan B** and Chakraborty U (2013) Drought and salinity stress responses in wheat (*Triticum aestivum* L.): activation of antioxidative defense and accumulation of stress responsive metabolites. International Conference on Bio-Resource and Stress Management”, February 6-9, 2013, jointly organized by Ratikanta Maiti Foundation and Central Research Institute for Jute and Allied Fibres (CRIJAF), Kolkata.
7. **B. Pradhan** and U. Chakraborty (2013) Antioxidative response of nine wheat (*Triticum aestivum* L.) varieties to salinity stress. National Conference on New Frontiers in Medicinal Plant Research & Special Meeting on Medicinal plants for Livelihood Security and Community Empowerment in Eastern Himalayas Organized by the Department of Botany Silikkim University, Gangtok-737 102. 3-5 October 2013.
8. **B. Pradhan** and U. Chakraborty (2014) Screening of five genotypes of wheat (*Triticum aestivum* L.) for drought and salt tolerance through their antioxidative profiling. UGC & DST Sponsored National Symposium on Advances in Plant and Microbial Research organized by DRS-Department of Botany, University of North Bengal, Siliguri-734013, WB, India.
9. **Pradhan B** and Chakraborty U (2017) Antioxidative Activities and Metabolomic Profiling of Common Indian Wheat Cultivars for Determining Resistance Against Elevated Salinity Stress. Agricultural Sciences. INTERNATIONAL CONFERENCE On Contemporary Issues in Integrating Climate-The Emerging Area of Agriculture, Horticulture, Biodiversity, Forestry; Engineering Technology, Applied Science and Business Management for Sustainable Development (AGROTECH-2017) Organized by Himalayan Scientific Society for Fundamental and Applied Research In Collaboration with: Kalimpong Science Center , Kalimpong and Krishi Sanskriti, New Delhi Supported by: Regional Research Station (Hill Zone) UBKV On Date 11-12 May, 2017.

Workshops/Training programmes attended:

1. One day Workshop on “Innovative agriculture extension module for effective outreach” jointly organized by Division of Agricultural Extension (IARI, New Delhi) & IARI, regional station-Kalimpong in collaboration with North Bengal Science Centre, Siliguri.
2. One day “Training cum Awareness Programme on Provisions of Protection of Plant Varieties & Farmers’ Rights Act-2001” on 30th June, 2015 organized by Indian Agricultural Research Institute-Regional Station, Kalimpong, Darjeeling & Protection of Plant Varieties & Farmers’ Rights Authority, Ministry of Agriculture, Govt. of India.
3. One day “User Awareness Programme on Access to E-resources under N-LIST Programme”-organized by University Library, University of North Bengal in collaboration with the INFLIBNET Centre, Ahmedabad (An Inter-University Centre of UGC) held on 10th February, 2012.
4. WORKSHOP-UGC sponsored “Research Scholar’s Training” from 30-06-2011 to 01-07-2011, North Bengal University.

5. WORKSHOP-“National workshop on Bioinformatics” held from 07-09th March, 2008, Bioinformatics Facility, Department of Botany, North Bengal University.
6. WORKSHOP-Plant Systematic: Challenges and Perspectives and Dr. Dan H. Nicolson Memorial Lectures organized by Department of Botany, University of Calcutta on and from 13th to 23rd February 2017.
7. Workshop on “Taxonomy of Vascular Plants: Principles & Practices” Organized by: CAS, Department of Botany, University of Calcutta Date: 5th to 12th March 2018.

Interests/Hobby:

1. Painting
2. Music
3. Book Reading & Travel