




Faculty Details proforma for DU Web-site (2021)

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cc: director@ducc.du.ac.in)

Title	Dr.	First Name	RATUL	Last Name	BAISHYA	Photograph
Designation		ASSOCIATE PROFESSOR				
Address		Department of Botany University of Delhi Room no. 17 & Lab 310 Delhi-110007				
Phone No Office		011-27667573				
Residence						
Mobile		+91-9910807343				
Email		rbaishyadu@gmail.com rbaishya@botany.du.ac.in				
Web-Page		www.du.ac.in www.botany.du.ac.in				
Educational Qualifications						
Degree	Institution		Year			
Ph.D.	North-Eastern Hill University- Shillong		2012			
M.Phil. / M.Tech.	-		-			
PG	North-Eastern Hill University- Shillong		2004			
UG	North-Eastern Hill University- Shillong		2002			
Any other qualification	CSIR-NET (JRF)		2003			
Career Profile						
Organisation / Institution		Designation		Duration		Role
Department of Botany, University of Delhi		Assistant Professor		6 Nov 2009 to 5 Nov 2021		Teaching and Research
Department of Botany, University of Delhi		Associate Professor		6 Nov 2021 till date		Teaching and Research
Administrative Assignments						
Member - Committee of courses for studies in Honors/PG and Research studies in Botany						
Member - Swachata Abhiyaan Committee						
Member - Gender Sensitization committee						
Nodal Officer NE- Committee to prevent racial discrimination and harassment of students from North-Eastern Region of India.						
Member - Foreign Students' Registry						
Member - Furniture sub-committee						
Member - Panel of Judges in the Annual flower Show, Garden Committee, University of Delhi						

Member - Department Promotion Committee (DPC) for Colleges and Departments
 Member - UGC Journal Uploading Committee
 Member - M.Phil/Ph.D. Course reform committee
 Member - Students' Lounge committee.
 Member - Students' Teachers Interaction.
 Member – Departmental clearance
 Member - Repairs & maintenance
 Member - Grievance Committee for UG/PG/M.Phil/Ph.D. admission
 Member - Board of Research Studies, Faculty of Science
 Member - Departmental Research Committee (DRC)
 Member - Internet restoration committee and others assigned by the Department.

Areas of Interest / Specialization

My research interest revolves around Environmental issues, Biodiversity conservation, Ecology, Ecosystem process and function, Mountain research, biomass and carbon sequestration research in different ecosystems, Environment Impact Assessment, Abiotic stress, Climate change effects and Plant productivity, Soil and plant nutrition.

Subjects Taught

M.Sc. Botany
 M. Sc. II, C-VIII-Plant Ecology
 BOT 202. Systematics, Evolution & Environmental Science
 BOT 304. Principles of Ecology
 BOT 306. Bioinformatics, Computational Biology and Biostatistics
 BOT 405. Agricultural Ecology: Principles and Applications
 BOT 409. M.Sc. Dissertation
 BOT-Core-3001. Principles of Ecology and Environmental Science (CBCS)
 BOT-Open Elective-3051. Climate Change and Ecosystem Function (CBCS)
 BOT-Elective-4009. Agricultural Ecology (CBCS)
 BOT-Elective-4004: Bioinformatics, Computation Biology & Biostatistics (CBCS)
 BOT-Elective-4017. Dissertation (CBCS)
 M.Phil. course Paper - Population Biology (8A) and Ecological Adaptations (9A)
 Ph.D. course work Group 3 (Methods of Field Biology)
 M.Phil/Ph.D. course work (Revised 2018 onwards).
 RM-2. Statistics for Biologists
 EL-2. Community Ecology
 EL-16. Population Ecology

REVIEWER OF INTERNATIONAL AND INDIAN JOURNALS

Proceedings of the National Academy of Science, India Section: Biological Science, Springer

Ecological Processes, Springer

Journal of Forestry Research, Springer

Journal of Biosciences, IAS, India

Ecosystem Services, Elsevier

Phytomorphology, ISPM, India

Tropical Ecology, Springer

Vegetos, Springer

Environmental Sustainability, Springer

Time table of the subjects taught during the current semester

S.No.	Subject	Days	Time	Classroom
1	Principles of Ecology and Environmental Science BOT-CORE-3001 (Theory 16 August - 9 September, 2021)	Monday (Theory)	11 am – 1:00 pm	ONLINE CLASS
2	Principles of Ecology and Environmental Science BOT-CORE-3001 (Practical 16 August - 9 December, 2021)	Monday (Practical)	1:30 pm – 5:30 pm	ONLINE CLASS
3	Climate Change and Ecosystem Function BOT-Open Elective-3051 (Theory only 16 August - 9 December, 2021)	Saturday	11:00 am -1:00 pm	ONLINE CLASS
4	Agricultural Ecology BOT-ELECTIVE-4009 Theory & Practical Jan 4 -April 29, 2021	Monday (Theory & Practical)	Theory: 8:45 am – 11:30 am Practical: 1:30 pm – 5:30 pm	ONLINE CLASS
5	Bioinformatics, Computational Biology and Biostatistics BOT-ELECTIVE-4004 Theory & Practical Jan-April 2021	Tuesday (Theory & Practical)	Theory: 8:45 am – 11:30 am Practical: 1:30 pm – 5:30 pm	ONLINE CLASS
6	BOT 4017: M.Sc. Dissertation Jan-April 2021	ONLINE GUIDANCE		

7	Ph.D./M.Phil. Course Work RM-02 (Statistics for Biologists) 9 September – 30 September 2021	Thursday Theory & Practical	11:30 am – 5:30 pm	ONLINE CLASS	
8	Ph.D./M.Phil. Course Work EL-02 (Community Ecology) 10 August – 31 August 2021	Tuesday Theory & Practical	11:30 am – 5:30 pm	ONLINE CLASS	
9	Ph.D./M.Phil. Course Work El-16 (Population Biology) 7 September – 28 September 2021	Tuesday Theory & Practical	11:30 am – 5:30 pm	ONLINE CLASS	Click here text.

Research Guidance

1. Supervision of Doctoral Thesis (Completed/Viva-voce awaited)

- i. **Urvashi Tomar (Awarded on 5 October 2020):** *“SOIL CARBON SEQUESTRATION, MICROBIAL ACTIVITY AND NUTRIENT DYNAMICS IN SEMI-ARID RIDGE FOREST ECOSYSTEM OF DELHI.”*
- ii. **Shikha Prasad (Awarded on 23 July, 2021):** *“EFFECT OF SEASONS AND TREE SPECIES ON VITAL ECOSYSTEM PROCESSES AND FUNCTIONS IN SEMI-ARID FOREST OF DELHI*

2. Supervision of Doctoral Thesis (Under Progress)

- i. **Siddhartha Kaushal (Regd. 2016)** is working on “Quantification of total ecosystem level carbon sequestration Western Himalaya in different climate scenarios”.
- ii. **Prachi (Regd. 2016)** is working on “Effect of Macronutrient amendments inmedicinal plants”.
- iii. **Anshu Siwach (Regd. 2021).** Effect of Bryophytesin various forest types of Uttarakhand

3. Supervision of M.Phil. dissertation with titles (Completed)

- Anshu Siwach (2020):** Effect of bryophytes in temperate Forests of Garhwal Himalaya
- Ravi Kumar (2019):** Biomass and carbon stock assessmentsemi-arid forests of India
- Rhituporn Saikia (2018):** Isolation, identification and characterization of phosphate Solubilizing bacteria of Delhi.
- Rajan Rathore (2018):** Carbon and nutrient dynamicsin Delhi.

Ekta (2014): Ecological study Ecosystem.

Aftab Hassan (2014): Soil carbon pool and CO₂ efflux studies Ecosystem.

4. Supervision of M.Sc. dissertation (Completed)-----35

5. Supervision of Undergraduate and Masters Summer Internship (Completed)-----5

6. Supervision of Undergraduate and Masters Summer Internship (Ongoing)-----1

Publications Profile

Siwach, A, Kaushal, S. and Baishya, R*. 2021. Terricolous mosses impact soil microbial biomass carbon and enzymatic activity under temperate forest types of Garhwal Himalayas. *Environmental Monitoring and Assessment*, Springer, 193:516, Published Online on 26 July, 2021. Impact factor 2.513 <https://doi.org/10.1007/s10661-021-09295-5>

Siwach, A. Kaushal, S. and Baishya, R*. 2021. Effect of Mosses on physical and chemical properties of soil in temperate forests of Garhwal Himalayas. *Journal of Tropical Ecology*, Cambridge University Press. 37: 126–135. Published Online on 15 July, 2021. Impact factor 1.394 <https://doi.org/10.1017/S0266467421000249>

Kaushal, S. Siwach, A. and Baishya, R*. 2021. Diversity, regeneration, and anthropogenic disturbance in major Indian Central Himalayan forest types: Implications for conservation (Published online on 28.05.2021), *Biodiversity and Conservation*, Springer. Impact factor 3.549 <https://doi.org/10.1007/s10531-021-02203-w>

Kaushal, S. and Baishya, R*. 2021. Stand structure and species diversity regulates biomass carbon stock under major Central Himalayan forest types of India. 10:14 1-18. *Ecological Processes*, Springer, Impact factor 2.849. <https://doi.org/10.1186/s13717-021-00283-8>

Prasad, S. and Baishya, R*. 2021a. Effect of tree species and seasons on soil nitrogen transformation rates in semi-arid forest of Delhi, India (Published on 2 October 2021), *VEGETOS*, Springer. <https://doi.org/10.1007/s42535-021-00291-1>

Dhyani, A*. Baishya, R. Uniyal, P.L. and Rao. K.S. 2021. Bryophyte diversity and community composition in the gap and non-gap areas of Chakrata forest range, Uttarakhand, India. (Published online on 24 September 2021) *VEGETOS*, Springer. <https://doi.org/10.1007/s42535-021-00295-x>

Prasad, S. and Baishya, R*. 2021b. Seasonal dynamics and tree-species affects soil microbial biomass carbon in semi-arid forest of India. (Accepted on 14 August 2021), *International Journal of Ecology and Environmental Sciences* (In Press).

- Tomar, U. and Baishya, R*. 2020. Seasonality and moisture regime control soil respiration, enzyme activities, and soil microbial biomass carbon in a semi-arid forest of Delhi, India *Ecological Processes*, 9:50 Springer. Published online on 26 September, 2020. Impact factor 2.849 <https://doi.org/10.1186/s13717-020-00252-7>
- Tomar, U. and Baishya, R*. 2019. Moisture regime influence on soil carbon stock and carbon sequestration rates in Semi-arid forest of National capital region, India. *Journal of Forestry Research*, Springer ISSN 1007-662X Published online on 21 September, 2019. 31(6):2323–2332 Impact factor: 2.149 <https://doi.org/10.1007/s11676-019-01032-6>
- Prasad, S. and Baishya, R*. 2019. Interactive effects of soil moisture and temperature on soil respiration under native and non-native tree species in semi-arid forest of Delhi, India. *Tropical Ecology*, Springer 60:252-260. <https://doi.org/10.1007/s42965-019-00028-x> ISSN 0564-3295
- Saikia, R. and Baishya, R*. 2019. Carbon sequestration as an ecosystem service: prospects of REDD+ projects in North-East India *In: Dhall et al. (Eds) North-East India: Issues and challenges*. Bookwell Publications, New Delhi pp 1-10
- Saikia, R. and Baishya, R*. 2019. Phosphate Solubilizing Bacteria isolated from crop soils of Delhi shows mineral phosphate solubilizing ability *In: Bikarma Singh (Ed.) Plants for Human Survival and Medicine*, New India Publishing Agency, New Delhi.) pp. 275-282.
- Sharma, P and Baishya, R*. 2019. Plant growth-promoting bacteria as a potent tool in amelioration of salinity stress: A Review *In: Bikarma Singh (Ed.) Plants for Commercial Values*, New India Publishing Agency, New Delhi. pp 211-227.
- Saikia, R. and Baishya, R*. 2018. Phosphate Solubilizing Bacteria in certain agricultural crop soils of Delhi. *International Journal of Plant and Environment*. Vol. 4, No. 1 (January 2018): 70-75. <https://doi.org/10.18811/ijpen.v4i01.11613>
- Prasad, S and Baishya, R*. 2017. Nitrogen Mineralization in Terrestrial Ecosystem. *The Botanica* 67: 61-66.
- Kaushal, S and Baishya, R*. 2017. Old-growth Forests as Carbon Reservoirs: A Review of Garhwal Himalayas. *The Botanica* 67: 97-105.
- Sharma, P and Baishya, R*. 2017. Phosphate Solubilizing Bacteria-Assisted Salinity Tolerance in Plants: A Review. *The Botanica* 67: 77-83
- Tomar, U and Baishya, R*. 2017. Land Use Changes and Soil Carbon Sequestration in Mitigation of Climate Change. *The Botanica* 67: 87-93.
- Saikia, R and Baishya, R*. 2017. Mechanisms and Genetics of Mineral and Organic Phosphate Solubilization by Phosphate Solubilizing Bacteria. *The Botanica* 67: 47-53.

- Hasan, A. & Baishya, R*. (2016). An allometry-based approach for understanding the biomass and carbon distribution in Delhi ridge forest Ecosystem. *In: Biodiversity and Environmental Conservation* (Krishna Upadhaya ed.) pp. 14-28.
- Sharma, D and Baishya, R*. 2016: Plant Canopy Architecture and Models: A Review. *Botanica* 66: 42-52.
- Baishya, R. & Barik, S.K*. 2015. Ecosystem level carbon and net primary productivity of old-growth and regenerating humid tropical forest of North-Eastern India. *International Journal of Plant and Environment* 1(1) DOI: <http://dx.doi.org/10.18811/ijpen.v1i1.7117>
- Baishya, R. (2015). REDD+ and its concerns in Indian Prospective. *The Botanica* 64 &65:15-16.
- Baishya, R. and Barik, S.K. 2011. Estimation of tree biomass, carbon pool and net primary production of an old-growth *Pinus kesiya* Royle ex. Gordon forest in north-eastern India. *Annals of Forest Science*. 68: 727-736. Impact factor 2.583 <https://doi.org/10.1007/s13595-011-0089-8>
- Thapa, N., Upadhaya, K*., Baishya, R. and Barik, S.K. 2011. Effect of Plantation on Plant Diversity and Soil Status of Tropical Forest Ecosystems in Meghalaya, Northeast India. *International Journal of Ecology and Environmental Sciences* 37 (1): 61-73.
- Barik, S.K*. Lakadong, N.J., Baishya, R., Chettri, A., Das, P. Kayang, H. and Marbaniang, D. 2009. A new record of *Monotropa hypopitys* L., a mycoheterotrophic plant for India. *Journal of Bombay Natural History Society* 106(1): 127-129.
- Baishya, R., Barik, S.K*. and Upadhaya, K. 2009. Distribution pattern of aboveground biomass in natural and plantation forests of humid tropics in northeast India. *Tropical Ecology* 50(2): 295-304.
- Upadhaya, K*., Barik, S.K., Adhikari, D., Baishya, R. and Lakadong, N.J. 2009. Regeneration ecology and population status of a critically endangered and endemic tree species (*Ilex khasiana* Purk.) in north-eastern India. *Journal of Forestry Research* 20(3): 223-228. <https://doi.org/10.1007/s11676-009-0041-z>
- Khar Lyngdoh, E. and Baishya, R. 2009. People's perception on climate change: A case study from Meghalaya *In: Reflections of Climate Change Leaders from the Himalayas*. Organized by British High Commission-New Delhi and LEAD India, pp. 115-136.

Publications in the Last one year

- Siwach, A, Kaushal, S. and Baishya, R*. 2021. Terricolous mosses impact soil microbial biomass carbon and enzymatic activity under temperate forest types of Garhwal Himalayas. *Environmental Monitoring and Assessment*, Springer, 193:516, Published Online on 26 July, 2021. Impact factor 2.513 <https://doi.org/10.1007/s10661-021-09295-5>
- Siwach, A. Kaushal, S. and Baishya, R*. 2021. Effect of Mosses on physical and chemical properties of soil in temperate forests of Garhwal Himalayas. *Journal of Tropical Ecology*, Cambridge University Press. 37: 126–135. Published Online on 15 July, 2021. Impact factor 1.394 <https://doi.org/10.1017/S0266467421000249>
- Kaushal, S. Siwach, A. and Baishya, R*. 2021. Diversity, regeneration, and anthropogenic disturbance in major Indian Central Himalayan forest types: Implications for conservation (Published online on 28.05.2021), *Biodiversity and Conservation*, Springer. Impact factor 3.549 <https://doi.org/10.1007/s10531-021-02203-w>
- Kaushal, S. and Baishya, R*. 2021. Stand structure and species diversity regulates biomass carbon stock under major Central Himalayan forest types of India. 10:14 1-18. *Ecological Processes*, Springer, Impact factor 2.849. <https://doi.org/10.1186/s13717-021-00283-8>
- Prasad, S. and Baishya, R*. 2021a. Effect of tree species and seasons on soil nitrogen transformation rates in semi-arid forest of Delhi, India (Published on 2 October 2021), *VEGETOS*, Springer. <https://doi.org/10.1007/s42535-021-00291-1>
- Dhyani, A*. Baishya, R. Uniyal, P.L. and Rao. K.S. 2021. Bryophyte diversity and community composition in the gap and non-gap areas of Chakrata forest range, Uttarakhand, India. (Published online on 24 September 2021) *VEGETOS*, Springer. <https://doi.org/10.1007/s42535-021-00295-x>
- Prasad, S. and Baishya, R*. 2021b. Seasonal dynamics and tree-species affects soil microbial biomass carbon in semi-arid forest of India. (Accepted on 14 August 2021), *International Journal of Ecology and Environmental Sciences* (In Press).
- Tomar, U. and Baishya, R*. 2020. Seasonality and moisture regime control soil respiration, enzyme activities, and soil microbial biomass carbon in a semi-arid forest of Delhi, India *Ecological Processes*, 9:50 Springer. Published online on 26 September, 2020. Impact factor 2.849 <https://doi.org/10.1186/s13717-020-00252-7>

Invited Talks:

- Life Sciences: Common hazards and knowhow on Laboratory safety protocols. Online Training for Technical Staff, Organized by University of Delhi, September 6-10 2021. Presented on September 8, 2021.
- Carbon Sequestration and Auditing: Methods, Scope and Prospects. Online Faculty Development Program on “Environmental Audit”. Organised by DBT Star College Scheme, Kirori Mal College, University of Delhi, July 1, 2021.
- Linking Ecosystem services with sustainable development. National Webinar on Linking Ecosystem Services with Sustainable Development. Organized by Department of Botany, University of Science and Technology, Meghalaya, India, June 30, 2021.
- Biodiversity, ecology, mapping and conservation aspects of medicinal plants of North-East India. Webinar-Cum-Workshop on Prospects in Horticulture: Cultivation of Medicinal Plants in North-East India. Organized by Rajdhani College, University of Delhi, 13 March 2021.
- Culture and Traditional Communities in Management of Biodiversity and Ecosystem Services in North-East India - Special Reference to Meghalaya. International Webinar on Community, Culture & Conflict in a Globalised World. Organised by JB College (Autonomous), Jorhat, Assam, 23 January 2021.
- Technological interventions in Carbon and solid waste management. Two-day workshop on “Carbon sequestration and solid waste management-A perspective, 5-6 November 2020, Organized by DBT star college scheme, Kirori Mal College, University of Delhi.
- Online assessment of Participants in Two-day workshop on “Carbon sequestration and solid waste management-A perspective held on 11 November 2020. Organized and conducted online quiz for two-day workshop participants of DBT star college scheme, Kirori Mal College, University of Delhi.
- Trends in Climate change research: Special reference to plants and soil organized by Prakriti, the environmental society at Lady Shri Ram College for Women, University of Delhi on 5 November 2020.
- 2020. Climate change and trends in carbon sequestration research. National Seminar on “Diversity and Reproduction in Plants and Microbes: Present Scenario”, Department of Botany, University of Jammu, Jammu. J&K. 7 February to 8 February 2020.
- 2020. Territorial ecosystems (Carbon sequestration, Quantification of carbon sequestered in terrestrial biomass). GREEN SKILL DEVELOPMENT PROGRAMME, GSDP COURSE ON

VALUATION OF ECOSYSTEM GOODS & SERVICES, conducted by School of Planning and Architecture, Delhi, sponsored by MOEFCC, Govt. of India. January 31, 2020.

- Study of field Ecology: Terrestrial (Vegetation sampling, carbon estimation, floral and faunal diversity). GREEN SKILL DEVELOPMENT PROGRAMME, GSDP COURSE ON VALUATION OF ECOSYSTEM GOODS & SERVICES, conducted by School of Planning and Architecture, Delhi, sponsored by MOEFCC, Govt. of India. January 31, 2020.
- Climate change and trends in Carbon Sequestration research. Prakriti, the environmental society at Lady Shri Ram College for Women on 4 April 2019.
- Ecosystem Ecology. Kalindi College Botanical Society, University of Delhi on 8 October 2018.
- Carbon sequestration and REDD+ mechanism as mitigation strategies to climate change. National workshop on recent trends in plant ecophysiology, University of Jammu, Jammu, J & K on 6 March 2018.
- Carbon sequestration as an Ecosystem Service: Prospects of REDD+ projects in North-East India. October 2nd & 3rd, 2017 organized by Department of Anthropology, University of Delhi, India.
- Carbon Sequestration Potential of Tea Plantation in India. National Conference on Tea Culture And Science - Special Reference to Present Scenario of Indian Tea 9 April 2013 Organized By The Department of Plantation Management and Studies, Sikkim University, Gangtok –737 102, Sikkim, India.
- Climate change and the need for carbon sequestration. Acted as mentor in the DST Inspire science camp under internship scheme 17-21 December, 2013. M.C. College, Barpeta, Assam, India.

Papers (Oral) Presented:

- Kaushal, S. and Baishya, R. 2021. Soil properties show variable patterns under different seasons and depth in upper-temperate and sub-alpine forest types of the Indian Central Himalayas. 5th Conference (ESDACON-2021) as ‘2nd World Environment Summit 2021’ held on 1-3 October 2021 organized by ESDA Delhi.
- Kaushal, S. and Baishya, R. 2019. Tree species diversity, carbon stock and disturbance index in different forest types across an elevational gradient in Garhwal Himalaya, Uttarakhand India. International conference on “Advances in sustainable agriculture: Bioresources, Biotechnology and Bioeconomy” held at Mansarovar Global University, Bhopal on 29-30 November 2019.
- Baishya, R. and Barik, S.K. 2018. Ecosystem carbon pool and net primary production in a tropical matured forest of North East India. 6th International Conference on Plants and Environmental Pollution (ICPEP-6), NBRI, Lucknow, November 27-30, 2018.

- Kaushal, S and Baishya, R. 2018. Species diversity and Carbon Stock in three temperate forest types of Garhwal Himalayas, Uttarakhand – India. 6th International Conference on Plants and Environmental Pollution (ICPEP-6), NBRI, Lucknow, November 27-30, 2018.
- Baishya, R. 2017. Carbon sequestration as an ecosystem service: prospects of REDD+ projects in north-east India. National Conference on “Environment, Sustainable Development and Future Perspective in Northeast India: Emic and Etic Dynamics” 2nd - 3rd October 2017, Department of Anthropology University of Delhi, Delhi-110007
- Hasan, A and Baishya, R. Dynamics of soil organic carbon (SOC) pool with land-use change in Delhi ridge forest ecosystem. DST sponsored National Conference on Random Waste Disposal: Socioecological impacts and concern. Mohammad Ali Jauhar University, Raipur, UP, India. 12 January 2014.
- Baishya, R., Kamei, J. and Barik, S.K. Carbon dynamics of tree species in a tropical and subtropical forest ecosystem of Meghalaya. *National Symposium on frontiers in biocomplexity and biodiversities of plants. March 14-15, 2008. CAS in Botany, NEHU, Shillong-22.*

Papers (Poster) Presented:

- Tontang, T, Kaushal, S, Sharma, P. and Baishya, R. 2020. Determinative studies over physicochemical properties of three different types of water treatment plants in Delhi NCR, India. National Online Conference on ‘Global Water Congress 2020’ (E-Conference) on 2nd - 4th October 2020 organized by Environment and Social Development Association (ESDA) in collaboration with CSIR-National Environmental Engineering Research Institute (NEERI), Dr. Bhim Rao Ambedkar College, University of Delhi, GRC India, GD Goenka University Gurugram, Amity University Gurugram, CPCB Alumni Association, Indian Water Works Association Mumbai and MSME Chamber of Commerce and Industry of India and other eminent institutions.
- Rai, R. Sharma, P. Kaushal, S. and Baishya. R. 2020. Effective phytoremediation of some Polluted water samples from Delhi NCR by *Pontederia crassipes* (Mart.) – A sustainable approach. National Online Conference on ‘Global Water Congress 2020’ (E-Conference) on 2nd - 4th October 2020 organized by Environment and Social Development Association (ESDA) in collaboration with CSIR-National Environmental Engineering Research Institute (NEERI), Dr. Bhim Rao Ambedkar College, University of Delhi, GRC India, GD Goenka University Gurugram, Amity University Gurugram, CPCB Alumni Association, Indian Water Works Association Mumbai and MSME Chamber of Commerce and Industry of India and other eminent institutions.

- Kaushal, S and Baishya, R. **2020**. Assessment of Soil Regulatory Ecosystem Services under two Himalayan Moist Temperate Forests. National Online Conference on Environment, human health and sustainable development goals and World Environment Day 2020 celebration held on **5-6 June 2020** organized by Environment and Social Development Association (ESDA) Delhi in association with GRC India, CSIR-NEERI, BRAC-Delhi University, Amity University Haryana, GD Goenka University Gurugram and Dr RML Avadh University Ayodhya.
- Sharma, P. and Baishya, R. **2020**. Mycorrhizal inoculant and Macronutrient amendments improves Growth, Photosynthetic Efficiency and Physiological parameters in *Catharanthus roseus* (L.) G. Don under Salinity stress conditions. National Online Conference on Environment, human health and sustainable development goals and World Environment Day 2020 celebration held on **5-6 June 2020** organized by Environment and Social Development Association (ESDA) Delhi in association with GRC India, CSIR-NEERI, BRAC-Delhi University, Amity University Haryana, GD Goenka University Gurugram and Dr RML Avadh University Ayodhya.
- Sharma, P. and Baishya, R. 2019. N, P, K and Mycorrhizal based bio-fertilizers affects Plant growth, Photosynthetic Efficiency, Lipid peroxidation and Proline content in *Catharanthus roseus* (L.) G. Don under salt stress Conditions. International conference on “Advances in sustainable agriculture: Bioresources, Biotechnology and Bioeconomy” held at Mansarovar Global University, Bhopal on 29-30 November, 2019
- Siwach, A., Kaushal, S. and Baishya, R. 2019. Understanding the effect of Bryophytic cover on physico-chemical properties of soil in an old growth temperate forest in Garhwal Himalaya, Uttarakhand. National Seminar on 'Biodiversity: Issues challenges and opportunities' CCS Haryana Agricultural University, Hisar, India, July 16-17, 2019.
- Kumar, R. and Baishya, R. 2019. Biomass and Carbon stock estimation using forest inventory and remote sensing data in temperate forests of India. International conference on Global environmental challenges Human health and sustainable development. Organised by ESDACON at JNU, Delhi 11-13 January, 2019.
- Saikia, R. and Baishya, R. 2017. Characterization of Phosphate Solubilizing Bacteria (PSB) isolated from agricultural crop soils of floodplains of Yamuna, Delhi. 86th Conference of Society of Biological Chemists. Emerging Discoveries in Health and Agricultural Sciences, School of Life Science, JNU during 16th -19th November, 2017
- Saikia, R. and Baishya, R. 2017. Use of Phosphate Solubilizing Bacteria as a potent biofertilizer in agriculture. XXVII Annual conference of Indian Association for Angiosperm Taxonomy & International Symposium on “plant systematics: priorities and challenges”, held in Department of Botany, University of Delhi during 10-12 November 2017.

- Tomar, U. and Baishya, R. 2017. Seasonal Dynamics of Soil Respiration and its Dependence on Temperature and Moisture in Semi-Arid Forest Ecosystem of Delhi, NCT. XXVII Annual conference of Indian Association for Angiosperm Taxonomy & International Symposium on “plant systematics: priorities and challenges”, held in Department of Botany, University of Delhi during 10-12 November 2017.
- Prasad, S. and Baishya, R. 2017. Impact of climatic factors on soil nitrogen mineralization rates across native and non-native tree species of Delhi-ridge. XXVII Annual conference of Indian Association for Angiosperm Taxonomy & International Symposium on “plant systematics: priorities and challenges”, held in Department of Botany, University of Delhi during 10-12 November 2017.
- Tomar, U. and Baishya, R. 2016. Effect of different moisture regimes on soil carbon pool in semi-arid ridges of Delhi, NCT. *Young Ecologist Talk and Interact (YETI)*. Amity University Campus, Sec-125, Noida, U.P-201301 held on 19 January 2016.
- Prasad, S. and Baishya, R. 2016. Seasonal variation in nitrogen mineralization under two tree species of semi-arid region of North-India. *Young Ecologist Talk and Interact (YETI)*. Amity University Campus, Sec-125, Noida, U.P-201301 held on 19 January 2016.
- Tomar, U. and Baishya, R. 2016. Effect of different moisture regimes on the pool size of soil carbon and microbial biomass carbon in semi-arid ridges of Delhi. Society for Plant Research (VEGETOS) and Department of Botany, University of Delhi held in Department of Botany, University of Delhi, 5 – 7th February 2016.
- Prasad, S. and Baishya, R. 2016. Effect of native and non-native tree species on vital ecosystem functions and processes under semi-arid region of North-India. Society for Plant Research (VEGETOS) and Department of Botany, University of Delhi held in Department of Botany, University of Delhi, 5 – 7th February 2016.

Research Projects (Major Grants/Research Collaboration)

1. Institution of Eminence (IoE) Faculty Research programme Grant (2021-22) as Principal Investigator.
2. Institution of Eminence (IoE) Faculty Research programme Grant (2020-21) as Principal Investigator.
3. A biotechnological approach to..... in Himalayas in response to changing climate (All India coordinated research project) 2019-2022. Funding Agency DBT, Co-Principal Investigator.
4. Quantifying the total ecosystem level carbon sequestration potential.....in Uttarakhand, Western Himalaya in different climate scenarios. (2017-2021) (Completed). Funding Agency SERB, Principal Investigator.

5. Diversity and performance of key forest tree species..... in Uttarakhand (2018-2021) (Completed). Funding Agency SERB, Co-Principal Investigator.
6. Dynamics of Soil Microbial Communities in Various Agro-climatic Regions” DU-DST-PURSE Grant 2 nd Phase. 2014-2018 (Completed), Co- Principal Investigator.
7. Soil carbon sequestration in..... of Delhi NCT (Nov. 2013- Oct. 2016), Funding Agency DST-SERB. (Completed), Principal Investigator.
Awards and Distinctions
CSIR-NET-JRF 2004-2006 CSIR-NET-SRF 2006-2009 DST-Young Scientist 2013
Association With Professional Bodies
Life member of Delhi University Botanical Society (DUBS), Delhi, India
Other Activities
Any assigned by the Department of Botany and Examination branch from time to time.



Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.