

Saurav Das

Research Assistant Professor

Panhandle Research, Extension & Education Center

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Google Scholar: <https://bit.ly/2PK6YHn>

ResearchGate: https://www.researchgate.net/profile/Saurav_Das5

GitHub: <https://github.com/Saurav12das>

Research Interests and Skills

Soil Health | Soil Microbiology | Soil C & N Dynamics | Plant-Microbe Interaction | Microbial Ecology
| Soil Fertility | Environmental Microbiology | Data-Science (R/Python) | Geospatial Analysis
(ArcGIS/QGIS/GEE)

Education & Training

2017	Ph.D.	Assam Agricultural University, INDIA	Microbiology (Soil & Water Science)
2010	M.Sc.	Dibrugarh University, INDIA	Biotechnology
2008	B.Sc.	Dibrugarh University, INDIA	Biology

Research & Professional Experience

2022 – current	Research Assistant Professor, Department of Agronomy & Horticulture, University of Nebraska – Lincoln, NE, USA
2020 - 2022	Postdoctoral Research Associate, Department of Agronomy & Horticulture, University of Nebraska – Lincoln, NE, USA
2018 – 2019	Visiting Scientist, Department of Agronomy & Horticulture, University of Nebraska – Lincoln, NE, USA
2018 – 2018	Research Associate, Guwahati University, Assam, INDIA
2016 – 2017	Adjunct Faculty, Sikkim University, Sikkim, INDIA
2011 – 2011	Junior Research Fellow, Assam Agricultural University, Assam, INDIA

Fellowship and Awards

- Selected in Graduate Aptitude Test (GATE) conducted by Indian Institute of Technology for Ph.D. research scholarship, India, 2011.
- Received graduate student award and grant money from University Grant Commission (UGC), Govt. of India for Ph.D. Research, India, 2012 – 2017. (~US \$35K).
- Selected in University Grant Commission – State Level Eligibility Test (UGC-SLET) for lectureship, India, 2014.

- Selected in Indian Council of Agricultural Research-National Eligibility Test (ICAR-NET) for lectureship, India, 2014 & 2016.

Research Grant (Funded)

1. Title: "Soil Health Gap Framework," USDA – NRCS, USA; \$338,000. **Co-PI**. [2022 – 2024]
2. Title: "An Interactive Soil Health Reference Map for Nebraska," USDA – NRCS, USA; \$150,000. **Co-PI**. [2020 – 2022].
3. Title: A study on arsenic tolerant bacterial communities prevalent in contaminated groundwater of upper Assam. Graduate Research Fund from University Grant Commission, Government of India, INDIA. \$35K. **PI**. [2012 – 2017]

Research Grant (Pending)

1. Title: Determine Region-Specific Effective Agronomic Practices to Fill the Soil Health Gap; USDA – NIFA, US; \$746,1095. **PI** [2023 – 2026]

Professional Associations

- Crop Science Society of America, USA 2018 - Present
- Soil Science Society of America, USA 2018 – Present
- Agronomy Society of America, USA 2018 - Present
- Society for Green Environment, India 2019 - Present
- American Geophysical Union, USA 2020 – Present

Publications in Review and Preparation

- a. **Das, S.,** and Maharjan, B. Cropland Reference Ecological Unit: A Land Classification Unit for Comparative Soil Studies. (*Under review: Ecological Indicators*).
- b. **Das, S,** Liptzin, D., Maharjan, B. Soil Health Lessons from the Century-Old Knorr Holden Plot in Nebraska. (*Under review: Geoderma*)
- c. De Silva. S, **Das, S.,** ... et al., Newly introduced creeper legume *Vigna marina* as a solution for road cuts protection in Sri Lanka. (*Under review agroecosystem, geosciences, & environment journal*)
- d. Millikan, T., **Das, S.,** ... et al., Precipitation defines the plant community diversity in Nebraska Sandhills. (To be submitted to Conservation Letters)
- e. **Das, S.,** and Maharjan, B. Effect of long-term manure application in community-based biogeochemistry of N and C. (Metagenomics and Metaphenomics approach) (under preparation)
- f. **Das, S.,** and Maharjan, B. Shift in Microbial Community Composition in response to long term manure and inorganic N fertilizer application. (Under preparation).

- g. **Das, S.**, Stephenson, M., and Maharjan, B. Potential soil health efficiency as a function of soil and climate. (Under preparation)
- h. **Das, S.**, and Maharjan, B. Data-Inventory: Reference Soil Health Status. (Under preparation)
- i. **Das, S.**, Karubakee, S, Mohapatra, A., Panday, D., Maharjan B. Interaction of soil compaction, types, and weather on nitrogen transformation. (To be submitted to Soil Tillage & Research)
- j. **Das, S.**, Ghimire, D., and Maharjan, B. Long-term localized manure storage can largely increase nitrate leaching. (To be submitted to the journal of environmental quality)
- k. **Das, S.**, Millikan, T., Stephenson, M, Maharjan, B. Soil carbon dynamics in world's most intact contiguous grassland ecosystem: Nebraska Sandhills. (To be submitted to soil biology and biochemistry)

Publications

1. Ray JG, **Das S**, Sasidharan S and Thakur N (2022) Editorial: Soil biology for sustainable agriculture and environment. *Front. Soil Sci.* 2:947619. <https://doi.org/10.3389/fsoil.2022.947619>
2. B. Maharjan, **Das, S.**, & Shapiro, C (2022). Effects of fused and blended fertilizers on maize yield and soil properties. *Agronomy Journal* <https://doi.org/10.1002/agj2.21170>
3. **Das, S.**, Berns, K., McDonald, M., Ghimire, D., & Maharjan, B. (2022). Soil health, cover crop, and fertility management: Nebraska producers' perspectives on challenges and adoption. *Journal of Soil and Water Conservation*, 77(2), 126-134. <https://doi.org/10.2489/jswc.2022.00058>
4. Beegum, S., Jainet, P. J., Emil, D., Sudheer, K. P., & **Das, S.** (2022). Integrated Simulation Modeling Approach for Investigating Pore Water Pressure Induced Landslides. *Preprint* [10.21203/rs.3.rs-1186263/v1](https://doi.org/10.21203/rs.3.rs-1186263/v1)
5. Ghimire, D., **Das, S.**, Mueller, N. D., Creech, C. F., Santra, D., Baenziger, P. S., ... & Maharjan, B. (2021) Effects of cultivars and nitrogen management on wheat grain yield and protein. *Agronomy Journal*. <https://doi.org/10.1002/agj2.20836>
6. Maharjan, B., **Das, S.**, Nielsen, R., & Hergert, G. W. (2021) Maize yields from manure and mineral fertilizers in the 100-year-old Knorr-Holden Plot. *Agronomy Journal*. <https://doi.org/10.1002/agj2.20713>
7. Borah, M., **Das, S.**, Bora, S. S., Boro, R. C., & Barooah, M. (2021). Comparative assessment of multi-trait plant growth-promoting endophytes associated with cultivated and wild *Oryza* germplasm of Assam, India. *Archives of Microbiology*, 1-22. <https://doi.org/10.1007/s00203-020-02153-x>
8. **Das, S.**, Plyler-Harveson, T., Santra, D. K., Maharjan, B., Nielson, K. A., & Harveson, R. M. (2020). A longitudinal study on morpho-genetic diversity of pathogenic *Rhizoctonia solani* from sugar beet and dry beans of western Nebraska. *BMC Microbiology*, 20. <https://doi.org/10.1186/s12866-020-02026-9>

9. Singh, A.K., **Das, S.**, Kumar, S., Gajamer, V.R., Najar, I.N., Lepcha, Y.D., Tiwari, H.K., Singh, S., 2020. Distribution of Antibiotic-Resistant Enterobacteriaceae Pathogens in Potable Spring Water of Eastern Indian Himalayas: Emphasis on Virulence Gene and Antibiotic Resistance Genes in Escherichia coli. *Front Microbiol* 11. <https://doi.org/10.3389/fmicb.2020.581072>
10. Maharjan, B., **Das, S.**, & Acharya, B. S. (2020). Soil Health Gap: A concept to establish a benchmark for soil health management. *Global Ecology and Conservation*, e01116. <https://doi.org/10.1016/j.gecco.2020.e01116>
11. Najar, I. N., Sherpa, M. T., Das, S., **Das, S.**, & Thakur, N. (2020). Diversity analysis and metagenomic insights into antibiotic and metal resistance among Himalayan hot spring bacteriobiome insinuating inherent environmental baseline levels of antibiotic and metal tolerance. *Journal of global antimicrobial resistance*, 21, 342-352. <https://doi.org/10.1016/j.jgar.2020.03.026>
12. **Das, S.**, Barooah, M., & Thakur, N. (2019). Endophytic Virome. *bioRxiv*, 602144. doi: <https://doi.org/10.1101/602144>
13. Singh, A. K., **Das, S.**, Singh, S., Pradhan, N., Gajamer, V. R., Kumar, S., ... & Tiwari, H. K. (2019). Physicochemical Parameters and Alarming Coliform Count of the Potable Water of Eastern Himalayan State Sikkim: An Indication of Severe Fecal Contamination and Immediate Health Risk. *Frontiers in public health*, 7. <https://doi.org/10.3389/fpubh.2019.00174>
14. Ray, M. K., Baruah, P. K., Mishra, P. K., & **Das, S** (2019). A comprehensive mycofloral diversity of pedosphere, phyllosphere, and aerosphere of Som. (*Persea bombycina* Kost.) in lower Brahmaputra valley of Assam. *Aerobiologia*, 1-14. <https://doi.org/10.1007/s10453-019-09588-w>
15. **Das, S.**, Khound, R., Santra, M., & Santra, D. K. (2019). Beyond Bird Feed: Proso Millet for Human Health and Environment. *Agriculture*, 9(3), 64. <https://doi.org/10.3390/agriculture9030064>
16. Panday, D., Ojha, R. B., Chalise, D., **Das, S.**, & Twanabasu, B. (2019). Spatial variability of soil properties under different land use in the dang district of Nepal. *Cogent Food & Agriculture*, 1600460. <https://doi.org/10.1080/23311932.2019.1600460>
17. **Das, S.**, Kumar, S., Bhagowati, P., & Singh, A. K. (2018). An Update on Plant-Derived Compounds as Potential Inhibitors of the Bacterial Efflux Pumps: With Reference to Staphylococcus aureus and Escherichia coli. *Preprints* 2018120362. <https://doi.org/10.20944/preprints201812.0362.v1>
18. Singh, A. K., **Das, S.**, Singh, S., Gajamer, V. R., Pradhan, N., Lepcha, Y. D., & Tiwari, H. K. (2018). First report on Bacterial Diversity of Potable Spring water of Indian Himalayan Region. *bioRxiv*, 320275. doi: <https://doi.org/10.1101/320275>
19. **Das, S.**, & Barooah, M. (2018). Characterization of siderophore producing arsenic-resistant Staphylococcus sp. strain TA6 isolated from contaminated groundwater of Jorhat, Assam and its

- possible role in arsenic geocycle. *BMC Microbiology*, 18(1), 104.
<https://doi.org/10.1186/s12866-018-1240-6>
20. Tikbir, G., Laxuman, S., **Saurav, D.**, Manju, R., & Lepcha, P. L. (2018). Efficacy of essential oil vapour phase against post-harvest fungal pathogen *Penicillium digitatum* isolated from *Citrus reticulata*. *Journal of Mycopathological Research*, 56(2), 81-87.
 21. Singh, A. K., **Das, S.**, Singh, S., Gajamer, V. R., Pradhan, N., Lepcha, Y. D., & Tiwari, H. K. (2018). Prevalence of Antibiotic Resistance in Commensal *Escherichia Coli* among the Children in Rural Hill Communities of Northeast India. *Plos One*;
<https://doi.org/10.1371/journal.pone.0199179>
 22. Najar, I. N., Sherpa, M. T., Das, S., **Das, S.**, & Thakur, N. (2018). Microbial ecology of two hot springs of Sikkim: Predominate population and geochemistry. *Science of The Total Environment*, 637, 730-745. <https://doi.org/10.1016/j.scitotenv.2018.05.037>
 23. **Das, S.**, Bora, S. S., Yadav, R. N. S., & Barooah, M. (2017). A metagenomic approach to decipher the indigenous microbial communities of arsenic-contaminated groundwater of Assam. *Genomics Data*, 12, 89 – 96. <https://doi.org/10.1016/j.gdata.2017.03.013>
 24. Bora, S.S., **Das, S.**, Lahan, J. P., Barooah M. (2017). Isolation and functional characteristics of cellulase free alkalo-thermophilic Xylanase enzyme produced by *Bacillus flexus*. *Indian Journal of Biotechnology*, 16, 395-402.
 25. Sarma, K., Roychoudhury, S., Sankar Bora, S., Dehury, B., Parida, P., **Das, S.** ... & M.K Modi, (2017). Molecular Modeling and Dynamics Simulation Analysis of KATNAL1 for Identification of Novel Inhibitor of Sperm Maturation. *Combinatorial Chemistry & High Throughput Screening*, 20(1), 82-92. <https://doi.org/10.2174/1386207320666170116120104>
 26. Gogoi, P., **Das, S.**, Das, S., & Khan, M.Z.A (2016). Effect of Organophosphorus Insecticide, Malathion on the Division of Meristems of *Allium cepa* L. *International journal of applied and pure bioscience* 4 (4):114-122
 27. Bora, S. S., Sarma, K., **Das, S.**, & Barooah, M. (2016). Structural and Functional analysis of Glutamate Decarboxylase System in *Bacillus aryabhattai*. *Research Journal of Biotechnology* 11(1):1-11
 28. Bora, S. S., Keot, J., **Das, S.**, Sarma, K., & Barooah, M. (2016). Metagenomics analysis of microbial communities associated with a traditional rice wine starter culture (Xaj). *3 Biotech* 6(2), 1-13. <https://doi.org/10.1007/s13205-016-0471-1>
 29. Elizabeth, T. A., Julius, K. O., Ekaette, N. D., Sudipta, S. B., **Das, S.**, & Barooah, M. (2016). Influence of Different Substrates on Ligninolytic Enzyme Production in Improved Strains of Wood Ear Mushroom (*Auricularia* Species). *Journal of Scientific and Industrial Research*, 75(12), 740 – 746.
 30. **Das S.**, Bora S. S., Lahan J. P., M. Chetia., Yadav R.N.S., Barooah M, (2015). Review: Ground-Water Arsenic contamination in the Northeastern States of India. *Journal of Environmental Research and Development* 9(3), 621-632.

31. Deka H., **Das S.**, Lahan J. P., Yadav R. N. S. (2013). In-vitro Free Radical Scavenging, Antioxidant and Antibacterial Activity of Azadirachta Indica A. Juss. Of Assam. *Advances in Life Sciences* 3(1), 1-4.

Book Published

1. Bora S. S., Sarma K, **Das S.** An Approach to Microbial Biotechnology: A Laboratory Handbook, Lap Lambert Academic Publishing (23rd May 2013), ISBN- 13: 978-3659401084

Book Chapter

1. **Das, S.**, & Beegum, S. (2022). Nanofertilizers for sustainable agriculture. In *Agricultural Nanobiotechnology* (pp. 355-370). Woodhead Publishing. <https://doi.org/10.1016/B978-0-323-91908-1.00005-5>
2. Kumar, S., Thakur, N., Singh, A. K., Gudade, B. A., Ghimire, D., & **Das, S.** (2022). Aquatic macrophytes for environmental pollution control. In *Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water* (pp. 291-308). Elsevier. <https://doi.org/10.1016/B978-0-323-85763-5.00023-4>
3. Kumar, S., Thakur, N., Singh, A. K., Gudade, B. A., Ghimire, D., & **Das, S.** (2022). Microbes-assisted phytoremediation of contaminated environment: Global status, progress, challenges, and future prospects. In *Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water* (pp. 555-570). Elsevier. <https://doi.org/10.1016/B978-0-323-85763-5.00007-6>
4. Ghosh, S., & **Das, S.** (2022). Impact of climate change on microbial endophytes: novel nanoscale cell factories. In *Microbiome Under Changing Climate* (pp. 161-185). Woodhead Publishing. <https://doi.org/10.1016/B978-0-323-90571-8.00007-9>
5. Maharjan B., Hergert G.W., **Das S.** (2022) Limited Irrigation for Managing Declining Water Resources in the US High Plains. In: Ray C., Muddu S., Sharma S. (eds) *Food, Energy, and Water Nexus*. Springer, Cham. https://doi.org/10.1007/978-3-030-85728-8_9
6. Kumar S., Abedin M.M., Singh A.K., **Das S.** (2020) Role of Phenolic Compounds in Plant-Defensive Mechanisms. In: Lone R., Shuab R., Kamili A. (eds) *Plant Phenolics in Sustainable Agriculture*. Springer, Singapore. https://doi.org/10.1007/978-981-15-4890-1_22.
7. Santra D.K., Khound R., **Das S.** (2019) Proso Millet (*Panicum miliaceum* L.) Breeding: Progress, Challenges and Opportunities. In: Al-Khayri J., Jain S., Johnson D. (eds) *Advances in Plant Breeding Strategies: Cereals*. Springer, Cham. https://doi.org/10.1007/978-3-030-23108-8_6.

Extension Article

1. **Das, S** et al., (2022). NRCS-UNL Collaborative Research on the Soil Health Gap Analysis in Nebraska. <https://cropwatch.unl.edu/2022/nrcs-unl-collaborative-research-soil-health-gap-analysis-nebraska>
2. **Das, S** et al., (2022). Motivation and Challenges in Adopting Soil Health Practices. Motivation and Challenges in Adopting Soil Health Practices. <https://cropwatch.unl.edu/2022/motivation-and-challenges-adopting-soil-health-practices>
3. Maharjan, B., **Das, S.**, Ghimire, D. (2021). Fertigation. In. FAO-United Nations Global Soil Recarbonization. Volume 3, pages: 177 – 189. <https://www.fao.org/documents/card/en/c/cb6595en/>
4. Maharjan B., Ghimire, D., Creech, C., Easterly, A., Mueller, N., **Das, S.**, and Santra, D. (2020). Improving Nitrogen Management in Dryland Winter Wheat Production [WWW Document], 2020. Crop Watch. URL <https://cropwatch.unl.edu/2020/improving-nitrogen-management-dryland-winter-wheat-production>

Invited Talks

1. **AGU Fall meeting 2021**, New Orleans, LA, USA. (2021). Topic – Soil Health Gap – Benchmarking Soil Health Managements. December 2021. <https://agu.confex.com/agu/fm21/meetingapp.cgi/Paper/965906>

Extension activities

- Organizing committee member of 1st, 2nd, & 3rd Panhandle Soil Health Workshop. 2020 - 2022. Panhandle Extension and Research Center, University of Nebraska – Lincoln, Scottsbluff, Nebraska, USA.
- Presentation during field day at Panhandle Research and Extension Center, Scottsbluff, UNL, NE.

Presentation

1. **Das, S.**, FNU, K. S., Mahapatra, A., & Maharjan, B. Effect of Soil Compaction on Nitrogen Dynamics Under Dry and Wet Weather in Sandy-Loam and Loam Soil. In ASA, CSSA and SSSA International Annual Meetings (2020) | VIRTUAL. ASA-CSSA-SSSA. (Url: <https://scisoc.confex.com/scisoc/2020am/prelim.cgi/Paper/126428>)

Mentioned in the News

1. AAU sounds arsenic alarm - Telegraph India [WWW Document], n.d. URL <https://www.telegraphindia.com/north-east/aau-sounds-arsenic-alarm/cid/1527740> (accessed 2.12.21).
2. **Das** works with Maharjan on soil health research | Announce | University of Nebraska-Lincoln [WWW Document], n.d. URL <https://newsroom.unl.edu/announce/unlagrohorthnews/11327/66328> (accessed 2.12.21).

3. Extension, N., n.d. Soil Health Gap — a concept to establish a benchmark for soil health management [WWW Document]. URL <https://www.thefencepost.com/news/soil-health-gap-a-concept-to-establish-a-benchmark-for-soil-health-management/> (accessed 2.12.21).
4. Soil health gap - a concept to establish a benchmark for soil health management [WWW Document], 2020. IANR News. URL <https://ianrnews.unl.edu/panhandle-perspectives-soil-health-gap-concept-establish-benchmark-soil-health-management> (accessed 2.12.21).
5. Star-Herald, K.F., n.d. UNL Panhandle Research and Extension Center holds soil health workshop [WWW Document]. starherald.com. URL https://starherald.com/townnews/agriculture/unl-panhandle-research-and-extension-center-holds-soil-health-workshop/article_2294a17d-eeb1-5a08-b763-39b141a15d10.html (accessed 2.12.21).
6. Scientist Establishes Concept for Soil Health Management. Upper Republican NRD, <https://www.urnrd.org/scientist-establishes-concept-soil-health-management> (accessed on 5.6.2021)
7. National Cooperative Soil Survey. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1822224.pdf?fbclid=IwAR2FIzIoduBBKZOJ4HL0n9_3CRb4RJgXsAfEve_GzrInNu-T1PDu6_JQOCQ (page 10 -11)
8. UNL scientists contribute to United Nations FAO Soil Carbon Sequestration Manual. <https://www.thefencepost.com/news/unl-scientists-contribute-to-united-nations-fao-soil-carbon-sequestration-manual/>
9. Panhandle Perspectives: UNL scientists contribute to United Nations FAO Soil Carbon Sequestration Manual. <https://ianrnews.unl.edu/panhandle-perspectives-unl-scientists-contribute-united-nations-fao-soil-carbon-sequestration-manual>

Academic and Professional Activities

- ASA-CSA-SSSA meeting session judge for graduate student poster competition. C01 Division – crop breeding and genetics. 2019. San Antonio, Texas, USA.
- ASA-CSA-SSSA meeting session judge for graduate student poster competition. C09 Division – biomedical, health beneficial, and nutritionally enhanced plants. 2019. San Antonio, Texas, USA.
- Reviewer for journals including BMC microbiology, Frontiers in Microbiology, Frontiers in Soil Science, Frontiers in Plant Science, Agriculture, Sustainability, Agronomy Journal,

Microbiology, Archives in Microbiology, Communications earth & environment, Journal of environmental quality etc.

- Guest Associate Editor for the Frontiers in Soil Science, section – "Soil Biogeochemistry and Nutrient Cycling". ([Frontiers in Soil Science | Soil Biogeochemistry & Nutrient Cycling](#))
- Editor for the research topic "Soil Biology for Sustainable Agriculture and Environment" in Frontiers in Soil Science. ([Soil Biology for Sustainable Agriculture and Environment | Frontiers Research Topic \(frontiersin.org\)](#))
- Review board member of MDPI microorganisms.
- Review Editor in Frontiers in Microbiology (Section: Microbiotechnology, Terrestrial Microbiology)
- Expert Panel member for Soil Health in Syngenta Foundation for Sustainable Agriculture, India.
- Chair for the Soil Chemistry Section in SSSA Annual Meeting 2022, Baltimore, Maryland, USA. Session: Spatio-Temporal Dynamics of SOM Oral: Importance of Regionally Significant Management Practices (includes student competition).
<https://scisoc.confex.com/scisoc/2022am/meetingapp.cgi/Session/23555>

Professional Development

1. Participated in Grant writing workshop. March 12, 2020, at the University of Nebraska – Lincoln, NE, USA.
2. Classes taken for coding and statistics:
 - a. Career track course "Data Scientist – with R" at Datacamp (<https://learn.datacamp.com/>).
 - b. "Responsive Web Design Certification Course" at FreeCodeCamp (<https://www.freecodecamp.org/>)
 - c. "CS50 - Introduction to Computer Science Course" from Harvard University at edx.org.
 - d. Career track course "Data Scientist – with Python" at Datacamp (<https://learn.datacamp.com>).
 - e. Course "Python for Everybody" at [FreeCodeCamp](#) by Dr. Charles Severance (from Michigan State University).
 - f. Audited UNL STAT 803: Ecological Statistics by Dr. Andrew Tyre (University of Nebraska – Lincoln).
 - g. Career track courses "Statistics with R" and "R programmer" at Datacamp.

Student Mentorship

1. **Travis Milikan** – Master student at Department of Agronomy and Horticulture, University of Nebraska – Lincoln, NE, USA. (2021 - 2022)
Project – Nebraska Sandhill Health

2. **Deepak Ghimire** – Graduate student at Department of Agronomy and Horticulture, University of Nebraska – Lincoln, NE, USA. (2020 – current)
Project: "Nitrogen management in winter wheat across Nebraska" and
"Precision nitrogen management using UAV mount multispectral sensors."
3. **Ankita Mahapatra** and **Karubakee Sahoo** – Summer Intern at Panhandle Research and Extension Center, University of Nebraska – Lincoln, Scottsbluff, NE, USA. (2020)
Project "Effect of compaction, weather and soil types in nitrogen dynamics"
4. **Jean D. Niwenshuti** – Summer Intern at Panhandle Research and Extension Center, University of Nebraska – Lincoln, Scottsbluff, NE, USA. (2019)
Project – "Pea Germplasm screening for western Nebraska."
5. **Prakash Roy** – Master's student at Department of Chemistry, BN College, Guwahati University, Dhubri, Assam, India. (2018)
Project – "A study of antifungal activities of first-row transition metal complexes with salen ligands."
6. **Nasima Akhtar** – Undergrad student at Department of Zoology, BN College, Guwahati University, Dhubri, Assam, India. (2018)
Project – "Isolation and Morphological Characterization of Bacteria and Fungi from soil sample of BN college campus"
7. **Smriti Rekha Gogoi, Elakshi Dekaboruah, and Parishmita Boruah** – Master's student at Department of Microbiology, Sikkim University, Gangtok, Sikkim, India. (2017)
Project – "Green synthesis of silver nanoparticle and its efficacy against ADR and MDR E. coli strain"
8. **Barsha Sunar** – Master's student at Department of Horticulture, Sikkim University, Gangtok, Sikkim, India. (2017)
Project – "Efficacy of essential oil and native plant extracts against postharvest decay of Avocado fruit"
9. **Ashish Kumar Singh** – Graduate student at Department of Microbiology, Sikkim University, Gangtok, Sikkim, India. (2016 -2017)
Project: "Deciphering microbial community of spring water of Sikkim and their antibiotic resistance pattern"

Languages

- English (Read, Write, Speak)
- Assamese (Read, Write, Speak)
- Bengali (Read, Write, Speak)
- Hindi (Read, Write, Speak)
- Nepali (Speak, Read)