

Name Dr. Arijit Barman
Date of birth 26/05/1988
Designation Senior Scientist
Qualification Ph.D.
Email id arijit.barman@icar.org.in; arijitbarman1988@gmail.com



Educational Qualifications

- Ph.D. (Soil Science and Agricultural Chemistry); ICAR-IARI, New Delhi, India (2018)
- M.Sc. (Soil Science and Agricultural Chemistry); Banaras Hindu University (2012)
- B.Sc. Ag. (Hons); Bidhan Chandra Krishi Viswavidyalaya (2010)

Professional Experience

- Senior Scientist at ICAR-NBSS&LUP, RC, Jorhat, Assam from 1/1/2025 to till date
- Scientist (Sr. Scale) at ICAR-NBSS&LUP, RC, Jorhat, Assam from 17/09/2022 to 31/12/2024
- Scientist (Sr. Scale) at ICAR-CSSRI, Karnal, Haryana from 1/1/2020 to 16/09/ 2022
- Scientist at ICAR-CSSRI, Karnal, Haryana from 1/4/2016 to 31/12/ 2019
- Scientist at ICAR-NAARM, Hyderabad from 1/1/2016 to 31/3/ 2016

Research Areas

- Soil Survey and Mapping using Remote Sensing and GIS
- Digital Soil Mapping
- Salt affected soil characterization using Hyperspectral Remote Sensing
- Chemistry and behaviour of Manganese and other nutrients
- Crop simulation modelling of Nitrogen (SOILN)

International Experience

Nominated by ICAR and contributed National soil salinity map to Global Soil Salinity Map of Global Soil Partnership of FAO.

Awards

- Merit Medal of Banaras Hindu University for standing first in Soil Science & Agricultural Chemistry at M.Sc. (Ag.).
- Zonal Awards (from north zone) of Indian Society of Soil Science for best presentation of M.Sc. dissertation.
- Best Oral presentation Award of Indian Society of Soil Salinity and Water Quality at the International Salinity Conference-2024

Honours/Recognitions

- Associate editor in the journal of Indian Society of Soil Salinity and Water Quality
- INSPIRE Fellowship – 2013, Department of Science and Technology, New Delhi.
- CSIR Junior Research Fellowship – 2012, Council of Scientific and Industrial Research, New Delhi, India.
- Junior and Senior Research Fellowship – 2010 and 2014, ICAR, New Delhi, India.

Ten Best Research Papers along with NAAS Rating-2026

S. No.	Publication	NAAS Rating
1	Banerjee, K., Krishnan, P., Kumar, A., Barman, A. , Roy, D., Sen, S. and Yadav, B., 2025. Characterizing and screening of wheat genotypes under salinity stress condition using thermography and multivariate techniques. <i>Scientific Reports</i> , 15(1), p.39220.	9.9
2	Singh, A., Rai, A.K., Choudhary, M., Barman, A. , Fagodiya, R.K., Yadav, R.K., Jha, P.K. and Gupta, P.K., 2024. Effectiveness of <i>Bacillus paramycoides</i> for Improving Zinc Nutrition of Rice Irrigated with Alkali Water. <i>Soil Systems</i> , 8(2), p.62.	9.5
3	Mukhopadhyay, R., Fagodiya, R.K., Prajapat, K., Narjary, B., Kumar, S., Singh, R.K., Bundela, D.S. and Barman, A. , 2023. Sub-surface drainage: A win-win technology for achieving carbon neutrality and land amelioration in salt-affected Vertisols of India. <i>Geoderma Regional</i> , 35, p.e00708.	9.3
4	Omuto, C.T., Scherstjanoi, M., Kader, M.A., Musana, B., Barman, A. , et al., 2023. Harmonization service and global library of models to support country-driven global information on salt-affected soils. <i>Scientific reports</i> , 13(1), p.13157.	9.9
5	Mukhopadhyay, R., Fagodiya, R.K., Narjary, B., Barman, A. , Prajapat, K., et al., 2023. Restoring soil quality and carbon sequestration potential of waterlogged saline land using subsurface drainage technology to achieve land degradation neutrality in India. <i>Science of the Total Environment</i> , 885, p.163959.	14.0
6	Sheoran, P., Kamboj, P., Kumar, A., Kumar, A., Singh, R.K., Barman, A. , Prajapat, K., Mandal, S., Yousuf, D.J., Narjary, B. and Kumar, S., 2023. Matching N supply for yield maximization in salt-affected wheat agri-food systems: On-farm participatory assessment and validation. <i>Science of The Total Environment</i> , 875, p.162573.	14.0
7	Chandra, P., Khippal, A.K., Prajapat, K., Barman, A. , Singh, G., et al., 2023. Influence of tillage and residue management practices on productivity, sustainability, and soil biological properties of rice-barley cropping systems in indo-gangetic plain of India. <i>Frontiers in microbiology</i> , 14, p.1130397.	10.5
8	Barman, A. , Hota, S., Mourya, K.K., Sheoran, P., Meena, R.S. and Saikia, U.S., 2023. Sustainable land management practices for mitigation of on-farm salinity: a review. <i>Indian Forester</i> 149 (2), 164-177	4.86
9	Barman, A. , Sheoran, P., et al. 2021. Soil spatial variability characterization: Delineating index-based management zones in salt-affected agroecosystem of India. <i>Journal of Environmental Management</i> , 296 , p.113243.	14.4
10	Chattopadhyay, A., Singh, A.P., Singh, S.K., Barman, A. , Patra, A., Mondal, B.P. and Banerjee, K. 2020. Spatial variability of arsenic in Indo-Gangetic basin of Varanasi and its cancer risk assessment. <i>Chemosphere</i> , 238 , p.124623.	6.0

Total Publications (Peer-reviewed journals only)

International:19

National:10

Google Scholar link: [Arijit Barman - Google Scholar](#)

Research Gate link: [Arijit Barman \(researchgate.net\)](#)