

Name	Dr. Roshan Lal Meena		
Date of birth	24-01-1987		
Designation	Sr. Scientist (Agronomy)		
Qualification	Ph.D.		
Email id	roshan.meena34@gmail.com; roshan.meena@icar.org.in		
Educational Qualifications			
Ph.D. (Agronomy), Maharana Pratap University of Agriculture & technology, Udaipur (2021); M.Sc. (Agronomy), Acharya N. G. Ranga Agricultural University, Hyderabad (2011). B.Sc. (Ag.) Hons., Swami Keswanand Agricultural University Bikaner (2009).			
Professional Experience			
Position	Institute	Joining date	
Scientist	NAARM, Hyderabad	01.01.2013	
Scientist	ICAR-NBSS&LUP, Nagpur	02.04.2013	
Scientist	ICAR-NBSS&LUP, RC, Udaipur	16.08.2013	
Scientist (Sr. Scale)	ICAR-NBSS&LUP, RC, Udaipur	01.01.2018	
Sr. Scientist	ICAR-NBSS&LUP, RC, Udaipur	01.01.2023	
Research Areas			
Soil survey, Agricultural land use planning, Remote sensing and GIS crop management and suitability, irrigation management, Agricultural marketing			
International Experience - Nil			
Awards			
ICAR-Junior Research Fellowship, 2009 • ICAR-Senior Research Fellowship, 2012 • ICAR-NET in Agronomy, 2012			
Honours/Recognitions – Nil			
- Young Scientist Award by DRASS during International webinar on URBAN & Peri-Urban Agriculture for Livelihood from July 29-30, 2020. Young Scientist Award for outstanding contribution and continued dedication to the research and achievements during 12th International Conference on “Emerging Issues in Agricultural, Food Technology, Biological & Applied Sciences for Global Development” organized by AEDS society during 15-17 November at MPUAT, Udaipur.			
Ten Best Research Papers along with NAAS Rating-2026			
Meena, R. L., Nogiya, Mahveer., Yadav, Brijesh., Jangir, Abhishek., Malav, L. C., Moharana, P. C., Sharma, R. P., Dash, Benukantha., Naitam, R. K., Vasu, D., Kumar, Sunil., Meena, R. S., Mina, B. L. and Patil, N.G. 2025. Land suitability assessment of pigeon pea (<i>Cajanus cajan</i>) in plains and hilly region of Western India using integrated AHP and GIS techniques. <i>AMA</i>, 56 (12). 21717-21734. (NAAS Rating-6.4). - Singh, Raman Jeet., Meena, Roshan Lal., Sharma, N.K., Kumar, Suresh. Kumar, Kuldeep and Kumar, Dileep. 2016. Economics, energy, and environmental assessment of diversified crop rotations in sub-Himalayas of India. <i>Environment Monitoring and Assessment</i>, 188:79. (NAAS Rating: 9.00). - Nogiya, M., Moharana, P.C., Meena, R.L., Yadav, Brijesh, Jangir, A., Malav, L.C., Sharma, R.P., Kumar, S., Meena, R.S., Sharma, G.K., Jena, R.K., Mina, B.L. and Patil, N.G. (2024). Spatial variability of soil variables using geostatistical approaches in the hot arid region of India. <i>Environmental Earth Sciences</i>, 83, 432. https://doi.org/10.1007/s12665-024-11737-5. (NAAS Rating-8.8). - Moharana, P. C., Yadav, B., Malav, L. C., Kumar, S., Meena, R. L., Nogiya, M. and Patil, N. G. (2024). Regional prediction of soil organic carbon dynamics for intensive farmland in the hot arid climate of India using the machine learning model. <i>Environmental Earth Sciences</i>, 83(18), 529. (NAAS 8.8).			

- Yadav, B., Malav, L.C., Jangir, A., Kharia, S.K., Singh, S.V., Yeasin, M., Nogiya, M., **Meena, R.L.**, Meena, R.S., Tailor, B.L., Mina, B.L., Othman Alhar, Munirah Sulaiman, Byong-Hun Jeon, Cabral-Pinto, Marina M.S. and Yadav Krishna Kumar. (2023). Application of analytical hierarchical process, multi-influencing factor, and geospatial techniques for groundwater potential zonation in a semi-arid region of western India. *Journal of contaminant hydrology*. 253.104122. <https://doi.org/10.1016/j.jconhyd.2022.104122> (NAAS Rating-10.4).
- Jangir, A., Nogiya, M., Yadav, B., Malav, L.C., Moharana, P.C., **Meena, R.L.**, Sharma, R.P., Tiwari, G., Dash, B., Naitam, R. and Vasu, D., 2026. Regional-scale predictive mapping of soil organic carbon in South Gujarat, India using machine learning algorithms. *Environmental Monitoring and Assessment*, 198(4), p.325. (NAAS Rating: 9.0).
- Yadav, B., Malav, L.C., Singh, S.V., Kharia, S.K., Yeasin, M.D., Singh, R. N., Nogiya, M., **Meena, R.L.**, Moharana, P.C., Kumar, N., Sharma, R.P., Reddy, G.P.O., Mina, B.L. and Jha, P.K. (2023). Spatiotemporal Responses of Vegetation to Hydroclimatic Factors over Arid and Semi-arid Climate. *Sustainability*, 15(21), 15191. <https://doi.org/10.3390/su152115191> (NAAS 9.3).
- Moharana, P. C., Yadav, B., Nogiya, M., **Meena, R. L.**, Jangir, A., Malav, L. C., Kumar, S., Sharma, R.P., Meena, R.S., Naitam, R., Kumar, N., Vasu, D., Tiwari, G., Dash, B., Shirale, A.O., Adamala, S., Singh, R.S., Mina, B.L., Biswas, H. and Patil, N. G. (2025). Estimating Soil Depth in Data-Sparse Regions: A Machine Learning Approach for Western India. *Communications in Soil Science and Plant Analysis*, 56(7), 1106–1131. <https://doi.org/10.1080/00103624.2025.2449946>. (NAAS 7.4).
- Moharana, P.C., **Meena, R.L.**, Nogiya, M., Jena, R.K., Sharma, G.K., Sahoo, S., Jha, P.K., Aditi, K. and Vara Prasad, P.V. (2022). Impacts of Land Use on Pools and Indices of Soil Organic Carbon and Nitrogen in the Ghaggar Flood Plains of Arid India. *Land*. 11(8): 1180. <https://doi.org/10.3390/land11081180> (NAAS Rating-9.2).
- Yadav, B., Malav, L.C., Jiménez-Ballesta, R., Kumawat, C., Patra, A., Patel, A., Jangir, A., Nogiya, M., **Meena, R.L.**, Moharana, P.C., Kumar, N., Sharma, R.P., Yadav, R.L., Reddy, G.P.O. and Mina, B.L. (2023). Modelling and Assessment of Land Degradation Vulnerability in Arid Ecosystem of Rajasthan Using Analytical Hierarchy Process and Geospatial Techniques. *Land*.12(106).<https://doi.org/10.3390/xxxxx>. (NAAS Rating-9.2).
- Meena, S. N., Sharma, S. K., Singh, P., Meena, B. P., Ram, A., **Meena, R. L.**, Singh, D., Meena, R. B., Nogiya, M., Jain, D., & Kumar, K. (2024). Comparative analysis of soil quality and enzymatic activities under different tillage based nutrient management practices in soybean-wheat cropping sequence in Vertisols. *Scientific reports*, 14(1), 6840. (NAAS 9.9).
- Moharana, P.C., Singh, R.S., Singh, S.K., Jena, R.K., Naitam, R.K., Verma, T.P., Nogiya, M., **Meena, R.L.**, Gupta, D.K., Kumar, Sunil., Tailor, B.L., and Singh, R. (2018). Assessment of soil quality monitoring indicators under long term rice cultivation in hot arid Ghaggar-flood plains of India. *Archives of Agronomy and Soil Science*. 64(14): 2030-2044. DOI: [10.1080/03650340.2018.1476755](https://doi.org/10.1080/03650340.2018.1476755) (NAAS Rating-7.8).
- Moharana, P.C., Dharumarajan, S., Yadavs, B., Jena, R.K., Pradhan, U.K., Sahoo, S., Meena, R.S., Nogiya, M., **Meena, R.L.**, Singh, R. S., Singh, S.K. and Dwivedi, B.S. (2023). Prediction of Soil Inorganic Carbon at Multiple Depths Using Quantile Regression Forest and Digital Soil Mapping Technique in The Thar Desert Regions of India. *Communications in Soil Science and Plant Analysis*. <https://doi.org/10.1080/00103624.2023.2253840> (NAAS 7.4).

Total Publications (Peer-reviewed journals only) - 38

International: 18

National: 20

Google Scholar link: <https://scholar.google.com/citations?user=hXdnVjMAAAAJ&hl=en>

Research Gate link: https://www.researchgate.net/profile/Roshan-Meena-2?ev=hdr_xprf