

CURRICULUM VITAE

Dr. Shikha

Subject Matter Specialist (Soil Science)

Krishi Vigyan Kendra, Ranichauri, Tehri Garhwal

VCSG Uttarakhand University of Horticulture & Forestry, Bharsar,

Pauri Garhwal, Uttarakhand



1. Personal & Professional Information

Name	Dr. Shikha
Designation	Subject Matter Specialist (Soil Science)
Discipline	Soil Science
Institution	VCSG Uttarakhand University of Horticulture & Forestry, Bharsar, Pauri Garhwal, Uttarakhand
Place of Posting	Krishi Vigyan Kendra, Ranichauri, Tehri Garhwal, Uttarakhand
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2. Educational Qualifications

Degree	Specialization	University / Institution	Year
B.Sc.	Agriculture	G.B.P.U.A.T. Pantnagar	2013
M.Sc.	Soil Science	G.B.P.U.A.T. Pantnagar	2015
Ph.D.	Soil Science	G.B.P.U.A.T. Pantnagar	2026

3. Area of Specialization

- Soil chemistry and soil fertility
- Integrated nutrient management
- Soil health and soil quality
- Soil carbon dynamics and carbon sequestration
- Sustainable nutrient management

4. Research & Professional Interests

Professional interests include Soil Science, soil fertility and nutrient management, soil health assessment, and sustainable agricultural practices. Her work focuses on soil testing, soil-test-based fertilizer recommendations, integrated nutrient management, and nutrient-use efficiency. She has been actively involved in on-farm trials, front-line demonstrations, farmer training, and extension activities in the KVK. Her interests also include soil health management and dissemination of sustainable agricultural technologies.

5. Research Projects

S. No.	Project Title	Funding Agency	Role	Duration
1.	National Initiative on Climate Resilient Agriculture (NICRA) Project	ICAR, CRIDA, Hyderabad	Co-PI	2017 to 2023
2.	Cluster Front Line Demonstration (CFLD) on Pulses	ICAR-ATARI, Ludhiana	Co-PI	2017 to 2023
3.	Cluster Front Line demonstration (CFLD) on Oilseed crops	ICAR-ATARI, Ludhiana	Co-PI	2018 to 2023
4.	Nano DAP	IFFCO	Co-PI	2021 to 2023
5.	Outscaling of Natural Farming through KVKs	ICAR-ATARI, Ludhiana	Nodal Officer	2022 to 2023

6. Extension Activities

- Conducting farmer training and capacity-building programmes on soil health, nutrient management and improved agricultural practices.
- Conducting on-farm trials, front-line demonstrations and technology demonstrations for dissemination of improved technologies.
- Undertaking soil testing, interpretation and distribution of Soil Health Cards with fertilizer recommendations.
- Providing technical advisory and diagnostic services on soil fertility, nutrient management and crop-related problems.
- Organizing KVK trainings, Kisan Melas, Kisan Goshties, exposure visits and awareness programmes.
- Conducting capacity-building programmes for rural youth and extension functionaries.
- Developing and disseminating extension literature and technical materials for farmers and stakeholders.
- Participating in radio/TV talks, newspaper coverage and other mass-media activities for technology dissemination.

7. Teaching /Academic Experience

- Teaching undergraduate and postgraduate courses in Soil Science disciplines.
- Involved in RAWE and experiential learning through field-based teaching and farmer interaction.
- Providing academic guidance to students and conducting theory/practical examinations and evaluation.
- Participating in academic committees, curriculum-related activities, student mentoring and other institutional responsibilities.

8. Awards & Recognition

Name of Award/Recognition	Awarding Institution	Year
Young Scientist Award 2017	The Society of Tropical Agriculture, New Delhi	2017
Best paper presentation	The Society of Tropical Agriculture, New Delhi	2017
Excellence in Extension Scientist Award	Agricultural & Environmental Technology Development Society (AETDS), Tribhuvan University, Kathmandu, Nepal	2019
Young Women Scientist Award	Agricultural Technology Development Society (ATDS), Ghaziabad, Uttar Pradesh	2019
Best KVK Scientist Award	Society of Krishi Vigyan	2020
Uttarakhand Icon Award	Uttarakhand book of record	2020
Best Poster Award	Fifth International Agronomy Congress on Agri- Innovations to combat Food and Nutrition Challenges held at PJTSAU, Hyderabad	2021
Bharat Gaurav Award for Best Scientist	Global Society for Health & Educational Growth, New Delhi	2023

9. Advanced Trainings/Summer-Winter School

- **21 days Centre of Advanced Faculty Training (CAFT)** training programme on “Exploitation of Beneficial Microbes in Organic Agriculture” at Organic Farming, Department of Soil Science, Faculty of Agriculture, Assam Agricultural University, Jorhat, Assam from 04-24 September, 2019.
- **21 days National Training Course (NTC-2020)** on “Preparing and Management of Result Oriented Research Projects in Agriculture, Horticulture, Animal Husbandry and Allied-Sectors” organized by National Agriculture Development Cooperative Ltd. (NADCL) Baramulla (J&K) and Co-organized by Agro- Environmental Developmental Society (AEDS) Rampur (Uttar Pradesh during 26th -15th June, 2020.
- **Three-week online course series 2020** on “Innovative Approaches Towards Managing Soil Health for Climate Smart Agriculture” organized by Parbhani chapter of Indian Society of Soil Science, Department of Soil Science and Agricultural Chemistry, Vasantrao Naik Marathwada Krishi Vidyapeeth (VNMKV), Parbhani during 5 September to 5 December, 2020

10. Publications (Research papers)

- **Shikha**, Singh, S. and Upadhyay, R. G. (2017). Interaction effect of soil fertility, fertilizer recommendation approaches and varieties on yield and quality of oat (*Avena sativa* L.). *International Journal of Tropical Agriculture*, 35(4): 959-966
- Reena, Dhyani, V. C., Chaturvedi, S. and **Shikha** (2017). Dynamics of yield, nitrogen uptake and nitrogen use efficiency in wheat (*Triticum aestivum*) crop as influenced by leaf colour chart and chlorophyll meter based real time nitrogen management. *International Journal of Agriculture Sciences*, 9(54):4930-4933.
- **Shikha**, S. and Singh, S. (2018). Varietal evaluation of oats (*Avena sativa* L.) varieties under different nutrient management. *International Journal of Chemical Studies*, 6(3):1268-1271.
- **Shikha**, Yewale, A. G., Kumari, K., and Paliwal, A. (2019). Productivity and profitability of Urd (*Vigna mungo* L.) as influenced by PUSA Hydrogel under rainfed condition in hilly region of Uttarakhand. *International Archive of Applied Sciences and Technology*, 7(5): 81-84.
- Sarkar, D., Sankar, A., Devika, O. S., Singh, S., **Shikha**, Parihar, M., Rakshit, A., Sayyed, R. Z., Gafur, A., Ansari, M. J., Danish, S., Fahad, S., and Datta, R. (2021). Optimizing nutrient use efficiency, productivity, energetics, and economics of red cabbage following mineral fertilization and biopriming with compatible rhizosphere microbes. *Scientific reports*, 11(1): 15680.
- Rakesh, S., Sarkar, D., Sinha, A. K., **Shikha**, Mukhopadhyay, P., Danish, S., Fahad, S., and Datta, R. (2021). Carbon mineralization rates and kinetics of surface-applied and incorporated rice and maize residues in Entisol and Inceptisol soil types. *Sustainability*, 13(13):1-16.
- **Shikha**, Yewale, A. G., Kumar, A. and Joshi, U. (2022). Impact of zinc sulphate on yield of rice (*Oryza sativa* L.) under front line demonstrations in zinc deficient area of hills of Garhwal region. *Climate Change and Environmental Sustainability*, 10(2):192-197.
- Dinesha, S., Rakesh, S., Sarkar, D., Jha, P. K., Balasani, R., **Shikha**, Kar, S. K., Seth, V., Rakshit, A., Datta, R. and Ercişli, S. (2024). Underutilized edible fruit species of the Indo-Gangetic Plains: A systematic review for food security and land degradation neutrality. *Turkish Journal of Agriculture and Forestry*, 48(3): 443-469.
- Dobhal, S., Binjola, R., **Shikha**, Kumar, R., Bali, R. S., Lal, P., Chaudhary, S. and Vasisth, A. (2025). Biomass production and carbon storage across slope aspects and altitudes in Western Himalaya: A case study of *Pinus roxburghii* forests in the fire-vulnerable region. *Journal of Environmental Management*, 395: 127884.
- **Shikha**, and Singh, A. P. (2026). Influence of diversified cropping systems on yield sustainability and soil properties in the Tarai region of Uttarakhand. *International Journal of Plant & Soil Science*, 38(7):411-418.

11. Other relevant publications and activities

Publications	Published
Research Paper(s)	15
Review paper(s)	05
Book (edited)	01
Book Chapter(s)	11
Article(s)	20
Booklet/ Bulletin	01
Literature/Pamphlets developed	12
Conference proceeding/abstract(s)	18
Trainings/Workshop/ Online Courses	16

12. Professional Memberships in Professional Societies:

- The Indian Science Congress Association, (L36671), Kolkata, India
- Agriculture Technology Development Society (ATDS), Ghaziabad, India
- Indian Association of Soil and Water Conservationists (IASWC), (LM 2216), Dehradun, India
- Agricultural & Environmental Technology Development Society (AETDS), U.S.Nagar, India
- Annual Membership of AGRICULTURE & FOOD: e- Newsletter (AM-AFM349)
- IUCN-CEM Membership from 2017-2020