

SARASWOTI KANDEL

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Dedicated and experienced soil science professional with a proven track record in research and education; committed to enhancing sustainable and efficient agricultural practices

HIGHLIGHTS

- **Analytical/Environmental:** Sustainable Agriculture, Carbon Sequestration, Bio-Fertilizer production, Geographic Information Systems-GIS, RemoteSensing-ERDASIMAGINE, IDRISI, technical/scientific report writing
- **Computing/Programming:** MSTAT-C, R studio, SPSS, Arc GIS, and Crop Modeling.
- **Research/Teaching:** Carbon Sequestration in the terrestrial ecosystem, Nutrient Cycling, Soil Microbiology, Organic Agriculture, Integrated Nutrient Management (IPM), Mushroom Production

Experience

Soil Scientist (S-2) **March 2014 to July 2023**
Nepal Agriculture Research Council (NARC) **Kathmandu, Nepal**

- Supervised soil microbiology laboratory at Soil Science Division, Nepal Agricultural Research Council(NARC), Khumaltar, Kathmandu
- Conducted research on the adaptability of Favabean variety yield trials in the National Grain Legume Research Program(GLRP) Nepal as developed by ICRISAT
- Conducted research on the effects of micronutrients on yield and yield attributes of soybeans and lentils in mid-western parts of Nepal under the National Grain Legume Research Program(GLRP)
- Conducted Isolation and production of Bio-Fertilizers
- Conducted research and production of various microorganisms in different types of soils and manure

Lecturer **Feb 2012 to July 2013**
Gokuleshwar Agriculture and Animal Science College (GAASC) **Baitadi, Nepal**

- Taught introductory soil physics, soil microbiology, soil chemistry, and soil fertility to undergraduate students

Instructor **Various dates**
Kantipur Multi-Technical Academy **Chitwan, Nepal**

- Taught various courses: off-season vegetable production under the plastic house and tunnel, sustainable farming systems, soil sampling and analysis, Horticulture, Integrated Nutrient Management(INM), Integrated Pest Management(IPM)

Education

MSc.Agriculture (Distinction) **2010-2012**
Institute of Agriculture and Animal Sciences, Tribhuvan University **Rampur, Chitwan**
Specialization: Soil Science
Dissertation: Carbon-Dioxide emission from Wheat (*Triticumaestivum*) Field as influenced by Tillage, Mulch, and Nitrogen

BSc.Agriculture (1st Division) **2005-2009**
Institute of Agriculture and Animal Sciences, Tribhuvan University **Rampur, Chitwan**
Major: Soil Science

Advanced Diploma **2009-2010**
Arava International Center for Agriculture Training (AICAT) **Arava, Israel**

Professional Affiliations

- Soil Science Society of Nepal–2014

Publication

Peer Reviewed Article

- Kandel, S., Malla, R., Adhikary, B. H., & Vista, S. P. (2020). Effect of Azolla application on rice production at mid-hills condition of Nepal. *Tropical Agroecosystems*, 1(2), 103–106. <https://doi.org/10.26480/taec.02.2020.103.106>
- Malla, R., Kandel, S., Prasad Yadav, B., Rasaily, S., & Wagle, P. (2021). Groundnut growth and yield responses to calcium and phosphorous fertilization. *International Journal of Advanced Research*, 9(4), 688–693. <https://doi.org/10.21474/ijar01/12752>
- Kandel, S., Pokhrel, A., Sharma, R., Rayamajhi, K., & Chaudhary, S. (2022). Efficacy of co-inoculation of the rhizobium and pseudomonas in combination with chemical fertilizer on the productivity of rice under a legume-based cropping system. *Journal of Agriculture and Natural Resources*, 5(1), 121–129. <https://doi.org/10.3126/janr.v5i1.50695>
- Sharma, R., Kandel, S., Khadka, S., & Chaudhary, S. (2022). Nutrient contents in different sources of organic manures used in different farms of Bhaktapur district, Nepal. *Journal of Agriculture and Natural Resources*, 5(1), 150–156. <https://doi.org/10.3126/janr.v5i1.50705>
- Sharma, P., Baidya, S., Kandel, S., Chaudhary, S., & Magar, P. B. (2022). Management of bacterial leaf blight disease of rice in farmer's field condition at Bhaktapur district of Nepal. *Journal of Agriculture and Natural Resources*, 5(1), 105–112. <https://doi.org/10.3126/janr.v5i1.50646>
- Kandel, S., Sharma, P., & Chaudhary, S. (2023). Impact of Organic and Inorganic Fertilizers on Microbial Populations at Various Altitudes of Nepal in Paddy Field Soil Systems. *International Journal of Innovative Science and Research Technology*, 8(1), 6. <https://doi.org/10.5281/zenodo.7527765>
- Kandel, S., Sharma, P., Sharma, R., Chaudhary, S., & Sapkota, P. (2023). Bio-Fertilizer: Possibilities and Scope in Nepal: A Review. *International Journal of Innovative Science and Research Technology*, 8(1), 1-2. <https://doi.org/10.5281/zenodo.7527759>
- Sharma, R., & Kandel, S. (2023). Slow-Release Fertilizers: A Scope to Efficient Agriculture in Nepal. *International Journal of Advanced Multidisciplinary Research and Studies*, 3(1), 225-228. ISSN: 2583-049X.

Conference Proceeding

- Saraswoti Kandel, Shree C Shah Ananda K Gautam and Keshab R Pande. Carbon Dioxide Emission from Soil Grown to Wheat Crop at Khumaltar, Lalitpur. Proceedings of the Second National Soil Fertility Research Workshop, 24-25 March, 2015. Soil Science Division, NARC, Khumaltar, Lalitpur, Nepal
- Keshav Raj Adhikari, Saraswoti Kandel, Zueng-Sang Chen, Shree Chandra Shah, Jihn-Sung Lai. Variability in Carbon Dioxide Emission from Soil Grown to Wheat Crop in Kathmandu, Nepal. Korea Society of Soil Science and Fertilizer Conference, Vol.2014 No.6.(377-377)

Awards

- Research Grant, Cereal Systems Initiatives for South Asia (CSISA),2011

Reference

1. Dr. Anil Pokhrel, Ginger Research Program, NARC (anilp.narc@gmail.com)
 2. Dr. Bhushan Shrestha, Central Department of Biotechnology (bhushan.shrestha@mbustb.edu.np)
 3. Dr. Sabina Devkota, National Soil Science Research Center, NARC (sabina.devkota@gmail.com)
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