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# Education

* **Master of Science in Biology Jan 2024 – Dec 2025**

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|  | Minnesota State University, Mankato | Mankato,MN |
| ● | **Bachelor of Science in Agriculture** | **2018- 2022** |
|  | Amritsar Group of Colleges | Punjab, India |

# Research and Publications

## Evaluating Soil and Plant Health in a Wide-row Maize *(Zea mays L.)* Production System Integrated with Perennial Cover Crop and Turkey.

Jan 2024- Current

* Researching along with a faculty member to see the effect of perennial cover and turkey in Maize and soil health.
* Collecting the data from the field and evaluation them in the data analysis software such as MS Excel and R- Studio.
* Working together with the faculty members, farmer, fellow graduate researchers, and undergraduate students to make sure the research goes smoothly.

## Effect of Four Different Types of Vermicomposts on Okra Productivity and Farm Income

June 2022- Dec 2022

* Conducted a greenhouse-based study using a complete block design on Okra to check the effectivity of four different Vermicomposts with different moisture content.
* Collected data on the plant and soil parameter and presented the findings on the paper.

[Click here for publication](https://www.cell.com/heliyon/fulltext/S2405-8440(24)10382-9)

## Effect of Different Mulching Materials on Leaf Spot Disease of Groundnut

June 2022- Dec 2022

* Conducted field-based research to investigate the impact of mulch on groundnut production
* Designed experiment as randomized complete block with seven treatments and three replications, applying a fertilizer dose of 20:40:20 NPK kg per hectare.
* Evaluated the disease scoring for leaf spot disease on Groundnut and presented the findings in the paper.

[Click here for publication](https://d1wqtxts1xzle7.cloudfront.net/101445375/40184-libre.pdf?1682360056=&response-content-disposition=inline%3B+filename%3DEffect_of_Different_Mulching_Materials_o.pdf&Expires=1721494023&Signature=A89DnJz5Xzn-gNuQi2OhKBvOdsuQ5Bff-Qq4a1KkLcbPz47xOrvmp1fUO49RyYq03Gm3LLoJcxlYQgcbXIITuLivw6gGo0wJEeenYtRSH34fG8dFQ-zUeY0YJ5ntbUDSoAw9kJc1-HYbOUnhM1Dfzldki2Yz5Tw0kZw8kkGUc0tWceWFwAAd-uWC9wOEF3cH2MtsDLaax2AzEw9T9lCAKMqDFkgrJ8MDBGdjY-O4fsUoi78o7yGJRT75uk0mwwIbV2oyzCIPzLGHcrMzqVYgjukqz5NnR9ELKeLTW7920zpEclI4Nt9oUbDPuS2spEAHzGrGDw1V60sSlpDglRbuhg__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA)

# Effect of mulch on yield of groundnut (Arachis hypogaea) in Nepal

June 2022- Dec 2022

* Conducted a field-based study using a randomized complete block design with seven mulching treatments and three replications.
* Applied fertilizer dose and collected data on pod yield, weed biomass, number of pods per plant, and benefit-cost ratio for each treatment.
* Analyzed results to identify the most effective mulching material for increasing groundnut productivity, with rice husk mulch showing the highest yield and benefit-cost ration.

[Click here for publication](https://journals.aesacademy.org/index.php/aaes/article/view/08-01-02)

# Work Experience

## Graduate Teaching Assistance Department of Biology, MNSU Jan 2024 – Current

Mankato, MN

* Conduct lab classes for undergraduate students in the Department of Biology, ensuring a hands-on learning experience and reinforcing theoretical concepts through practical application.
* Grade assignments and lab reports, providing detailed feedback to help students understand their mistakes and improve their performance.
* Offer assistance and support to students during office hours and emails addressing their questions and concerns and helping them grasp complex biological concepts.

## Research Intern National Soil Science Research Centre Dec 2021 – Aug 2022

Kathmandu, Nepal

* Supported planning and design of soil research considering the needs of the population for sustainable agriculture.
* Conducted a project assessing soil fertility status using chromatography and spectroscopy techniques.
* Assisted the soil lab scientists with tasks such as collecting soil samples using hand and hydraulic probes, applying fertilizers, conducting field layout, and performing laboratory analysis.

## Student Intern Nepal Oilseed Research Program April 2021 – Sept 2021

Sarlahi, Nepal

* Collaborated with management on field management and cultivation of oilseeds and studied the life cycle of pests such as thrips, aphids, and leafhoppers in groundnut crops.
* Applied field designing techniques for oilseed cultivation, including RCBD and split-split plot design, and worked on projects related to mulch effects, yield evaluation, and management practices for groundnut and sunflowers.
* Participated in trials and evaluations, including rice trials with the National Rice Research Program, disease evaluation of wheat (Loose smut), and seed production of Dhaincha (Sesbania bispinosa).

# Skills

* Software: R-lab ,R-Studio, Office 365, MS Excel, MS Word, MS PowerPoint, Statistical Tool for Agriculture Research(Tool)
* Communication/Organization: Quick learner, teamwork, detail oriented, and customer service.
* Technical: Design for Experiments, Data Collection, PMN Analysis, Inorganic Nitrogen Test
* Equipment: Spadmeter, Malvern, Slake.