RAVINDER SINGH

2942 SW 35th Pl Apt 35, Gainesville, Fl, Contact number: (405)-762-8430
Email: rsingh4@ufl.edu

PROFILE SUMMARY

- Enthusiastic, self-motivated graduate student with proven leadership capabilities, who likes to take initiative, and seek out new challenges.
- Demonstrates excellent organizational abilities balancing work, academics, and organizational involvement.
- Adept at working across departments, with faculty, administers, and students.

ACADEMIC BACKGROUND

Ph. D. in Soil and Water Sciences — (January 2023- Present)

University of Florida, Gainesville, FL — GPA 4.00/ 4.00

Advisor- Dr. Lakesh Sharma
Specialization- Soil Fertility and Nutrient Management
Dissertation: Using Bio-stimulant to reduce nitrogen and phosphorous rates in potato

Master of Science in Plant and Soil Science — (December 2022)

Oklahoma State University, Stillwater, OK — GPA 4.00/ 4.00

Advisor- Dr. Hailin Zhang
Specialization- Soil Fertility and Nutrient Management
Thesis: Interactive effect of Nitrogen, Phosphorous, and Potassium fertilizer on Corn

Bachelor of Science in Agriculture — (August 2020)

Punjab Agricultural University, Ludhiana, India — OCPA: 7.99 / 10

RESEARCH/WORK EXPERIENCE

Graduate Research Assistant — **Jan 2023- Present**
University of Florida, Gainesville, FL

Graduate Research Assistant — **Jan 2021- Dec 2022**
Oklahoma State University, Stillwater, OK

- Establishing field research and conducting field research activities (soil and plant sampling, weed management, data collection includes stand count, NDVI readings).
- Process and analyze plant and soil samples in the lab for nutrient analysis.
- Adept in using LECO CN828 for analyzing carbon and nitrogen in soil, plant, and grain samples.
- Proficient in SAS 9.4 programming for statistical analysis.
- Prepare extracts for pH, nitrates, phosphorous, and potassium analysis.
- Assisting lab members in field activities of long-term soil fertility trails.

Soil Fertility Lab Manager **May 2021- Dec 2022**
Oklahoma State University, Stillwater, OK

- Maintaining lab analysis record for long-term soil fertility trails.
- Analyzing soil, plant, and grain samples for carbon and nitrogen using LECO.
- Purchasing and maintaining record of lab supplies.
- Coordinates and supervise the work of undergraduate student employees.
- Maintaining lab safety and train other graduate students.

Undergraduate Laboratory of Soil Science **June 2016- Feb 2020**
Punjab Agricultural University, Ludhiana, India

- Adept in surveying and taking soil samples from various sites, and making soil maps.
- Experience in working with atomic spectrophotometers, flow injection calorimeters, Flame photometers, and other soil chemistry equipment.
- Refining technology options for managing low quality groundwater.
- Prediction, assessment and enhancement of biotic carbon sequestration in soils.
- Phytoremediation of cadmium-contaminated soil through multipurpose tree species.

DATA ANALYSIS SKILLS

- SAS and R- Basic data analysis skills.
- Python- Beginner knowledge of Jupyter notebook, NumPy, Seaborn libraries.
- AgiSoft Metashape- Image Processing skills, which includes Building Orthomosaic, Digital Elevation Model, Calculating Vegetative Indices from Images.
- ENVI- Hyperspectral data extraction from plots, Vegetation Indices calculations.
- Sigma Plot- Data Visualization.

PROFESSIONAL ACTIVITIES

- American Society of Agronomy, Member April 2020-Present
- Soil Science Society of America, Member April 2020-Present
- Crop Science Society of America, Member April 2020-Present
- American Society for Horticultural Science, Member March 2023-Present

PUBLICATIONS

- Peer-reviewed
  - **Singh, R**., Sawatzky, S. K., Thomas, M., Akin, S., Zhang, H., Raun, W., & Arnall, D. B. (2023). Nitrogen, Phosphorus, and Potassium Uptake in Rain-Fed Corn as Affected by NPK Fertilization. *Agronomy*, *13*(7), 1913.

Submitted

- **Singh, R**., Sawatzky, S. K., Akin, S., Thomas, M., Raun, W. R., Zhang, H., & Arnall, D. B. (2023) Micronutrients concentration and content in rain-fed corn as affected by nitrogen, phosphorous and potassium fertilization.
- **Singh, R**., Sawatzky, S. K., Akin, S., Thomas, M., Raun, W. R., Zhang, H., & Arnall, D. B. (2023) Effect of nitrogen, phosphorous, and potassium fertilizer on grain yield, biomass, nitrogen use efficiency, and nutrient removal.

- Extension publications-
  - Singh, K., Singh, H., Johnson L., Carter E., Sharma L., **Singh R**. (2023) Plant Growth Regulators as Management Tool in Cotton Production. EDIS

- Conferences Abstracts/ Posters/ Presentations
  - **Singh, R**., Sawatzky, S. K., Akin, S., Thomas, M., Raun, W. R., Zhang, H., & Arnall, D. B. (2022) Magnesium and micronutrients uptake in corn as affected by NPK fertilization. [Abstract]. ASA, CSSA, SSSA International Annual Meeting, Baltimore, MD. (2nd Prize in graduate student competition).
  - **Singh, R**., Sawatzky, S. K., Akin, S., Thomas, M., Raun, W. R., Zhang, H., & Arnall, D. B. (2021) Interactive Effect of Nitrogen, Phosphorous, and Potassium Fertilizer on Grain Yield and Nutrient Uptake in Corn. [Abstract]. ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT.
  - **Singh, R.,** Arnall, D.B., & Sharry, R., (2022) Effect of Manure Applications Compared to Commercial Fertilizer for Total Nitrogen in Dryland Winter Wheat (*Triticum Aestivum L*.). In Soil Fertility Abstracts. Great Plains Soil Fertility Conference, Denver, CO
  - Akin, S., **Singh, R**., Sawatzky, S. K., Thomas, M., Raun, W. R., & Arnall, D. B. (2021) Wheat Yield Response to Nitrogen in No-till and Bedded Cropping Systems. [Abstract]. ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT.
  - Sawatzky, S. K., **Singh, R**., Akin, S., Thomas, M., Raun, W. R., & Arnall, D. B. (2021) Influence of Nitrogen Timing on Dual Purpose Winter Wheat [Abstract]. ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT.
  - Thomas, M., Sawatzky, S. K., **Singh, R**., Akin, S., Raun, W. R., & Arnall, D. B. (2021) Evaluation of Starter Nitrogen Fertilizer Rates for Corn Production in the Southern Great Plains [Abstract]. ASA, CSSA, SSSA International Annual Meeting, Salt Lake City, UT.
  - Sawatzky, S. K., **Singh, R**., Akin, S., Thomas, M., Raun, W. R., & Arnall, D. B. (2021) Effect of Rate and Timing of Nitrogen Applications on Forage Sorghum Biomass Yield. In Soil Fertility Abstracts. Great Plains Soil Fertility Conference, Denver, CO.

LEADERSHIP ACTIVITIES / COMMUNITY INVOLVEMENT

- Sikh Student Association, University of Florida, Member (2023-Present)
- Association of Horticulturists of Indian Subcontinent (AHIS), Secretary (2023-Present)
- Serving on Graduate level Scholarship Committee in Soil Science Society of America (2023-Present)
- Reviewer for Scientific Journal, Agrosystems, Geosciences & Environment (2023-Present)
- Graduate and Professional Student Government Association (GPSGA), Parliamentarian (2022-2023)
- Plant and Soil Science Graduate Student Organization, GPSGA Representative (2021-2023)
- GPSGA, Social Chair (2021-2022)
- Indian Student Association, Member (2021-2023)
- Association of Agricultural Scientists of Indian Origin, Student ambassador (2023-Present)
- Judging Undergrad student posters at Undergrad research symposium (April 2022)
- Served as Judge for OSSEF Science Fair (March 2022)

AWARDS AND HONOURS

- UF/ IFAS Travel Grant (Summer 2023)
- Graduate Leadership Conference Award (Tri-Societies) (Fall 2022)
- Second prize in graduate student poster competition at Tri-Societies Annual Meeting (Fall 2022)
- GPSGA Travel Award for attending Tri- Societies Annual Meeting (Fall 2022)
- Bayer Encompass Scholar for 2022-23 by ASA, CSSA, SSSA Societies (2022-2023)
- Bayer Encompass Scholar for 2021-22 by ASA, CSSA, SSSA Societies (2021-2022)
- GPSGA Travel Award for attending Tri- Societies Annual Meeting (Fall 2021)
- GPSGA Travel Award for attending Great Plains Soil Fertility Conference (Spring 2022)
- Dr. William R. Raun Memorial Scholarship (2022-2023)
- Gault-Halstead-Warth Trust Endowment Scholarship (2022-2023)
- Awarded with University Merit Scholarship six times in a row for excellence in studies (2014 –2020)
- Awarded with Punjab State Scholarship (2014-2016)