Mengxiao Li

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Address: Chengdu City, Sichuan Province, China

EDUCATION BACKGROUND

Sichuan Agricultural University

Sep.2017 - Jun.2020

College of Resources

Master of Agriculture

Soil Science

GPA: 3.5/4.0

Core courses: Progress in Agricultural Resources and Environment Science(88/100), Plant Nutrition Diagnosis and Fertilization(87/100), Agriculture Information Processing and Analysis(88/100),

Biogeochemistry(83/100), Plant Nutrition and Environmental Ecology(84/100), Land Information topics(90/100)

Thesis: Study on mechanism of nitrogen regulation measures on key nitrogen conversion process in calcareous purple soil

Sichuan Agricultural University

Sep. 2012 – *Jun.* 2016

College of Resources and Environment

Bachelor of Engineering

Land Resource Management

Core courses: Soil Science(88/100), Soil Scienc(Practical Teaching)(88/100), Remote Sensing Foundation and Application(90/100), Geological basis(82/100), Land Use management(87/100), Land planing(90/100)

PUBLICATIONS

- He X, Li M, Zhou M, et al. Gross nitrogen transformations and ammonia oxidizers affected by nitrification inhibitors and/or organic amendments in a calcareous soil: A ¹⁵N tracing study[J]. *Applied Soil Ecology*, 2023, 188: 104926.
- Lan T, **Li M**, He X, et al. Effects of exogenous carbon and nitrification inhibitors on denitrification rate, product stoichiometry and *nirS/nirK*-type denitrifiers in a calcareous soil: evidence from ¹⁵ N anaerobic microcosm assays[J]. *Journal of Soils and Sediments*, 2023, 23(3): 1217-1232.
- Lan T, **Li M**, He X, et al. Effects of synthetic nitrification inhibitor (3, 4-dimethylpyrazole phosphate; DMPP) and biological nitrification inhibitor (methyl 3-(4-hydroxyphenyl) propionate; MHPP) on the gross N nitrification rate and ammonia oxidizers in two contrasting soils[J]. *Biology and Fertility of Soils*, 2022, 58(3): 333-344.
- Lan T, Li M, Han Y, et al. How annual CH₄, N₂O, and NO emissions from rice-wheat system are affected by nitrogen fertilizer rate and type?[J]. *Applied Soil Ecology*, 2020, 150: 103469.

RESEARCH EXPERIENCE

Lan Ting's Research Team in Sichuan Agricultural University

Dec. 2023 – Present

Research Assistant

- Organizing experimental data to assess how combined microplastics and cadmium pollution affect pak
 choi growth, alongside changes in the physical and chemical properties of the surrounding rhizosphere
 soil
- Using Python for data analysis, mining, and visualization

• Writing scientific paper.

Study on the characteristics of nitrogen transformation in purple soil

Jul.2018 – Jan.2020

In Transfer Process and Loss Control Mechanism of Fertilizer Nitrogen project

(National key R & D Plan project 2017YFD0200100)

Key Memeber

- Assisted in designing the experimental protocol for indoor cultivation experiments in the project, aiming to investigate the effects of nitrogen regulation measures on the nitrification, denitrification processes, and N₂O emissions in alkaline soil, while exploring their impact on changes in biodiversity
- Conducted indoor cultivation experiments for the project, performing experiments involving aerobic and anaerobic cultivation of alkaline soil with the use of N¹⁵ isotope tracing technology
- Performed one-way ANOVA analysis on the data by SPSS and visualized the data through Origin

Exchange Programme at the Nanjing Normal University on the Isotope Tracer method

Dec.2018

Research Assistant

- Understood and learned the principles of microdiffusion method
- Completed the collection of ¹⁵NO₃- and ¹⁵NH₄+ through the method
- Finalized all equipment preparations and project planning for the implementation of the microdiffusion method in our laboratory experiment

Study on the Evolution of Nitrogen Transformation Processes

Nov.2017 - Jun.2018

during the Development of Purple Soil

(National Natural Science Foundation of China, Grant No. 41501243)

Research Assistant

- Assisted in the preparation and customization of experimental equipment in the early stages of the experiment
- Aided and participated in cultivation experiments (employing N¹⁵ isotope tracing technology) to compare the effects of synthetic nitrification inhibitors and biological nitrification inhibitors on the nitrification, denitrification processes, and N₂O emissions in both acidic and alkaline soils.
- Contributed to organizing experimental data.

WORKING EXPERIENCE

Wekemo Tech Group Co., Ltd. Shenzhen, China

Jul.2020 - Jul.2023

Pre-sales technical & sales

- Introduced researchers to relevant knowledge in microbiomics and metabolomics
- Offered advice and guidance on researchers' study proposals while aligning with product services
- Provided guidance and recommendations for researchers' sample collection efforts

TECHNICAL SKILLS

Language: English (fluent), Mandarin (native)

Programming Language: Python

Software: Origin, Microsoft office, SPSS

Certifications: CET-6, CET-4

Hobbies: Reading, Swimming, Pilates, Painting, Video production,