

# Curriculum Vitae

## Mengmeng Yang

E-mail: [yangmengmeng@scbg.ac.cn](mailto:yangmengmeng@scbg.ac.cn), Date of Birth: May 29, 1997 (Current address: South China Botanical Garden, Chinese Academy of Sciences, 723 Xingke Road, Tianhe District, Guangzhou, 51000, China)

### PROFILE

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I have spent four years of study in the field of forest ecology following my research interest; I've developed a particular interest in the ecological process, soil microbial ecology, soil carbon, nitrogen cycles, wildfire ecology, and natural resources monitoring, on which I have published two articles; I would love to advance my understanding of ecology research further through joint PhD study.

### RESEARCH INTERESTS

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Ecological process, microbial biology, soil carbon, nitrogen cycles, wildfire ecology, and natural resources monitoring.

### ACADEMIC RECORD

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**Sept 2023-Present**    **Ph.D. candidate** in Forest Ecology, Chinese Academy of Sciences, Beijing, China

**Research Title:**        Understanding Soil Carbon and Nitrogen Cycles and Microbial Mechanisms on Burnt *Pinus Massoniana* Sites in Southern Subtropical China: Implications for Post-Fire Restoration Strategies

**Sept 2020-June 2023**    **Master** of Science in Forest Ecology, Chinese Academy of Sciences, Beijing, China

**Research Title:**        Soil physicochemical properties and microbial community characteristics of *Pinus massoniana* burnt sites in southern subtropical China under different restoration methods after fire disturbance

**Sept 2015-June 2019**    **Bachelor** of Science in Landscape Agriculture, Hunan University of Science and Technology, Xiangtan, China

### MAIN PUBLICATIONS

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- 1) **Yang, M.**, Luo, X., Cai, Y., Mwangi, B.N., Khan, M.S., Haider, F.U., Huang, W., Cheng, X., Yang, Z., Zhou, H., Liu, S., Zhang, Q., Luo, M., Ou, J., Xiong, S., Li, Y.\* , 2024. Effect of fire and post-fire management on soil microbial communities in a lower subtropical forest ecosystem after a mountain fire. *Journal of environmental management* 351, 119885.
- 2) **Yang, M.**, Wei, S., Mwangi, B.N., Liu, S., Huang, J., Li, Y.\* , 2022. Horizontal Distribution Characteristics and Environmental Factors of Shrubland Species Diversity in Hainan Island, China.

## **SKILLS & AWARDS**

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### **Language Skills:**

- English (Good)
- Chinese (Fluent)

**Software Skills:** Arc GIS pro, R studio, Origin2023b, M.S. Office, SPSS, PS and AI.

### **Experimental Skills:**

- Determination of soil greenhouse gas emissions
- Determination of soil microbial carbon use efficiency
- Data analysis of soil microbial high-throughput sequencing
- Measurement of soil physical properties such as soil porosity and capillary water content using cutting ring method
- Determination of soil chemical properties such as pH, the content of ammonium and nitrate nitrogen

### **Awards:**

- Special Awards for Services, Hunan University of Science and Technology, Xiangtan, China. 2017-2018.
- Merit student of University of Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, China. 2021-2022.

## **RESEARCH PROJECTS PARTICIPATION**

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- National Natural Science Foundation of China, No.31961143023  
“Based on the research on the maintenance mechanism of lower subtropical forest ecosystem service function in China to study the sustainability and resilience of forests under different management systems”
- The National Natural Science Foundation of China, No.31670453  
“Study on the contribution of physiological processes and physical environment to the evapotranspiration of forest ecosystem and its regulation mechanism in humid region”
- The National Key Research and Development Program of China, No.2021YFF0703905  
“Forest ecosystem data intelligent management, product development and mining applications”

## **RESEARCH EXPERIENCE**

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- Survey of shrub plant communities in South China, Main Participants 08/2020 – 09/2021
- Plant diversity survey and soil sample collection
- Explore code to calculate plant biodiversity

- Laboratory experiment and data analysis of soil physical and chemical properties
- Water quality, soil and sediment monitoring in Shenzhen Wetland Park, Guangdong Province, China, Main Participants 08/2021 – 05/2022
- Monitoring of dissolved oxygen, ammonium nitrogen and nitrate nitrogen in seawater
- Write monthly and annual project reports
- Monitoring on ecological restoration of burned land in Foshan City, Guangdong Province, China, Main Participants 08/2021 – 12/2024
- Soil and plant sample collection
- Measurement of soil respiration
- Data analysis of microbial high-throughput sequencing
- Laboratory experiment and data analysis of soil physical and chemical properties