

JILU CHE

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No.159 Longpan Road, Nanjing, China, 210037

RESEARCH INTEREST

Plant microbiome, Microbial ecology, Blueberry root-associated microbial

EDUCATION

Ph.D Candidate in Forestry

September 2021 - Present

- Nanjing Forestry University

- Supervisor: Prof. Weilin Li

Master of Science (M.Sc.(Agr.)) in Forestry

September 2014 - June 2017

- Zhejiang Agriculture and Forestry University

- Supervisor: Prof. Shuquan Yu

• Thesis: *Heavy Metal Enrichment Efficiency of Urban Green Tree of Cinnamomum Camphora in Differnt Pollution Degrees*

Bachelor of Science (B.Sc.(Agr.)) in Landscape

September 2009 - June 2014

- North West Agriculture and Forestry University

RESEARCH EXPERIENCE

Institute of Soil Science, Chinese Academy of Sciences

September 2020 - August 2021

Research Associate

Adviser: Prof. Xin Song

- Working towards sustainable remediation of soil with microbial coupling thermal treatment and phytoremediation. We focus on the exploration of microorganisms that degrade PAHs and plants that bioaccumulate PFASs, which contribute to sustainable remediation.

Nanjing Agriculture University

September 2017 - August 2020

Research Associate

Adviser: Prof. Qingsheng Cai

- Exploring plant responses to cadmium stress and functional genes in plant responses to cadmium stress; screening for Cd-tolerant PGPR. Explore the methods of molecular breeding or exogenous addition to alleviate cadmium stress to plants.

PUBLICATIONS

Jilu Che, Yaqiong Wu, Hao Yang, Ying Chang, Wenlong Wu, Lianfei Lyu, Xiaomin Wang, Weilin Li, **(2024)**. Metabolites of blueberry roots at different developmental stages strongly shape microbial community structure and intra-kingdom interactions at the root-soil interface, *Science of the Total Environment*, 947, 174333.

Jilu Che, Yaqiong Wu, Hao Yang, Wenlong Wu, Lianfei Lyu, Weilin Li, **(2024)**. Beneficial ecological networks dominate the dynamic root endosphere microbiome during long-term symbiosis with host plants, *Plant and Soil*, 501, 289–305.

Hao Yang, Yaqiong Wu, **Jilu Che**, Wenlong Wu, Lianfei Lyu, Weilin Li, **(2024)**. LC-MS and GC-MS Metabolomics Analyses Revealed That Different Exogenous Substances Improved the Quality of Blueberry Fruits under Soil Cadmium Toxicity, *Journal of Agricultural and Food Chemistry*, 72, 904-915.

Mukhtiar Ali, Xin Song, Qing Wang, Zhuangxia Zhang, Meng Zhang, Ma Min, **Jilu Che**, Rui Li, Xing Chen, Zhiwen Tang, Biao Tang, Xiaogfeng Huang, **(2024)**. Effects of short and long-term thermal

exposure on microbial compositions in soils contaminated with mixed benzene and benzo[a]pyrene: A short communication, ***Science of the Total Environment***, 912, 16886211.

Jilu Che, Chang Xu, Xin Song, Xiaoyan Ding, Hong Chen, **(2024)**. Bioaccumulation of PFASs in cabbage collected near a landfill site in China: Laboratory and field investigations, ***Science of the Total Environment***, 906, 167578.

Jilu Che, Yaqiong Wu, Hao Yang, Shaoyi Wang, Wenlong Wu, Lianfei Lyu, Weilin Li, **(2023)**. Root Niches of Blueberry Imprint Increasing Bacterial-Fungal Interkingdom Interactions along the Soil-Rhizosphere-Root Continuum, ***Microbiology Spectrum***, 11(3), 1-15.

Mukhtiar Ali, Xin Song, Qing Wang, Zhuangxia Zhang, **Jilu Che**, Xing Chen, Zhiwen Tang, Xin Liu, **(2023)**. Mechanisms of biostimulant-enhanced biodegradation of PAHs and BTEX mixed contaminants in soil by native microbial consortium, ***Environmental pollution***, 318, 120831.

Junying Wang, Chong Shi, Donglu Fang, **Jilu Che**, Wenlong Wu, Lianfei Lyu, Weilin Li, **(2023)**. The impact of storage temperature on the development of microbial communities on the surface of blueberry fruit, ***Foods***, 12, 1611.

Yongkang Duan, Haiyan Yang, Hao Yang, Zhiwen Wei, **Jilu Che**, Wenlong Wu, Lianfei Lyu, Weilin Li, **(2023)**. Physiological and morphological responses of blackberry seedlings to different nitrogen forms, ***Plants***, 12, 1480.

Jilu Che, Yaqiong Wu, Hao Yang, Shaoyi Wang, Wenlong Wu, Lianfei Lyu, Weilin Li, **(2022)**. Long-term cultivation drives dynamic changes in the rhizosphere microbial community of blueberry, ***Frontiers in Plant Science***, 13, 962759.

Xin Liu, Qing Wang, Xin Song, Kang Li, Mukhtiar Ali, Changlong Wei, **Jilu Che**, Siwei Guo, Xuedan Dou, **(2022)**. Utilization of biochar prepared by invasive plant species *Alternanthera philoxeroides* to remove phenanthrene co-contaminated with PCE from aqueous solutions, ***Biomass Conversion and Biorefinery***, 13399.