INSTITUTE OF AGRICULTURAL RESOURCES AND REGIONAL PLANNING , CAAS

Ai Chao

Professor

Ph.D. Supervisor

86-10-82108669

aichao@caas.cn

Innovation Team of Plant Nutrition,IARRP,CAAS

Ziyuan Building, 12 Zhongguancun Nandajie Street, Haidian District, Beijing, China

Research Interests

- **Soil nitrogen cycling**
- **Plant-microbe interactions**

Publication

Wheat rhizodeposition stimulates soil nitrous oxide emission and denitrifiers harboring the nosZ clade I gene, Soil Biology and Biochemistry, 2020, DOI: 10.1016/j.soilbio.2020.107738

The stronger impact of inorganic nitrogen fertilization on soil bacterial community than organic fertilization in short-term condition, Geoderma, 2021, DOI: 10.1016/j.geoderma.2020.114752

Structure and assembly cues for rhizospheric nirK- and nirS-type denitrifier communities in long-term fertilized soils,Soil Biology and Biochemistry, 2018, DOI: 10.1016/j.soilbio.2018.01.007

Distinct responses of soil bacterial and fungal communities to changes in fertilization regime and crop rotation, Geoderma, 2018, DOI: 10.1016/j.geoderma.2018.01.010

A distinctive root-inhabiting denitrifying community with high $N_2O/(N_2O+N_2)$ product ratio, Soil Biology and Biochemistry, 2017, DOI: 10.1016/j.soilbio.2017.02.008

Reduced dependence of rhizosphere microbiome on plant-derived carbon in 32-year long-term inorganic and organic fertilized soils, Soil Biology and Biochemistry, 2015, DOI:

10.1016/j.soilbio.2014.09.028

The alleviation of acid soil stress in rice by inorganic or organic ameliorants is associated with changes in soil enzyme activity and microbial community composition, Biology and Fertility of Soils, 2015, DOI: 10.1007/s00374-015-0994-3

Different roles of rhizosphere effect and long-term fertilization in the activity and community structure of ammonia oxidizers in a calcareous fluvo-aquic soil, Soil Biology and Biochemistry, 2013, 10.1016/j.soilbio.2012.08.003

Responses of extracellular enzyme activities and microbial community in both the rhizosphere and bulk soil to long-term fertilization practices in a fluvo-aquic soil, Geoderma, 2012, DOI: 10.1016/j.geoderma.2011.07.020