INSTITUTE OF AGRICULTURAL RESOURCES
AND REGIONAL PLANNING , CAAS

Fan Fenliang

Professor

Ph.D. Supervisor

86-10-82106732

fanfenliang@caas.cn

Innovation Team of Soil-Plant Interactions,IARRP,CAAS

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

Research Interests

- **Soil-plant-microbe interaction**
- **Biological fertility**
- **Soil microbial carbon and nitrogen cycle**

Publication

Microbial mechanisms of the contrast residue decomposition and priming effect in soils with different organic and chemical fertilization histories, Soil Biology and Biochemistry, 2019, DOI: 10.1016/j.soilbio.2019.05.001

Substrate-driven microbial response: A novel mechanism contributes significantly to temperature sensitivity of N2O emissions in upland arable soil, Soil Biology and Biochemistry, 2018, DOI: 10.1016/j.soilbio.2017.11.021

Loss of soil microbial diversity may increase insecticide uptake by crop Agriculture, Ecosystems and Environment, 2017, DOI: 10.1016/j.agee.2017.02.010

The response patterns of community traits of N2O emission-related functional guilds to temperature across different arable soils under inorganic fertilization, Soil Biology and Biochemistry, 2017, DOI: 10.1016/j.soilbio.2017.01.022

Long-term organic and inorganic fertilization alters temperature sensitivity of potential N_2O emissions and associated microbes, Soil Biology and Biochemistry, 2016, DOI: 10.1016/j.soilbio. 2015.11.005

Probing microbial coupling of carbon and nitrogen cycling during decomposition of maize dresiue by 13C-DNA-SIP, Soil Biology and Biochemistry, 2014, DOI: 10.1016/j.soilbio.2013.12.002

Urea-and nitrapyrin-affected N_2O emission is coupled mainly with ammonia oxidizing bacteria growth in microcosms of three typical Chinese arable soils, Soil Biology and Biochemistry, 2013, DOI: 10.1016/j.soilbio.2013.08.001

Mineral fertilizer alters cellulolytic community structure and suppresses soil cellobiohydrolase activity in a long-term fertilization experiment, Soil Biology and Biochemistry, 2012, DOI: 10.1016/j. soilbio.2012.06.008

Linking plant identity and interspecific competition to soil nitrogen cycling through ammonia oxidizer communities, Soil Biology and Biochemistry, 2011, DOI: 10.1016/j.soilbio.2010.09.009

Plant carbon partitioning below ground in the presence of different neighboring species, Soil Biology and Biochemistry, 2008, DOI: 10.1016/j.soilbio.2008.05.003