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Research Interests

- Agricultural non-point source pollution
- Carbon & Nitrogen cycling in farmland ecosystem
- Resource utilization of agricultural waste

Publication

Plastic pollution in croplands threatens long-term food security, Global Change Biology, 2020, DOI: 10.1111/gcb.15043

Contrasting impacts of long-term application of manure and crop straw on residual nitrate-N along the soil profile in the North China Plain, Science of the Total Environment, 2019, DOI: 10.1016/j.scitotenv.2018.09.275

Ammonia emissions from paddy fields are underestimated in China, Environmental Pollution, 2018, DOI: 10.1016/j.envpol.2017.12.103

Long-term manure application increased greenhouse gas emissions but had no effect on ammonia volatilization in a Northern China upland field, Science of the Total Environment, 2018, DOI: 10.1016/j.scitotenv.2018.03.069

Biochar amendment with fertilizers increases peanut N uptake, alleviates soil N₂O emissions



without affecting NH₃ volatilization in field experiments, Environmental Science and Pollution Research, 2018, DOI: 10.1007/s11356-017-1116-6

Optimizing the nitrogen application rate for maize and wheat based on yield and environment on the Northern China Plain, Science of The Total Environment, 2018, DOI: 10.1016/j.scitotenv.2017.09. 183

Nitrogen application rates need to be reduced for half of the rice paddy fields in China, Agriculture, Ecosystems and Environment, 2018, DOI: 10.1016/j.agee.2018.05.023

An optimal regional nitrogen application threshold for wheat in the North China Plain considering yield and environmental effects, Field Crops Research, 2017, DOI: 10.1016/j.fcr.2017.03. 002

Cropping systems affect paddy soil organic carbon and total nitrogen stocks (in rice-garlic and rice-fava systems) in temperate region of southern China, Science of the Total Environment, 2017, DOI: 10.1016/j.scitotenv.2017.06.226

Effect of biochar additions to soil on nitrogen leaching, microbial biomass and bacterial community structure, European Journal of Soil Biology, 2016, DOI: 10.1016/j.ejsobi.2016.02.004