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研究方向：

1) 耕作制度：主要围绕稻麦周年两熟系统可持续耕层结构优化与培肥展开；
2) 农田生态：主要围绕土壤生物驱动的碳氮循环和作物生产功能反馈展开；
3) 生态循环农业：主要围绕农业废弃物的资源化利用展开。

工作经历：

2020.12-至今　　南京农业大学农学院，教授
2015.12-2020.11　南京农业大学农学院，副教授
2017.11-2018.11　美国俄克拉荷马大学，访问学者；
2013.7-2015.12　南京农业大学农学院，讲师。

教育经历：

2008.9-2013.6　浙江大学生命科学学院，生态学专业 博士；
2004.9-2008.6　电子科技大学生命科学与技术学院，生物技术专业 本科。

教学工作：

本科生：《农业生态学》和《耕作学》；
研究生：《农业生态学》

科研项目：

国家自然科学基金面上项目 (No.31770483)：秸秆还田条件下蚯蚓-菌根互作对麦田 N_2O 排放的驱动机理 (在研；2018.1.1-2021.12.31)；

国家自然科学基金国际(地区)合作交流项目 (No.31811530008)：中-瑞小麦氮素获取的根系分化与菌根形成权衡策略研究 (在研；2018.1.1-2020.12.31)；

国家重点研发计划“粮丰科技专项”课题任务 (No.2017YFD03012-02-01)：稻-麦周年秸秆高效利用模式与效益研究 (在研；2017.7.1-2020.12.31)；

江苏省自然科学基金面上项目 (No. BK20191310)：秸秆还田条件下稻麦两熟作物氮素获取的根际驱动机理 (在研；2019.7.1-2021.7.1)。

同行评审论文：

[1] **Haishui Yang,** Chun Fang, Yi Meng, Yajun Dai, Jian Liu. Long-term ditch-buried straw return increases functionality of soil microbial communities. Catena, 2021, 202: 105316

[2] **Haishui Yang,** Jiajia Zhou, Martin Weih, Yifan Li, Silong Zhai, Qian Zhang, Weiping Chen, Jian Liu, Ling Liu, Shuijin Hu. Mycorrhizal nitrogen uptake of wheat is increased by earthworm activity only under no-till and straw removal conditions. Applied Soil Ecology, 2020, 155: 103672

[3] **Haishui Yang,** Yifan Li, Silong Zhai, Chun Fang, Jian Liu, Qian Zhang. Long term ditch-buried straw return affects soil fungal community structure and carbon-degrading enzymatic activities in a rice-wheat rotation system. Applied Soil Ecology, 2020, 155:103660

[4] **Haishui Yang**, Mingmin Xu, Yifan Li, Chaofan Xu, Silong Zhai, Jian Liu. The impacts of ditch-buried straw layers on the interface soil physicochemical and microbial properties in a rice-wheat rotation system. Soil & Tillage Research, 2020, 202:104656.

[5] **Haishui Yang**, Jinxia Feng, Martin Weih, Yi Meng, Yifan Li, Silong Zhai, Wuyi Zhang. Yield reduction of direct-seeded rice under straw return can be mitigated by appropriate water management improving soil phosphorus availability. Crop & Pasture Science, 2020, 71: 134-146.

[6] **Haishui Yang**, Yi Meng, Jinxia Feng, Yifan Li, Silong Zhai, Jian Liu. Direct and indirect effects of long-term ditch-buried straw return on soil bacterial community in a rice-wheat rotation system. Land Degradation and Development, 2020, 31: 851–867.

[7] **Haishui Yang,** Jiajia Zhou, Jinxia Feng, Silong Zhai, Weiping Chen, Jian Liu, Xinmin Bian. Ditch-buried straw return: a novel tillage practice combined with deep ploughing and tillage rotation in rice-wheat rotation systems. Advances in Agronomy, 2019, 154: 257-290

[8] **Haishui Yang**, Degui Yu, Jiajia Zhou, Silong Zhai, Xinmin Bian, Martin Weih. Rice-duck co-culture for reducing negative impacts of biogas slurry application in rice production systems. Journal of Environmental Management, 2018, 213: 142-150

[9] **Haishui Yang,** Silong Zhai, Yifan Li, Jiajia Zhou, Ruiyin He, Jian Liu, Yaguang Xue, Yali Meng. Waterlogging reduction and wheat yield increase through long-term ditch-buried straw return in a rice-wheat rotation system. Field Crops Research, 2017, 209: 189-197

[10] **Haishui Yang**, Tao Li, Guijie Li, Qixiang Sun. Preparation and evaluation of camptothecin granules for molluscacidal activity. Allelopathy Journal, 2017, 42:

145-156

[11] **Haishui Yang**, Qian Zhang, Roger T. Koide, Jason D. Heoksema, Jianjun Tang, Xinmin Bian, Shuijin Hu, Xin Chen. Taxonomic resolution is a determinant of biodiversity effects in arbuscular mycorrhizal fungal communities. Journal of Ecology, 2017, 105: 219-228

[12] **Haishui Yang**, Jianglai Xu, Yi Guo, Roger T. Koide, Yajun Dai, Mingmin Xu, Liping Bian, Xinmin Bian, Qian Zhang. Predicting plant response to arbuscular mycorrhizas: The role of host functional traits. Fungal Ecology, 2016, 20: 79-83

[13] **Haishui Yang**, Jinxia Feng, Silong Zhai, Yajun Dai, Mingmin Xu, Junsong Wu, Mingxing Shen, Xinmin Bian, Roger T. Koide, Jian Liu. Long-term ditch-buried straw return alters soil water potential, temperature and microbial communities in a rice-wheat rotation system. Soil & Tillage Research, 2016, 163 (1): 21-31

[14] **Haishui Yang**, Roger T. Koide, Qian Zhang. Short-term waterlogging increases arbuscular mycorrhizal fungal species richness and shifts community composition. Plant and Soil, 2016, 404 (1): 373-384

[15] **Haishui Yang**, Yajun Dai, Mingmin Xu, Qian Zhang, Xinmin Bian, Jianjun Tang, Xin Chen. Metadata-mining of 18S rDNA sequences reveals that "everything is not everywhere" for glomeromycotan fungi. Annals of Microbiology, 2016, 66 (1): 361-371

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[18] Xiaohua Wang[#], **Haishui Yang**[#] (co-first author), Jian Liu, Junsong Wu, Weiping Chen, Jie Wu, Liqun Zhu, Xinmin Bian. Effects of ditch-buried straw return on soil organic carbon and rice yields in a rice–wheat rotation system. Catena, 2015, 127: 56-63

[19] **Haishui Yang**, Qian Zhang, Yajun Dai, Qian Liu, Jianjun Tang, Xinmin Bian, Xin Chen. Effects of arbuscular mycorrhizal fungi on plant growth depend on root system: a meta-analysis. Plant and Soil, 2015, 389 (1-2):361-374

[20] **Haishui Yang**, Yajun Dai, Xiaohua Wang, Qian Zhang, Liqun Zhu, Xinmin Bian. Meta-analysis of interactions between arbuscular mycorrhizal fungi and biotic stressors of plants. The Scientific World Journal, 2014,746506

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neighbor effects mediated by rhizosphere factors along a simulated aridity gradient. Plant and Soil, 2013, 369: 165-176

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[25] Silong Zhai, Chaofan Xu, Yongcheng Wu, Jian Liu, Yali Meng*, **Haishui Yang***. Long-term ditch-buried straw return alters soil carbon sequestration, nitrogen availability and grain production in a rice-wheat rotation system. Crop & Pasture Science. 2021

[26] Sillong Zhai, Yifan Li, Chaofan Xu, Weiping Chen, Jinxia Feng, Yali Meng*, **Haishui Yang*.** Symbiotic soil fungi suppress N_2O emission but promote nitrogen remobilization to grains under organic amendment. Applied Soil Ecology, 2021, 167: 104012

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