

导师姓名	李鹏	性别	男	邮箱	Bio_lip@hainnu.edu.cn
专业	微生物生态				
研究方向	青枯菌与寄主互作机制； 环境微生物多样性及其维持机制				
联系方式		15120998611			

1. 个人情况介绍

李鹏，男，汉族，1985 年 4 月生，山东人，中共党员，博士研究生学历，理学博士学位，副教授，硕导，博导，海南省拔尖人才。至今发表研究论文 30 余篇，其中第一作者或通讯作者文章 20 余篇。主持国家自然科学基金 2 项，海南省重点研发项目 1 项，海南省重点研发项目子课题 1 项，海南省自然科学基金 1 项，中国博士后基金 1 项。主要研究兴趣：青枯菌等病原细菌的致病力调控机制和常见病害生物防控；环境微生物多样性及其功能维持机制。主要从事①青枯菌中群体感应系统对致病力的调控机制研究；②功能性的简化微生物组开发和利用；③青枯菌等病原菌与环境微生物的互作研究。

2. 近年来代表性科研成果

(1) Jingyang Sun, Yonglin Li, Li Zheng, Daipeng Chen, Xiaofan Zhou, **Peng Li**.

The first complete genome of *Robbsia andropogonis* reveals its arsenal of virulence system causing leaf spot disease of areca palm. **Phytopathology Research**, 2024, 6:51.

(2) **Peng Li**, Cristina Bez, Yong Zhang, Yinyue Deng, Vittorio Venturi*. N- acyl

homoserine lactone cell–cell diffusible signalling in the *Ralstonia solanacearum* species complex. **Molecular Plant Pathology**, 2024, 25:e13467.

(3) Xia Li, Wenfang Yin, Junjie Desmond Lin, Yong Zhang, Quan Guo, Gerun

Wang, Xiayu Chen, Binbin Cui, Mingfang Wang, Min Chen, **Peng Li**, Ya-Wen He, Wei Qian, Haibin Luo, Lian-Hui Zhang, Xue-Wei Liu*, Shihao Song*, Yinyue Deng*. Regulation of bacterial physiology and virulence by the second messenger 2',3'-cyclic guanosine monophosphate. **Nature Communications**, 2023,14:7654

- (4) Jinxing Liao, Zihan Li, Dan Xiong, Danyu Shen, Limin Wang, Long Lin, Xiaolong Shao, Lisheng Liao, **Peng Li**, Liqun Zhang, Hai-Hong Wang, Guoliang Qian*. Quorum quenching by a type IVA secretion system effector. **The ISME Journal**, 2023, doi: 10.1038/s41396-023-01457-2
- (5) Qingmei Liu, Chuhao Li, Xiaohan Zhang, Mengfan Ding, Xinyue Liao, Jinli Yan, Ming Hu, Leilei Yang, Xiaoqing Wang, Lisheng Liao, **Peng Li***, Xiaofan Zhou* PhcX is a LqsR-family response regulator that contributes to *Ralstonia solanacearum* virulence and regulates multiple virulence factors, 2023, **mBio**, 14(5): e02028-23.
- (6) Xiulan Cao[#], Yuting Xie[#], **Peng Li***, Genome sequence resource of *Serratia ureilytica* HNU47: A strain with biocontrol potential against bacterial wilt pathogen *Ralstonia solanacearum*, **Plant Disease**, 2023, 107(3):919-921.
- (7) Jin Cai, XiuLan Cao, Bin Wang, Jing Liu, MinJing Chen, YunZhan Luo, XueLong Zhang, **Peng Li*** & Cai-Juan Zheng*. Bioactive secondary metabolites from tomato derived bacterium *Bacillus velezensis* HNU24. **Natural Product Research**, 2023, 37(23):3964-3970.
- (8) Jinli Yan[#], **Peng Li**[#], Xiaoqiang Wang, Minya Zhu, Hongyu Shi, Guohui Yu, Xuemei Chen, Huishan Wang, Xiaofan Zhou, Lisheng Liao, Lianhui Zhang. RasI/R quorum sensing system controls the virulence of *Ralstonia solanacearum* strain EP1. **Appl Environ Microbiol**. 2022, 88(15):e0032522.
- (9) **Peng Li**, Xiulan Cao, Liwen Zhang, Mingfa Lv*, Lianhui Zhang*. PhcA and PhcR regulate ralsolamycin biosynthesis oppositely in *Ralstonia solanacearum*.

Frontiers in Plant Science, 2022, 27(13): 903310.

- (10) **Peng Li**, Yan Jiang, Yingying Fei, Xianchun Zeng. Dynamic variation of camel gastrointestinal bacterial communities contributing to Benzo(a)pyrene degradation. **Applied Biochemistry and Microbiology**, 2022, 58(6):798-807.
- (11) Siyuan Ma, Yubin Lin, Yongqiang Qin, Xiaoping Diao*, **Peng Li***. Microbial diversity characteristics of areca palm rhizosphere soil at different growth stages, **Plants-Basel**, 2021, 10(12), 2706.
- (12) Fangfang Shen, Wenfang Yin, Shihao Song, Zhang Z, Peiyi Ye, Yong Zhang, Fei He*, **Peng Li***, Yinyue Deng*. *Ralstonia solanacearum* promotes pathogenicity by utilizing L-glutamic acid from host plants. **Molecular Plant Pathology**, 2020, 21(8): 1099-1110.
- (13) Shihao Song, Wenfang Yin, Xiuyun Sun, Binbin Cui, Lei Huang, **Peng Li**, Liang Yang, Yinyue Deng*. Anthranilic acid from *Ralstonia solanacearum* plays dual roles in intraspecies signalling and inter-kingdom communication. **The ISME Journal**, 2020, 14: 2248-2260.
- (14) Mingfa Lv, Ming Hu, **Peng Li**, Zide Jiang, Lian-Hui Zhang, Jianuan Zhou*. A two-component regulatory system VfmIH modulates multiple virulence traits in *Dickeya zeae*, **Molecular Microbiology**, 2019, 111(6), 1493–1509.
- (15) Ying Zhang, Anna Hu, Jianuan Zhou, Wenfei Zhang, **Peng Li***. Comparison of bacterial communities in soil samples with and without tomato bacterial wilt caused by *Ralstonia solanacearum* species complex. **BMC Microbiology**, 2020, 20:89.