



**基本情况:**

姓名: 李新宇

性别: 女

职称: 研究员

现工作单位: 中国科学院沈阳应用生态研究所微生物资源与生态组

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**教育背景:**

1995. 9—1999. 7 吉林农业大学农村能源开发与利用专业, 学士学位

1999. 8—2002. 7 吉林农业大学植物病理专业, 硕士学位

2002. 8—2005. 6 中国科学院沈阳应用生态研究所微生物专业, 博士学位

### 工作经历:

2005.7—2007.7 中国科学院沈阳应用生态研究所微生物资源与生态组，助理研究员

2007.8—2018.7 中国科学院沈阳应用生态研究所微生物资源与生态组，副研究员

2018.8—至今 中国科学院沈阳应用生态研究所微生物资源与生态组，研究员

### 访问与进修:

2010年3—9月赴美国俄克拉荷马大学环境基因组研究所进行交流访问。

### 主要研究方向:

主要研究方向为微生物生态学和环境微生物学，重点关注环境因子（农药，臭氧等）及人为耕作对土壤微生物生态过程的影响；农田土壤功能微生物种群结构变化对土壤质量的影响；农药污染及退化农田土壤微生物修复理论及技术。

### 发表文章:

Yang Tingting, Zhang Huiwen, Wang Jian, **Li Xinyu\***（通讯作者）, Li Xu, Su Zhencheng. High bioremediation potential of strain *Chenggangzhangella methanolivorans* CHL1 for soil polluted with metsulfuron-methyl or tribenuron-methyl in a pot experiment. *Environmental Science and Pollution Research*, 2021, 28: 4731-4738.

Wang Huanhuan, Li Xiang, Li Xu, Wang Jian, **Li Xinyu\***（通讯作者）, Guo Qiucui, Yu Zhixiong, Yang Tingting, Zhang Huiwen. Long-term no-tillage and different residue amounts alter soil microbial community composition and increase the risk of maize root rot in northeast China. *Soil & Tillage Research*, 2020, 196: 104452.

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Li Xu, Wang Huanhuan, Li Xiang, **Li Xinyu\***（通讯作者）, Zhang Huiwen. Distribution characteristics of fungal communities with depth in paddy fields of three soil types in China. *Journal of Microbiology*, 2020, 58: 279–287.

Yu Zhixiong, Zhang Huiwen, Fu Xuanhe, Li Xu, Guo Qiucui, Yang Tingting, **Li Xinyu\***（通讯作者）. Immobilization of esterase SulE in cross-linked gelatin/chitosan and its application in

remediating soils polluted with tribenuron-methyl and metsulfuron-methyl. Process Biochemistry, 2020, 98: 217–223.

Li Xu, Wang Huanhuan, Li Xiang, **Li Xinyu\*** (通讯作者), Zhang Huiwen. Shifts in bacterial community composition increase with depth in three soil types from paddy fields in China. Pedobiologia, 2019, 77: 150589.

**Li Xinyu**, Wang Jian, Zhang Shaopeng, Wang Huanhuan, Li Xiang, Li Xu\*, Zhang Huiwen. Distribution of fungal endophytes in roots of *Stipa krylovii* across six vegetation types in grassland of northern China. Fungal Ecology, 2018, 31: 47-53.

**Li Xinyu**, Sun Jing, Wang Huanhuan, Li Xu\*, Wang Jian, Zhang Huiwen. Changes in the soil microbial phospholipid fatty acid profile with depth in three soil types of paddy fields in China. Geoderma, 2017, 290: 69-74.

Wang Huanhuan, Li Xu, Li Xiang, **Li Xinyu\*** (通讯作者), Wang Jian, Zhang Huiwen. Changes of microbial population and N-cycling function genes with depth in three Chinese paddy soils, PLoS ONE, 2017, 12(12): e0189506.

**Li Xinyu**, Deng Ye, Li Qi, Lu Caiyan, Wang Jingjing, Zhang Huiwen, Zhu Jianguo, Zhou Jizhong and He Zhili. Shifts of functional gene representation in wheat rhizosphere microbial communities under elevated ozone. ISME J., 2013, 7(3): 660-671.

**Li Xinyu**, Li Xu, Wang Jian, Wang Xiujuan, Sun Jian, Su Zhencheng, Zhang Huiwen, Li Peijun. Profiles of Mycobacterium communities under polycyclic aromatic hydrocarbon contamination stress in the Shenuo irrigation area, northeast China. Can. J. Microbiol., 2013, 59: 694–700

Zhencheng Su, Jian Wang, Xu Li, **Xinyu Li\*** (通讯作者), Huiwen Zhang, Peijun Li. The effect of polycyclic aromatic hydrocarbon contamination on distribution of the Sphingomonas community in the Shenuo irrigation area of Northeast China. Ann Microbiol, 2013, 63: 1005–1012.

Wang Jingjing, Zhang Huiwen, Zhang Xiaoli, Qin Shenghong, Tan Huanbo, **Li Xinyu\*** (通讯作者). Effects of long-term chlorimuron-ethyl application on the diversity and antifungal activity of soil *Pseudomonas* spp. in a soybean field in Northeast China. Annals of Microbiology, 2013, 63(1): 335-341.

**Li Xinyu**, Su Zhencheng, Li Xu, Zhang Chenggang and Zhang Huiwen.. Assessing the effects of acetochlor on soil fungal communities by DGGE and clone library analysis. Ecotoxicology, 2010, 19(6): 1111-1116.

**Li Xinyu**, Zhang Huiwen, Wu Minna, Zhangyan and Zhang Chenggang, The effect of

methamidophos on soil fungi community in microcosms by plate count, DGGE and clone library analysis. Journal of Environmental Sciences, 2008, 20 (5): 619-625.

**Li Xinyu**, Zhang Huiwen, Wu minna Su Zhencheng and Zhang Chenggang Impact of acetochlor on ammonia-oxidizing bacteria in microcosm soils. Journal of Environmental Sciences, 2008, 20: 1126–1131.

**Li XinYu**, Zhang Huiwen, Zhou Qixing, Su Zhencheng and Zhang Chenggang. Effects of Acetochlor and Methamidophos on Fungal Communities in Black Soil. Pedosphere, 2005, 15(5): 646-652.

李新宇, 张惠文, 张晶, 苏振成, 张成刚. 乙草胺和甲胺磷对农田黑土可培养真菌数量及种群结构的影响. 应用生态学报, 2005, 16(6): 1099-1103.

李新宇, 张惠文, 张晶, 张勤, 张成刚. 乙草胺、甲胺磷及其复合对土壤真菌种群的毒性效应. 农业环境科学学报, 2008, 27(5): 1842-1847.

晏培, 王秀娟, 孙健, 宋宇, 张惠文, 李新宇(通讯作者). 臭氧浓度升高对不同品种小麦根际细菌种群的影响. 生态学杂志, 2014, 33(4): 1015-1020.

李想, 王欢欢, 郭秋翠, 李旭, 李新宇(通讯作者), 张惠文. 玉米茎腐病病原禾谷镰孢拮抗菌筛选及分子鉴定. 玉米科学, 2020, 28(5): 169-175.

#### 发明专利:

李新宇、郭秋翠、李旭、张惠文. 一种节杆菌属细菌高密度发酵培养基. 国家发明专利, 申请号: 201910279171.5

李新宇、郭秋翠、李旭、张惠文. 一种改性玉米秸秆材料固定化农用微生物菌剂的制备方法. 国家发明专利, 申请号: 201911110814.X

李新宇、李想、王欢欢、李旭、张惠文. 一种微生物菌剂及其制备方法和应用. 国家发明专利, 申请号: 201811608561.4

李新宇、孙京、李旭、王萱、张惠文. 一种高效提取土壤微生物磷脂脂肪酸的方法. 国家发明专利, 申请号: 201610012045.X