

Zhigang Li



Title:

Professor, Agricultural College of Guangxi University

Email: lizhigangnn@s163.com

Telephone: +86 15277071931

STUDY WORK HISTORY

In 1994, graduated from Guangxi Agricultural University, China;
In 1996, he received his MSc. from the Guangxi University, China;
In 1999, he received his Ph.D. from the Zhejiang University, China;
In 1994, he joined the Department of agronomy, Guangxi Agricultural University, and served as assistant teacher;
In 1997, Guangxi Agricultural University merged with Guangxi University, he joined the Agricultural College of , Guangxi University, and served as lecturers, associate professor and professor successively.

TEACHING AREA

Plant physiology, Agroecology

RESEARCH INTEREST:

Environmental ecology and the safety of crop production

RESEARCH HIGHLIGHT

The research and application of ecological remediation technology for water and soil pollution has been our main focus in recent years. We found that artificial wetlands can provide a solid barrier for safe crop production by removing heavy metals and antibiotics in wastewater, and that artificial wetlands have a high removal efficiency of Cr⁶⁺ in water bodies. We also found that returning rice straw to the field can significantly reduce soil chromium toxicity to rice, significantly reduce rice chromium uptake, and achieve the goal of safe rice production.

PUBLICATIONS

[1] Nong Y, Liu XY, Peng Z, Li LX, Cheng XR, Wang XL, Li ZW, Li ZG, Li SL. Effects of Domestic Sewage on the Photosynthesis and Chromium Migration of *Coix lacryma-jobi* L. in Chromium-Contaminated Constructed Wetlands.

- Sustainability. 2023, JUL; 15(13): DOI10.3390/su151310250
- [2] Fang ZR, Wang QY, Zhang CQ, Li SL, Li S , Wang XL, Cheng XR, He ZL , Li ZG. Effects of Cr⁶⁺ stress on chromium chemical speciation distribution and bacterial community structure in the *Coix lacryma-jobi* L. constructed wetlands. *Environmental Pollutants And Bioavailability*. 2023. 34(1): 433-445
- [3] Li LX, Li Q , Tang YJ, Li SL, Cheng XR, Li ZW, Wang XL, Li ZG. Effects of different nutritional conditions on accumulation and distribution of Cr in *Coix lacryma-jobi* L. in Cr⁶⁺-contaminated constructed wetlands. *Ecotoxicology And Environmental Safety*. 3021. 225: DOI10.1016/j.ecoenv.2021.112763
- [4] WU ZH, LI LX, LI SL, Chen XR, Wang XL, Li ZW, LiZG. Morphological transformation and migration of chromium in horizontal subsurface flow and vertical flow constructed wetlands. *Journal of Agro-Environment Science*, 2023, 42 (8) : 1803-1815
- [5] Li ZG, Lai PH, Li SL, Liu FJ, Wang LQ, Wang AQ, Long AS, Han SJ. Regulation of ascorbic acid on the physiology and biochemistry and the expression of genes related to oxidation and regeneration of sugarcane protoplasts. *Plant Physiology Journal*, 2020, 56 (06): 1248-1258.