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Research Interests

- Collection and preservation of probiotic strains from plants and animals
- Functional evaluation of probiotics
- The interaction mechanisms of probiotics with hosts

Publication

Detection, Structural Elucidation, and Biological Effects of Diverse N-Acyl-homoserine Lactone Signaling Molecules in the Plant-Promoting Endophytic Bacterium *Rhizobium oryzihabitans* M15, *Journal of Agricultural and Food Chemistry*, 2021, DOI: 10.1021/acs.jafc.1c03895

Stereoisomers of Nonvolatile Acetylbutanediol Metabolites Produced by *Bacillus velezensis* WRN031 Improved Root Elongation of Maize and Rice, *Journal of Agricultural and Food Chemistry*, 2020, DOI: 10.1021/acs.jafc.0c01352

Quorum sensing signal autoinducer-2 promotes root colonization of *Bacillus velezensis* SQR9 by affecting biofilm formation and motility, *Appl Microbiol Biotechnol*, 2020, DOI: 10.1007/s00253-020-10713-w

Haloferax profundus sp. nov. and *Haloferax marisrubri* sp. nov., Isolated from the Discovery Deep Brine-Seawater Interface in the Red Sea, *Microorganisms*, 2020, DOI: 10.3390/microorganisms8101475



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Isolation, Identification and Characterization of Endophytic Bacterium *Rhizobium oryzihabitans* sp. nov., from Rice Root with Biotechnological Potential in Agriculture, Microorganisms, 2020, DOI: 10.3390/microorganisms8040608

Complete Genome Sequencing of *Bacillus velezensis* WRN014, and Comparison with Genome Sequences of other *Bacillus velezensis* Strains, J Microbiol Biotechnol, 2019, DOI: 10.4014/jmb.1901.01040

Comparative genomics reveals adaptations of a halotolerant thaumarchaeon in the interfaces of brine pools in the Red Sea, The ISME Journal, 2015, DOI: 10.1038/ismej.2014.137

Acyl homoserine lactone-based quorum sensing in a methanogenic archaeon, The ISME Journal, 2012, DOI: 10.1038/ismej.2011.203