CURRICULUM VITAE

Personal Information			
Name	Ming SUN	Gender	Man
Position Title		Professor	
Working Department			
Email	m98sun@mail.hzau.edu.cn		
Address			
Tel	+86-27-87283455	Fax	

Photo

Research Interest

Microbial pesticides

Professional Memberships

Other Roles

Education & Working Experience

Education

1984.09-1988.07 Wuhan University, Microbiology BS

1988.09-1991.06 Huazhong Agricultural University, Microbiology MsD

1992.09-1995.12 Huazhong Agricultural University, Microbiology PhD

Working and Research Experiences

1991.07-now Huazhong Agricultural University

1994. 05-1994.11 The Ohio State University, visiting scholar

1997.06-1997.09	University of Waterloo, UNISCO-ASM visiting scholar
1997.10-1998.10	Institute of Molecular Agrobiology, visiting scholar
2002.07-2003.01	Cornell University, senior visiting scholar
2004.05-2004.11	The University of Hong Kong, Croucher visiting scholar

Publications

1. Shi J, Peng D, Zhang F, Ruan L, Sun M (2020) The Caenorhabditis elegans CUB-like-domain containing protein RBT-1 functions as a receptor for Bacillus thuringiensis Cry6Aa toxin. PLoS Pathog. 16(5):e1008501.
2. Xin B, Liu H, Zheng J, Xie C, Gao Y, Dai D, Peng D, Ruan L, Chen H, Sun M (2020) In Silico analysis highlights the diversity and novelty of circular bacteriocins in sequenced microbial genomes. mSystems. 5(3):e00047-20.
3. Zheng Z, Zhang Y, Liu Z, Dong Z, Xie C, Bravo A, Soberón M, Mahillon J, Sun M, Peng D. (2020) The CRISPR-Cas systems were selectively inactivated during evolution of Bacillus cereus group for adaptation to diverse environments. ISME J. 14(6):1479-1493.
4. Deng Y, Chen H, Li C, Xu J, Qi Q, Xu Y, Zhu Y, Zheng J, Peng D, Ruan L, Sun M. (2019) Endophyte Bacillus subtilis evade plant defense by producing lantibiotic subtilomycin to mask self-produced flagellin. Commun Biol, 2:368.
5. Sajid M, Geng C, Li M, Wang Y, Liu H, Zheng J, Peng D, Sun M. (2018) Whole-Genome Analysis of Bacillus thuringiensis Revealing Partial Genes as a Source of Novel Cry Toxins. Appl Environ Microbiol, 84(14). doi: 10.1128/AEM.00277-18.
6. Peng D, Luo X, Zhang N, Guo S, Zheng J, Chen L, Sun M. (2018) Small RNA-mediated Cry toxin silencing allows Bacillus thuringiensis to evade Caenorhabditis elegans avoidance behavioral defenses. Nucleic Acids Res, 46(1):159-173.
7. Geng C, Liu Y, Li M, Tang Z, Muhammad S, Zheng J, Wan D, Peng D, Ruan L, Sun M. (2018) Dissimilar Crystal Proteins Cry5Ca1 and Cry5Da1 Synergistically Act against Meloidogyne incognita and Delay Cry5Ba-Based Nematode Resistance. Appl Environ Microbiol, 83(18). doi: 10.1128/AEM.03505-16.

8. Zheng J, Gao Q, Liu L, Liu H, Wang Y, Peng D, Ruan L, Raymond B, Sun M. (2018) Comparative Genomics of Bacillus thuringiensis Reveals a Path to Specialized Exploitation of Multiple Invertebrate Hosts. mBio, 8(4). doi: 10.1128/mBio.00822-17.
9. Du C, Cao S, Shi X, Nie X, Zheng J, Deng Y, Ruan L, Peng D, Sun M. (2017) Genetic and biochemical characterization of a gene operon for trans-aconitic acid, a novel nematicide from Bacillus thuringiensis. J Biol Chem, 292(8):3517-3530.
10. Zheng J, Peng D, Chen L, Liu H, Chen F, Xu M, Ju S, Ruan L, Sun M. (2016) The Ditylenchus destructor genome provides new insights into the evolution of plant parasitic nematodes. Proc Biol Sci, 283(1835). pii: 20160942.
11. Zhang F, Peng D, Cheng C, Zhou W, Ju S, Wan D, Yu Z, Shi J, Deng Y, Wang F, Ye X, Hu Z, Lin J, Ruan L, Sun M. (2016) Bacillus thuringiensis Crystal Protein Cry6Aa Triggers Caenorhabditis elegans Necrosis Pathway Mediated by Aspartic Protease (ASP-1). PLoS Pathog, 12(1):e1005389.
12. Peng DH, Lin J, Huang Q, Zheng W, Liu GQ, Zheng J, Zhu L, Sun M, (2016) A novel metalloproteinase virulence factor is involved in B. thuringiensis pathogenesis in nematodes and insects. Environ Microbiol, 18(3):846-862.
13. Ju S, Lin J, Zheng J, Wang S, Zhou H, Sun M. (2016) Alcaligenes faecalis ZD02, a novel nematicidal bacterium with an extracellular serine protease virulence factor. Appl Environ Microbiol, 82(7):2112-2120.
14. Ruan L, Crickmore N, Peng D, Sun M. (2015) Are nematodes a missing link in the confounded ecology of the entomopathogen Bacillus thuringiensis? Trends Microbiol, 23(6):341-346.
15. Ruan L, Wang H, Cai G, Peng D, Zhou H, Zheng J, Zhu L, Wang X, Yu H, Li S, Geng C, Sun M. (2015) A two domain protein triggers heat shock pathway and necrosis pathway both in model plant and nematode. Environ Microbiol, 17(11):4547-4565.
16. Xin B, Zheng J, Xu Z, Li C, Ruan L, Peng D, Sun M (2015) Three novel lantibiotics ticin A1, A3, and A4 have extremely stable properties and are promising food bio-preservatives. Appl Environ Microbiol, 81(20):6964-7220.
17. Xin B, Zheng J, Xu Z, Song X, Ruan L, Peng D, Sun M. (2015) The Bacillus cereus group is an excellent reservoir of novel Lanthipeptides. Appl Environ Microbiol,

81(5):1765-1774.

18. Zheng J, Gänzle MG, Lin XB, Ruan L, Sun M. (2015) Diversity and dynamics of bacteriocins from human microbiome. Environ Microbiol, 17(6):2133-2143.
19. Deng Y, Li CZ, Zhu YG, Wang PX, Qi QD, Fu JJ, Peng DH, Ruan LF, Sun M. (2014) ApnI, a transmembrane protein responsible for subtilomycin immunity, unveils a novel model for lantibiotic immunity. Appl Environ Microbiol, 80(20):6303-6315.
20. Luo X, Chen L, Huang Q, Zheng J, Zhou W，Peng D，Ruan L, Sun M. (2013) Bacillus thuringiensis metalloproteinase Bmp1 functions as a nematicidal virulence factor. Appl Environ Microbiol, 79(2):460-468.
21. Wang P, Liu Y, Zhang C, Zhu Y, Deng Y，Guo S，Peng D, Ruan L, Sun M. (2013)The resolution and regeneration of a cointegrate plasmid reveals a model for plasmid evolution mediated by conjugation and oriT site-specific recombination. Environmental Microbiology, 15(12):3305-3318.
22. Zheng J, Peng D, Song X , Ruan L, Mahillon J，Sun M. (2013) Differentiation of Bacillus thuringiensis, B. cereus, and B. thuringiensis on the basis of the csaB gene reflects host source. Appl Environ Microbiol, 79(12):3860-3863.
23. Wang F, Liu Y, Zhang F, Chai L, Ruan L, Peng D, Sun M. (2012) Improvement of crystal solubility and increasing toxicity against Caenorhabditis elegans by Asparagine substitution in Block 3 of Bacillus thuringiensis crystal protein Cry5Ba. Appl Environ Microbiol, 78(20):7197-7204.
24. Ye W, Zhu L, Liu Y, Crickmore N, Peng D, Ruan L, Sun M. (2012) Mining new crystalprotein genes from Bacillus thuringiensis on the basis of mixed plasmid-enriched genome sequencing and a computational pipeline. Appl Environ Microbiol, 78(14):4795-4801.
25. Luo Y, Ruan L, Zhao C, Wang C, Peng D, Sun M. (2011) Validation of the intact Zwittermicin A biosynthetic gene cluster and discovery of a complementary resistance mechanism in Bacillus thuringiensis. Antimicrob Agents Chemother, 55(9):4161-4169.
26. Peng D, Qiu D, Ruan L, Zhou C, Sun M. (2011) Protein elicitor PemG1 from Magnaporthe grisea induces SAR in plants through the salicylic acid and Ca^{2+}-related signaling pathways. Mol Plant Microbe Interact, 24(10):1239-1246.

27. Peng D, Wang F, Li N, Zhang Z, Song R. Zhu Z, Ruan L, Sun M. (2011) Single cysteine substitution in Bacillus thuringiensis Cry7Ba1 improves the crystal solubility and produces toxicity to Plutella xylostella larvae. Environ Microbiol, 13(10):2820-2831.
28. Liu X, Ruan L, Hu Z, Peng D, Cao S, Zheng J, Liu Y, Yu Z, Sun M. (2010) Genome wide screening revealed the genetic determinants of a antibiotic insecticide in Bacillus thuringiensis. J Biol Chem, 285: 39191-39200.
29. Fang S, Wang L, Guo W, Zhang X, Peng D, Luo C, Yu Z, Sun M. (2009) Bacillus thuringiensis Bel protein synergizes the toxicity of Cry1Ac protein to Helicoverpa armigera larvae by degrading insect intestinal mucin. Appl Environ Microbiol, 75: 5237–5243.
30. Guo S, Liu M, Peng D, Ji S, Wang P,Yu Z, Sun M. (2008) New strategy for isolating novel nematicidal crystal protein genes from Bacillus thuringiensis strain YBT-1518. Appl Environ Microbiol, 74: 6997-7001.
31. Sun M, Gene Engineering (2nd edition), 2013, Beijing: Higher Education Press.