

Xinli Sun, PhD
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Education

1. Doctor of Philosophy, Ph.D. Huazhong Agricultural University, Biochemistry & Molecular Biology 1998-2002
2. Master's Degree, M.Sc (Ag.), China Agricultural University, Plant Genetics & Breeding, 1991-1994
3. Bachelor's Degree, B.Sc. Hebei University, Biochemistry, 1984-1988

Research and professional experience

- Assistant professor: Hebei Normal University, 1995-1999
- Associate professor: Hebei Normal University, 1999-2004
- Postdoctoral research associate: University of Edinburgh, 2004-2007
- Postdoctoral research associate: Ohio State University, 2007-Present

Research interests

1. The mechanism of plant-pathogen interactions, and the signal transduction pathways of the plant disease resistance.
2. Plant functional genomics.

Publication

- 1) **Xinli Sun**, Chini Andrea, Eleonor Gilroy, Gary Loake. ADS1, a member of MATE-transporters, controls plant disease resistance by regulating salicylic acid and auxin response and involves in ROS accumulation (Completed)
- 2) **Xinli Sun**, Eleonor Gilroy, Gary Loake. Regulation of plant disease resistance, stress responses, and ABA signaling in *Arabidopsis* by the KAN4 transcription factor. (Completed)
- 3) **Xinli Sun**, Yinglong Cao, Shiping Wang. Point Mutations with Positive Selection Were a Major Force during the Evolution of a Receptor-Kinase Resistance Gene Family of Rice. *Plant Physiol.* 2006, 140: 998-1008.
- 4) **Xinli Sun**, Yinglong Cao, Zhifen Yang, Caiguo Xu, Xianghua Li, Shiping Wang, and Qifa Zhang. *Xa26*, a gene confers resistance to *Xanthomonas oryzae* pv. *oryzae* at both seedling and adult stages of rice, encodes a LRR receptor kinase-like protein. *plant J.* 2004 37:517-527.
- 5) **Xinli Sun**, Zhifen Yang, Shiping Wang and Qifa zhang. Identification of a 47 kb DNA fragment containing *Xa4*, a locus for bacterial blight resistance in rice. *Theor. Appl. Genet.* 2003 106:683-687
- 6) **Xinli Sun**, Laiqun Zhang, Haihong Sun, Yufeng xia, Xiaoyan Feng, Youai Wang. Probe for acid electrophoresis conditions of wheat gliadin. *Acta Agronomica Sinica.* 1999, (25):1 126-129
- 7) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. The differentiation of isozyme genes of *Indica* varieties in east and west Asia. *Scientia Agriculture Sinica.* 1997. 30(5): 50-55
- 8) **Xinli Sun**, Haihong Sun, Youai Wang. Polyacrylamide gel polyerization: ascorbic-fereous sulfate-ammonlum persulfate initiator for acid system. *Acta*

- Biochimica et Biophysica Sinica*. 1998, 30(4):407-410
- 9) **Xinli Sun**, Shuping Wu, Haihong Sun, Laiqun Zhang, Yufeng xia, Youai Wang. Analysis of various kinds of wheat storage proteins with electrophoresis. *Acta Bot. Boreal. –Occident. Sin.* 1998. 18(3): 433-439
 - 10) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. Study on classification rice cultivars (*Oryza sativa L.*) with isozyme quantitated. *Acta Agronomica Sinica*. 1996. 22(6): 693-699
 - 11) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. A method for studing electrophoretic variation of isozymes in rice with polyacrylamide gel. *Chinese J. Rice Sci.* 1996. 10 (1):43-50
 - 12) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. Diversity and nonrandom association of rice isozyme genes. *Acta Genetica Sinica*. 1996 23(4): 276-285.
 - 13) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. Is Yunnan a rice diversity center in isozyme variation?, *Rice Genetic Newsletter*, 96,Vol 11
 - 14) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. Segregation distortion in hybrids between indica and japonica rice varieties. *Journal of China Agricultural university*. 1996. 1 (1): 16, 22
 - 15) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. PAGE electrophoresis system for 8 isozymes in rice, *CRRN.*, 1995,4
 - 16) **Xinli Sun**, Hongwei Cai and Xiangkun Wang. A peroxidase locus was located on chromosome 6, *CRRN.*, 1996,1
 - 17) ZhifenYang, **Xinli Sun**, Shiping Wang, Qifa Zhang. Identifying and tagging a new gene for bacterial blight resistance in a 20 kb DNA fragment of rice. *Theor. Appl. Genet.* 2003,106:1467-1472
 - 18) Hongwei Cai, **Xinli Sun** and Xiangkun Wang New isozyme loci for malate dehydrogenase. *Rice Genetic Newsletter* 96,Vol 11
 - 19) Xiaoyan Feng, **Xinli Sun**, Yufeng Xia, Youai Wang. Effect of different detergents on succinate dehydrogenase. *Journal of Hebei Normal university (nature science)*
 - 20) Yufeng Xia, **Xinli Sun**, Xiaoyan Feng,, Youai Wang. The study of purifying succinate dehydrogenase. *Journal of Hebei Normal university (nature science)*. 2000, 24(4). 519-520,532
 - 21) Cao Y, Duan L, Li H, **Sun X**, Zhao Y, Xu C, Li X, Wang S.Functional analysis of Xa3/Xa26 family members in rice resistance to *Xanthomonas oryzae* pv. *oryzae*.*Theor Appl Genet.* 2007 115(7):887-95.
 - 22) Hua J P, Y Z Xing, C G Xu, **X L Sun**, S B Yu and Qifa Zhang. Genetic dissection of an elite rice hybrid revealed that heterozygotes are not always advantageous for performance. *Genetics*. 2002, 162:1885-1895
 - 23) Y F Tan, M Sun, Y Z Xing, J P Hua, **X L Sun**, Q F Zhang, H Corke. Mapping quantitative trait loci for milling quality, protein content and color characteristics of rice using a recombinant inbred line population derived from an elite rice hybrid. *Theor Appl Genet*, 2001, 103:1037-1045
 - 24) Jinping Hua, Yongzhong Xing, Weiren Wu, Caiguo Xu, **Xinli Sun**, Sibin Yu, and Qifa Zhang. Single-locus heterotic effects and dominance by dominance

interactions can adequately explain the genetic basis of heterosis in an elite rice hybrid. *Proc. Natl. Acad. Sci. USA*, Vol. 100, Issue 5, 2574-2579, March 4, 2003

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- 26) Xingyong Zhong, Yifang Tan, Caiguo Xu, Jingping Hua, **Xinli Sun**. Mapping Quantitive trait loci for grain appearance traits of rice using a recombinant line population. *Acta Botanica Sinica*, 2001, 43(8):840-845
- 27) Xingyong Zhong, Caiguo Xu, Jingping Hua, Yifang Tan, **Xinli Sun**. Mapping and isolation of quantitative trait loci controlling plant height and heading date in rice. *Acta Botanica Sinica*, 2001, 43(7):721-726