

Biographical Sketch for Guihua Bai

EDUCATION

- 1995 Ph.D. Plant Pathology, Purdue University.
- 1985 M.S. Plant Genetics and Breeding, Nanjing Agricultural University, Nanjing, China.
- 1982 B.S. Agronomy, Nanjing Agricultural University, Nanjing, China.

CURRENT EMPLOYMENT

- Research Molecular Geneticist (Plant), USDA-ARS
- Director of USDA Central Small Grain Genotyping Center, Manhattan, KS
- Adjunct Professor, Dept. of Agronomy, Kansas State University, Manhattan, KS

HONOR AND AWARDS

- 2013 Elected Fellow, Crop Science Society of America
- 2012 ASA Tengtou Agricultural Science Award, American Society of Agronomy
- 2011 'USDA Secretary's Honor Award (team member).
- 2010 Elected Fellow, American Society of Agronomy
- "2006 National Friendship Award" by Chinese Government
- "2004 Governor Friendship Award" by Jiangsu Province, China.
- Member, Gamma Sigma Delta, Honor Society of Agriculture

MEMBERSHIPS AND OTHER SERVICES

- Associate editors for PeerJ, PlosOne, and Crop Journal
- Sigma Xi member
- American Phytopathology Society
- Crop Science Society of American
- Agronomy Society of American
- Who is Who in America
- American Association for the Advancement of Science

ACDEMIC ACHIEVEMENTS

- Published 190 peer-reviewed articles
- Cloned *Fhb1* for wheat FHB resistance and *TaPHS1* for wheat preharvest sprouting, and contributed to cloning of five other plant genes
- Transferred *Fhb1*, a major FHB resistance gene, into 18 US winter wheat backgrounds
- Co-released 36 hard winter wheat varieties and registered 5 germplasm lines

CURRENT RESEARCH

- Develop and deploy high-throughput DNA markers for marker-assisted breeding to facilitate the early release of superior hard winter wheat germplasm and cultivars
- Identify novel wheat genes/QTLs for biotic and abiotic stress resistance and superior yield traits and develop DNA markers for these traits to be used in breeding
- Fine map and clone the important wheat genes for yield, and disease resistance
- Develop improved germplasm lines with resistance to multiple disease and abiotic stresses.



Presentation title: 'Wheat resistance to Fusarium head blight'.