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## EDUCATION:

**Ph.D. Plant Genetics and Breeding**, Technical University of Munich, Germany, Sept.1999
**M.Sc. Plant Genetics and Breeding**, Wuhan Institute of Botany, Chinese Academy of Sciences, China, July 1989
**B.Sc. Biology**, Department of Biology, Henan Normal University, Xinxiang, China, July 1986

## RESEARCH EXPERIENCE:

**Research Associate**, Department of Plant Science, University of Manitoba, Winnipeg, MB, July, 2007-present.
**NSERC Visiting Fellow**, Cereal Research Centre, Agriculture and Agri-Food Canada, Winnipeg, MB, June 2004 – June 2007.
**Postdoc/Research Scientist**, Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, Oct.1999 - June 2004.
**Doctoral Research Assistant**, Division of Plant Breeding and Applied Genetics, Technical University of Munich, Freising-Weihenstephan, Germany, Sept.1994 - Sept.1999.
**Plant Breeder**, Zhengzhou Institute of Pomology, Chinese Academy of Agricultural Sciences, Zhengzhou, China, July 1989 - Aug.1994

## AWARDS, HONORS, PROFESSIONAL AFFILIATIONS AND ACTIVITIES:

- Member of the Canadian Society of Plant Physiologists;
- Manuscript reviewer for Canadian Journal of Plant Science, Cereal Chemistry, Euphytica, Genetical Research, Genome, Hereditas, Heredity, Journal of Agricultural & Food Chemistry, Journal of Experimental Botany, Molecular Genetics & Genomics, Plant Breeding, Plant Pathology, Plant Science, Theoretical & Applied Genetics;
- Editorial Board Member of Journal of Triticeae Crops;
- NSERC fellowship from 06.2004 to 06.2007;
- Member of German Society of Plant Breeding (GPZ) from 02. 2002 to 06.2004;
- Scholarship of DAAD (German Academic Exchange Service) from 08.1994 to 09.1999;
- Received the second award in Science & Technology Progress from the Ministry of Agriculture of China, 1992 (for selection and breeding of 'Mimei seedless No. 1' watermelon new variety)

## PUBLICATIONS AND PRESENTATIONS

### I. Cereal Crops (Wheat and Barley)

**Articles Published in Peer-Reviewed Journals:**

1. **Huang XQ,** Cloutier S (2008) Molecular characterization and genomic organization of low molecular weight glutenin subunit genes at the *Glu-3* loci in hexaploid wheat (*Triticum aestivum* L.) Theor Appl Genet 116:953-966
2. Röder MS, **Huang XQ,** Börner A (2008) Fine mapping of the region on wheat chromosome 7D controlling grain weight. Functional & Integrative Genomics 8:79-86
3. Yi YJ, Liu HY, **Huang XQ**, An LZ, Wang F, Wang X.L (2008) Development of molecular markers linked to

the wheat powdery mildew resistance gene *Pm4b* and marker validation for molecular breeding. Plant Breed 127:116–120

4. Wang AL, Pei YH, Zhang YZ, Zhang Q, He ZH, Xia XC, Appels R, Ma WJ, **Huang XQ**, Yan YM (2008) Rapid separation and characterization of grain water-soluble proteins in bread wheat cultivars (*Triticum aestivum* L.) by capillary electrophoresis. Can J Plant Sci 88:843–848
5. **Huang XQ,** Cloutier S (2007) Hemi-nested touchdown PCR combined with primer-template mismatch PCR for rapid isolation and sequencing of low molecular weight glutenin subunit gene family from a hexaploid wheat BAC library. BMC Genetics 8:18
6. **Huang XQ**, Wolf M, Ganal MW, Orford S, Koebner RMD, Röder MS (2007) Did modern plant breeding lead to genetic erosion in European winter wheat varieties? Crop Sci 47:343-349
7. Pei YH, Wang AL, An XL, Li XH, Zhang YZ, **Huang XQ,** Yan YM (2007) Characterization and comparative analysis of three low molecular weight glutenin C-subunit genes isolated from *Aegilops tauschii*. Can J Plant Sci 87:273–280
8. **Huang XQ**, Cloutier S, Lycar L, Radovanovic N, Humphreys G, Noll JS, Somers DJ, Brown PD (2006) Molecular detection of QTLs for agronomic and quality traits in a doubled haploid population derived from two Canadian wheats (*Triticum aestivum* L.). Theor Appl Genet 113:753-766
9. Li JZ, **Huang XQ**, Heinrichs F, Ganal MW, Röder MS (2006) Analysis of QTLs for yield components, agronomic traits and disease resistance in an advanced backcross population of spring barley. Genome 49:454-466
10. Yifru T, Hammer K, **Huang XQ,** Röder MS (2006) Regional patterns of microsatellite diversity in Ethiopian tetraploid wheat landraces. Plant Breed 125:125-130
11. Yifru T, Hammer K, **Huang XQ,** Röder MS (2006) Analysis of microsatellite diversity in Ethiopian tetraploid wheats. Genet Resour Crop Evol 53:1115-1126
12. **Huang XQ**, Röder MS (2005) Development of SNP assays for genotyping of the puroindoline b gene for grain hardness in wheat using Pyrosequencing. J Agric Food Chem 53:2070-2075
13. Li JZ, **Huang XQ**, Heinrichs F, Ganal MW, Röder MS (2005) Analysis of quantitative trait loci for yield, yield components and malting quality in an advanced backcross population of spring barley. Theor Appl Genet 110:356-363
14. **Huang XQ,** Röder MS (2004) Molecular mapping of powdery mildew resistance genes in wheat: **a review**. Euphytica 137:203-223
15. **Huang XQ**, Hsam SLK, Mohler V, Röder MS, Zeller FJ (2004a) Genetic mapping of three alleles at the *Pm3* locus conferring powdery mildew resistance in common wheat (*Triticum aestivum* L.) Genome 47:1130-1136
16. **Huang XQ**, Kempf H, Ganal MW, Röder MS (2004b) Advanced backcross QTL analysis in progenies derived from a cross between a German elite winter wheat variety and a synthetic wheat (*Triticum aestivum* L.). Theor Appl Genet 109:933-943
17. Khlestkina EK, **Huang XQ**, Quenum FJ-B, Chebotar S, Röder MS, Börner A (2004) Genetic diversity in cultivated plants - alterations or stability. Theor Appl Genet 108:1466-1472
18. Alamerew S, Chebotar S, **Huang XQ**, Röder MS, Börner A (2004) Genetic diversity in Ethiopian hexaploid and tetraploid wheat germplasm assessed by microsatellite markers. Genet Resour Crop Evol 51:559-567
19. Błaszcyk L, Goyeau H, **Huang XQ**, Röder MS, Stepien L, Chełkowski J (2004) Identifying leaf rust resistance genes and mapping the gene *Lr37* on the microsatellite map of wheat. Cell Mol Biol Lett 9:869-878
20. **Huang XQ**, Cöster H, Ganal MW, Röder MS (2003a) Advanced backcross QTL analysis for the identification of quantitative trait loci alleles from wild relatives of wheat (*Triticum aestivum* L.). Theor Appl Genet 106:1379-1389
21. **Huang XQ**, Wang LX, Xu MX, Röder MS (2003b) Microsatellite mapping of the powdery mildew resistance gene *Pm5e* in common wheat (*Triticum aestivum* L.). Theor Appl Genet 106:858-865
22. **Huang XQ**, Börner A, Röder MS, Ganal MW (2002a) Assessing genetic diversity of wheat (*Triticum aestivum* L.) germplasm using microsatellite markers. Theor Appl Genet 105:699-707

**23.** **Huang XQ**, Hsam SLK, Zeller FJ (2002b) Chromosomal location of genes for resistance to powdery mildew in Chinese wheat lines Jieyan 94-1-1 and Siyan 94-1-2. Hereditas 136:212-218
24. Wang HJ, **Huang XQ**, Röder MS, Börner A (2002) Genetic mapping of loci determining long glumes in the genus *Triticum*. Euphytica 123:287-293
25. Hsam SLK, **Huang XQ,** Zeller FJ (2001) Chromosomal location of genes for resistance to powdery mildew in common wheat (*Triticum aestivum* L. em. Thell.) 6. Alleles at the *Pm5* locus. Theor Appl Genet 102:127-133
26. **Huang XQ**, Hsam SLK, Zeller FJ, Wenzel G, Mohler V (2000a) Molecular mapping of the wheat powdery mildew resistance gene *Pm24* and marker validation for molecular breeding. Theor Appl Genet 101:105-111
27. **Huang XQ**, Hsam SLK, Zeller FJ (2000b) Chromosomal location of two novel genes for resistance to powdery mildew in Chinese landraces (*Triticum aestivum* L. em. Thell.). J Genet Breed 54:311-317
28. **Huang XQ**, Zeller FJ, Hsam SLK, Wenzel G, Mohler V (2000c) Chromosomal location of AFLP markers in common wheat (*Triticum aestivum* L.) utilizing nulli-tetrasomic lines. Genome 43:298-305
29. Schwarz G, Herz M, **Huang XQ**, Michalek W, Jahoor A, Wenzel G, Mohler V (2000) Application of fluorescence-based semi-automated AFLP analysis in barley and wheat. Theor Appl Genet 100:545-551
30. Hsam SLK, **Huang XQ**, Ernst F, Hartl L, Zeller FJ (1998) Chromosomal location of genes for resistance to powdery mildew in common wheat (*Triticum aestivum* L. em. Thell.) 5. Alleles at the *Pm1* locus. Theor Appl Genet 96:1129-1134
31. Zeller FJ, **Huang XQ**, Paderina EV, Collaku A, Kowalczyk K, Aslam M, Peusha H, Hsam SLK (1998) Identification of powdery mildew resistance genes in common wheat (*Triticum aestivum* L. em. Thell.) XII. Cultivars and landraces grown in Mediterranean countries. Plant Genet Resour Newsletter 116:5-8
32. **Huang XQ**, Hsam SLK, Zeller FJ (1997) Identification of powdery mildew resistance genes in common wheat (*Triticum aestivum* L. em Thell.) IX. Cultivars, land races and breeding lines grown in China. Plant Breed 116:233-238
33. **Huang XQ**, Hsam SLK, Zeller FJ (1997) Chromosomal location of genes for resistance to powdery mildew in common wheat (*Triticum aestivum* L. em. Thell.) 4. Gene *Pm24* in Chinese landrace 'Chiyacao'. Theor Appl Genet 95:950-953

**Conference Proceedings, Book Chapters, Internet and Non-refereed Publications:**

34. Röder MS, **Huang XQ** (2007) A novel gene for grain weight *gw1* and a novel *Rht* locus on chromosome arm 7DS. Annual Wheat Newsletter 53:24-25
35. Khlestkina EK, **Huang XQ**, Varshney RK, Chebotar S, Röder MS, Graner A, Börner A (2006) Dynamics of genetic diversity in wheat and barley germplasm collected at different time periods of last century. In: Börner A, Pánková K, Snape JW (Eds.), Proc 13th Intern EWAC Workshop, 27 June-1 July 2006, Prague, Czech Republic, pp94-97
36. **Huang XQ,** Röder MS (2005) Assessment of SNP haplotypes of the puroindoline b gene for grain hardness in European wheat varieties by Pyrosequencing. http://pgrc.ipk-gatersleben.de/puroindoline/
37. Röder MS, **Huang XQ** (2005) Dissection of QTL for grain weight into single Mendelian genes. Annual Wheat Newsletter 51:31-32
38. Röder MS, **Huang XQ,** Ganal MW (2004) Wheat microsatellites in plant breeding - potential and implications. In: Lörz H, Wenzel G (eds), Biotechnology in Agriculture and Forestry, Vol55. Molecular Marker Systems in Plant Breeding and Crop Improvement**,** Springer Verlag Heidelberg, pp255-266
39. Reeves JC, Chiapparino E, Donini P, Ganal M, Guiard J, Hamrit S, Heckenberger M, **Huang XQ** et al. (2004) Changes over time in the genetic diversity of four major European crops - a report from the Gediflux Framework 5 project. In: Vollmann J, Grausgruber H, Ruckenbauer P (eds), Genetic variation for plant breeding, 17th EUCARPIA General Congress, Sept. 8-11, 2004, Tulln, Austria, pp3-8
40. **Huang XQ,** Röder MS (2003) High-density genetic and physical mapping of the powdery mildew resistance gene *Pm24* on chromosome 1D of wheat. In: Pogna HN, Romano M, Pogna EA, Galterio G (eds), Proc 10th Intl Wheat Genet Symp, Sept. 1-6, 2003, Paestum, Italy, pp 961-964

41. Röder MS, **Huang XQ**, Börner A, Ganal MW (2003) Wheat microsatellite diversity of a genebank collection in comparison to registered varieties. In: Pogna HN, Romano M, Pogna EA, Galterio G (eds), Proc 10th Intl Wheat Genet Symp, Sept. 1-6, 2003, Paestum, Italy, pp625-627
42. **Huang XQ**, Börner A, Röder MS, Ganal MW (2002) Construction of a dendrogram of 998 wheat accessions from the gene bank. http://pgrc.ipk-gatersleben.de/dendro/
43. Wenzel G, Lössl A, Frei U, Mohler V, Hsam SLK, **Huang XQ**, Thummler F, Zeller FJ (2000) Genomics as a tool for an efficient utilization of genetic resources using potato and wheat as examples. In: Integration of Biodiversity and Genome Technology for Crop Improvement, Tsukuba, Japan, pp7-10
44. **Huang XQ**, Hsam SLK, Zeller FJ (1997) Genetic analysis of powdery mildew resistance of four common wheat cultivars. In: Tvaruzek L (ed) Proceedings of the International Conference-Protection of Cereal Crops against Harmful Organisms. Kromeriz, Czech Republic, pp 190-193

**Conference Abstracts and Poster Presentations:**

45. **Huang XQ,** Brûlé-Babel A (2008) Development of genome-specific primers for genes involved in starch biosynthesis in hexaploid wheat (*Triticum aestivum* L.). In: 6th Canadian Plant Genomics Workshop, June 23-26, 2008, Toronto, Canada
46. Röder MS, **Huang XQ** (2008) Fine mapping of a QTL for grain weight in wheat. In: Molecular Mapping & Marker Assisted Selection in Plants, February 3-6 2008, Vienna, Austria
47. **Huang XQ,** Cloutier S (2006) Genomic organization and molecular evolution of the *Glu-3* loci for LMW-GS genes in hexaploid wheat. In: 4th Canadian Plant Genomics Workshop, June 19-22, 2006, Ottawa, Canada.
48. **Huang XQ,** Cloutier S (2006) Toward understanding the genomic organization of the *Glu-3* loci for LMW glutenin genes in hexaploid wheat. In: Plant & Animal Genome XIV Conference, January 14-18, 2006, San Diego, CA, USA, P284
49. Börner A, Khlestkina EK, **Huang XQ,** Röder MS (2004) Genetic erosion in crop plants? A case study. In: Vollmann J, Grausgruber H, Ruckenbauer P (eds), Genetic variation for plant breeding, 17th EUCARPIA General Congress, Sept. 8-11, 2004, Tulln, Austria, pp137
50. **Huang XQ**, Röder MS, Mohler V, Zeller FJ (2003) High-density genetic and physical mapping of wheat chromosome 1D reveals that the powdery mildew resistance gene *Pm24* is located in a highly recombinogenic region. In: 11th Molecular Markers Symposium of the GPZ, Sept. 16-17, 2003, IPK-Gatersleben, Germany
51. Li JZ, **Huang XQ**, Heinrichs F, Röder MS, Ganal MW (2003) Mapping of quantitatively inherited traits in barley by AB-QTL analysis. In: 11th Molecular Markers Symposium of the GPZ, Sept. 16-17, 2003, IPK-Gatersleben, Germany,
52. **Huang XQ**, Wang LX, Xu MX, Röder MS (2002) Identification of microsatellite markers linked to the gene *Pm5e* for resistance to powdery mildew in common wheat (*Triticum aestivum* L.). In: the 3rd Plant Genomics Conference in China, August 19-22, 2002, Beijing, China, pp103
53. Li JZ, **Huang XQ**, Heinrichs F, Röder MS, Ganal MW (2002) Identification of quantitative trait loci in spring barley by mean of advanced backcross QTL analysis. 6th Gatersleben Research Conference 2002, March 07-11, 2002, Gatersleben, Germany
54. **Huang XQ**, Wang LX, Xu MX, Röder MS (2002) Microsatellite mapping of the wheat powdery mildew resistance gene *Pm5e* in common wheat (*Triticum aestivum* L.). In: 10th Molecular Markers Meeting of the GPZ, Sept. 16-17, 2002, Freising-Weihenstephan, Germany
55. **Huang XQ**, Röder MS, Pestsova E, Börner A, Ganal MW (2001) Development and use of wheat microsatellite markers for the characterization of germplasm of hexaploid wheat (*Triticum aestivum* L.). In: Plant & Animal Genome IX Conference, January 13-17, 2001, San Diego, CA, USA, P260
56. **Huang XQ**, Börner A, Röder MS, Ganal MW (2001) Application of microsatellite markers in assessing genetic diversity of wheat (*Triticum aestivum* L.) germplasm. In: 9th Molecular Markers Meeting of the GPZ, Sept. 25-26, 2001, Halle/S, Germany
57. **Huang XQ**, Wendehake K, Börner A, Vosman B, Cooke R, Isaac P, Röder MS, Ganal MW (2000) Variety

identification and characterization of germplasm using microsatellite markers. In: tenth international ITMI public workshop, June 14-16, 2000, University of Delaware, Delaware, USA.

58. **Huang XQ**, Börner A, Röder MS, Ganal MW (2000) Application of microsatellite markers for the characterization of wheat (*Triticum aestivum* L.) germplasm. In: the first Plant Genomics Conference in China, July 24-27, 2000, Dalian, China. pp13

**II. Horticultural Crop (Watermelon)**

59. Tan SY, Liu WG, **Huang XQ** (2002) Selection and breeding of seedless watermelon new variety 'Zhengkang seedless No. 3'. J Fruit Sci 19(6):406-410
60. Tan SY, Liu WG, **Huang XQ** (2001) Breeding of seedless watermelon new variety 'Zhengkang seedless No. 1'. China Watermelon and Muskmelon (3):2-3
61. Tan SY, Huang ZG, Lang Y, Liu WG, **Huang XQ** (2000) Relationship between germination, growth of pollens and endogenous hormones in autotetraploid watermelon. Acta Agriculturae Boreali-Sinica 15:73-78
62. Lang Y, Tan SY, Huang ZG, Liu WG, **Huang XQ** (1998) Study on low fertility and embryo development of autotetraploid watermelon. . J. Fruit Sci 15(3):243-251
63. Tan SY, Huang ZG, Liu WG, Lang Y, **Huang XQ** (1998) Study on embryo development of autotetraploid watermelon. China Watermelon and Muskmelon (1):2-5
64. Tan SY, Liu WG, **Huang XQ** (1998) A new variety of seedless watermelon with black rind - 'Mimei seedless No. 2'. China Watermelon and Muskmelon (3):2-4
65. Tan SY, Liu WG, **Huang XQ** (1997) A new variety of seedless watermelon - 'green Mibao'. China Watermelon and Muskmelon (4):4-6
66. Tan SY, Liu WG, **Huang XQ** (1995) Effect of KT-30 on raising the fruiting rate of triploid seedless watermelon. China Watermelon and Muskmelon (2):9-11
67. Tan SY, Liu WG, **Huang XQ** (1995) A new variety of seedless watermelon with yellow rind - 'golden sun seedless No. 1'. China Watermelon and Muskmelon (4):5-7
68. Tan SY, **Huang XQ,** Liu WG (1994) The superiority of triploid seedless watermelon and series of seedless watermelon new varieties. China Watermelon and Muskmelon (4):22-23
69. Tan SY, **Huang XQ,** Liu JW (1993) A study on the increase of induction frequency of tetraploid watermelon. Acta Agriculturae Boreali-Sinica 8(4):12-15
70. Tan SY, **Huang XQ,** Li SJ (1993) Selection and breeding of watermelon new variety 'Mimei tetraploid'. J Fruit Sci 10(2): 87-91
71. Tan SY, **Huang XQ,** Li SJ (1993) 'Mimei seedless No. 1' watermelon new variety. Acta Horticulturae Sinica 20(1):103-104
72. Tan SY, **Huang XQ,** Liu JW (1993) A preliminary report on raising the fruiting rate of triploid seedless watermelon with KT-30. China Watermelon and Muskmelon (1):19-20
73. Tan SY, **Huang XQ,** Liu JW (1993) Breeding and cultivation of 'Mimei seedless No. 1' watermelon new variety. China Watermelon and Muskmelon (2):2-5

**III. Ornamental Plant (Sacred lotus)**

74. **Huang XQ**, Chen JY, Huang GZ (1992) Preliminary study on biosystematic relationship between the two *Nelumbo* species. Acta Horticulturae Sinica 19(2):164-170
75. **Huang XQ** (1991) Cytogenetic observation on *Nelumbo lutea* Pers. Hereditas (Beijing) 13(1):4-7