

Zeng-Yu Wang
Associate Professor
Forage Improvement Division
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Professional Preparation

Hebei Agricultural University, China	Agronomy	B.S., 1985
Hebei Agricultural University, China	Agronomy	M.S., 1987
China Agricultural University	Agronomy	Ph.D., 1990
Swiss Federal Institute of Technology	Biotechnology	Post-doctoral Fellow, 1991-1995

Appointments

- Associate Professor, Forage Improvement Division, The Samuel Roberts Noble Foundation, Ardmore, Oklahoma, 2004 – present
- Assistant Professor, Forage Improvement Division, The Samuel Roberts Noble Foundation, Ardmore, Oklahoma, 1998 – 2003
- Research Scientist, Plant Biotechnology Center, Agriculture Victoria, Melbourne, Australia, 1995–1998

Selected Publications

- Hisano H, Nandakumar R and Wang Z-Y (2009) Genetic modification of lignin biosynthesis for improved biofuel production. *In Vitro Cellular and Developmental Biology-Plant* 45:306-313.
- Ma X, Wright E, Ge Y, Bell J, Xi Y, Bouton JH and Wang Z-Y (2009) Improving phosphorus acquisition of white clover (*Trifolium repens* L.) by transgenic expression of plant-derived phytase and acid phosphatase genes. *Plant Science* 176:479-488.
- Mian R, Zhang Y, Wang Z-Y, Zhang J, Cheng X, Chen L, Chekhovskiy K, Dai X, Mao C, Cheung F, Zhao X, He J, Scott A, Town C and May G (2008) Analysis of tall fescue ESTs representing different abiotic stresses, tissue types and developmental stages. *BMC Plant Biology* 2008, 8:27 doi:10.1186/1471-2229-8-27.
- Zhang J-Y, Brockling C., Sumner L, and Wang Z-Y (2007) Heterologous expression of two *Medicago truncatula* putative ERF transcription factor genes, *WXP1* and *WXP2*, in *Arabidopsis* led to increased leaf wax accumulation and improved drought tolerance, but differential response in freezing tolerance. *Plant Molecular Biology* 64: 265-278.
- Ge Y, Cheng X, Hopkins A and Wang Z-Y (2007) Generation of transgenic *Lolium temulentum* plants by *Agrobacterium tumefaciens*-mediated transformation. *Plant Cell Reports* 26:783-789.
- Crane C, Wright E, Dixon RA and Wang Z-Y (2006) Transgenic *Medicago truncatula* plants obtained from *Agrobacterium tumefaciens*-transformed roots and *Agrobacterium rhizogenes*-transformed hairy roots. *Planta* 223:1344-1354.
- Xiao K, Liu J, Dewbre G, Harrison M and Wang Z-Y (2006) Isolation and characterization of root-specific phosphate transporter promoters from *Medicago truncatula*. *Plant Biology* 8:439-449.

- Ge Y, Norton T and Wang Z-Y (2006) Transgenic zoysiagrass (*Zoysia japonica*) plants obtained by *Agrobacterium*-mediated transformation. *Plant Cell Reports* 25: 792-798.
- Wang Z-Y and Ge Y (2006) Recent advances in genetic transformation of forage and turf grasses. *In Vitro Cellular & Developmental Biology - Plant* 42: 1-18.
- Xiao K, Katagi H, Harrison M and Wang Z-Y (2006) Improved phosphorus acquisition and biomass production in *Arabidopsis* by transgenic expression of a purple acid phosphatase gene from *M. truncatula*. *Plant Science* 170: 191-202.
- Cheng X-F and Wang Z-Y (2005) Overexpression of *COL9*, a *CONSTANS-LIKE* gene, delays flowering by reducing *CO* and *FT* expression in *Arabidopsis thaliana*. *Plant Journal* 43: 758-768.
- Zhang J-Y, Broeckling CD, Blancaflor EB, Sledge M, Sumner LW and Wang Z-Y (2005) Overexpression of *WXP1*, a putative *Medicago truncatula* AP2 domain-containing transcription factor gene, increases cuticular wax accumulation and enhances drought tolerance in transgenic alfalfa (*Medicago sativa*). *Plant Journal* 42: 689-707.
- Xiao K, Harrison M and Wang Z-Y (2005) Transgenic expression of a novel *M. truncatula* phytase gene results in improved acquisition of organic phosphorus by *Arabidopsis*. *Planta* 222: 27-36.
- Wang Z-Y and Ge Y (2005) Rapid and efficient production of transgenic bermudagrass and creeping bentgrass bypassing the callus formation phase. *Functional Plant Biology* 32: 769-776.
- Xiao K, Zhang C, Harrison M and Wang Z-Y (2005) Isolation and characterization of a novel plant promoter that directs strong constitutive expression of transgenes in plants. *Molecular Breeding* 15: 221-231.
- Wang Z-Y and Ge Y (2005) *Agrobacterium*-mediated high efficiency transformation of tall fescue (*Festuca arundinacea* Schreb.). *J. Plant Physiol.* 162: 103-113.
- Mian R, Saha M, Hopkins A and Wang Z-Y (2005) Use of tall fescue EST-SSR markers in phylogenetic analysis of cool-season forage grasses. *Genome* 48: 637-647.
- Wang Z-Y, Ge Y, Mian R and Baker J (2005) Development of highly tissue culture responsive lines of *Lolium temulentum* by anther culture. *Plant Science* 168: 203-211.
- Wang Z-Y, Ge YX, Scott M and Spangenberg G (2005) Viability and longevity of pollen from transgenic and non-transgenic tall fescue (*Festuca arundinacea*) (*Poaceae*) plants. *American Journal of Botany* 91:523-530.
- Chen L, Auh C, Dowling P, Bell J, Lehmann D and Wang Z-Y (2004) Transgenic down-regulation of caffeic acid *O*-methyltransferase (COMT) led to improved digestibility in tall fescue (*Festuca arundinacea* Schreb.). *Functional Plant Biology* 31:235-245.
- Wang Z-Y, Bell J and Lehmann D (2004) Transgenic Russian wildrye (*Psathyrostachys juncea*) plants obtained by biolistic transformation of embryogenic suspension cells. *Plant Cell Reports* 22:903-909.
- Wang Z-Y, Lawrence R, Hopkins A, Bell J and Scott M (2004) Pollen-mediated transgene flow in the wind-pollinated grass species tall fescue (*Festuca arundinacea* Schreb.). *Molecular Breeding* 14:47-60.