Jianming Fu, Ph. D.

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Education

Ph. D. in Biology, 1999, Rutgers University, USA

Publications since 1999 (Nine papers published before 1999 not listed. *Corresponding author)

Fu J*, Bowden R, Jagadish K, Vara Prasad (2023) Genetic variation for terminal heat stress tolerance in winter wheat, Frontiers in Plant Science (accepted)

Fu J*, Jagadish K, Bowden R (2022) Effects of post-flowering heat stress on chlorophyll content and yield components of a spring wheat diversity panel, Crop Science, 62 (5): 1926-1936

Momčilović I, **Fu J**, Pantelić D, Rudić J, Broćić Z (2021) Effects of high-temperature stress on potato productivity and nutritive characteristics (book chapter in "The Potato Crop: Management, Production and Food Security" edited by Villa PM, Nova Science Publishers, NY, USA. pp. 91-122.

Hein N, Bheemanahalli R, Wagner D, Vennapusa A, Bustamante C, Ostmeyer T, Pokharel M, Chiluwal A, **Fu J**, Srikanthan D, Neilsen M, Jagadish K (2020) Improvised cyber-physical system captured post-flowering high night temperature impact on yield and quality of field grown wheat, Scientific Reports, 10, 22213

Tian B, Talukder SK, **Fu J**, Fritz A, Trick H (2018) Expression of a rice soluble starch synthase gene improved the grain yield in heat stress conditions in wheat, *In Vitro* Cellular & Developmental Biology-Plant 54 (3): 216–227

Pantelić D, Dragićević I, Rudić J, **Fu J**, Momčilović I (2018) Effects of high temperature on *in vitro* tuberization and accumulation of stress-responsive proteins in potato, Horticulture, Environment, and Biotechnology 59 (3): 315–324

Fu J*, Bowden R, Jagadish KSV, Gill B (2017) Genetic variation for tolerance to heat stress in *Dasypyrum villosum*, Crop Science 57(5): 2626-2632

Momcilovic I, Pantelic D, Zdravkovic-Korac S, Oljaca J, Rudic J, **Fu J** (2016) Heat-induced accumulation of protein synthesis elongation factor 1A implies an important role in heat tolerance in potato, Planta 244 (3): 671–679

Fu J*, Bowden R, Prasad PVV, Ibrahim A (2015) Genetic variation for heat tolerance in *Triticum turgidum* L, Journal of Crop Improvement 29:565-580

J. Fu (2015) Peer review report on "Climatic impacts of winter wheat yields in Picardy, France and Rostov, Russia: 1973-2010", Agricultural and Forest Meteorology 201:539

- Zhang X, **Fu J**, Hiromasa Y, Pan H, Bai G (2013) Differentially expressed proteins associated with Fusarium Head Blight resistance in wheat, PLoS ONE 8(12): e82079
- Momcilovic I, **Fu J** (2013) Protein synthesis elongation factors EF-Tu and EF-1α: biosynthesis, functions and applications in the improvement of heat tolerance in plants (book chapter in "New Research on Protein Synthesis", edited by Bethaz C and Puma VL, Nova Science Publishers, NY, USA. pp.1-49)
- **Fu J,** Patel M, Nuutila AM, Skadsen R (2012) Antifungal thionin peptide gene expression in transgenic barley (book chapter in "Small Wonders: Peptides for Disease Control", edited by Rajasekaran K, Cary JW, Jaynes JM, Montesinos E, American Chemical Society Publisher, Washington D. C. USA. pp. 359-377)
- **Fu J***, Momcilovic I, Prasad PVV (2012) Molecular bases and improvement of heat tolerance in crop plants (book chapter in "Heat Stress: Causes, Prevention and Treatments", edited by Josipovic S, Ludwig E, Nova Science Publishers, NY, USA, pp.185-214)
- **Fu J***, Momcilovic I, Prasad PVV (2012) Roles of protein synthesis elongation factor EF-Tu in heat tolerance in plants, Journal of Botany 2012:1-8
- Ali M, Ibrahim A, Hays D, Ristic Z, **Fu J** (2010) Response of wild tetraploid wheat (*Triticum turgidum* L.) to heat stress, Journal of Crop Improvement 24 (3):228-243
- **Fu J***, Ristic Z (2010) Analysis of transgenic wheat (*Triticum aestivum* L.) harboring a maize plastid EF-Tu gene: segregation pattern, expression and effects of the transgene, Plant Molecular Biology 73:339–347
- Ristic Z, Momcilovic I, Bukovnik U, Prasad PVV, **Fu J**, DeRidder B, Elthon T, Mladenov N (2009) Rubisco activase and wheat productivity under heat stress conditions, Journal of Experimental Botany 60 (14): 4003-4014
- Bukovnik U, **Fu J**, Bennett M, Prasad PVV, Ristic Z (2009) Heat tolerance and expression of protein synthesis elongation factors, EF-Tu and EF-1alpha, in spring wheat, Functional Plant Biology 36 (3): 234-241
- **Fu J**, Momcilovic I, Clemente T, Nersesian N, Trick H, Ristic Z (2008) Heterologous expression of a plastid EF-Tu reduces protein thermal aggregation and enhances CO2 fixation in wheat (*Triticum aestivum*) following heat stress, Plant Molecular Biology 68: 277-288
- **Fu J**, Peterson K, Guttieri M, Souza E, Raboy V (2008) Barley (*Hordeum vulgare* L.) inositol monophosphatase: gene structure and enzyme characteristics, Plant Molecular Biology 67: 629–642

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- Bowen D, Souza E, Guttieri M, Raboy V, **Fu J** (2007) A low phytic acid barley mutation alters seed gene expression, Crop Science 47 (S2): 149-159
- **Fu J**, Sampalo R, Gallardo F, Canovas F, Kirby E (2003) Assembly of a functional pine glutamine synthetase in leaves of transgenic poplar leads to an enhanced vegetative growth in young plants, Plant Cell and Environment 26(3): 411-418
- **Fu J**, Skadsen R, Kaeppler H (2003) Transformation and expression of an antifungal protein hordothionin gene in transgenic barley and oat, Plant Biotechnology and Beyond, Indra K. Vasil (ed), Kluwer Academic Publishers, 159-160
- Gallardo F, **Fu J**, Jing Z, Kirby E, Cánovas F (2003) Modification of nitrogen metabolism in woody plants, Plant Physiology and Biochemistry 41(6-7): 587-594
- Skadsen R, Sathish P, Federico M, Abebe T, **Fu J**, Kaeppler H (2002) Cloning of the promoter for a novel barley gene, *Lem1*, and its organ-specific promotion of GFP expression in lemma and palea, Plant Molecular Biology 49: 545-555
- Cánovas F, Kirby E, Fernando G, **Fu J**, Cantón F, Angel G (2000) Transgenic plants have enhanced vegetative growth, Spanish Patent No: 00980164
- Gallardo F, **Fu J**, Canton F, Canovas F, Kirby E (1999) Expression of a conifer glutamine synthetase gene in transgenic poplar, Planta 210(1): 19-26

Grant review panels

USDA/NIFA/AFRI grant review panel: Evaluating proposals for the FY2021 AFRI Predoctoral Fellowships (Reviewed and wrote review summaries for 21proposals, and lead panel discussions for 4 proposals)

Editorial board member for Journals including

Asian Journal of Botany
International Journal of Plant Science & Agriculture
Journal of Plant Science and Phytopathology
Frontiers in Cell and Developmental Biology (Cellular Biochemistry section)
Frontiers in Molecular Biosciences (Cellular Biochemistry section)

Reviewer for journals: Agronomy; Agricultural and Forest Meteorology; BMC Plant Biology; Canadian Journal of Plant Sciences; Crop Science; Food and Chemical Toxicology; International Journal of Molecular Sciences; Journal of American Society for Horticultural Science; Journal of Plant Biotechnology; PeerJ; Plant Cell Report; Plants; The Scientific Journal of Plant Biotechnology; Scientific Reports; and more

Academic society membership

Sigma Xi, The Scientific Research Society (at Large, since 2001) Crop Science Society of America (Since 2017) American Society of Plant Biologists, USA, 1999 to 2005 International Association for Plant Tissue Culture & Biotechnology, USA, 1997 to 2005