

Patricia Klein

PROFESSOR & ASSOCIATE HEAD FOR GRADUATE PROGRAMS

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EDUCATION/TRAINING

1993	Postdoc	Plant Pathology, University of Kentucky, USA
1989	PhD	Biochemistry, Texas A&M University, USA
1984	MS	Crop Science, Texas Tech University, USA
1982	BS	Horticultural Sciences, Texas A&M University, USA

POSITIONS & EMPLOYMENT

2013 – Present	Associate Head for Graduate Programs, Department of Horticultural Sciences, Texas A&M University
2002 – Present	Assistant/Associate/Professor, Department of Horticultural Sciences Faculty of Molecular & Environmental Plant Sciences Texas A&M University, College Station, TX
1997 – 2002	Assistant Professor, Department of Biochemistry and Biophysics Texas A&M University, College Station, TX
1995 – 1997	Research Associate, USDA-ARS, Eastern Regional Research Center, Wyndmoor, PA
1993 – 1995	Assistant Professor, Department of Horticulture and Landscape Architecture, University of Kentucky, Lexington, KY

OTHER POSITIONS AND PROFESSIONAL MEMBERSHIPS

2012 – Present	American Society for Horticultural Scientists
2005 – Present	Associate Editor, The Plant Genome
2007 – 2010	Kansas State University Sorghum Translational Genomics Program Scientific Advisory Board Member
2005 – 2013	Gramene Scientific Advisory Board Member
2001 – Present	American Society of Plant Biologists Member
2000 – 20003	Interim Director, Laboratory for Plant Genome Technology, Borlaug Center, Texas A&M University

HONORS & AWARDS

- College of Agriculture and Life Sciences Dean's Outstanding Achievement Award for Interdisciplinary Research, Texas A&M University, 2012

SELECTED PUBLICATIONS

- Anderson, S.L., A.L. Mahan, S.C. Murray, and **P.E. Klein** (2018) Four Parent Maize (FPM) Population: Effects of Mating Designs on Linkage Disequilibrium and Mapping Quantitative Traits. *Plant Genome* **doi:** 10.3835/plantgenome2017.11.0102.
- Mahan, A.L., S.C. Murray, and **P.E. Klein** (2018) Four-Parent Maize (FPM) Population: Development and Phenotypic Characterization. *Crop Sci.* **doi:** 10.2135/cropsci2017.07.0450.
- Yan, M. D.H. Byrne, **P.E. Klein**, J. Yang, Q. Dong, and N. Anderson (2018) Genotyping-by-Sequencing Application on Diploid Rose and a Resulting High-Density SNP-based Consensus Map. *Hort Res.* **doi:** 10.1038/s41438-018-0021-6.
- Byrne, D.H., **P. Klein**, M. Yan, E. Young, J. Lau, K. Ong, M. Shires, J. Olson, M. Windham, T. Evans, and D. Novick (2018) Challenges of Breeding Rose Rosette-Resistant Roses. *HortSci.* **doi:** 10.21273/HORTSCI12553-17.
- Echeverria-Beirute, F., S.C. Murray, **P. Klein**, C. Kerth, R. Miller and B. Bertrand (2017) Rust and Thinning Management Effect on Cup Quality and Plant Performance for Two Cultivars of *Coffea arabica* L. (2017) *J. Agric. Food Chem.* **doi:** 10.1021/acs.jafc.7b03180.
- Pugh, N.A., R. Rodriguez-Herrera, R.R. Klein, **P.E. Klein** and W.L. Rooney (2017) Identification of Quantitative Trait Loci for Popping Traits and Kernel Characteristics in Sorghum Grain. *Crop Sci.* **57:** 1999-2006.

- Patil, N.Y., R.R. Klein, C.L. Williams, S.D. Collins, J.E. Knoll, A.M. Burrell, W.F. Anderson, W.L. Rooney, and **P.E. Klein** (2017) Quantitative Trait Loci Associated with Anthracnose Resistance in Sorghum. *Crop. Sci.* **57**: 1-14.
- Turco, G.M., K. Kajala, G. Kunde-Ramamoorthy, C-Y. Ngan, A. Olson, S. Deshpande, D. Tolkunov, B. Waring, S. Stelpflug, **P. Klein**, J. Schmutz, S. Kaeppler, D. Ware, C-L. Wei, J.P. Etchells, S.M. Brady (2017) DNA Methylation and Gene Expression Regulation Associated with Vascularization in *Sorghum bicolor*. *New Phytologist* **doi**: 10.1111/nph.14448.
- Grauke, L.J., A.M. Mendoza-Herrera, D.M. Stelly and **P.E. Klein** (2016) 'Jones Hybrid' Hickory: A Case Study in *Carya* Curation. *SpringerPlus* **5**: 1860.
- Overholt, W.A., K. P. Hidayat, B. Le Ru, K. Takasu, J.A. Goolsby, A. Racelis, A.M. Burrell, D. Amalin, W. Agum, M. Njaku, B. Pallangyo, **P.E. Klein**, and J.P. Cuda (2016) Potential Biological Control Agents for Management of Cogongrass [*Imperata cylindrica* (Cyperales: Poaceae)] in the Southeastern USA. *Florida Entomologist* **99**: 734-739.
- Adeyanju, A., J. Yu, C. Little, W. Rooney, **P. Klein**, J. Burke and T. Tesso (2016) Sorghum Recombinant Inbred Lines Segregating for Stay-green QTLs and Leaf Dhurrin Content Show Differential Reaction to Stalk Rot Diseases *Crop Sci.* **doi**:10.2135/cropsci2015.10.0628.
- Klein, R.R., F.R. Miller, S. Bean and **P.E. Klein** (2016) Registration of 40 Converted Germplasm Sources from the Reinstated Sorghum Conversion Program. *J. Plant Reg.* 45:57-61.
- Upadhyaya, H.D., Yi-Hong Wang, D.V.S.S.R. Sastry, S.L. Dwivedi, P.V.V. Prasad, A.M. Burrell, R.R. Klein, G.P. Morris, **P.E. Klein** (2015) Association Mapping of Low Temperature Germinability and Seedling Vigor in Sorghum Under Controlled Conditions. *Genome* **doi**: 10.1139/gen-2015-0122.
- Klein, R.R., F.R. Miller, D.V. Dugas, P.J. Brown, A.M. Burrell and **P.E. Klein** (2015) Allelic Variants in the *PRR37* Gene and the Human-mediated Dispersal and Diversification of Sorghum. *Theor. Appl. Genet.* **doi**: 10.1007/s00122-015-2523-z.
- Burrell, A.M., A.E. Pepper, G. Hodnett, J.A. Goolsby, W.A. Overholt, A.E. Racelis, R. Diaz and **P.E. Klein** (2015) Exploring Origins, Invasion History and Genetic Diversity of *Imperata cylindrica* (L) P. Beauv. (Cogongrass) in the United States using Genotyping by Sequencing. *Mol. Ecol.* **doi**: 10.1111/mec.13167.
- Burrell, A.M., A.D. Sharma, N.Y. Patil, S.D. Collins, W.F. Anderson, W.L. Rooney and **P.E. Klein** (2015) Sequencing of an Anthracnose Resistant Sorghum Genotype and High Density Mapping of a Major QTL Reveal Strong Candidate Genes for Anthracnose Resistance. *Crop Sci.* **doi**: 10.2135/cropsci2014.06.0430.
- Takasu, K., Y. Yoshiyasu, A.M. Burrell, **P.E. Klein**, A. Racelis, J.A. Goosby and W.A. Overholt (2014) *Acrapex azumai* Sugi (Lepidoptera: Noctuidae) as a Possible Biological Control Agent of the Invasive Weed *Imperata cylindrica* (L.) Beauv. (Poaceae) in the United States. *Lepidoptera Sci.* **65**: 30-35.
- Yang, S. R.L. Murphy, D.T. Morishige, **P.E. Klein**, W.L. Rooney and J.E. Mullet (2014) Sorghum Phytochrome B Inhibits Flowering in Long Days by Activating Expression of *SbPRR37* and *SbGHD7*, Repressors of *SbEHD1*, *SbCN8* and *SbCN12*. *PLOS ONE* **doi**: 10.1371/journal.pone.0105352.
- Borrell, A.K., J.E. Mullet, B. George-Jaeggli, E.J. van Oosterom, G.L. Hammer, **P.E. Klein**, and D.R. Jordan (2014) Drought Adaptation of Stay-green Cereals Associated with Canopy Development, Leaf Anatomy, Root Growth and Water Uptake. *J. Exp. Bot.* **doi**: 10.1093/jxb/eru232.
- Borrell, A.K., E.J. van Oosterom, J.E. Mullet, B. George-Jaeggli, D.R. Jordan, **P.E. Klein**, and G.L. Hammer (2014) Stay-green Alleles Individually Enhance Grain Yield in Sorghum under Drought by Modifying Canopy Development and Water Uptake Patterns. *New Phytol.* **doi**: 10.1111/nph.12869.
- Gill, J.R., W.L. Rooney and **P.E. Klein** (2014) Effect of Humidity on Intergeneric Pollinations of *iap* (*Inhibition of Alien Pollen*) sorghum [*Sorghum bicolor* (L.) Moench]. *Euphytica* **doi**: 10.1007/s10681-014-1113-5.
- Murphy, R.L., D.T. Morishige, J.A. Brady, W.L. Rooney, S. Yang, **P.E. Klein** and J.E. Mullet (2014) *Ghd7* (*Ma6*) Represses Sorghum Flowering in Long Days: *Ghd7* Alleles Enhance Biomass Accumulation and Grain Production. *The Plant Genome* **doi**: 10.3835/plantgenome2013.11.0040.