

Keith E. Woeste, Ph.D.

a. *Professional Preparation*

B.S. Botany	1980 University of Florida
M.Div. Theology	1986 Jesuit School of Theology, Berkeley, CA
M.S. Horticulture	1990 University of California, Davis, CA
Ph.D. Genetics	1995 University of California, Davis, CA
Post-doctoral Studies	1995 – 1998 University of Illinois, Chicago, IL

b. *Appointments*

National Program Leader for Genetics (Interim, 2014), USDA Forest Service
Research Molecular Geneticist (1999–present). GS-13 RWU 4157 USDA Forest Service
North Central Research Station Hardwood Tree Improvement and Regeneration Center,
West Lafayette, IN
Adjunct Assistant Professor, Purdue University, Department of Forestry and Natural
Resources (1999–present).

c. *Current Students (total 5 Ph.D., 3 M.S.)*

James Jacobs (PhD)
Nicholas LaBonte (PhD)

d. *Research Interests*

Dr. Woeste is a forest geneticist whose research interests include conservation genetics and forest tree breeding. Significant accomplishments include development and application of nuclear microsatellites for genetic analysis in *Juglans*, in collaboration with Dr. Michael Ostry, the establishment and maintenance of largest and most comprehensive germplasm repository for the threatened species *Juglans cinerea*, collaboration with Paul Berrang to establish USDA Forest Service R9 butternut seed source tree testing orchard, development of SSRs for study of genetic diversity of *Geosmithia morbida*, the fungal component of Thousand Cankers Disease of walnut. Breeding research is focused on improvement of fine hardwoods, including black walnut, black cherry, red oak and white oak.

e. *Recent Publications: 116 total*

Pollegioni, P., I. Olimpieri, K.E. Woeste, G. De Simoni, M. Gras, and M. E. Malvolti. 2012. Barriers to interspecific hybridization between *Juglans nigra* L. and *J. regia* L. species. *Tree Genetics & Genomes* 9:291-305.

Gireesh, T., Y.A. Varghese, K.E. Woeste, V.C. Mercykutty, and J. Marattukalam. 2012. Effect of monoclonal and assorted seedling root stocks on long term growth and yield of *Hevea* clones. *Silvae Genetica* 61(1-2):52-57.

Parks, A., M.A. Jenkins, K.E. Woeste, M.E. Ostry (2012) Conservation status of a threatened tree species: establishing a baseline for restoration of *Juglans cinerea* L. in the southern Appalachian Mountains. Accepted in *Natural Areas Journal*, September 4.

Utley, C., T. Nguyen, T. Roubtsova, M.V. Coggeshall, T. Ford, L.J. Grauke, L.J., A. Graves, C. Leslie, J. McKenna, K. Woeste, M. Yaghamour, W. Cranshaw, S. Seybold, Steven, R. Bostock, N. Tisserat (2012) Susceptibility of walnut and hickory species to *Geosmithia morbida*. *Plant Disease* 97:601-607.

Fan, Y., K. Rupert, A. Wiedenhoef, K. Woeste, C. Lexer, R. Meilan. 2013. Figured grain in aspen is heritable and not affected by graft-transmissible signals. *Trees Structure and Function* 27:973 – 983.

Huang, Z.; Zhao, P.; Medina, J.; Meilan, R.; Woeste, K. 2013. Roles of JnRAP2.6-like from the transition zone of black walnut in hormone signaling. *PLoSOne* 8(11): e75857. Published online 2013 November 12. doi: [10.1371/journal.pone.0075857](https://doi.org/10.1371/journal.pone.0075857)

McKenna, J. R., Ostry, M. E., and Woeste, K. E. 2013. Resistance breeding to mitigate butternut canker disease. In: McManus, Katherine A.; Gottschalk, Kurt W., eds. *Proceedings, 24th USDA Interagency Research Forum on Invasive Species. Publication - FHTET 13-01*. U.S. Department of Agriculture, Forest Service, Forest Health Technology Enterprise Team:Fort Collins, CO. 124 p.

Worthen-Alexander, L. and K. Woeste (2014) Pyrosequencing of the northern red oak (*Quercus rubra* L.) chloroplast genome reveals high quality polymorphisms for population management. *Tree Genetics and Genomes*. (DOI) **10.1007/s11295-013-0681-1**

114. Parks, A., M. Jenkins, M. Ostry, P. Zhao, K. Woeste 2014. Biotic and abiotic factors affecting the genetic structure and diversity of butternut in the southern Appalachian Mountains, USA. *Tree Genetics and Genomes*
<http://link.springer.com/article/10.1007/s11295-014-0702-8#page-1>

115. Pollegioni, P., Woeste, K.E., Chiocchini, F., Olimpieri, I., Tortolano, V., Clark, J., Hemery, G.E., Mapelli, S., Malvolti, M.E. 2014. Landscape genetics of Persian walnut (*Juglans regia* L.) across its Asian range. *Tree Genetics and Genomes*
<http://link.springer.com/article/10.1007/s11295-014-0740-2>.

116. Xu, Y., K. Woeste, N. Cai, X. Kang, G. Li, S. Chen, A. Duan. 2014. Variation in needle and cone traits in natural populations of *Pinus yunnanensis*. *Journal of Forestry Research*. (IN PRESS)