

curriculum vitae

TIMOTHY A. RINEHART

USDA, ARS, Southern Horticultural Laboratory
810 Highway 26 West
Poplarville, MS 39470
tim.rinehart@ars.usda.gov
work: 601.403.8766 or cell: 228.224.2666
Fax 601.795.4965

University Education

- 2001 Ph.D. (Botany) University of Idaho, Moscow, Idaho
Title: Transposable Elements and Genome (dis)Organization in Higher Eukaryotes.
- 1994 B.S. (Biology) Case Western Reserve University, Cleveland, Ohio

Employment

- 2003 – present Research Molecular Geneticist (Plants) and Lead Scientist for “Small Fruit and Ornamental Genetic Research for the Mid-South” (four CAT1 SY and one postdoc).
USDA, ARS, Southern Horticultural Laboratory, Poplarville, MS 39470
- 2000 – 2003 Project Manager and DNA Analyst
Sequetech Corporation, Mountain View, CA 94043
- 1995 – 2000 Lecturer, Teaching Assistant, Research Assistant
University of Idaho, Moscow, ID 83844
- 1994 – 1995 Custom Sequencing Laboratory Technician
United States Biochemical, Cleveland, OH 44128
- 1994 – 1995 Staff Research Assistant, Type I
Case Western Reserve University, Dept. of Biol. Sci., Cleveland, OH 44106

Research Interests

My objective is to develop strategies for breeding new and improved woody ornamental germplasm adapted to the southeastern United States. I focus on understanding the genetic basis of host-plant resistance and integrating that knowledge *via* molecular-marker assisted breeding programs, typically developing SSR markers for ornamental crops. I am particularly interested in the genes responsible for remontant flowering in *Hydrangea* and flea beetle resistance in *Lagerstroemia*.

Refereed Publications

Johnson, D., B. Fitzpatrick, X. Wang, T. Rinehart, B. Ownley, and R. Trigiano (2009) High genetic diversity in dogwoods despite massive mortality caused by anthracnose disease. submitted to *Science*.

Greer, S., S. Reed, and T. Rinehart (2009) Dormancy and germination in vitro response of *Hydrangea macrophylla* and *Hydrangea paniculata* seed to light, stratification, and gibberilic acid. submitted to *Environmental and Experimental Botany*.

Kardos, J., C. Robacker, M. Dirr, and T. Rinehart (2009) Production and verification of *Hydrangea macrophylla* × *H. angustipetala* hybrids. submitted to *HortScience*.

Baird, R., P. Wadl, X. Wang, D. Hadziabdic, T. Rinehart, H. Abbas, T. Shier, and R. Trigiano (2009) Microsatellites from the charcoal rot fungus (*Macrophomina phaseolina*). submitted to *Molecular Ecology Resources*.

Xinwang Wang, X., T. Rinehart, P. Wadl, J. Spiers, D. Johnson, R. Trigiano (2009) A New Electrophoresis Technique to Separate Microsatellite Alleles. accepted by *African Journal of Biotechnology*.

- Rinehart, T., X. Wang, and R. Trigiano (2009), Chapter ten. Molecular tools for studying plant genetic diversity. accepted for publication in *Plant Cell Culture, Development and Biotechnology*, editors R. N. Trigiano, M. T. Windham and A. S. Windham. CRC Press LLC.
- Greer, S. and T. Rinehart (2008) In vitro responses of *Hydrangea macrophylla* and *Hydrangea paniculata* seed to ethyl methane sulfonate (EMS) and stratification. accepted by *HortScience*.
- Wang, X., L. Good, D. Johnson, P. Wadl, D. Panthee, B. Scheffler, T. Rinehart, N. Stewart, J. Yuan, N. Stewart, and R. Trigiano (2008) Microsatellites from *Conyza canadensis* (horseweed). accepted by *Weed Science*.
- Wadl, P., X. Wang, A. Trigiano, J. Skinner, M. Windham, R. Trigiano, T. Rinehart, S. Reed, and V. Pantalone (2008) Molecular Identification Key for Cultivars and Lines of *Cornus florida* and *C. kousa* Based on Microsatellite Loci. *Journal of the American Society of Horticultural Science*, 133(6):783-793.
- Wang, W., P. Wadl, T. Rinehart, B. Scheffler, M. Windham, J. Spiers, D. Johnson, and R. Trigiano (2008) A linkage map for flowering dogwood (*Cornus florida*) based on microsatellite markers. accepted by *Euphytica*.
- Rinehart, T. and C. Ponders. Estimating diversity among *lagerstroemia* species and hybrids using SSR markers (2008) accepted by *Acta Horticulturae*.
- Rinehart, T. and S. Reed, Using SSR Markers to estimate diversity among *hydrangea* germplasm and improve breeding of new cultivars (2008) accepted by *Acta Horticulturae*.
- Li, Y., M. Windham, R. Trigiano, S. Reed, J. Spiers, and T. Rinehart (2008). Bright-field and fluorescence microscopic study of development of *Erysiphe polygoni* in susceptible and resistant bigleaf *hydrangea*. in press at *Plant Disease*.
- Reed, S., and T. Rinehart (2008) SSR Marker Analysis of Genetic Relationships within *Hydrangea paniculata*. in press at *HortScience*
- Rinehart, T., and S. Reed (2008) Chapter 37: Breeding Horticultural Plants. in *Plant Propagation Concepts and Laboratory Exercises*. Editors C. Beyl and R. N. Trigiano. CRC Press LLC.
- DeVries, R., R. Trigiano, M. Windham, A. Windham, J. Sorochan, T. Rinehart, and J. Vargas (2008) Genetic analysis of fungicide-resistant *Sclerotinia homoeocarpa* isolates from Tennessee and northern Mississippi. *Plant Disease*. 92:83-90.
- Wang, X., R. Trigiano, M. Windham, B. Scheffler, T. Rinehart, and J. Spiers (2008) Development and characterization of simple sequence repeats for flowering dogwood (*Cornus florida* L). *Tree Genetics and Genomes*, 4:461-468.
- Reed, S., K. Jones, and T. Rinehart (2008) Production and Characterization of Intergeneric Hybrids between *Dichroa febrifuga* and *Hydrangea macrophylla*. *Journal of American Society for Horticultural Science*, 133:84-91. (cover photo)
- Ponders, C., T. Rinehart, E. Edwards and P. Knight (2007) An Analysis of Combining Ability for Height, Leaf Out, Bloom Date and Flower Color for *Crapemyrtle*. *HortScience* 42:1317-1322.
- Wadl, P., X. Wang, B. Scheffler, T. Rinehart, and R. Trigiano (2007) Microsatellites from *kousa dogwood* (*Cornus kousa*). *Molecular Ecology Resources*, doi: 10.1111/j.1471-8286.2007.02062.
- Rinehart, T, X. Wang, and R. Trigiano (2007), Chapter twenty-six. Molecular tools for studying plant

pathogens. *Plant Pathology Concepts and Laboratory Exercises*, Second Edition, editors R. N. Trigiano, M. T. Windham and A. S. Windham. CRC Press LLC.

Wang, X., R. Trigiano, M. Windham, R. DeVries, B. Scheffler, T. Rinehart, and J. Spiers (2007) A simple PCR procedure for discovering microsatellites from small insert libraries. *Molecular Ecology Notes*, 7:558–561.

Jones, K., S. Reed, and T. Rinehart (2007) Analysis of Ploidy level and its effect on guard cell length, pollen diameter and fertility in *Hydrangea macrophylla*. *HortScience*, 42:483-488.

Pounders, C., T. Rinehart, and H. Sakhanokho (2007) Evaluation of Inter-Specific Hybrids between *Lagerstroemia indica* and *L. speciosa*. *HortScience* 42:1169-1174.

Reed, S., and T. Rinehart (2007) SSR Marker Analysis of Genetic Relationships within *Hydrangea macrophylla*. *Journal of American Society for Horticultural Science*, 132:341-351.

Smith, N., Trigiano, R., Windham, M., Lamour, K., Finley, L., Wang, X., and Rinehart, T. (2007) AFLP Markers identify *Cornus florida* cultivars and lines. *Journal of American Society for Horticultural Science*, 132: 90-96.

Rinehart, T., B. Scheffler, and S. Reed (2006) Genetic Diversity Estimates for the Genus *Hydrangea* and Development of a Molecular Key Based on SSR. *Journal of the American Society for Horticultural Science*, 131:787-797.

Rinehart, T., C. Copes, T. Toda and M. Cubeta (2006) Genetic Characterization of Binucleate *Rhizoctonia* species causing web blight on Azalea in Mississippi and Alabama. *Plant Disease*, 91:616-623.

Rinehart, T., and D. Boyd (2006) Rapid, High-throughput detection of azalea lace bug, *Stephanitis pyrioides* (Scott) (Hemiptera: Tingidae) Predation by Lacewing larvae, *Chrysoperla rufilabris* (Burmeister) (Neuroptera: Chrysopidae), using Fluorescent PCR Primers. *Journal of Economic Entomology*, 99:2142-2145.

Sampson, B., T. Rinehart, L. Oscar, S. Stringer, and J. Spiers (2005) Biology of Endoparasitoids (Hymenoptera) Attacking Cranberry and Blueberry Tipworms (*Dasineura oxycoccana* Johnson) and *Prodiplosis vaccinii* (Diptera: Cecidomyiidae) on cultivated blueberries. *Annals of Entomological Society of America*, 99:113-120.

Rinehart, T., R. Grahn, and H. Wichman (2005) SINE extinction preceded LINE extinction in Sigmodontine rodents: Implications for retrotranspositional dynamics and mechanisms. *Cytogenetics and Genome Research*, 110:416-425.

Grahn, R., T. Rinehart, M. Cantrell, and H. Wichman (2005) Extinction of LINE-1 activity coincident with a major mammalian radiation in rodents. *Cytogenetics and Genome Research*, 110:407-415.

Rinehart, T. (2004) AFLP analysis using GeneMapper software and an Excel macro that aligns and converts output to binary. *Biotechniques*, 37:186-188.

Rinehart, T., C. Dean and C. Weil (1997) Comparative Analysis of non-random DNA repair following *Ac* transposon excision in maize and *Arabidopsis*. *The Plant Journal*, Vol. 12, pp 1419-1427.

Current Service

- Research Program Coordinator, and Conference Co-organizer for the Second International *Hydrangea* Conference scheduled for 2010.
- Woody Landscape Plant Crop Germplasm Committee (WLPCGC) 2003-present.
- University of Tennessee, Knoxville, TN, adjunct faculty, Dept. of Entomology and Plant

Pathology.

- Mississippi State University, adjunct faculty, Dept. of Plant and Soil Sciences.
- Institutional Biosafety Committee Member, Southern Horticultural Laboratory.
- Environmental Management System Committee Member, Southern Horticultural Laboratory.
- Safety Committee Member, Southern Horticultural Laboratory.
 - Cyber Security Officer, 2006 - present.
- Webmaster and IT specialist, USDA-ARS Southern Horticultural Laboratory, 2004 - present.
- Graduate Student Committee Member, Renea DeVries, University of Tennessee, Knoxville, TN (graduated May 2006 with M.S.), Denita Johnson and Philip Wadl (current Ph.D. candidates).
- Reviewer for the *Journal of American Society of Horticultural Science*, *HortScience*, *Journal of Hortscience and Biotechnology*, *Molecular Phylogenetics and Evolution*, *Scientia Horticulturae*, *The International Journal of Conservation*, *Plant Disease*, *DNA Research*, *Journal of Herbs, Spices & Medicinal Plants*, *Hereditas*, and *Canadian Journal of Botany*.

Scientific Community

- American Society for Horticultural Science (ASHS) and Southern region, 2003 - present
 - Ornamental Plant Breeding Working Group, Chair-elect for 2008-2009
- International Society of Horticultural Science (ISHS), 2003 - present
- Mississippi Nursery and Landscape Association (MNLA), 2003 - present
- The American Hydrangea Society (AHS) 2003 - present
- American association for the advancement of Science (AAAS), 1999 - present
- Botanical Society of America, 2006 – present

Teaching

2000 Instructor, Biology 352, Experimental Genetics, University of Idaho (UI), Moscow, ID

1999 Graduate Teaching Assistant, Botany 425/525, Developmental Plant Anatomy, UI, Moscow, ID

1998 Graduate Teaching Assistant, Biology 203, General Botany, UI, Moscow, ID

1995 Graduate Teaching Assistant, Biology 100, Introduction to Biology for non-majors, UI, Moscow, ID

Science Talks

- 2008 Southern Nursery Association (SNA) Research Conference, Atlanta, GA.
"Relationships between *Hydrangea indochinensis*, *H. macrophylla*, *H. scandens*, and *Dichroa febrifuga* based on SSR markers."
- 2008 American Society for Horticultural Science (ASHS) National Meeting, Orlando, FL.
"Increasing phenotypic diversity in *Hydrangea macrophylla* using targeted and random mutation."
- 2008 American Society for Horticultural Science (ASHS) National Meeting, Orlando, FL.
"Genetic Diversity estimates for *Dichroa* species."
- 2008 First International Symposium on Woody Ornamental Plants for the Temperate Zone, Pruhonice, CZ. "Estimating Genetic Diversity among *Lagerstroemia* species and hybrids using SSR markers".
- 2006 Southern Nursery Association (SNA) Research Conference, Atlanta, GA.
"Using DNA fingerprinting to identify mislabeled plants in the trade: an example from hydrangea."
- 2006 Invited speaker, American Society for Horticultural Science (ASHS) National Meeting, New Orleans, LA. "Examples of Genome Evolution in Polyploids where Bigger is Better."
- 2006 American Society for Horticultural Science (ASHS) National Meeting, New Orleans, LA.
"Using SSR Markers to Verify Crapemyrtle Hybrids"
- 2005 Southern Nursery Association (SNA) Research Conference, Atlanta, GA.
"Genetic and Phenotypic Diversity of Binucleate Rhizoctonia Species Causing Web Blight on Azaleas"
- 2005 Southern Nursery Association (SNA) Research Conference, Atlanta, GA.

- “Inter- and Intraspecific Hybrid Verification in Hydrangea using Newly Developed SSR Markers”
- 2005 American Society for Horticultural Science (ASHS) National Meeting, Las Vegas, NV.
“SSR Markers for Accelerated Hydrangea Breeding and Hybrid Verification”
- 2004 Invited speaker, Fall 2004 Seminar Series, University of Tennessee, Department of Entomology and Plant Pathology, Knoxville, TN
“DNA-based Tools for Rhizoctonia Detection and Identification”
- 2001 Invited speaker, Colloquium Series, University of Idaho, Dept. of Biol. Sci., Moscow, ID.
“Transposable Elements and Genome (dis)Organization in Higher Eukaryotes.”
- 1999 Meetings of the Society for the Study of Evolution, American Society of Naturalists and Society of Systematic Biologists, University of Wisconsin, Madison, WI.
“Similar, Coordinated LINE and SINE activity in South American rodents.”
- 1999 Fall Seminar Series, University of Idaho, Dept. of Biological Sciences, Moscow, ID.
“Looking for SINEs of Activity: Profiling Retrotransposition in South American Rodents.”
- 1997 39th Annual Maize Genetics Conference, Sheraton Sand Key Resort, Clearwater Beach, FL.
“Comparative analysis of non-random DNA double-strand break repair following *Ac/Ds* excision in maize and *Arabidopsis*.”

Industry Talks

- 2008 35th Annual Horticultural Field Day, MSU, Coastal Research and Extension Center, South Mississippi Branch Experiment Station, MAFES, Poplarville, MS
“*Hydrangea macrophylla* sun tolerance in the Deep South.”
- 2007 Invited speaker at the Southern Plant Conference, Mobile, AL.
“Molecular Tools for Plant Patent Protection, True-to-Name Verification and Parentage Analysis”
- 2006 Master Gardener Meeting, Biloxi, MS
“USDA-ARS research on Hydrangea.”
- 2004 32nd Annual Horticultural Field Day, Mississippi State University (MSU), Coastal Research and Extension Center, South Mississippi Branch Experiment Station, Mississippi Agricultural and Forestry Experiment Station (MAFES), Poplarville, MS
“USDA Crapemyrtle Breeding Program in Poplarville, MS.”
- 2004 32nd Annual Horticultural Field Day, MSU, Coastal Research and Extension Center, South Mississippi Branch Experiment Station, MAFES, Poplarville, MS
“Genetic diversity and molecular detection of *Rhizoctonia* species in a nursery environment.”
- 2004 32nd Annual Horticultural Field Day, MSU, Coastal Research and Extension Center, South Mississippi Branch Experiment Station, MAFES, Poplarville, MS
“Pollinator Gardening: The Bees”
- 2003 31st Annual Horticultural Field Day, MSU, Coastal Research and Extension Center, South Mississippi Branch Experiment Station, MAFES, Poplarville, MS
“What can molecular genetics do for ornamental plant research?”
- 2003 31st Annual Horticultural Field Day, MSU, Coastal Research and Extension Center, South Mississippi Branch Experiment Station, MAFES, Poplarville, MS
“Genetic diversity in *Hydrangea*.”

Scholarships, Fellowships, Awards

- 2008 USDA certificate of Merit and Award for Outstanding Performance Rating.
- 2008 Nomination for Early Career Scientist of the Year Award, not selected.
- 2008 USDA certificate of Merit and Award for Superior Performance Rating.
- 2007 USDA Postdoctoral Research Associate Program Award, \$100,000 for a 2 year postdoc.

2007 USDA Spot Award for IT support with the E-mail transition to Outlook.
2007 USDA certificate of Merit and Award for Superior Performance Rating.
2006 USDA certificate of Merit and Award for Superior Performance Rating.
2006 USDA Employee Recognition and Remembrance Award in recognition of volunteer effort after Hurricane Katrina, \$2000.
2005 USDA certificate of Merit and Award for Superior Performance Rating.
2004 USDA Spot Award for Website Centralization.
1999 Travel Grant, Graduate Student Association, \$500.
1998 Graduate Student Exhibition Outstanding Division Participant, GSA, \$200.
1997 Travel Grant, Graduate Student Association, \$500.
1990 Presidential Scholarship, CWRU, \$10,000.

Trade Publications

Rinehart, T. (2005) Using Technology to Breed Hydrangeas (plus cover photo). LNLA Newsletter.
Rinehart, T. (2005) USDA Ornamental Research in Poplarville, Mississippi. MNLA Newsletter.

Published Abstracts and Proceedings.

T. Rinehart (2008) Using DNA fingerprinting to assess genetic diversity in *Hydrangea macrophylla*. Independent Plant Breeders Conference, Mobile, AL.

Johnson, D., X. Wang, M. Fitzpatrick, T. Rinehart, B. Ownley, Trigiano (2008) Genetic Diversity of flowering dogwood in the southeastern united states. Evolution Conference, Joint annual meeting of the Society for the Study of Evolution (SSE), the Society of Systematic Biologists (SSB), and the American Society of Naturalists (ASN), Minneapolis, MN.

Greer, S., S. Reed, J. Adkins, and T. Rinehart (2008) Micropropagation and tissue culture of *Hydrangea macrophylla* for mutagenesis, ploidy manipulation and possible transformation. American Society of Horticultural Science, Southern Region Annual Meeting, Dallas, TX.

Greer, S., S. Reed, J. Adkins, T. Rinehart (2008) Micropropagation and tissue culture of *Hydrangea macrophylla* for mutagenesis, ploidy manipulation and possible transformation. American Society of Plant Biologists, Southern Region Annual Meeting, Bossier City, LA.

Rinehart, T. and S. Reed (2008) Genetic Diversity estimates for *Dichroa* species. American Society of Horticultural Science Annual Meeting, Orlando, FL.

Wang, X., B. Sheffler, T. Rinehart, A. Gann, S. Reed, M. Windham, R. Trigiano, and P. Wadl (2008) Applications of microsatellites in two big bracted dogwood species, flowering and kousa dogwood. American Society of Horticultural Science Annual Meeting, Orlando, FL.

Greer, S., S. Reed, J. Adkins, and T. Rinehart (2008) Increasing phenotypic diversity in *Hydrangea macrophylla* using targeted and random mutation. American Society of Horticultural Science Annual Meeting, Orlando, FL.

Rinehart, T. and S. Reed (2008) Using SSR Markers to estimate diversity among hydrangea germplasm and improve breeding of new cultivars. First International Symposium on Woody Ornamental Plants for the Temperate Zone, Pruhonice, CZ.

Rinehart, T. and C. Pounders (2008). Estimating diversity among *Lagerstroemia* species and hybrids using SSR markers. First International Symposium on Woody Ornamental Plants for the Temperate Zone, Pruhonice, CZ.

Li, Y., M. Windham, R. Trigiano, S. Reed, J. Spiers, and T. Rinehart (2008) Effects of shading on *Cercospora* leaf spot in bigleaf hydrangea. Proceedings of the 53rd Annual Southern Nursery Association Research Conference, Atlanta, GA.

- Rinehart, T. and S. Reed (2008) Relationships between *Hydrangea indochinensis*, *H. macrophylla*, *H. scandens*, and *Dichroa febrifuga* based on SSR markers. Proceedings of the 53rd Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T., A. Owings, S. Reed, and G. Bi (2008) Hydrangea sun tolerance for the deep south. Proceedings of the 53rd Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Copes, W., M. Cubeta, T. Toda, and T. Rinehart. (2008) *Rhizoctonia* species associated with bark media and plant strata of container grown azaleas. International Rhizoctonia Symposium, Berlin GE.
- Li, Y., M. Windham, A. Windham, S. Reed, M. Mmbaga, J. Spiers, T. Rinehart, and R. Trigiano (2008) Effects of host resistance and shading density on the disease severity of hydrangea leaf spot. American Phytopathological Society Annual Meeting, San Diego CA.
- Reed, S. and T. Rinehart (2007) Hybridization of *Dichroa febrifuga* and *Hydrangea macrophylla*. International Hydrangea Conference, Ghent, Belgium.
- Rinehart, T., and S. Reed (2007) Preliminary genetic map of *Hydrangea macrophylla* using SSR markers and a pseudo testcross strategy. International Hydrangea Conference, Ghent, Belgium.
- Rinehart, T., and W. McLaurin (2007) DNA fingerprint database for crapemyrtle cultivar identification, hybrid verification, and parentage analysis. Proceedings of the 52th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Li, Y., M. Windham, R. Trigiano, A. Windham, S. Reed, M. Mmbaga, J. Spiers, and T. Rinehart (2007) Resistance to powdery mildew in hydrangeas. Proceedings of the 52th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Hadziabdic, D., W. Wang, R. Trigiano, B. Fitzpatrick, B. Ownley, M. Windham, T. Rinehart, and Q. Xiang (2007) Genetic diversity of flowering dogwood (*Cornus florida*) in Tennessee. Proceedings of the 52th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- M. Windham, M., M. Mmbaga, S. Reed, T. Rinehart, A. Windham, and Y. Li (2007) Evaluation of *Hydrangea macrophylla* cultivars for resistance to powdery mildew. Proceedings of the 52th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Wadl, P., J. Skinner, X. Wang, T. Rinehart, S. Reed, V. Pantalone, M. Windham, and R. Trigiano (2007) Breeding intra and interspecific *Cornus* species. Proceedings of the 52th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Li, Y., Windham, M., Trigiano, R., Windham, A., Reed, S., Mmbaga, M., Spiers, J., Rinehart, T., (2007) Resistance to powdery mildew in Hydrangea. American Society for Horticultural Science Annual Meeting, Scottsdale, AZ.
- Wang, X., Trigiano, R., Windham, M., Scheffler, B., Rinehart, T., Spiers, J. (2007) Microsatellites and their application in flowering dogwood. Botany and Plant Biology Joint Congress, Chicago, IL.
- Wadl, P., Skinner, J., Wang, X., Rinehart, T., Reed, S., Pantalone, V., Windham, M, Trigiano, R. (2007) Breeding Intra and Inter Specific *Cornus* species. American Society for Horticultural Science Annual Meeting, Scottsdale, AZ.
- Wang, X., Trigiano, R., Windham, M., Rinehart, T., Spiers, J. (2007) A novel Microsatellite array in flowering dogwood (*Cornus florida*) with Device HAD-GT12. International Plant and Animal Genome Conference. San Diego, CA.
- Wadl, P., Wang, X., Windham, M, Rinehart, T., Trigiano, R., (2007) Development of Microsatellite

- markers from Kousa dogwood. American Society for Horticultural Science Annual Meeting, Scottsdale, AZ.
- Rinehart, T. (2007) Genetic Diversity Estimates and DNA fingerprint Database for Crapemyrtle Cultivars. American Society for Horticultural Science Southern Region Meeting, Mobile, AL.
- Kardos, J., C. Robacker, M. Dirr, and T. Rinehart. (2006) Production and verification of hybrids from *Hydrangea macrophylla* x *H. angustipetala* and *H. macrophylla* x *Dichroa febrifuga*. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- DeVries, R., R. Trigiano, M. Windham, A. Windham, T. Rinehart, and J. Sorochan. (2006) Analysis of genetic diversity between fungicide resistant *Sclerotinia homoeocarpa* isolates using AFLP and vegetative compatibility. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Reed, S. and T. Rinehart. (2006) *Hydrangea macrophylla* and *serrata*—Should we lump ‘em or split ‘em? Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Jones, K., S. Reed, and T. Rinehart. (2006) Wide crosses in the Hydrangeaceae: *Dichroa febrifuga* x *Hydrangea macrophylla*. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T. and S. Reed (2006) Using DNA fingerprinting to identify mislabeled plants in the trade: an example from hydrangea. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T., R. Trigiano, W. McLaurin, P. Knight (2006) The utility of DNA fingerprinting for plant patent protection: an example from *Lagerstroemia*. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Wang, X., R. Trigiano, M. Windham, R. DeVries, T. Rinehart, J. Spiers, and B. Scheffler. (2006) Analysis of genetic diversity in selected *Cornus* species using SSR markers. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Jones, K., S. Reed, and T. Rinehart (2006) Production of an Intergeneric Hydrangeaceae Hybrid. American Society for Horticultural Science Annual Meeting, New Orleans, LA.
- Wang, X., R. Trigiano, M. Windham, R. DeVries, T. Rinehart, J. Spiers, and B. Scheffler (2006) Analysis of Genetic Diversity in Selected *Cornus* Species Using SSR Markers. American Society for Horticultural Science Annual Meeting, New Orleans, LA.
- Rinehart, T., C. Pounders, and B. Scheffler (2006) Using SSR Markers to Verify Crapemyrtle Hybrids. American Society for Horticultural Science Annual Meeting, New Orleans, LA.
- Rinehart, T. (2006) Examples of Genome Evolution in Polyploids where Bigger is Better. American Society for Horticultural Science Annual Meeting, New Orleans, LA.
- Rinehart, T., C. Pounders, and B. Scheffler (2006) Cultivar Identification And Interspecific Hybrid Verification In *Lagerstroemia* Using SSR Markers. International Plant and Animal Genome Conference XIV, San Diego, CA.
- Trigiano, R., X. Wang, M. Windham, R. DeVries, T. Rinehart, J. Spiers, and B. Scheffler (2006) Genetic Diversity In Flowering Dogwood (*Cornus florida* L.) Using Microsatellite (SSR) Markers. International Plant and Animal Genome Conference XIV, San Diego, CA.
- Trigiano, R., X. Wang, M. Windham, R. DeVries, T. Rinehart, J. Spiers, and B. Scheffler (2006) The

- optimization of microsatellite discovery in flowering dogwood (*Cornus florida*). International Plant and Animal Genome Conference XIII, San Diego, CA.
- Trigiano, R., M. Windham, A. Windham, R. DeVries, and T. Rinehart (2006) Genetic Diversity of Tennessee *Sclerotinia homeocarpa* isolates delineated by vegetative compatibility and AFLP analysis. American Phytopathological Society Annual Meeting, Quebec City, Canada.
- Trigiano, R., X. Wang, M. Windham, R. DeVries, T. Rinehart, J. Spiers, and B. Scheffler (2006) Genetic Diversity in Flowering Dogwood (*Cornus florida*) using Microsatellite (SSR) Markers. International Plant and Animal Genome Conference XIII, San Diego, CA.
- Wang, X., R. Trigiano, M. Windham, R. DeVries, T. Rinehart, J. Spiers, and B. Scheffler (2006) The Optimization of Microsatellite Discovery in Flowering Dogwood (*Cornus florida*). International Plant and Animal Genome Conference XIII, San Diego, CA.
- Rinehart, T., B. Scheffler and C. Pounders (2006) Cultivar Identification and Interspecific Hybrid Verification in *Lagerstroemia* using SSR Markers. International Plant and Animal Genome Conference XIII, San Diego, CA.
- Fain, G., J. Altland, and T. Rinehart (2006) Molecular and Morphological Characterization of Cardamine Species. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T., S. Reed and B. Scheffler (2006) Inter- and Intraspecific Hybrid Verification in *Hydrangea* using Newly Developed SSR Markers. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T., W. Copes, and M. Cubeta (2006) Genetic and Phenotypic Diversity of Binucleate *Rhizoctonia* Species Causing Web Blight on Azaleas. Proceedings of the 51th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T., W. Copes, and M. Cubeta (2005) Genetic and Physical Characterization of Binucleate *Rhizoctonia* Species Causing Web Blight on Azaleas. Proceedings of the 50th Annual Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T., W. Copes, and M. Cubeta (2005) Genetic, Pathogenic, and Phenotypic Characterization of *Rhizoctonia* ssp. Isolated from Container-grown Azalea in the Southern United States. American Phytopathological Society Annual Meeting, Austin, TX.
- Rinehart, T., S. Reed and B. Scheffler (2005) *Hydrangea* microsatellite markers for cultivar identification and hybrid verification. American Society for Horticultural Science Annual Meeting, Las Vegas, NV.
- Rinehart, T. and S. Reed (2005) *Hydrangea* microsatellite markers for cultivar identification and hybrid verification. International Plant and Animal Genome Conference XIII, San Diego, CA.
- Rinehart, T., S. Reed and B. Scheffler (2005) Estimating Genetic Diversity within the *Hydrangea* Genus using Molecular Markers. Proceedings of the 50th Southern Nursery Association Research Conference, Atlanta, GA.
- Rinehart, T. and S. Reed (2005) New Molecular Markers in *Hydrangea* and Their Usefulness in Evaluating Diversity, Verifying Hybrids and Uncovering Genes. American Society for Horticultural Science, Southern Region Annual Meeting. Little Rock, AR.
- Rinehart, T. and C. Weil (1998) Comparative analysis of non-random *Ac/Ds* footprint formation in maize and *Arabidopsis*. Graduate Student Exhibition, GSA, University of Idaho, Moscow, ID.

Weil, C., J. Eissis, T. Rinehart and P. Page (1997) Unusual host control of *Ds* transposition in maize. Keystone Symposium on Transposition and Site-specific Recombination, Santa Fe, NM.

Rinehart, T., K. Poppleton, N. Daigle and C. Weil (1997) Non-random double-strand break repair accompanies *Ac/Ds* transposon excision in maize and *Arabidopsis*. Keystone Symposium on Transposition and Site-specific Recombination, Santa Fe, NM.

Rinehart, T., C. Dean, K. Poppleton, N. Daigle and C. Weil (1997) Comparative analysis of non-random DNA double-strand break repair following *Ac/Ds* excision in maize and *Arabidopsis*. 39th Annual Maize Genetics Conference, Sheraton Sand Key Resort, Clearwater Beach, FL.

Rinehart, T. (1996) *Ac/Ds* transposable elements: Analysis of insertion sites and excision products. Computational Molecular Biology, Visualization Analysis and Design in the Molecular Science (VADMS) Department, Washington State University, Pullman, WA.

Rinehart, T. and C. Weil (1996) Non-random DNA repair following *Ac/Ds* excision in *Arabidopsis*. 38th Annual Maize Genetics Conference, Pheasant Run Resort, St. Charles, IL.