# Marisa Y. Thompson, Ph.D. Extension Urban Horticulture Specialist Extension Plant Sciences Department New Mexico State University Agricultural Science Center at Los Lunas risi@nmsu.edu

### Education

- Ph.D. Plant & Environmental Sciences. New Mexico State University, 2017. Dissertation: "Return bloom in pecan: plant growth regulators, floral initiation-related gene expression, and shoot morphology"
- M.S. Horticulture. New Mexico State University, 2011. Thesis: "Mature Pecan Orchard Floor Vegetation Management: Impacts on Tree Water Status, Nutrient Content, and Nut Production"
- B.A. Biology and Psychology. Honors: magna cum laude. University of New Mexico, 2007

### Journal & Magazine Publications

- Thompson, M. Y., Randall, J. J., VanLeeuwen, D., Heerema, R. 2021. Differential Expression of Key Floral Initiation Genes in Response to Plant Growth Regulator Application and Alternate Bearing in Pecan. HortScience. Published online 3 May 2021. <u>https://doi.org/10.21273/JASHS04954-20</u>
- Thompson, M. Y. May 2021. Touch and Grow: Herb Appeal. Edible NM Magazine. Issue 73: Early Summer. <u>https://issuu.com/ediblesantafe/docs/enm-earlysummer2021</u>
- Thompson, M. Y. March 2021. Touch and Grow: Seed Starters. Edible NM Magazine. Issue 72: Spring. <u>https://www.ediblenm.com/touch-and-grow-seed-starters/</u>
- Thompson, M. Y. January 2021. Busy Winter Waiting. Edible NM Magazine. Issue 71: Late Winter. <u>https://www.ediblenm.com/busy-winter-waiting/</u>
- Thompson, M. Y. September 2020. In the Throes of Tomatoes. Edible NM Magazine. Issue 69: Fall 2020. <u>https://www.ediblenm.com/in-the-throes-of-tomatoes/</u>
- Thompson, M. Y. July 2020. Resources for Gardening in New Mexico. Edible NM Magazine. Issue 68: Late Summer 2020. <u>https://www.ediblenm.com/touch-and-grow/</u>
- Thompson, M. Y., Randall, J. J., Heerema, R., VanLeeuwen, D. 2019. Exogenous Plant Growth Regulators Show Promise for Management of Alternate Bearing in Pecan. *HortScience*. 54: 1204-1207. <u>https://doi.org/10.21273/HORTSCI13854-18</u>
- Thompson, M. Y. 2018. The Christmas Flower: Poinsettia Production in New Mexico (12th ed., vol. 70, pp. 12-14). Susan Espinoza (Ed.), Enchantment Magazine. New Mexico Rural Electric Cooperative. Circulation 101,612.
- Heerema, R., D. VanLeeuwen, M. Thompson, J.D. Sherman, M.J. Comeau, and J.L. Walworth. 2017. Soil-application of zinc-EDTA increases leaf photosynthesis of immature 'Wichita' pecan trees. Journal of American Society for Horticultural Science. 142: 27-35. <u>https://doi.org/10.21273/JASHS03938-16</u>
- Randall, J., R. Heerema, and A. Rascon, M.T. Potter. 2015. Molecular mechanisms of pecan flower induction. Acta Horticulturae. 1070:89-99.
- Potter, M.T., R. Heerema, J. Schroeder, J. Ashigh, D. VanLeeuwen, and C. Fiore. 2012. Mature Pecan Orchard Floor Vegetation Management: Impacts on Tree Water Status, Nutrient Content, and Nut Production. HortScience. 47: 727-732. <u>https://doi.org/10.21273/HORTSCI.47.6.727</u>

### Weekly Newspaper Column: Southwest Yard & Garden

Ongoing, since Sept 2017. Access the newest columns at <u>https://nmsudesertblooms.blogspot.com</u> Top 10 Most Viewed:

- <u>Give it a Grow: Watermelon & Corn Growing Tips for NM Gardens</u>, 21 May 2018
- <u>Grow Your Library: Recommended Plant Books</u> (2020 Update!), 26 February 2020
- <u>What Does Red or Green Really Mean? Phytochemical Coloration in Chiles</u>, 30 September 2018, Coauthored with Dr. Ivette Guzman
- <u>Saving Zinnia Seeds</u>, 20 December 2018
- <u>Tomato Warning: Side Splits and Shoulder Cracks</u>, 20 August 2020
- <u>Pine Sawyers: Don't Let These Beetles Saw Down Your Tree</u>, 23 September 2018. Co-authored with Dr. Carol Sutherland
- <u>Pick Figs Now, Propagate Cuttings Later</u>, 2 August 2018
- <u>Fertilizer for Thought: Caring for Your Pines</u>, 7 March 2018
- Picky Picky: Selecting the Right Fruit Tree for Your Garden, 3 April 2019
- Through Thick and Thin: Managing Fruit Load on Backyard Trees, 31 May 2018

## **Grant Support**

- Thompson, M. Y., C. Cramer, A. Bennett. Sponsoring Organization: General Mills Foundation. Total Award: \$10,000. March 2019.
- Skidmore, A., W. Giese, M. Thompson. "Delivering IPM Education and Outreach to New Mexico's Communities", Sponsoring Organization: US Department of Agriculture/National Institute of Food and Agriculture NIFA. Total Award: >\$600,000. September 1, 2017 - August 31, 2021.
- Thompson, M. Y., C. Campbell. "Recommended Tree Species Lists for New Mexico Landscapes", Sponsoring Organization: NM Energy, Minerals, and Natural Resources Department. Total Award: \$29,888. August 31, 2018 - December 31, 2019.

### **Research Presentations**

- American Society of Horticultural Science Conference. "Tomato Root Pruning Affects Plant Dry Weights, but Not Yield" M. Thompson, S. Walker, C. Havlik, and D. VanLeeuwen. Las Vegas, July 2019, poster.
- American Society of Horticultural Science Conference. "Exogenous Plant Growth Regulators Show Promise for Management of Alternate Bearing in Pecan" M. Thompson, J. Randall, R. Heerema, and D. VanLeeuwen. Hawaii, Sept 2017, poster.
- Western Pecan Growers Association Conference "Plant Growth Regulators for Pecan Orchards" Las Cruces, NM, Mar 2017
- International Plant and Animal Genome Conference. "Using Transcriptome Libraries to Reveal Flower Initiation Timing of Carya illinoinensis" H. Shadgou, M. Thompson, J. Martin, R. Heerema, J. Randall. San Diego, CA, Jan 2017

# Select Extension & Outreach Presentations from 2020 & 2019

 Extension Master Gardener classes (3 hours each), including "Basic Botany and Plant ID for Gardeners," "Native Plants of New Mexico," "Introduction to Fruit Trees," "Trees & Shrubs," in the Counties of Bernalillo, Colfax, Doña Ana, Lea, Los Alamos, Otero, Sandoval, San Juan, San Miguel, Santa Fe, Taos, and Valencia, etc., offered annually

## Presentations (continued)

- "Gardening Gift Ideas" Ready, Set, GROW! Gardening Webinar Series, presented with the Ready, Set, GROW! Team, December 2020
- "Sustainable Urban Forests in a Changing Climate" Las Cruces Tree Stewards, City of Las Cruces in October 2019 and Roswell Garden Club, November 2020
- "Yard & Garden" 2020 Pesticide Training Webinar Series, presented with NMSU Extension Entomologist Dr. Carol Sutherland, November 2020
- "Taking Care of the Winter Landscape" Ready, Set, GROW! Gardening Webinar Series, November 2020
- "Winterizing House Plants" and "Diagnosing Tree Issues" Webinars for Hidalgo County Cooperative Extension, October 2020
- "Tree Selection and Care: Avoiding Probable Pests and Disasters" Pesticide Safety Education Program Webinar, September 2020
- "Ornamental Chile Peppers" 2020 NMSU VIRTUAL Chile Field Day, September 2020
- "Fruit Tree Pruning and Care" Gutierrez-Hubbell House Backyard Farming Series for Bernalillo County Open Space (with County Extension Horticulture Agent Sara Moran) & Sierra County Extension (with NMSU Extension Pecan Specialist Dr. Richard Heerema), both in March 2020
- "Climate Ready Trees" Think Trees NM Conference with Sarah Hurteau of The Nature Conservancy and Andrew Lisignoli of Trees of Corrales Nursery, January 2020
- "Everybody say "TREES"!" Chaves County Pesticide Applicators Workshop, November 2019
- "Let's Grow Above and Beyond" Colfax County Extension Master Gardener Banquet and 10th Anniversary, November 2019
- "Reaching Rural STEM Students Opportunities at the NMSU Ag Science Center at Los Lunas" UNM Valencia STEM Speaker Series, November 2019
- "Landscaping with Native Plants" Southwest Turfgrass Association Conference, Albuquerque, October 2019
- "Healthy Plants, Healthy Hearts: Building Community with Horticulture" Valencia County Home & Garden EXPO Keynote, March 2019
- "The Magic of Mulch" Valencia County Home & Garden EXPO, March 2019
- "Identifying Common Tree Pests" ABC Tree Stewards at the Albuquerque BioPark, March 2019
- "Pruning Roses" Jericho Nursery Educational Series, March 2019
- "Planting on the Jicarilla" Jicarilla Apache Nation Extension Gardening Series, April 2019
- "Diagnosing Tree Symptoms" Think Trees NM Conference, Jan 2019

# Membership in Professional Societies, Committees, and Associations

- American Horticultural Therapy Association
- American Society for Horticultural Science
- International Association of Horticultural Science
- International Society of Arboriculture
- Native Plant Society of New Mexico
- New Mexico Association of County Agricultural Agents
- New Mexico Extension Specialist Association (president, 2020-2021)
- New Mexico Urban Forestry Council
- Think Trees New Mexico (vice-president, 2021-)