

# W. Gill Giese Jr. PhD

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## EDUCATION

PhD Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA (2014)  
Dissertation: "Root Pruning and Ground Cover Effect on Cabernet Sauvignon Grapevines"

Teacher Certification: Vocational Agriculture/General Science/Biology, University of Arkansas, Fayetteville, AR (1990)

MS Horticulture, University of Arkansas, Fayetteville, AR (1988)  
Thesis: "A Comparison of Nitrogen Rates and Method of Application on Yield and Quality of Three Broccoli Cultivars"

BS Agriculture, University of Arkansas, Fayetteville, AR (1983)

## PROFESSIONAL APPOINTMENTS AND WORK EXPERIENCE

### **Assistant Professor/Instructor, Plant and Soil Science**

**Jan 2023 – Present**

*College of Agriculture, Arkansas State University, Jonesboro, AR*

- Teaching:
  - Teach undergraduate and graduate classes within agriculture, plant and soil science
  - Spring 2023
    - Soils (PSSC 2813)
    - Seed Production Processing and Analysis (PSSC 4343)
    - Introduction to Plant Science (PSSC 1303)
    - Agriculture and the Environment (AGRI 4223)

### **Assistant Professor, Viticulture Extension Specialist**

**July 2017 – Dec 2022**

*Extension Plant Sciences, New Mexico State University, Las Cruces, NM*

- Extension:
  - Support New Mexico winegrowers' economic success
    - Deliver programming with NM Wine winegrowers' association and NM Wine and Vine Society (amateur grape growers)
    - Organize and execute annual NM Wine Educational Conference per technical program and invited speakers
    - Revise existing viticulture extension bulletins and guides supported by New Mexico applied research
    - Generate new bulletins, instructional videos, timely viticulture blog (*AMPELOS*) <https://nmsuloslunasasc.blogspot.com> and NMSU Viticulture website
  - Develop and deliver practical and innovative viticulture and enology information vetted by NMSU Viticulture Advisory Board
    - Inform commercial winegrowers, County Extension Agents, private consultants, governmental agencies, Master Gardeners, homeowners and community colleges (workforce development)
    - Execute ~30 workshops/seminars/field days/private pesticide applicator/Master Gardener training sessions annually
    - Make site visits and extension consultations (in person or virtual) addressing growers' challenges and questions
    - Distribute information: new cultivars and rootstocks, vineyard establishment, irrigation, insect pests and diseases
    - Collect/interpret growers' soil and plant tissue samples, submit to commercial analytical lab, interpret results with growers
    - Correlate measured irrigation water to production goals at collaborative vineyards to improve water use efficiency
  - Mentor and teach: vineyard employees, students, and research technicians in applied viticulture research and outreach
- Research:
  - Evaluate rootstocks, table, and wine grape cultivars inclusive of hybrids
  - Co-sponsor visiting research scientist/statistician
  - Investigate vineyard cover crop impact on native pollinators, soil health, eco-services, yield, and grapevine water relations
  - Survey occurrence, distribution and IPM of plant parasitic nematodes in New Mexico vineyards
  - Field evaluation of commercial inactivated yeast products to enhance ripeness, flavor, and aroma precursors
  - Collate, correlate, and interpret statewide climatic data and interpret its impact on grapevine phenology and performance
  - Investigate trellis system and canopy management impact on vine yield and berry composition
  - Investigate water use efficiency of vineyard cover crops and grapevines for production goals

### **Winemaker/Viticulturist, Shelton Vineyards, Dobson, NC**

**2005 - 2017**

- Directed harvest, processing, fermentation, fining, blending, filtering, aging, bottling, storage and release of ~ 25,000 cases annually
- Supervised 7 vineyard/winery employees
- Maintained wine lab for berry, must and wine analysis
- Managed 100-acre vineyard: select varieties/clones and rootstocks, pruning, nutrient management, pest control, and frost mitigation
- Assured winery/vineyard compliance: TTB, EPA, NCDA, and OSHA
- Conducted wine education classes, dinners, vendor education, and external events for retail and wholesale clientele
- Managed budget, responsible for bid research and evaluation/purchasing of winery and vineyard supplies, equipment and labor
- Collaborated on applied research and extension with:
  - North Carolina State University: water use cover crops, foliar nitrogen impact on Merlot berry composition
  - Virginia Tech: virus surveys. cover crops, grape rooting patterns, fungicide efficacy, enhancement grape composition
  - North Carolina Cooperative Extension Service: recurring programming for regional winegrower's technical group

- Board Member of North Carolina Wine Council

**Lead Instructor, Surry Community College, Dobson, NC**

**2001 - 2013**

- Established, developed and delivered 2-year degree program in Viticulture and Enology
  - Constructed and delivered viticulture courses within the North Carolina Community College system: *Introduction to Viticulture, Vineyard Establishment and Development, Grape and Wine Science, Grape Pests, Diseases and Disorders, Vineyard Operations*
- Taught agriculture courses: *Soils, Agricultural Marketing and Agricultural Economics*
- Taught, mentored and supervised internships for students pursuing AA degrees, diplomas or certification, and/or transfer to 4-year institutions
- Designed, planted and managed 5-acre on-campus vineyard
- Maintained and operated 2,500-gallon capacity, on-campus, TTB bonded winery
- Supervised three employees: enology instructor, vineyard and winery technicians
- Harvested ~ 15 wine grape varieties, fermented, filtered, finished, label design, barrel aged, bottled, and marketed 'SURRY CELLARS' wines via student managed accounts at restaurants, retail accounts and wine festivals: sales supported departmental budget
- Advised local growers on disease control, cultivar/rootstock selection, vineyard establishment, cover crops, canopy management, vineyard IPM
- Advised/consulted with Western Virginia Community College, Roanoke, VA, Harrisburg Area Community College, Harrisburg, PA
- Delivered continuing education, seminars, workshops and field days with invited speakers and regional farmers
- Collaborated on applied agriculture research projects:
  - Fungicide efficacy and evaluation (Dr. Anton Baudoin, Virginia Tech)
  - Ground cover/water dynamics: (Dr. Josh Heitman, NCSU and Dr. N. Agam, Ben-Gurion Univ., Negev, Israel)
  - NE 10-20 project, evaluation of red vinifera varieties in warm, humid climate (NCSU)
  - Phenological/climate characterization of the Yadkin Valley, NC (Mr. Michael Leonardelli, Univ. of Missouri)
  - On-farm, fertilizer/lime study (Mr. Tim Hambrick, NCDA, NC Cooperative Extension Service)

**Research Specialist, Food Science Department, University of Arkansas, Fayetteville, AR**

**1995 - 2001**

- Managed research vineyard, equipment and greenhouse and pilot winery for processing and analysis of juice and wine
- Executed grape harvest/processing, winemaking and lab/sensory analysis of wine and juice
- Coordinated and supervised graduate and undergraduate student labor in various research projects

**Graduate and Research Assistant, Agronomy and Entomology Departments, University of Arkansas, Fayetteville, AR**

**1990 - 1995**

- Vegetable entomology: IPM, insect pests and virus vectors, pesticide screening/efficacy within the IR-4 program
- Small grains breeding: maintained greenhouse and made crosses in wheat breeding program. planted/maintained/harvested field wheat, rye and barley plots statewide, supervised labor, collected/analyzed data

**Student Teacher, University of Arkansas, Fayetteville, AR and Greene County Tech HS, Paragould, AR**

**1989 - 1990**

- Taught HS vocational agriculture, horticulture, gas engine/welding/shop, drafting, agronomy, and public speaking

**Assistant Plant Breeder, Petoseed Co, Felde FL**

**1988 - 1989**

- Supervised field crews, conducted field operations, collected data in various vegetable breeding lines and crops
- Assured safety and compliance with methyl bromide and other pesticides

**Student/Graduate Student, Texas A&M University, College Station, TX**

**1985 - 1988**

- Student and research technician for Dr. Leonard Pike, TAMU, short-day onion breeding

**Stock Seed Technician, ARCO Seed Co., El Centro, CA**

**1983 - 1984**

- Assured safe/efficient culture and harvest of short-day hybrid onion and vegetable seed, breeder to commercial lots
- Managed, treated and stored stock seed in controlled atmosphere warehouse
- Traveled to and contracted seed increase farms in Yuma, AZ and Baja, Mexico

**Farmer, Laborer, Manager, ABC Farm, Fayetteville, AR**

**1975 - 2001**

- Produced grapes, blackberries, strawberries and blueberries, cut flowers, honey, chestnuts, greenhouse plants and field grown vegetables, marketed via grower's cooperative, grocery stores, restaurants and on-farm retail market
- Designed and installation of drip irrigation systems
- Hosted 'Farm School' for pre-school and elementary age students

**PEER-REVIEWED PUBLICATIONS**

- Velasco Cruz, C., G. Giese, J. Beacham, and D. Saldaña Zepeda. *Soil Moisture and Root Occurrence Impact Sampling Efficiency for Three Nematode Species In New Mexico Vineyards*. *HortScience* (under review)
- Lujan, P., M. Kersten, and G. Giese. *First Report of Grapevine red blotch virus (GRBV) in New Mexico*. *Phytopathology*. <https://apsjournals.apsnet.org/journal/phyto>, (under revision)
- G. Giese, D. Zepeda-Saldana, J. Beacham and C. Velasco-Cruz. 2021. *Modeling Nematode Population Dynamics Using a Multivariate Poisson Model with Spike and Slab Variable Selection*. *Journal Applied Statistics* <https://doi.org/10.1080/02664763.2021.1935800>
- Dold, C., J. Heitman, G. Giese, A. Howard, J. Havlin and T.J. Sauer. 2018. *Water Dynamics and Water Stress in a North Carolina Vineyard*. *Agronomy*, 9, 152, March, Special Issue, Crop Evapotranspiration.
- Kelly, M., G. Giese, C. Velasco-Cruz, L. Lawson, S. Ma, M. Wright and B. Zoecklein. 2017. *Effect of Foliar Nitrogen and Sulfur on Petit Manseng (Vitis vinifera L.) Composition*. *Journal of Wine Research*. May 2017.
- Giese, G., T.K. Wolf, C. Velasco-Cruz, and L. Roberts. 2016. *Cover Crop and Root Pruning Effects on the Rooting Pattern of SO4 Rootstock Grafted to Cabernet Sauvignon*. *Am. J. Enol. Vitic.* 67:106-115.

- **Giese, G.,** T.K. Wolf, C. Velasco-Cruz, L. Roberts and J. Heitman. 2015. *Cover Crop and Root Pruning Impacts on Vegetative Growth, Crop Yield Components, and Grape Composition of Cabernet Sauvignon*. Am. J. Enol. Vitic. 66:212-226.
- **Giese, G.,** C. Velasco-Cruz, L. Roberts, J. Heitman and T.K. Wolf. 2014. *Complete Vineyard Floor Cover Crops Favorably Limit Grapevine Vegetative Growth*. Sci. Hortic. 170: 256-266.
- Holland, S., A. Howard, J.L. Heitman, T.J. Sauer, **W. Giese,** T.B. Sutton, N. Agam, A. Ben-Gal, and J.L. Havlin. 2014. *Implications of an Interrow Fescue Cover Crop for Below-Canopy Water Dynamics in a vineyard*. Agron. J. 106:1267-1274.
- Holland, S., J. Heitman, A. Howard, T. Sauer, **W. Giese,** A. Ben-Gal., N. Agam, D. Kool, and J. Havlin. 2013. *Micro-Bowen Ratio System for Measuring ET in a Vineyard Interrow*. Ag. For. Met. 177: 93-100.
- **Giese, G.** 2010. *Managing Soil Quality in Mid-Atlantic Vineyards*. Crops & Soils. 43: 4-9.
- **Giese, G.** 2008. *Winegrape Quality: When is it Time to Pick?* In: T.K. Wolf, editor, Wine Grape Production Guide for Eastern North America. NRAES, Cooperative Extension, Ithaca, NY.

#### EXTENSION PUBLICATIONS

- Penn State and NMSU, Text: *Winegrape Growers Guide for Eastern North America*, Hickey, C., **Giese, G.** co-editors of revision (in process)
- **Giese, G.,** Hoffman, M., Hatch, T., and E. Synder. *Under-trellis Cover Crops for North Carolina Vineyards*. Raleigh, NC: North Carolina Cooperative Extension (in review, January 2023)
- NMSU, Circular-705, *Grape Integrated Pest Management (IPM) in New Mexico*, Kersten, M., **Giese, G.,** 2022
- NMSU, H-329 *Grape Powdery Mildew*, **Giese, G.,** Lujan, P. 2022
- NMSU, H-334 *Managing Weeds in Grapes in New Mexico*, Beck, L., **Giese, G.** 2021
- NMSU, H-311 *Improving the Size and Quality of Seedless Grapes*, **Giese, G.** 2021
- **Giese, G.,** Frank Sholedice (Ed.), H-338 *Grapevine Phenology: Annual Growth and Development*. Las Cruces: NMSU Extension, 2020.
- Wolf, T. K., **Giese, W. G.,** *Floor Management Strategies for Virginia Vineyards*. Blacksburg, VA: Virginia Cooperative Extension. [www.ext.vt.edu](http://www.ext.vt.edu), 2020
- NMSU, H-303 *Pruning Grapes to the Four-Arm Kniffen System*, 2019
- NMSU, H-309 *Grape Varieties for North-Central New Mexico*, 2019

#### FUNDED GRANTS

- Weed Science Society of America, 2023, with Prof Erik Lehnhoff and Asso. Prof. Leslie Beck, *Developing an Electric Mulch System in Vineyards and Blueberry Production*, ~\$30,000
- Western SARE: 2021-2023, with Research Scientist, Ms. Miranda Kersten, *Native Habitat Enhancement for IPM in New Mexico Vineyards* - \$91,718
- New Mexico Department of Agriculture NMDA: 2020-2022, with Dr. Kevin Lombard and Dr. Shengrui Yao, *Evaluation of 15 Table Grape Varieties at Three Sites* - \$52,818
- County of Santa Fe: 2019-2021, *Vineyard/Winery Incubator Feasibility Study* - \$9,500
- Stahmann Pecan Co. Inc., Las Cruces NM, 2017-2021, NMSU Viticulture, *Annual Undergraduate Viticulture Internship*- \$14,000/year
- National Institute of Food and Agriculture: NIFA-USDA: NMSU, 2017-2019. Co-PI with PI Dr. Ashley Bennett (author) *Extension Implementation Program Area (EIP)*, 20% of grant amount, *IPM Implementation in Specialty Crops: Grapes* – \$634,286
- Golden LEAF Foundation (co-author), North Carolina Wine and Grape Council: Surry Community College, 2009. *Sentinel Vines to Evaluate Powdery Mildew Sensitivity to Fungicides on Winegrapes*, with Dr. Anton Baudoin, Virginia Tech - \$14,364
- NC Wine and Grape Council: Surry Community College, 2009. with Dr. Molly Kelly, Virginia Tech, *Optimized Grape & Wine Potential Through Intensive Vineyard and Winery Management*- \$50,000
- NC Wine and Grape Council/ SRSFC Research Project 2009. with Dr. Sara E. Spayd, NC State University, *Evaluation of Grape Cultivars and Clones for North Carolina*- \$11,754

#### TEACHING

- **Invited Lecturer – for the following classes:**
  - **Horticulture – Agriculture and Horticulture Department, Morehead State University**  
February 2022. “Viticulture, Caring for the Vine” – Morehead, KY
  - **Economics of Making and Marketing Wine - Agricultural Economics Department, New Mexico State University**  
October 2018, 2019, 2020, 2021. “Growing Grapes in New Mexico” – Las Cruces, NM
  - **Soil Chemistry - Plant and Environmental Sciences Department, New Mexico State University**  
September 2020. “Terroir and Soils...Myth and Matter” – Las Cruces, NM
  - **Hospitality Restaurant and Tourism Department, New Mexico State University**  
each semester August 2017 to February 2021. “Grape and Wine Science” – Las Cruces, NM
  - **Wine and Culture - English Department, University of New Mexico**  
September 2019. “Grafting and Propagation of Wine Grapes” – Albuquerque, NM
  - **Organic Fall Vegetable Production - Plant and Environmental Sciences Department, New Mexico State University**  
October 2018. “Grape Berry Maturity...When Is It Time to Harvest?” – Las Cruces, NM
  - **Sustainable Agriculture - University of New Mexico**  
May 2018. “Sustainability of New Mexico Grape Production” – Albuquerque, NM
  - **Student Symposium STEM program - University of New Mexico, Valencia Campus**  
April 2018. “Careers in Agriculture” – Valencia, NM
  - **Instructor - Viticulture Educational Series, High Country Winegrowers Association – Spring 2013, Boone, NC: 10-week viticulture course: for grape growers and county agents**
- **Instructor – Viticulture and Enology: Curriculum Development, Surry Community College – 2001 to 2013, Dobson, NC**
- **Instructor – Spring Viticulture VIN 114, VESTA, Redlands Community College – 2012, 2013, El Reno, OK**

## MEETING ABSTRACTS AND PRESENTATIONS

- **Giese, G.**, 2022. *Know Your Vineyard: Climate Change and New Mexico Viticulture, Pruning, Water Issues*, New Mexico Winegrowers Conference, Albuquerque, NM, March
- **Giese, G.**, 2022. *Vineyard Floor Management*, North Carolina Winegrowers Conference, Winston-Salem, NC, January
- **Giese, G.**, 2020. New Mexico Winegrowers Conference, February, Las Cruces, NM
- **Giese, G.**, 2019. *Grapevine Water Use in New Mexico*, El Llano Estacado/Prairie Partners Annual Conference, December, Tucumcari, NM
- **Giese, G.**, 2019. L. Quintana, C. Velasco-Cruz, and M. Kersten. *Characterization of Grapevine Water Use in Central New Mexico*. New Mexico Water Resources Research Institute, 64<sup>th</sup> Annual New Mexico Water Conference, Common Water, Sacred Water Tribal perspectives on water issues in New Mexico. November, Pojoaque, NM
- **Giese, G.**, 2019. J.M. Beacham, C. Velasco-Cruz, S.H. Thomas and T.O. Powers. *Plant Parasitic Nematodes Associated with Grapevines, Vitis vinifera, New Mexico*. Society of Nematologists Annual Meeting, July, Raleigh, NC
- **Giese, G.**, 2019. *Regional report*, NVEELC (National Viticulture Enology Extension Leadership Conference), April, Fredericksburg, TX
- **Giese, G.**, 2019. *New Mexico Wine Conference, March, Albuquerque, NM*
- **Giese, G.**, 2018. *Grape Growing in New Mexico*, El Llano Estacado/Prairie Partners Annual Conference, December 4, Tucumcari, NM
- **Giese, G.** 2018. *Terroir: Myths and Misconceptions*, Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC, October
- **Giese, G.** 2018. *Vineyard Ground Covers and Vineyard Soil Compaction*, Virginia Vineyard Association, Winchester, VA, June
- **Giese, G.**, J. Beacham, S.H. Thomas, C. Sutherland, T.O. Powers, L. Roberts, M. Kersten, and A. Bennett. 2018. *Plant Parasitic Nematodes Associated with New Mexico Vineyards*. Society of Nematologists Annual Meeting, July, Albuquerque, NM
- **Giese, G.**, K. Lombard, C. Velasco-Cruz, and M. Leonardelli. 2018. *Rootstock Influence on Scion Mortality, Performance and Berry Composition in The Four Corners Region of New Mexico*. 69<sup>th</sup> Annual Meeting, ASEV, June, Monterey, CA
- **Giese, G.** 2018. *Regional report*, NVEELC (National Viticulture Enology Extension Leadership Conference), May, Prosser, WA
- **Giese, G.** 2018. *Varieties and Rootstocks for Arizona, "Vine Balance"*, Arizona Grape Growers, Benson, AZ, March
- **Giese, G.** 2018. *Root-pruning, intra-row Ground Covers and Cabernet Sauvignon*, Oregon Wine Symposium, Portland, OR, February
- **Giese, G.** 2018. *Viticulture Update, Grapes...Myth, Mystery and Terroir, Grape Anatomy and Physiology: Practical Applications in the Vineyard*. New Mexico Wine Conference, February, Santa Fe, NM
- **Giese, G.** 2016. *Varietal Information: Tannat in North Carolina*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- **Giese, G.** 2016. *Vine performance after ten years of exposure to under-trellis ground covers*. ASEV, Eastern Sect., July 18-21, St. Louis, MO
- **Giese, G.** 2016. *Vineyard Cover Crops*. Southern SARE Cover Crops Conference, July 18-19, Mt. Olive and Goldsboro, NC
- **Giese, G.** 2016. *Canopy Management Workshop/Field Day*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- **Giese, G.** 2016. *Spraying to the label and beyond: Science and intuition to optimize disease control*. NC Winegrowers Association, January 22-24, Winston-Salem, NC
- Elder, K., S. Spayd, **G. Giese** and J. Geller. 2015. *Assessment of Winegrape Cultivars in North Carolina*. Abstract, 66<sup>th</sup> Annual Meeting ASEV, Portland, OR, June 15-18.
- **Giese, G.** 2015. *Canopy Management: What, When, Why and How*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- **Giese, G.** 2015. *Ozone – Uses and Hazards of Ozone in the Cellar. Safety & Sanitation*. NC Winegrowers Association, Winston-Salem, NC
- **Giese, G.** 2014. *Determination of Harvest Timing*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- **Giese, G.** 2014. *Dormant Pruning*. NC Winegrowers Association, Winston-Salem, NC
- Howard, A., **G. Giese**, J.L. Heitman, and J.L. Havlin. 2013. *V. Vinifera Water Dynamics in the Southeast: Observations and Modeling*. Am. Soc. Enology Vit. Eastern Sect. Winston-Salem, NC
- Baudoin, A, L. Rallos, M. Nita, **G. Giese**. 2012. *Sentinel vines to monitor fungicide resistance in grape powdery mildew*. Phytopathology 102: S3.1 (abstr.)
- **Giese, G.** 2013. *Winter, Frost and Chilling...Injury?* Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- **Giese, G.** 2013. *Cover Crops to Optimize Grapevine Growth*. Grape Expectations: The Bordeaux/New Jersey Connection, Rutgers University Extension Service, Monroe Twp, NJ
- **Giese, G.**, M.K. Kelly, C. Velasco-Cruz, and T.K. Wolf. 2011. *Root Pruning and Cover Crops Influence Berry Composition*. ASEV-Eastern Sect. Baltimore, MD
- Heitman, J.L., A. Howard, S. Holland, N. Agam, A. Ben-Gal, T. Sauer, J. Havlin, and **G. Giese**. 2012. *Below Canopy Evapotranspiration in a Rain-fed Southeastern U.S. Vineyard*. ASA CSSA SSSA International Annual Meetings, Cincinnati, OH
- **Giese, G.**, J.L. Heitman, and T.K. Wolf. 2011. *Perennial Cover Crops to Optimize Vegetative Growth of Cabernet Sauvignon Grapevines*. ASA CSSA SSSA International Annual Meetings, San Antonio, TX
- Holland, S., J.L. Heitman, A. Howard, J. Havlin, T. Sauer, and **G. Giese**. 2011. *Measuring the Influence of an Inter-row Fescue Crop on Below-Canopy Humidity in a North Carolina Vineyard*. ASA CSSA SSSA International Annual Meetings, San Antonio, TX.
- Howard, A., J.L. Heitman, J. Havlin, **G. Giese**, and T. Sauer. 2011. *Water Stress Dynamics for North Carolina V. Vinifera*. ASA CSSA SSSA International/Annual Meetings, San Antonio, TX
- **Giese, G.**, and T.K. Wolf. 2010. *Grapevine Growth Management with Root Pruning and Perennial Cover Crop*. ASEV, 63<sup>rd</sup> Annual Meeting, Seattle, WA
- **Giese, G.**, and A. Baudoin. 2010. *Sentinel vines to evaluate powdery mildew sensitivity to fungicides on winegrapes and New Options for Winegrape Disease Control*. NC Wine and Grape Council and NC Winegrowers Association, Greensboro, NC
- Howard, A., J.L. Heitman, **G. Giese**, and J.L. Havlin. 2010. *Water Management for North Carolina Wine Grape Production*. Soil Sci. Soc. Raleigh, NC
- Howard, A., J.L. Heitman, J. Havlin, **G. Giese** and T. Sauer. 2010. *Water Dynamics for North Carolina V. Vinifera*. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA
- **Giese, G.**, and T.K. Wolf. 2009. *Root pruning and groundcover to optimize vine vigor and berry composition in Cabernet Sauvignon grapevines*. Am. J. Enol. Vitic. 60:551A (abstr.)

- **Giese, G., M. Kelly and T. K. Wolf.** 2007. *Can root pruning and ground covers restrict vegetative growth and improve fruit composition of Cabernet Sauvignon grapevines?* National Viticulture Research Conference, Davis, CA

#### **EXTENSION PRESENTATIONS, WORKSHOPS, MEDIA**

- 2023. *Considerations in Establishing or Expanding Vineyards*, Arkansas Grown Conference, January 25-28, Little Rock, AR.
- 2022. *Pruning Workshop*, Fabian Garcia Agriculture Science Center, Las Cruces, NM
- 2022. *Growing Table and Wine Grapes in Northern New Mexico*, Fruit Growers Conference, Los Luceros, NM with Dr. Shengrui Yao and Mr. Don Martinez, County Agent Rio Arriba County, March
- 2022. *Vineyard Floor Management*, North Carolina Winegrowers Conference, Winston-Salem, NC, January
- 2021. *Grapevine Maintenance*, Encanto Garden Club, Albuquerque, NM, November.
- 2021. *Grape Production, Master Gardener Lectures (6)*, Valencia, Taos, Bernalillo, Santa Fe, Eddy and Doña Ana Counties, March-July
- 2020. *New Mexico Wine Pairings for the Holidays*, Ready, Set, Grow!, WEBINAR, collaboration with County Agent, Susan DeVos-Cole
- 2020. *Winterize Your Grapevines*, WEBINAR, collaboration with County Agent, Don Martinez
- 2020. *Balanced Harvest*, WEBINAR, collaboration with Penn State University Extension, August, <https://psuwineandgrapes.wordpress.com/2020/08/24/a-balanced-harvest/>
- 2020. *Pruning workshop*, Santa Ana Pueblo Vineyard Sandoval County, NM, February
- 2020. *Grape growing in NM*, Bi-annual In-service Training, NM Cooperative Extension Agents and Specialists, Las Cruces, January
- 2019. *Wine and Food Pairing for the Holidays*, Los Ranchos Agri-Nature Center, Albuquerque, NM, December
- 2019. *Pesticide Resistance, Private Pesticide Applicator Training/Certification*, Las Cruces and Isleta Pueblo, November
- 2019. *Cherry Winemaking Workshop: From Tree to Tasting*, Los Lunas, NM, August to October
- 2019. *Grape Production, Master Gardener Lectures (6)*, Valencia, Taos, Bernalillo, Santa Fe, and Eddy Counties, March-April
- 2019. *Wine Making 101 Workshop, PARTS I and II*, Albuquerque Bio-Park, Albuquerque, October
- 2019. *Berry Sensory Assessment Workshop*, Agri-Nature Park Los Ranchos, Albuquerque, September
- 2019. *Grape Grafting and Propagation*, Agri-Nature Park Los Ranchos, Albuquerque, January
- 2018. *Wine Making 101 Workshop, PARTS I and II*, Albuquerque Bio-Park, Albuquerque, October
- 2018. *Berry Sensory Assessment Workshop*, Agri-Nature Park Los Ranchos, Albuquerque, September
- 2018. *Grape Production*, Artesia ASC Field Day, September
- 2018. *Cover Crops and Vineyard Health*, Grape Field Day, Fabian Garcia ASC, Las Cruces, August
- 2018. *Wine Analysis Workshop*, Los Lunas ASC, Los Lunas, July
- 2018. *Grape Varieties, Rootstocks and New Mexico Terroir*, Fruit Growers Workshop, Alcalde, NM, March
- 2018. *Grape Production, Master Gardener Lectures (7)*, Valencia, Bernalillo, Sandoval, Santa Fe, Los Alamos, and Cibola Counties, March
- 2018. *Pruning Workshops (6)*: Fabian Garcia ASC, Las Cruces, January, Albuquerque Bio-Park, Albuquerque, January, Jaramillo Vineyard, Belen, February, Los Lunas ASC, Los Lunas, Rio Rancho Agri-Nature Center, Albuquerque, March, Farmington ASC, March
- 2018 to present. YouTube, videos:
  - *Grapevine Care: Situational Pruning Series Parts I, II, III* <https://www.youtube.com/watch?v=4tFccsDyUMI>
  - *Pruning Grapevines After the First Year, PART I* <https://www.youtube.com/watch?v=IDKQ-BwOtfq>
  - *Pruning Grapevines After the First Year, PART II* <https://www.youtube.com/watch?v=zz0fMIYvZ2U>
  - *Training Grapevines: Renovation of a Neglected Grapevine* <https://www.youtube.com/watch?v=c8Vlda9y3js>
  - *Training a Grapevine to a "high-wire" trellis system* <https://www.youtube.com/watch?v=8krxWF8u0M4>
  - *Harvesting Grapes: Field Assessment of Grape Maturity* <https://www.youtube.com/watch?v=665iXo1ApXs>
- 2017. *Potassium in the Vineyard and Winery*, Hot-Weather Winemaking Workshop, Los Lunas ASC, Los Lunas, November.
- 2017. *Canopy Management*, Grape Field Day, Fabian Garcia ASC, Las Cruces, August
- 2017. *Grape Varieties for New Mexico*, Los Lunas ASC Field Day, July
- 2016. *Varietal Information, Tannat in North Carolina*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- 2016. *Canopy Management Workshop/Field Day*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- 2014. *Determination of Harvest Timing*. Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC
- 2013. *Winter, Frost and Chilling...Injury?* Surry County Vinedressers Meeting, NC Coop. Ext., Dobson, NC

#### **STAKEHOLDER, COMMUNITY, ACADEMIC SERVICE and COLLABORATION**

- **Collaborator**, University of Arkansas, hybrid grapes (wine and table) field trials with Dr. John Clark, 2018 – ongoing
- **Collaborator**, University of New Mexico (Biology Dept), Assessing Plant Water Status Using Wearable Plant Sensors, 2020 to present
- **Collaborator**, University of Arkansas, Chambourcin Wine with Non-Saccharomyces Yeast Sensory Trial, 2022
- **Lead Faculty Member and Sponsor**, for visiting scientist, agricultural statistics, Dr. Ciro Velasco-Cruz, Research Professor, Estadística, Colegio de Posgraduados, Carretera Mexico-Texcoco, Estado de Mexico, Mexico (2018-present)
- **Collaborator**, Grapevine care and pruning practices @ Los Ranchos Community Garden, Mr. John Garlisch, Bernalillo Cty. Ext. Agent
- **Collaborator**, Vineyard Under-trellis Cover Cropping, Dr. Mark Hoffmann NCSU, Tremain Hatch VT, Ms. Hannah Lepsch, Ms. Elina Synder, Ext Agents
- **Organizer**, NM Wine Annual Education Conference, collaboration with *NM Wine*, guest speakers and technical program (2017 to present)
- **Board Member**, National Grape and Research Association, Extension and Outreach Committee (November 2019 to present)
- **Board Member**, American Society of Enology and Viticulture, Nominations Committee (October 2019 to present)
- **Board Member**, NM Wine Growers Association (ex-officio, August 2017 to Present)
- **Wine Judge**, NM State Fair Wine Competition, (2017, 2018, 2019)
- **Faculty Sponsor**, for visiting scholar, sustainable agriculture, Ms. Ludim Quintana, (2019)
- **Board Member**, S.T.E.M. Advisory Board, UNM Valencia Campus (August 2018 to Present)
- **Reviewer**: *American Journal Enology and Viticulture, Agronomy, HortScience, HortTechnology, Plant and Soil, Soil Systems, Scientia Horticulturae*,

- *Volunteer*, IPM/EIP grant funded Demonstration Garden, Los Lunas ASC (2017 to present)
- *Volunteer*, Soil Health Institute (July 2018)

#### **PROFESSIONAL DEVELOPMENT**

- 2021. ASA, CSSA, SSA International Annual Meeting, Salt Lake City, UT, November 7-10
- 2020. University of California, Chemistry for Winemakers VIT259, July to September, (online)
- 2020. University of Arizona, Greenhouse Crop Production and Engineering Design Short Course, Controlled Environment Agriculture Center, Tucson, AZ, March 2-5 <https://ceac.arizona.edu/events/cea-short-course>
- 2019. Lean Farm School, Clay Bottom Farm, Goshen, IN, June <https://www.claybottomfarm.com/>
- 2018. Fertigation, Drip/Micro Irrigation Design Courses, Irrigation Training and Research Center, California Polytechnic State University, San Luis Obispo, CA, August <http://www.itrc.org/>

#### **PROFESSIONAL MEMBERSHIPS**

- American Society of Enology and Viticulture (ASEV)
- American Society of Horticulture (ASHS)

#### **AWARDS**

- Graduate Student Scholarship, 2005. ASEV Eastern Section, St Louis, MO
- Best Student Paper, 2009. *Root Pruning and Cover Crops to Optimize Vine Vigor and Berry Composition in Cabernet Sauvignon Grapevines*, ASEV-Eastern Section, Painesville, OH