Marin Talbot Brewer

Curriculum Vitae

ADDRESS

Department of Plant Pathology
University of Georgia
2105 Miller Plant Science Building
Athens, GA 30602

Phone: 607-229-2501
E-mail: mtbrewer@uga.edu

EDUCATION

2011	Ph.D.	Plant Pathology and Plant-Microbe Biology	Cornell University
2003	M.S.	Plant, Soil, and Environmental Science	University of Maine
1998	B.S.	Biological Sciences	University of Cincinnati

PROFESSIONAL RESEARCH EXPERIENCE

2022–Present	Professor, Plant Pathology, University of Georgia (60% research/40% instruction)
2017–2021	Associate Professor, Plant Pathology, University of Georgia
2011–2016	Assistant Professor, Plant Pathology, University of Georgia
2006–2011	Doctoral Research, Plant Pathology and Plant-Microbe Biology, Cornell University
2003–2006	Research Associate, Horticulture and Crop Science, The Ohio State University
2000–2003	Masters Research, Plant, Soil, and Environmental Science, University of Maine
1999–2003	Biological Science Technician, USDA-ARS NEPSWL, Orono, Maine

HONORS AND AWARDS

2022 William Terrell Distinguished Professor, University of Georgia, College of Agricultural & Environmental Sciences
2022 W.H. Weston Award for Excellence in Teaching, Mycological Society of America
2021 D.W. Brooks Award for Excellence in Teaching, University of Georgia
2021 Plenary Speaker, Plant Health 2021, American Phytopathological Society
2019 Early Career Teaching Award, University of Georgia, College of Agricultural & Environmental Sciences
2019 Outstanding Faculty Mentor Award, University of Georgia, College of Agricultural & Environmental Sciences
2016 Public Service and Outreach Fellowship, UGA Office of the VP for Public Service
2016 Focus on Faculty, UGA Office of the Sr. VP for Academic Affairs and Provost
2013 Schroth Faces of the Future: Mycology, American Phytopathological Society
2011 Teaching Assistant of the Year, Investigative Biology Laboratory, Cornell University
2010 Barbara McClintock Graduate Student Award, Plant Sciences, Cornell University
2010 ASEV Scholarship, American Society for Enology and Viticulture
2010 ASEV-ES Scholarship, American Society for Enology and Viticulture – Eastern Section
2010 AWS Scholarship, American Wine Society
2009 Best Oral Presentation Award, Mycological Society of America
2009 Graduate Fellowship and Award, Mycological Society of America
2009 Richard P. Korf Mentor Travel Award, Mycological Society of America
2009 ASEV Scholarship, American Society for Enology and Viticulture
2009 AWS Scholarship, American Wine Society
2008 Richard L. Gabrielson Award, American Phytopathological Society
2008 Research Travel Grant, Cornell University Graduate School, Competitive Award

TEACHING EXPERIENCE

PATH 3010 Fungi, Friends and Foes, 3 credits, 100 to 450+ students, every spring 2012–Present
PATH 4200/6200 Mycology, 4 credits with lab, 20 to 40+ students, every fall 2011–Present
PBIO 8960 Genetics of Yeast and Filamentous Fungi, guest lecturer 2014, 2016, 2018
FYOS 1001 First Year Odyssey Historic Plant Diseases, guest lecturer every fall 2016–Present

MENTORING AND ADVISING

Graduate Student Major Advisor: 14; 6 PhD, 8 MS; 5 current, 9 graduated
Graduate Student Advisory Committees: 35; 22 PhD, 12 MS; 12 current, 23 graduated
Postdoctoral Researchers: 2
Visiting Scholars: 2
Technicians: 4
Undergraduate Researchers: 22 (13 Course-based research credit, 2 Center for Undergraduate Opportunities Honors Scholars, 3 USDA Research and Extension Experiences for Undergraduates, 4 NSF Research Experiences for Undergraduates)
Young Scholars High School Student Summer Researchers: 6

GRANTS AND CONTRACTS

USDA NIFA SCRI. 2023–2027. SAM: Sustainable Anthracnose Management for Watermelon and Cucumber Growers in the Eastern U.S. **Co-PD, $4,790,065**
USDA NIFA AFRI Research and Extension Experiences for Undergraduates (REEU). 2022–2027. Crop Genetics and Genomics II: Promoting diversity in agriscience through undergraduate mentoring in research and extension. **Co-PD, $750,000**
USDA NIFA AFRI Foundational Program, Understanding Antimicrobial Resistance. 2019–2024. Rapid detection of azole-resistant *Aspergillus fumigatus* and identification of factors contributing to antimicrobial resistance. **PI, $497,830**
USDA Western SARE. 2020–2022. Fungal leaf spots: field, lab, and online tutorial for professionals in Guam and the Northern Mariana Islands. **Co-PI, $66,013**
Peanut Foundation. 2020–2021. Characterization and diversity of peanut pathogens for varietal development in the USA. **Co-PI, $50,996**
National Peanut Board. 2019. Characterization and diversity of peanut pathogens for varietal development in Georgia. **Co-PI, $10,000**
USDA NIFA AFRI Research and Extension Experiences for Undergraduates (REEU). 2018–2021. Promoting diversity in agriscience through integrative undergraduate training and research experiences in crop genetics and genomics. **Co-PI, $278,912**
CDC Broad Agency Announcement. 2018–2019. Azole resistance in East Coast and West Coast agricultural settings. **Co-PI, $241,404**
CDC Broad Agency Announcement. 2017–2018. Azole resistance in agricultural settings. **Co-PI, $197,798**
University of Georgia President's Interdisciplinary Seed Grant. 2017-2018. Investigation of azole-resistant *Aspergillus fumigatus* from agricultural and clinical settings. **PI, $95,777**
USDA & Georgia Department of Agriculture Specialty Crop Block Program. 2017–2020. Reduced fungicide use through early detection of gummy stem blight. **Co-PI, $93,000**
University of Georgia Public Service and Outreach Fellowship. 2016. Integrating UGA Mycology and the State Botanical Garden of Georgia. **PI, $15,000**
Cotton Incorporated. 2016–2019. Genetic and pathogenic characterization of *Fusarium oxysporum* f. sp. *vasinfectum* isolates from the southeastern US. **PI, $155,481**
National Science Foundation. 2015–2018. Digitization TCN: Collaborative: The Microfungi Collections Consortium: a networked approach to digitizing small fungi with large impacts on the function and health of ecosystems. **Co-PI, $2,855,171**

Georgia Commodity Commission for Vegetables. 2015. Understanding the distribution and development of resistance to triazole fungicides in gummy stem blight fungi. **PI, $3,000**

Cotton Incorporated. 2014–2016. Host range, pathogenicity and genetic diversity of *Corynespora cassiicola*, cause of target spot of cotton. **PI, $113,901**

USDA Cooperative Agreement. 2013–2015. Whole genome sequencing of *Uromyces transversalis* for diagnostic marker development. **Co-PI, $62,000**

UGA CAES Seed Grant. 2014. Understanding the genetic basis of disease emergence in the USA and abroad of the tropical and subtropical pathogen, *Corynespora cassiicola.* **PI, $5,000**

UGA CAES Faculty Summer Research Support. 2014. Uncovering the underlying basis of extreme genetic diversity in *Exobasidium maculosum*, an emerging pathogen of blueberry in the southeastern USA. **PI, $5,000**

UGA CAES Faculty Summer Research Support. 2012–2013. Diversity of the gummy stem blight fungus, *Didymella bryoniae*, within and among watermelon fields in the Southeast. **PI, $10,000**

Georgia Commodity Commission for Blueberries. 2012. Exobasidium fruit and leaf spot development and diversity in Georgia and initial management strategies with fungicides. **PI, $9,000**

PROFESSIONAL AFFILIATIONS

American Phytopathological Society
Mycological Society of America
Genetics Society of America

SELECT SERVICE

Executive Vice President (EVP), Mycological Society of America, EVP provides leadership as a member of MSA Executive Council and runs the day-to-day activities of the society, 2018–2021

Executive Editor (4 Exec. Editors serve as Editors-in-Chief), *Mycologia*, 2023–Present

Senior Editor, *Phytopathology* Editorial Board, 2018–Present

Senior Editor, *PhytoFrontiers* Editorial Board, 2020–Present

Grant review and panels: BARD, The US-Israel Agricultural Research & Development Fund (2018, 2020, 2021, 2022), NSF-Division of Environmental Biology (2018, 2022), NSF-NIFA Plant-Biotic Interactions Panel (2022, 2023), US DOE Biopreparedness Research Virtual Environment (BRaVE) Panel (2023)

Faculty Coordinator, USDA Research and Extension Experiences for Undergraduates (REEU), Crop Genetics and Genomics summer research program, 10–15 undergraduate students per summer, 2018–Present

Chair, UGA Horticulture Department Program Review Committee, 2023–Present

University Review Committee (P&T at the university level), University of Georgia, 2022–Present

Graduate Studies Committee, Department of Plant Pathology, 2017–Present

Promotion & tenure external reviewer and letter writer, three assistant professors at three universities undergoing promotion to associate professor and tenure, 2018, 2019, 2021

Post Tenure Review Leader (2021) and Committee Member (2022, 2023), Department of Plant Pathology

Peer Review of Teaching, for faculty undergoing promotion, Department of Plant Pathology 2021–Present

Workshop Planning Committee, National Academies of Sciences Engineering and Medicine, The role of plant agricultural practices on development of antimicrobial resistant fungi affecting human health, Forum on Microbial Threats Workshop, January–June 2022

Chair, Undergraduate Curriculum Committee, College of Agricultural & Environmental Sciences, University of Georgia, 2019–2020

Undergraduate Curriculum Committee, College of Agricultural & Environmental Sciences, University of Georgia, 2015–2018
Undergraduate Affairs Committee, College of Agricultural & Environmental Sciences, University of Georgia, 2014–2017
Workshop Instructor, Training for Agricultural Professionals in Guam and the Northern Marianas Islands on identification of prevalent fungal leaf pathogens and their diseases, University of Guam, August 8–14, 2021
Diagnostician of mushrooms and other fungi for the State of Georgia, 2011–Present
Fellow, State Botanical Garden of Georgia, 2016–2017
President, Georgia Association of Plant Pathologists, 2016–2017
Local Organizer, 2017 Annual Meeting of the Mycological Society of America, 2013–2017

INVITED PRESENTATIONS ***indicates national or international audience**

Antifungal resistant *Aspergillus fumigatus*, a plant-associated human pathogen: environmental reservoirs of AR*Af* in the US. 2023. Biosecurity Research Institute, Kansas State University, March 9, 2023, Manhattan, KS
Field crop pathogen resistance and link to human health. 2022 Indiana Certified Crop Advisor Conference, December 13, 2022, Indianapolis, IN
Antifungal resistance in the plant-associated fungus *Aspergillus fumigatus* develops in agricultural environments. Department of Biology Seminar Series, Washington University, December 12, 2022, St. Louis, MO
Azole-resistant *Aspergillus fumigatus* in the environment: Identifying key reservoirs and hotspots of antifungal resistance. Department of Plant Pathology Seminar Series, Washington State University, December 5, 2022, virtual seminar
*****Genomic surveillance and epidemiology: The role of plant agricultural practices on development of antimicrobial resistant fungi affecting human health. Forum on Microbial Threats Workshop, National Academies of Sciences Engineering and Medicine, June 22, 2022, Washington, DC
*****The impact of food production on antifungal resistance in pathogens of plants and people. Symposium - Microbial diversity in food systems, from farm to fork. American Society for Microbiology (ASM) Microbe 2022 conference, June 11, 2022, Washington, DC
*****How can we minimize the risk of development of antifungal resistance in the environment? Symposium - One Health and mycology: what are the significant and potential interactions between agriculture and human health. European Congress for Clinical Microbiology and Infectious Diseases, April 23, 2022, Lisbon, Portugal
Environmentally acquired antifungal resistance in a plant-associated pathogen of humans. Department of Plant Pathology Seminar Series, University of Wisconsin, Madison, February 15, 2022, virtual seminar
Antifungal-resistant *Aspergillus fumigatus* in the environment. Department of Botany and Plant Pathology Seminar Series, Oregon State University, October 14, 2021, virtual seminar
Hotspots of antifungal-resistant Aspergillus fumigatus in the environment. Department of Horticulture Seminar Series, University of Georgia, October 27, 2021, Athens, GA
*****Is azole use in agriculture contributing to azole-resistant *Aspergillus fumigatus* in humans? Plenary Speaker: Plant Health 2021, Seismic shifts in disease risk. Annual Meeting of the American Phytopathological Society, August 2, 2021, virtual meeting
Azole-resistant *Aspergillus fumigatus* from agricultural settings. Antimicrobial Resistance Division Seminar Series. Centers for Disease Control and Prevention, November 1, 2019, Atlanta, GA
*Evolution of azole-resistant *Aspergillus fumigatus* in agricultural and clinical environments. Special Session: Impacts of agricultural fungicides on clinical anti-fungal resistance. Annual Meeting of the American Phytopathological Society, August 6, 2019, Cleveland, OH

Population biology of emerging fungal threats to plants and people. Department of Plant Pathology and Plant-Microbe Biology Seminar Series, Cornell University, March 7, 2019, Ithaca, NY

*When pathogen populations diverge: understanding species boundaries for improved management of fungicide resistance. Population Dynamics of Fungicide Resistance Special Session. International Congress of Plant Pathology, August 2, 2018, Boston, MA

*Comparative genomics of host-specialized populations of *Corynespora cassiicola* causing emerging target spot diseases. ICTF Symposium: Expanding the taxonomic context of genome sampled fungi. Eleventh International Mycological Congress, July 20, 2018, San Juan, PR

Population Biology of Plant-Pathogenic Fungi Causing Emerging Diseases in the Southeast. Mycotic Diseases Branch Seminar Series. Centers for Disease Control and Prevention, June 5, 2018, Atlanta, GA

*Understanding and managing emerging diseases in the southeastern U.S. using comparative genomics for marker development for fungal plant pathogens. Genomics-Based Approaches Facilitate Diagnostic and Population Genetic Marker Development for Plant Pathogens Special Session. Annual Meeting of the American Phytopathological Society, August 7, 2017, San Antonio, TX

*Population genomics of fungi causing emerging plant diseases. Population Genomics of Emerging Diseases Symposium, Annual Meeting of the Mycological Society of America, August 10, 2016, Berkeley, CA

Population structure and elevated genetic diversity in the emerging blueberry pathogen *Exobasidium maculosum*. Rosie Perez Memorial Seminar, Department of Plant Pathology, North Carolina State University, March 31, 2016, Raleigh, NC

*Phylogenetic and population genomic approaches for studying plant-parasite coevolution. Frontiers in Phylogenetics Symposium, National Museum of Natural History, Smithsonian Institution, September 15, 2015, Washington, DC

Gummy stem blight: how understanding pathogen population biology can improve disease management. Department of Entomology and Plant Pathology Seminar Series, Auburn University, March 2, 2015, Auburn, AL

*Population genetic and genomic approaches for understanding the emergence of fungal plant pathogens. Genome-Wide Association Studies in Fungi Symposium. Tenth International Mycological Congress 2014, August 5, 2014, Bangkok, Thailand

Diversity and speciation in fungal pathogens of cucurbits and blueberry. Department of Plant Pathology Seminar Series, University of Florida, April 1, 2014, Gainesville, FL

Drivers of diversity, population structure, and speciation in plant pathogenic fungi. College of Agricultural, Forest, and Environmental Sciences Seminar Series, Clemson University, December 2, 2013, Clemson, SC

*Evolutionary history and genetic diversity of *Didymella bryoniae*. Schroth Faces of the Future Symposium, Annual Meeting of the American Phytopathological Society, August 12, 2013, Austin, TX

Extreme genetic diversity in an emerging fungal pathogen of blueberry. The Plant Center Retreat, University of Georgia, October 26, 2012, Helen, GA

WEBINARS AND PODCASTS

Antifungal resistance: Understanding this global threat. Antimicrobial Resistance (AMR) Exchange Webinar Series. Centers for Disease Control and Prevention, June 7, 2022, 3000 participants for live event, https://www.youtube.com/watch?v=4hUp8q3nBsQ

Antimicrobial resistance from fungicide use can affect public health. Webinar for online video educational series for Certified Crop Advisors, Crop Protection Network, Oct. 24, 2022, https://www.youtube.com/watch?v=90QBUu4P718

Fungicide use in crops poses risk to certain human medications. Questions in Sustainability Podcast, Sept. 14, 2021, https://sustainableag1.podbean.com/e/fungicide-use-in-crops-poses-risk-to-certain-human-medications/

PUBLICATIONS (PEER-REVIEWED) ***indicates corresponding author**

1. M. Gonzalez, B. Abernathy, R. Kemerait, D. Bertioli, **M.T. Brewer***, S. Bertioli-Leal. 2024. Chromosome-scale genome sequence of *Nothopassalora personata* (syn. *Cercosporidium personatum*), a devastating fungal pathogen of peanut. PhytoFrontiers, accepted.
2. C. Wang, N. Miller, D. Vines, P. Severns, M. Momany, **M.T. Brewer**. 2024. Azole resistance mechanisms and population structure of the human pathogen *Aspergillus fumigatus* on retail plant products. Applied & Environmental Microbiology, accepted.
3. A.D. Newell, A.A. Sial, **M.T. Brewer***. 2023. Evidence for vector transmission of the blueberry pathogen *Exobasidium maculosum*, cause of Exobasidium leaf and fruit spot. PhytoFrontiers, 3: 347-354.
4. L. Gómez Londoño, **M.T. Brewer***. 2023. Detection of azole-resistant *Aspergillus fumigatus* in the environment from air, plant debris, compost, and soil. PLoS ONE 18: e0282499.
5. B.N. Celia-Sanchez, B. Mangum, **M.T. Brewer**, M. Momany. 2022. Analysis of Cyp51 protein sequences shows 4 major Cyp51 gene family groups across Fungi. G3: Genes|Genomes|Genetics 12: jkac249.
6. L.G. Sumabat Dacones, R.C. Kemerait, **M.T. Brewer***. 2022. Comparative genomics of host-specialized populations of *Corynespora cassiicola* causing target spot epidemics in the southeastern United States. Frontiers in Fungal Biology 3: 910232.
7. L. Pandey, C. Burks, L. Gómez Londoño, L. Newsom, J. Brock, R.C. Kemerait, **M.T. Brewer***. 2022. First report of Tar Spot on corn caused by *Phyllachora maydis* in Georgia, USA. Plant Disease 106: 2262.
8. S.E. Kang, L.G. Sumabat, T. Melie, B. Mangum, M. Momany, **M.T. Brewer***. 2022. Evidence for the agricultural origin of resistance to multiple antimicrobials in *Aspergillus fumigatus*, a fungal pathogen of humans. G3: Genes|Genomes|Genetics 12: jkab427
9. K. Wise, **M.T. Brewer**, C. Bradley, D. Mueller, A. Sisson…P. Vincelli. 2021. Fungicides are more than a plant disease management tool. Crop Protection Network 4009, doi.org/10.31274/cpn-20211011-000.
10. C. Burks, A. Darby, L. Gómez Londoño, M. Momany, **M.T. Brewer***. 2021. Azole-resistant *Aspergillus fumigatus* in the environment: Identifying key reservoirs and hotspots of antifungal resistance. PLoS Pathogens 17: e1009711.
11. C.M. Deom, **M.T. Brewer**, P. Severns. 2021. Positive selection and intrinsic disorder are associated with multifunctional C4(AC4) proteins and gemini virus diversification. Scientific Reports 11: 11150.
12. R. Stam, P. Gladieux, B.A. Vinatzer, E.M. Goss, N. Potnis, T. Candresse, **M.T. Brewer**. 2021. Population genomic- and phylogenomic-enabled advances to increase insight into pathogen biology and epidemiology. Phytopathology 111: 8-11.
13. **M.T. Brewer***, C.J. Cameron, C.T. Chan, B. Dutta, R.D. Gitaitis, L.J. Grauke, J.H. Brock, T.B. Brenneman. 2021. *Neofusicoccum caryigenum,* a new species causing leaf die-back disease of pecan (*Carya illinoinensis*). Mycologia 113: cover, 586-598.
14. C.F. Hong, **M.T. Brewer**, P.M. Brannen, H. Scherm. 2020. Temporal disease dynamics and relative importance of sexual and asexual reproduction of grape downy mildew (*Plasmopara viticola*) in an isolated vineyard in the North Georgia Mountains, USA. Plant Pathology 69: 1721-1730.
15. H.C. Halpern, P. Qi, R.C. Kemerait, **M.T. Brewer***. 2020. Genetic diversity and population structure of races of *Fusarium oxysporum* causing cotton wilt. G3: Genes|Genomes|Genetics 10: 3261-3269.

16. S. Campbell, H. Scherm, **M.T. Brewer**, P.M. Brannen. 2020. Fungicide sensitivity survey of *Plasmopara viticola* populations in Georgia vineyards. Plant Health Progress 21: 256-261.
17. R.P. Larkin, **M.T. Brewer**. 2020. Effects of crop rotation and biocontrol amendments on Rhizoctonia disease of potato and soil microbial communities. Agriculture 10: 128.
18. J.E. DeLong, J.E. Stewart, A. Valencia-Botin, K.F. Pedley, J.W. Buck, **M.T. Brewer*.** 2019. Invasions of Gladiolus rust in North America are caused by a widely-distributed clone of *Uromyces transversalis*. PeerJ 7: e7986.
19. J. Standish, T.B Brenneman, **M.T. Brewer**, K.L. Stevenson. 2019. Assessing fitness costs and phenotypic instability of fentin hydroxide and tebuconazole resistance in *Venturia effusa*. Plant Disease 103: 2271-2276.
20. C.F. Hong, **M.T. Brewer**, P.M. Brannen, H. Scherm, H. 2019. Prevalence, geographic distribution, and phylogenetic relationships among cryptic species of *Plasmopara viticola* in grape-producing regions of Georgia and Florida, U.S.A. Journal of Phytopathology 167: 422–429.
21. A. Petkar, K. Harris-Shultz, H. Wang, **M.T. Brewer**, L. Sumabat, P. Ji. 2019. Genetic and phenotypic diversity of *Fusarium oxysporum* f. sp. *niveum* populations from watermelon in the southeastern United States. PLoS ONE 14: e0219821.
22. F.B. Browne, P.M. Brannen, H. Scherm, **M.T. Brewer**, S. Wilde, E.A. Richardson. 2019. Orange cane blotch of commercial blackberry in the southeastern United States. Plant Health Progress 20: 67-69.
23. H. Li, T.A. Nuckols, D. Harris, K.L. Stevenson, **M.T. Brewer***. 2019. Differences in fungicide resistance profiles and multiple resistance to a quinone-outside inhibitor (QoI), two succinate dehydrogenase inhibitors (SDHI), and a demethylation inhibitor (DMI) for two *Stagonosporopsis* species causing gummy stem blight of cucurbits. Pest Management Science 75: 3903-3101.
24. M.B. da Silva, R.F. Davis, H. Doan, R.L. Nichols, R.C. Kemerait, H.C. Halpern, **M.T. Brewer**, G. Jagdale, P.W. Chee. 2019. Fusarium wilt of cotton may result from the interaction of *Fusarium oxysporum* f. sp. *vasinfectum* with *Belonolaimus longicaudus*. Journal of Nematology 51:1-10.
25. L.G. Sumabat, R.C. Kemerait, D.K. Kim, Y.R. Mehta, **M.T. Brewer***. 2018. Clonality and geographic structure of host-specialized populations of *Corynespora cassiicola* causing emerging target spot epidemics in the southeastern United States. PLoS ONE 13: e0205849.
26. L.G. Sumabat, R.C. Kemerait, **M.T. Brewer***. 2018. Phylogenetic diversity and host specialization of *Corynespora cassiicola* causing target spot, an emerging disease of cotton and other crops in the southeastern United States. Phytopathology 108: 892-901.
27. H. Halpern, A. Bell, T. Wagner, J. Liu, R.L. Nichols, J. Olvey, J.E. Woodward, S. Sanogo, T.A. Jones, C.T. Chan, **M.T. Brewer***. 2017. First report of Fusarium wilt of cotton caused by *Fusarium oxysporum* f. sp. *vasinfectum* race 4 in Texas, USA. Plant Disease 102: 446.
28. H. Li, T.M. Gotilla**, M.T. Brewer***. 2017. Organization and evolution of mating-type genes in three *Stagonosporopsis* species causing gummy stem blight of cucurbits and leaf spot and dry rot of papaya. Fungal Biology 121: 849-857.
29. H. Li, K.L. Stevenson, **M.T. Brewer***. 2016. Differences in sensitivity to a triazole fungicide among *Stagonosporopsis* species causing gummy stem blight of cucurbits. Plant Disease 100: 2106-2112.
30. H. Li, **M.T. Brewer***. 2016. Spatial genetic structure and population dynamics of gummy stem blight fungi in the southeastern U.S. Phytopathology 106: 900-908.
31. R.H. Garampalli, M.K. Gopalakrishna, H. Li, **M.T. Brewer***. 2016. Two *Stagonosporopsis* species identified as causal agents of gummy stem blight epidemics of gherkin cucumber (*Cucumis sativus*) in Karnataka, India. Eur J Plant Pathol 145: 507-512.
32. W.O. Cline, **M.T. Brewer**. 2016. Exobasidium leaf and fruit spot. Highbush Blueberry. Compendium of Blueberry, Cranberry, and Lingonberry Diseases and Pests. 2nd edition. Eds. J. Polashock et al., APS Press.

33. J.E. Stewart, K. Brooks, P.M. Brannen, W.O. Cline, **M.T. Brewer***. 2015. Elevated genetic diversity in the emerging blueberry pathogen *Exobasidium maculosum*. PLoS ONE 10: e0132545.
34. **M.T. Brewer***, M. Rath, H. Li. 2015. Genetic diversity and population structure of cucurbit gummy stem blight fungi based on microsatellite markers. Phytopathology 105: 815-824.
35. J.E. Stewart, A.N. Turner, **M.T. Brewer***. 2015. Evolutionary history and variation in host range in three *Stagonosporopsis* species pathogenic to cucurbits. Fungal Biology 119: 370-382.
36. C. Chen, C.H. Bock, P.M. Brannen, J.E. Adakaveg, M.W. Hotchkiss, **M.T. Brewer**, B.W. Wood. 2014. Genetic variability among populations of *Fusicladium* species from different host trees and geographic locations in the USA. Mycological Progress 13: 1179-1190.
37. **M.T. Brewer***, A.N. Turner, P.M. Brannen, W.O. Cline, E.A. Richardson. 2014. *Exobasidium maculosum*, a new species causing leaf and fruit spots on blueberry in the southeastern USA, and its relationship with other *Exobasidium* spp. parasitic to blueberry and cranberry. Mycologia 106: 415-423.
38. J. DeLong, **M.T. Brewer***. 2013. *Macrocybe titans*: largest species of mushroom in the Western Hemisphere found growing in Georgia. CAES Publications C1033.
39. B. Asalf, D.M. Gadoury, A.M. Tronsmo, R.C. Seem, L. Cadle-Davidson, **M.T. Brewer**, A. Stensvand. 2013. Temperature regulates the initiation of chasmothecia in powdery mildew of strawberry. Phytopathology 103: 717-724.
40. **M.T. Brewer**, O. Frenkel, M.G. Milgroom. 2012. Linkage disequilibrium and spatial aggregation of genotypes in sexually reproducing populations of *Erysiphe necator*. Phytopathology 102: 997-1005.
41. N. Zhang, **M.T. Brewer**, E. van der Knaap. 2012. Fine mapping of *fw3.2* controlling fruit weight in tomato. Theoretical and Applied Genetics, 125: 273-284.
42. O. Frenkel, I. Portillo, **M.T. Brewer**, J-P. Péros, L. Cadle-Davidson, M.G. Milgroom. 2012. Development of microsatellite markers from the transcriptome of *Erysiphe necator* for analyzing population structure in North America and Europe. Plant Pathology 61: 106-119.
43. **M.T. Brewer**, L. Cadle-Davidson, P. Cortesi, P. Spanu, and M.G. Milgroom. 2011. Identification of mating-type genes and development of PCR-based markers for mating type in powdery mildew fungi. Fungal Genetics and Biology 48: 704-713.
44. P.D. Spanu, J.C. Abbott, J. Amselem, T.A. Burgis, D.M. Soanes, K. Stüber, E.V.L. van Themaat, J.K.M. Brown, S.A. Butcher, S.J. Gurr, M.H. Lebrun, C.J. Ridout, P. Schulze-Lefert, N.J. Talbot, N. Ahmadinejad, C. Ametz, G.R. Barton, M. Benjdia, P. Bidzinski, L.V. Bindschedler, M. Both, **M.T. Brewer**, L. Cadle-Davidson, M.M. Cadle-Davidson, J. Collemare, R. Cramer, O. Frenkel, D. Godfrey, J. Harriman, C. Hoede, B.C. King, S. Klages, J. Kleemann, D. Knoll, P.S. Koti, J. Kreplak, F. López-Ruiz, X. Lu, T. Maekawa, S. Mahanil, C. Micali, M.G. Milgroom, G. Montana, S. Noir, R.J. O'Connell, S. Oberhaensli, F. Parlange, C. Pedersen, H. Quesneville, R. Reinhardt, M. Rott, S. Sacristán, S.M. Schmidt, M. Schön, P. Skamnioti, H. Sommer, A. Stephens, H. Takahara, H. Thordal-Christensen, M. Vigouroux, R. Weßling, T. Wicker, R. Panstruga. 2010. Genome expansion and gene loss in powdery mildew fungi reveal functional tradeoffs in extreme parasitism. Science 331: 1543-1546.
45. **M.T. Brewer** and M.G. Milgroom. 2010. Phylogeography and population structure of the grape powdery mildew fungus, *Erysiphe necator,* from diverse *Vitis* species. BMC Evolutionary Biology 10: 268.
46. O. Frenkel, **M.T. Brewer** and M.G. Milgroom. 2010. Variation in pathogenicity and aggressiveness of *Erysiphe necator* from different *Vitis* species and geographic origins in the eastern United States. Phytopathology 100: 1185-1193.
47. M.G. Milgroom, K. Sotirovski, M. Risteski, and **M.T. Brewer**. 2009. Heterokaryons and parasexual recombinants of *Cryphonectria parasitica* in two clonal populations in southeastern Europe. Fungal Genetics and Biology 46: 849-854.

48. M.J. Gonzalo, **M.T. Brewer**, C. Anderson, D. Sullivan, S. Gray, E. van der Knaap. 2009. Fruit shape analysis using morphometric and morphology attributes implemented in Tomato Analyzer Software Program. Journal of the American Society for Horticultural Science 134: 77-87.
49. M.G. Milgroom, K. Sotirovski, D. Spica, J.E. Davis, **M.T. Brewer**, M. Milev, and P. Cortesi. 2008. Clonal population structure of the chestnut blight fungus in expanding ranges in southeastern Europe and Turkey. Molecular Ecology 17: 4446-4458.
50. **M.T. Brewer**, J.B. Moyseenko, A.J. Monforte, and E. van der Knaap. 2007. Morphological variation in tomato: a comprehensive study of quantitative trait loci controlling fruit shape and development. Journal of Experimental Botany 58: 1339-1349.
51. **M.T. Brewer**, K. Fujimura, L. Lang, N. Dujmovic, S. Gray, and E. van der Knaap. 2006. Development of a controlled vocabulary and software application to analyze fruit shape variation in tomato and other plant species. Plant Physiology 141: 15-25, cover.
52. **M.T. Brewer** and R.P. Larkin. 2005. Efficacy of several potential biocontrol organisms against *Rhizoctonia solani* on potato. Crop Protection 24: 939-950.