

Plant Pathology Seminar Series

“Populations of *Fusarium oxysporum*”

By: Tom Gordon



Populations of *Fusarium oxysporum* found in native grassland soils persist when those soils are brought under cultivation. Most strains will colonize roots of crop plants without doing visible damage, but some will emerge as host-specific pathogens, most likely due to a chance encounter between a susceptible host and a potential pathogen. However, co-evolution with a wild relative of the affected crop plant is also possible, and this may explain the origin of a recently described pathogen affecting blackberry.

4:10 pm | September 14th, 2020 | Plant Pathology 515, Fall 2020

Zoom Link and ID: <https://wsu.zoom.us/j/91621814000?pwd=MDVOY1prSOQybDRaMXNvTVNxTS82UT09>

Meeting ID: 916 2181 4000

Passcode: 5353

Call in number: 1 253 215 8782



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Biographical Sketch

Thomas R. Gordon

Education

California State University, Northridge Biology B.S. 1974

California State University, Northridge Botany M.S. 1976

University of California, Davis Plant Pathology Ph.D. 1981

Current position

Distinguished Professor Emeritus of Plant Pathology, U.C. Davis

Previous appointments

Chair, Department of Plant Pathology, University of California, Davis, 2005-2013

Distinguished Professor of Plant Pathology, University of California, Davis, 2017-2019

Professor, Department of Plant Pathology, University of California, Davis, 1998-2016

Associate Professor, Department of Plant Pathology, University of California, Davis, 1996-1997

Associate Professor, Department of Plant Pathology, University of California, Berkeley, 1992-1995

Assistant Professor, Department of Plant Pathology, University of California, Berkeley, 1985-1991

Post-Doctoral Scholar, Department of Plant Pathology, University of California, Davis, 1982-1985

Research focus

The ecology and evolution of plant-associated fungi and management of plant diseases caused by fungal pathogens

Honors and Awards

Fellow of the American Phytopathological Society, 2014

UC Davis Award for Excellence in Honors Instruction, 2014

UC Davis Academic Senate Distinguished Teaching Award, 2013

Professional Service

2013 – 2019, Editorial Board, American Phytopathological Society – APS Press,

2006-2016, Editorial Board, Plant Pathology

2005- 2013, Editorial Board, Phytoparasitica

2002-2003 Senior Editor, Phytopathology

2001-2002 Associate editor, Phytopathology

Recent invited presentations

2018, Meeting of European Cooperation in Science and Technology, Lisbon, Portugal

2016, Keynote speaker, Annual Meeting of Spanish Society of Plant Pathology, Valladolid, Spain

2013, Symposium speaker, Annual meeting of American Phytopathological Society, Austin, TX

2012, Symposium speaker, Annual meeting of APS Pacific Division, Sacramento, CA

2011, North American Forest Insect Work Conference, Portland, OR

2010, European Food Safety Authority, Seville, Spain

Publications

Total since 2010: 62

Ten recent publications

Henry, P.M., Haugland, M., Lopez, L., Munji, M., Watson, D.C. Gordon, T.R. 2020. The potential for *Fusarium oxysporum* f. sp. *fragariae*, cause of Fusarium wilt of strawberry, to colonize organic matter in soil and persist through anaerobic soil disinfestation. Plant Pathology 69: 1218-1226.

Paugh, K.R., Gordon, T.R. 2020. The population of *Fusarium oxysporum* f. sp. *lactucae* in California and Arizona. Plant Disease 104:1811-1816.

Carter, J.W., Gordon, T.R. 2020. Infection of the native California grass, *Bromus carinatus*, by *Fusarium circinatum*, the cause of pitch canker in pines. Plant Disease 104:194-197.

Lloyd, M.G., McRoberts, N., Gordon, T.R. 2019. Cryptic infection and systemic colonization of leguminous crops by *Verticillium dahliae*, the cause of Verticillium Wilt. *Plant Disease* 103: 3166-3171.

Paugh, K.R., Gordon, T.R. 2019. Effect of planting date and inoculum density on severity of Fusarium Wilt of lettuce in California *Plant Disease* 103:1498-1506.

Gordon, T.R., Stueven, M., Pastrana, A.M., Henry, P.M., Dennehy, C.M., Kirkpatrick, S.C., Daugovish, O. 2019. The effect of pH on spore germination, growth, and infection of strawberry roots by *Fusarium oxysporum* f. sp. *fragariae*, cause of Fusarium wilt of strawberry. *Plant Disease* 103:697-704.

Paugh, K.R., Gordon, T.R. 2019. Effect of planting date and inoculum density on severity of Fusarium wilt of lettuce in California. *Plant Disease* 103:1498-1506.

Pastrana, A.M., Watson, D.C., Gordon, T.R. 2019. Transmission of *Fusarium oxysporum* f. sp. *fragariae* through stolons in strawberry plants. *Plant Disease* 103:1249-1251.

Reynolds, G.J., McRoberts, N., Kirkpatrick, S.C., Gordon, T.R. 2019. Environmentally induced changes in the distribution of disease susceptibility phenotypes in *Pinus radiata*. *Forest Pathology*. DOI: 10.1111/efp.12497.

Henry, P.M., Pastrana, A.M., Leveau, J.H.L., Gordon, T.R. 2019. Persistence of *Fusarium oxysporum* f. sp. *fragariae* in soil through asymptomatic colonization of rotation crops. *Phytopathology* 109:770-779.



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