

USDA Forest Service, Pacific Southwest Research Station

Sudden Oak Death/Phytophthora ramorum publications and presentations

2012 – 2013 Publications

Journal/Refereed Papers

Aguayo, J.; Adams, G. C.; Halkett, F.; Catal, M.; Husson, C.; Nagy, Z. Á.; Hansen, E.M.; Frey, P.; Marçais, B. 2013. Strong genetic differentiation between North American and European populations of *Phytophthora alni* subsp. *uniformis*. *Phytopathology*. 103:190-199.

Beh, M.M.; Metz, M.R.; Frangioso, K.M.; Rizzo, D.M. 2012. The key host for an invasive forest pathogen also facilitates the pathogen's survival of wildfire in California forests. *New Phytologist*. 196(4):1145-54. DOI: 10.1111/j.1469-8137.2012.04352.

Cobb, R.C.; Eviner, V.T.; and Rizzo, D.M. 2013. Mortality and Community Changes Drive Sudden Oak Death Impacts on Litterfall and Soil Nitrogen Cycling. *New Phytologist*. 200: 422–431. DOI: 10.1111/nph.12370.

Cobb, R.C.; Rizzo, D.M.; Hayden, K.J.; Garbelotto, M.; Filipe, J.A.N.; Gilligan, C.A.; Dillon, W.W.; Meentemeyer, R.K.; Valachovic, Y.S.; Goheen, E.; Swiecki, T.J.; Hansen, E.M.; and Frankel, S.J. 2013. Biodiversity conservation in the face of dramatic forest disease: an integrated conservation strategy for tanoak (*Notholithocarpus densiflorus*) threatened by sudden oak death. *Madroño* 60(2): 151-164.

Dillon, W.W.; Meentemeyer, R.K.; Vogler, J.B.; Cobb, R.C.; Metz, M.R. and Rizzo, D.M. 2013. Range-wide threats to a foundation tree species from disturbance interactions. *Madroño*. 60(2):139-150.

Dodd, R.S.; Mayer, W.; Nettel, A.; and Afzal-Rafii, Z. 2013. Clonal Growth and Fine-Scale Genetic Structure in Tanoak (*Notholithocarpus densiflorus*: Fagaceae). *Journal of Heredity*. 104(1):105–114.

Dodd, R.S.; Nettel, A.; Wright, J.W.; and Afzal-Rafii, Z. 2013. Genetic Structure of *Notholithocarpus densiflorus* (Fagaceae) from the Species to the Local Scale: A Review of Our Knowledge for Conservation and Replanting. *Madroño* 60(2):130-138.

Elliott, M. and Chastagner, G.A. 2013. Susceptibility of *Rhododendrons* to *Phytophthora ramorum*. *B&B*. 65(3): 14-17.

Frankel, S.J. 2013. Foreward. *Tanoak: History, Ecology and Values*. *Madroño* 60(2): 63.

Hansen, E.M.; Reeser, P.W.; Sutton, W. 2012. *Phytophthora Beyond Agriculture*. *Annual Review of Phytopathology*. DOI: 10.1146/annurev-phyto-081211-172946.

- Hansen, E.; Reeser, P.; Sutton, W.; Sims, L. 2012. Host and habitat index for Phytophthora species in Oregon. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3026.
- Hansen, E. M.; Reeser, P. W.; Sutton, W. 2012. *Phytophthora borealis* and *Phytophthora riparia*, new species in *Phytophthora* ITS Clade 6. *Mycologia*. 104(5):1133–1142. DOI: 10.3852/11-349.
- Hayden, K. J.; Garbelotto, M.; Dodd, R.; and Wright, S. J. W. 2013. Scaling up from greenhouse resistance to fitness in the field for a host of an emerging forest disease. *Evolutionary Applications*. 6(6):970–982. DOI: 10.1111/eva.12080.
- Huai, W.-x.; Tian, G.; Hansen, E. M.; Zhao, W.-x.; Goheen, E. M.; Grünwald, N. J.; Cheng, C. 2013. Identification of *Phytophthora* species baited and isolated from forest soil and streams in northwestern Yunnan province, China. *Forest Pathology*. 43: 87–103. DOI: 10.1111/efp.12015.
- Hummel, R.; Elliott, M.; Chastagner, G.; Riley, R.; Riley, K.; and DeBauw, A. 2013. Influence of nitrogen fertility on susceptibility of rhododendrons to *Phytophthora ramorum*. *HortScience*. 48(5):1–7. 2013.
- Jones, M.I.; Coleman, T.W.; Graves, A. D.; Flint, M.L.; Seybold, S.J. 2013. Sanitation Options for Managing Oak Wood Infested With the Invasive Goldspotted Oak Borer (Coleoptera: Buprestidae) in Southern California. *Economic Entomology*. 106(1):235-46.
- Liebholt, A.M.; McCullough, D.G.; Blackburn, L.M.; Frankel, S. J.; Von Holle, B.; Aukema, J.E. 2013. A highly aggregated geographical distribution of forest pest invasions in the USA. *Diversity and Distributions*. 19, 1208–1216. 9 p.
- Meentemeyer, R.K.; Haas, S.E.; Vaclavik, T. 2012. Landscape epidemiology of emerging infectious diseases in natural and human-altered ecosystems. *Annual Review of Phytopathology*. 50: 379-402.
- Mehl, H.; Mori, S.; Frankel, S.J.; Rizzo, D.M. 2013. Mortality and growth of dwarf mistletoe-infected red and white fir and the efficacy of thinning for reducing associated losses. *Forest Pathology*. 43: 193–203.
- Metz, M.R.; Frangioso, K.M.; Wickland, A.C.; Meentemeyer, R.K.; Rizzo, D.M. 2012. [An emergent disease causes directional changes in forest species composition in coastal California](#). *Ecosphere*. 3:art86. (October 11, 2012) DOI: 10.1890/ES12-00107.1.
- Nielsen, B. and Alexander, J. 2013. Foods from the Tanoak Forest Ecosystem. *Madroño*. 60 (2): 126-129. DOI: 10.3120/0024-9637-60.2.126
- Reeser, P.; Sutton, W.; and Hansen, E. 2013. *Phytophthora pluvialis*, a new species from mixed tanoak-Douglas-fir forests of western Oregon, U.S.A. *North American Fungi*. 8(7): 1-8. DOI: 10.2509/naf2013.008.007.

Riedel, M.; Werres, S.; Elliott, E.; McKeever, K.; Shamoun, S.F. 2012. Histopathological investigations of the infection process and propagule development of *Phytophthora ramorum* on rhododendron leaves. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3036

Stong, Rachel A.; Kolodny, Eli; Kelsey, Rick G.; González-Hernández, M. P. Vivanco, Jorge M.; Manter, Daniel K. 2013. Effect of Plant Sterols and Tannins on *Phytophthora ramorum* Growth and Sporulation, *Journal of Chemical Ecology* 39(6):733-43. DOI: 10.1007/s10886-013-0295-y.

Tooley, P. W.; Browning, M.; and Leighty, R. M. 2013. Inoculum Density Relationships for Infection of Some Eastern US Forest Species by *Phytophthora ramorum*. *Phytopathology*. 161(9): 595–603. DOI: 10.1111/jph.12107

Vercauteren, A.; Riedel, M.; Maes, M.; Werres, S.; and Heungens, K. 2012. Survival of *Phytophthora ramorum* in *Rhododendron* root balls and in rootless substrates. *Plant Pathology*. 62:166–176. DOI: 10.1111/j.1365-3059.2012.02627.x

Wright, J. W.; and Dodd, R.S. 2013. Could Tanoak Mortality Affect Insect Biodiversity? Evidence For Insect Pollination in Tanoaks. *Madroño*. 60(2):87-94.

Journal - Entire Issue

Parke, J. L. (ed.) 2013. [Forest Phytophthoras](#). 2(1). ISSN: 2164-7232

Frankel, S.J. (ed.) 2013. Tanoak: History, Ecology and Values. *Madroño*. 60 (2): 63 – 164. April.

Proceedings

Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. 2013. Proceedings of the Sudden Oak Death Fifth Science Symposium. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. 176 pages.

Sniezko, R. A.; Yanchuk, A.D.; Kliejunas, J.T.; Palmieri, K.M.; Alexander, J. M.; and Frankel, S. J., tech. coords. 2012. Proceedings of the fourth international workshop on the genetics of host-parasite interactions in forestry: Disease and insect resistance in forest trees. Gen. Tech. Rep. PSW-GTR-240. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. 372 p.

Misc. papers – peer reviewed

Dick, M. and Parke, J.L. 2012. *Phytophthora kernoviae*. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3051

Talgo, V. and Chastagner, G. 2012. *Phytophthora* on *Abies* spp. (true firs). JKI Data Sheets Plant Diseases and Diagnosis. ISSN 2191-1398, DOI: 10.5073/jkidsppd.2012.003

Flint; M. L.; Jones, M. I.; Coleman, T. W.; Seybold, S. J. 2013. [Goldspotted Oak Borer](#). Pest Note 74163. University of California, Agriculture and Natural Resources. Statewide Integrated Pest Management Program. January 2013. 7 pages.

Frankel, S.; Juzwik, J.; Koch, F. 2012. [Forest Tree Diseases and Climate Change](#). U.S. Department of Agriculture, Forest Service, Climate Change Resource Center.

Hansen, E.M., 2012. *Phytophthora alni*. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3031

Hansen, E.M. 2012. *Phytophthora pinifolia*. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3056

Oh, E. and Parke, J.L. 2012. *Phytophthora katsurae*. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3046

Robin, C.; Smith, I.; and Hansen, E.M. 2012. *Phytophthora cinnamomi*. *Forest Phytophthoras*. 2(1). DOI: 10.5399/osu/fp.2.1.3041

Misc. papers including proceedings papers

Alexander, J. 2012. The Status of Sudden Oak Death Control in California. *California Pest Control Advisor*. Volume 25: 41-43 (December 2012).

Alexander, J. 2013. [Sudden Oak Death](#). *Ecological Landscaping Association*, August 2013 newsletter. August 11, 2013.

Anonymous. 2012. Abstracts Book. 2012 California Forest Pest Council meeting. November 7-8, 2012. Sacramento, CA. 28 p.

Beh, M.M.; Metz, M.; Frangioso, K.; and Rizzo, D. 2013. Survival of *Phytophthora ramorum* Following Wildfires in the Sudden Oak Death-Impacted Forests of the Big Sur Region. In, Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. (tech. coords.) 2013. *Proceedings of the Sudden Oak Death Fifth Science Symposium*. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pages 62-64.

Chastagner, G.; Riley, K. and Elliott, M. 2013. Susceptibility of Larch, Hemlock, Sitka Spruce, and Douglas-fir to *Phytophthora ramorum*. In, Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. (tech. coords.) 2013. *Proceedings of the Sudden Oak Death Fifth Science Symposium*. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pages 77 -79.

Hansen, E.; Hulbert, J.; Peterson, E. Roads Are Not Significant Pathways for SOD Spread, in Oregon At Least. 2013. In, Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. (tech.

coords.) 2013. Proceedings of the Sudden Oak Death Fifth Science Symposium. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pages 84-85.

Frankel, S.; Rizzo, D.M; Mehl, H. 2012. Communicating Forest-Pest Trends. In, Zeglan, S. and Palacios, P. Proceedings of the 59th Annual Western International Forest Disease Work Conference. October 10-14, 2011, Leavenworth, WA. Pages 95-96.

Frankel, S; Shaw, D.; Shaw, C.G. 2012. Climate Change Committee Report. In, Zeglan, S. and Palacios, P. Proceedings of the 59th Annual Western International Forest Disease Work Conference. October 10-14, 2011, Leavenworth, WA. Page 176.

Kanaskie, A.; Hansen, E.; Goheen, E. M.; Osterbauer, N.; McWilliams, M.; Laine, J.; Thompson, M.; Savona, S.; Timeus, H.; Woosley, B.; Wiese, R.; Sutton, W.; Reeser, P.; Hulbert, J.; Shultz, R.; and Hilburn, D. 2013. Detection and Eradication of *Phytophthora ramorum* From Oregon Forests, 2001-2011. In, Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. (tech. coords.) 2013. Proceedings of the Sudden Oak Death Fifth Science Symposium. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pages 3- 13.

Palmieri, K. and Frankel, S.J. 2013. Sudden oak death and *Phytophthora ramorum*. 2011 - 2012 Summary Report. A compendium of 2012 monthly newsletters. Sacramento, CA: California Oak Mortality Task Force. 24 p.

Palmieri, K. and Frankel, S.J. 2013. Sudden Oak Death/*Phytophthora ramorum*: 2012 California Summary. In, Smith, T. and Palmieri, K. 2013. 2013 California Forest Pest Conditions Report. Sacramento, CA: California Forest Pest Council. Pages 29 - 33.

Valachovic, Y.; Cobb, R.; Rizzo, D.; Twieg, B.; Lee, C.; and Glebocki, R. Is Stump Sprout Treatment Necessary to Effectively Control *Phytophthora ramorum* in California's Wildlands? 2013. In, Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. (tech. coords.) 2013. Proceedings of the Sudden Oak Death Fifth Science Symposium. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pages 114-117.

Valachovic, Y.; Lee, C.; Twieg, B.; Rizzo, D.; Cobb, R.; and Glebocki, R. 2013. Suppression of *Phytophthora ramorum* Infestations Through Silvicultural Treatment in California's North Coast. In, Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M; and Alexander, J. M. (tech. coords.) 2013. Proceedings of the Sudden Oak Death Fifth Science Symposium. Gen. Tech. Rep. PSW-GTR-243. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pages 108-113.