

Daniel C. Thomas

thomasdc@whitman.edu

DEGREES AWARDED:

Bachelor of Science, 2003, Biology, William and Mary

PhD, Biology, 2017, University of Oregon

AREAS OF INTEREST:

Plant-Fungal Interactions

Plant and Microbial Ecology

PROFESSIONAL EXPERIENCE:

- Science advisor and researcher at Reserva Los Cedros, Ecuador July 2020 to present
- Adjunct professor, Department of Biology, Whitman College, January - May 2020
- Research scientist, Department of Biology, Whitman College, April 2018 - May 2020
- Graduate teaching fellow, Department of Biology, University of Oregon, Eugene, 2012-2017
- Biological Science technician (plants) and crew lead, for the USDA Forest Service, the US Geological Survey, Bureau of Land Management, and the US Park Service, at various duty stations throughout the American west. 2004-2012. Inquire for more details.

INSTRUCTIONAL EXPERIENCE:

- Biology 272 Mycology - foundations of mycology. Spring 2020. Whitman College.
- Numerous classes in ecology, botany, and mycology as a graduate teaching fellow at the University of Oregon. Inquire for details.

GRANTS / RESEARCH-FUNDING AWARDS

- National Geographic Exploration Grant (collaborator/co-author), \$27,000, 2018
- American Orchid Society Research Grant, \$10,000, 2018
- Backus Graduate Award, Mycological Society of America, \$2000, 2017
- Freeman Rowe Scholarship, Cascade Mycological Society, \$1000, 2017
- 2016 Graduate Award, Sonoma County Mycological Society, \$2000, 2016
- Forest Fungal Ecology Research Award, Mycological Society of America, \$1000, 2015
- Grant Recipient for Canopy Studies, IDEA WILD, \$800, 2014
- Scholarship, Oregon Mycological Society, \$1000, 2013
- Eastern Asia Pacific Summer Institute Fellowship, National Science Foundation \$5000, 2013
- William R. Sistrom Memorial Scholarship for Microbial Research, \$1200, University of Oregon, 2013
- Harvard Travellers Grant, Harvard Travellers Club, \$2000, 2011.

MANUSCRIPTS:

- Thomas, D., Vandegrift, A., Ludden, A., Carroll, G.C., Roy, B.A. (2016). Spatial ecology of the fungal genus *Xylaria* in a tropical cloud forest. *Biotropica*, 48.3, 381-393.
- Thomas, D., Vandegrift, R., Roy, B. A., Hsieh, H. M., & Ju, Y. M. (2019). Spatial patterns of fungal endophytes in a subtropical montane rainforest of northern Taiwan. *Fungal ecology*, 39, 316-327.
- Thomas, D., Vandegrift, R., and Roy, B.A. (2020). An agent-based model of the Foraging Ascomycete Hypothesis. *Fungal Ecology*, 47, 100963
- Roy, B.A., Zorrilla, M., Endara, L., Thomas, D.C., Vandegrift, R., Rubenstein, J.M., Policha, T., Rios-Touma, Blanca, B. and Read, M., (2018). *New Mining Concessions Could Severely Decrease Biodiversity and Ecosystem Services in Ecuador*. *Tropical Conservation Science*, 11.

MANUSCRIPTS SUBMITTED FOR PUBLICATION:

- Roy, B. A., Thomas, D., Peterson, I. A. B., and Soukup H. C. (2020). *Mycena citrinomarginata* is associated with roots of perennial grasses in Pacific Northwest Prairies. Submitted to *Mycologia*.
- Vandegrift, R., Thomas, D., Ju, Y., Soukup, H., Carroll G. C., Roy B. A. (2020). Spatial ecology of Xylariales in Taiwan: combining traditional collection and next-generation sequence-based microbial survey techniques. Submitted to *Mycologia*.
- Cooley, A., Zheng, C., Om, K., Kinser, T., Stanton, K., Thomas, D., Cheng, P., Eggert, A., Person, A., Hom, E., Yuan Y., Puzey, J. Myb5a/NEGAN activates petal anthocyanin pigmentation and shapes the MBW regulatory network in *Mimulus*. Submitted to *Genetics*.

MANUSCRIPT IN PREPARATION:

- Thomas, D., Vandegrift, R., Bailes, G., Roy B. A. (2017) Understanding and mitigating some limitations of Illumina © MiSeq for environmental sequencing of fungi. Pre-print, available at [biorxiv.org](https://doi.org/10.1101/184960), doi: <https://doi.org/10.1101/184960>
- Bailes, G., Dan Thomas Daniel, Bridgham, Scott D., and Roy, Bitty A. Drivers of grass fungal endophyte communities in prairies of the Pacific Northwest. (Manuscript in preparation). Preprint available at [biorxiv.org](https://doi.org/10.1101/2020.02.23.953489), doi: <https://doi.org/10.1101/2020.02.23.953489>

CURRENT PROJECTS:

Patterns in Plant Diversity in an Andean cloud forest matrix - evidence for alternate stable states? [Jupyter notebook available here](#).

OTHER SELECTED PRODUCTS:

- Thomas, D., Hundley, D., Cooley. (2019). A. makeFlowerPolygons: an image analysis pipeline for *Mimulus* petal spots. On Python Package Index at: <https://pypi.org/project/makeFlowerPolygons-dcthom/>, and at Github at: <https://github.com/danchurch/mimulusSpeckling>.

- Newman, D., Vandegrift, R., Batallas, R., Dentinger, B., Dueñas, N., Flores, J., Grant, J., Goyes, P., Jenkinson, T., Kaishian, P., Navas, D., Thomas, D., Roy, B. (2019). Richer Than Gold: The Fungal Biodiversity of a Threatened Andean Cloud Forest Reserve. Mycological Society of America Annual Meeting, Minneapolis, MN. (Poster).
- Vandegrift, A., Thomas, D., Ludden, A., Carroll, G.C., Roy, B.A. (2013). Dispersal and diversity of *Xylaria* endophytes in the cloud forest of Ecuador. Association of Tropical Biology and Conservation Meeting, San José, Costa Rica. (Poster.)