

Thomas R. Weicht



Graduate student quote: *Tom "is an international man of mystery known for inscrutable lectures on coenzymatic stoichiometry, fathomless quantities of taxonomic lore, a professed appreciation of parsimony and his deep love of soil."*

Appointments:

2004-present, **Research Technician Senior**, Department of Plant & Soil Science, Univ. of Vermont, Burlington, VT
2000-2001, **Research Technician**, Department of Environmental Science, University of Toledo, Toledo, OH
1996-2000, **Research Technician**, Department of Biology, University of Toledo, Toledo, OH

Education:

BS Plant Science, Highest Honors, University of California, Davis
MS Plant Pathology, University of California, Davis

Specialized Taxonomy Courses completed

Free-living nematodes, Wageningen Agricultural University, Netherlands, 1998
Bacterivorous nematodes, University of California-Riverside, 2001
Introductory Acarology, Ohio State University, 1997
Soil Oribatida, Ohio State University, 1999
Soil Mesostigmata, Prostigmata and Oribatida, Ohio State University, 2002

Scholarly and Professional Honors

Outstanding Plant Pathology Undergraduate, UC Davis, 1987
Peter Shields Undergraduate Scholarship, UC Davis, 1986.
Outstanding Crops and Soils Student, Sierra Community College, 1982

Publications

1. Andrews, T., Neher, D.A., **Weicht, T.R.**, and Barlow, J.W. 2019. [Mammary microbiome of lactating organic dairy cows varies by time, tissue site, and infection status.](#) ***PloS ONE*** 14(11): e0225001. DOI 10.1371/journal.pone.0225001
2. Neher, D.A., Cutler, A.J., **Weicht, T.R.**, Sharma, M., and Millner, P.D. 2019. [Composts of poultry litter or dairy manure differentially affect survival of enteric bacteria in fields with spinach.](#) ***Journal of Applied Microbiology*** 126:1910-1922. DOI 10.1111/jam.14268
3. Neher, D.A., **Weicht, T.R.** 2018. [A plate competition assay as a quick preliminary assessment of disease suppression.](#) ***Journal of Visualized Experiments*** e58767, <http://www.jove.com/video/58767>, DOI 10.3791/58767.

4. Neher, D. A., Fang, L., and **Weicht, T. R.** 2017. Ecoenzymes as indicators of compost to suppress *Rhizoctonia solani*. *Compost Science and Utilization* 25(4): 251-261. DOI 10.1080/1065657X.2017.1300548.
5. Neher, D.A., **Weicht, T.R.**, and Dunseith, P. 2015. Compost for management of weed seeds, pathogen, and early blight on brassicas in organic farmer fields. *Agroecology and Sustainable Food Systems* 39: 3-18.
6. Neher, D. A., and **Weicht, T. R.** 2013. Nematode genera in forest soil respond differentially to elevated CO₂. *Journal of Nematology* 45: 214-222.
7. Neher, D. A., **Weicht, T. R.**, Bates, S. T., Leff, J. W., and Fierer, N. 2013. Changes in bacterial and fungal communities across compost recipes, preparation methods, and composting times. *PLoS ONE* DOI 10.1371/journal.pone.0079512.
8. Neher, D.A., **Weicht, T.R.**, and Barbercheck, M.E. 2012. Linking invertebrate communities to decomposition rate and nitrogen availability in pine forest soils. *Applied Soil Ecology* 54:14-23.
9. Barbercheck, M.E., Neher, D.A., Anas, O., El-Allaf, S.M., and **Weicht, T.R.** 2009. Response of soil fauna to disturbance across three resource regions in North Carolina. *Environmental Monitoring and Assessment* 152: 283-298.
10. Neher, D.A., Lewins, S.A., **Weicht, T.R.**, and Darby, B.J. 2009. Microarthropod communities associated with biological soil crusts in the Colorado Plateau and Chihuahuan deserts. *Journal of Arid Environments* 73:672-677.
11. Veluci, R.M., Neher, D.A., and **Weicht, T.R.** 2006. Fixation and Leaching of Nitrogen by Biological Soil Crust Communities in Mesic Temperate Soils. *Microbial Ecology* 51: 189-196
12. Li, F., Neher, D.A., Darby, B.J., and **Weicht, T.R.** 2005. Observed differences in life history characteristics of nematodes *Aphelenchus* and *Acrobeloides* upon exposure to copper and benzo(a)pyrene. *Ecotoxicology* 14: 419-429.
13. **Weicht, T.R.**, and Moorhead, D.L. 2004. The impact of anhydrobiosis on the persistence of *Scottinema lindsayae* (Nematoda): a modeling analysis of population stability thresholds. *Polar Biology* 27: 507-512.
14. Neher, D.A., **Weicht, T.R.**, Moorhead, D.L., and Sinsabaugh, R.L. 2004. Elevated CO₂ alters functional attributes of nematode communities in forest soils. *Functional Ecology* 18:584-591.
15. Neher, D.A., Walters, T., Will-Wolf, S., Toppin, J., Traub, J., **Weicht, T.R.**, Veluci, R.M., Tramer, E., Saiya-Cork, K., and Johansen, J.R. 2003. Biological soil crust and vascular plant communities in a sand savanna of northwestern Ohio. *Journal of the Torrey Botanical Society* 130:244-252.
16. Görres, J. H., Savin, M. Neher, D. A., **Weicht, T. R.**, and Amador, J.A. 1999. Grazing in a porous environment 1. Interaction between grazing and soil structure on nutrient mineralization. *Plant and Soil* 212:75-83.
17. Neher, D. A., **Weicht, T. R.**, Savin, M., Görres, J. H. and Amador, J. A. 1999. Grazing in a porous environment 2. Nematode community structure. *Plant and Soil* 212:85-99. Erratum: replace Table 2 with this version.
18. **Weicht, T.R.**, and MacDonald, J.D. 1992. Effect of Phytophthora root-rot on Na⁺-uptake and accumulation by safflower. *Phytopathology* 82:520-526.
19. Van Bruggen, A.H.C., Neher, D.A., and **Weicht, T.R.** 1991. Teaching computer-based diagnosis of plant-diseases. *Plant Disease* 75: 320-322.

Presentations at Scientific Meetings

Weicht, T.R., LeBlanc, N., and Neher, D.A. 2010. Investigating foraging strategies in bacterivorous nematodes. Invited symposium presentation, *Organization of Nematologists of Tropical America*, Quito, Ecuador.

Weicht, T.R., Gorres, J., Moorhead, D.L., and Neher, D.A. 2009. Bacterivorous nematode population dynamics in a pore network matrix model. Oral presentation, *Society of Nematologists and Soil Ecology Society*, Burlington, Vermont.

Weicht, T.R., Görres, J.H., and Neher, D. 2008. Linking soil structure and soil habitat at scales appropriate to

microinvertebrates and ecological function. Poster presentation, *Soil Science Society of America*.

Lewins, S.A., **Weicht, T.R.**, and Neher, D.A., 2008. The microarthropod community associated with desert biological crusts of the Colorado Plateau, Poster presentation, *Eastern Branch, Entomological Society of America*, Syracuse, New York.

Barbercheck, M.E., Neher, D.A., Anas, O., El-Allaf, S.M., and **Weicht, T.R.** 2007. Response of soil fauna to disturbance across three resource regions in North Carolina, Poster presentation, *Soil Ecology Society*, Moab, Utah.

Weicht, T.R., Moorhead, D.L., Görres, J.H., and Neher, D.A. A grid based autonomous agent model of hierarchical soil structure and bacterivorous nematodes, Poster presentation, Soil Science Society of America, Indianapolis, Indiana, 2006.

Weicht, T.R., Moorhead, D.L. and Brown, I. Temperature-sensitivity of *Panagrolaimus davidi*: A model of population dynamics for a bacterivorous Antarctic nematode. Oral presentation, Ecological Society of America, Portland, Oregon, 2004.

Weicht, T.R. and Moorhead, D.L. Impacts of temperature and moisture regimes on *Scottinema lindsayae* population dynamics, an Antarctic soil nematode. Oral presentation, Ecological Society of America, Savannah, Georgia, 2003.

Moorhead, D.L., Neher, D.A., Sinsabaugh, R.L., and **Weicht, T.R.** Soil nematode communities show little response to elevated CO₂. Poster presentation, FACE investigator's meeting, Chicago, Illinois, 2001.

Neher, D.A., and **Weicht, T.R.** Effect of elevated CO₂ on soil nematode communities, Poster presentation at the Soil Ecology Society, Callaway Gardens, Georgia, 2001.

Neher, D.A. and **Weicht, T.R.** Comparison of nematode communities in soils exposed to ambient or elevated CO₂ concentrations. Poster presentation at the Ecological Society of America, Snowbird, Utah, 2000.

Neher, D.A., and **Weicht, T.R.** 1999. Comparison of nematode communities in soils of FACE sites at Duke Forest and Oak Ridge National Laboratory locations. Poster at the New Phytologist Symposium and GCTE Focus 1 Workshop, Townsend, Tennessee, 1999.

Neher, D.A., **Weicht, T.R.**, Savin, M., Görres, J. and Amador, J.A. 1999. Effect of matric potential on nematode community composition. Oral presentation at the Society of Nematologists, Monterey, California, 1999.

Neher, D.A., **Weicht, T.R.**, and Görres, J. 1998. Effect of matric potential on nematode community structure and grazing associations. Invited oral contribution. 24th International Nematology Conference, Dundee, Scotland, United Kingdom, 1998.

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