

Curriculum Vitae

M-Emad Tahtamouni, PhD

Assistant Professor of Environmental Microbiology

Academic Address

Department of Life Sciences
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Education:

1. PhD. (*Environmental Microbiology*). Plant and Environmental Sciences Department, New Mexico State University, USA. July 2014.

Dissertation Title: Functional and Genetic Diversities of Soil and Plant Associated Microbial Communities across Variable Spatial Scales in Semiarid Ecological Regions

2. M.Sc. (*Plant/Microbial Interaction*). Jordan University of Science and Technology (JUST), Jordan. June 2005.

Thesis Title: Biological control of white cottony stem rot (*Sclerotinia sclerotiorum* (Lib.) De Bary) by chitinolytic actinomycetes under laboratory and greenhouse conditions in Jordan

3. B.Sc. (*Plant Sciences*). Jordan University of Science and Technology (JUST), Jordan. June 2001.

Publications:

- **Tahtamouni M.**, McCollough C., Buck G. 2021. Teaching microbiology via distance education. Academic Exchange Quarterly Fall 2021 ISSN 1096-1453 Volume 25, Issue 3
- **Mohammad E Tahtamouni**, Sa'eb Khresat, Mary Lucero, Jesus Sigala, Adrian Unc. 2016. Diversity of endophytes across the soil-plant continuum for *Atriplex* spp. in arid environments. *Journal of Arid Land*, 8(2): 241–253. doi: 10.1007/s40333-015-0061-9.
- **Tahtamouni, M.**, Hameed, K. M and Saadoun, I. 2009. Biological control of white cottony stem rot (*Sclerotinia sclerotiorum* (Lib.) De Bary) by chitinolytic actinomycetes under laboratory and greenhouse conditions in Jordan. *Jordan Journal of Agricultural Sciences*, 5 (No.3): 306-313.
- **Tahtamouni, M. E. W.**, Hameed, K. M. and Saadoun, I. M. 2006. Biological control of *Sclerotinia sclerotiorum* using indigenous chitinolytic actinomycetes in Jordan. (*Plant Pathol. J.* 22: 107-114).

- **Tahtamouni, M.**, Unc, A., Lucero, M., Sigala, J and Khresat, S. Soil community catabolic profiles for a semiarid reclaimed surface coalmine, **Submitted** to the International Journal of Mining, Reclamation and Environment
- **Tahtamouni, M.**, Unc, A., Lucero, M., Sigala, J and Khresat, S. Evaluation of arid land soil microbial functional and genetic diversities: role of grazing status induced variability and similarities across sampled matrices In Progress.
- **Tahtamouni, M.** and M., Sigala. Integration of a spring-planted mustard cover crop and mustard seed meal for control of Verticillium wilt in Chile pepper. In Progress.

Conferences/Published abstracts:

- 1- Sanogo, S, Lujan, P., Rudolph, R., Uchanski, M., Walker, S., and **Tahtamouni, E.** 2015. Integration of spring-planted mustard cover crop and mustard seed meal for control of Verticillium wilt in chile pepper. (Annual Meeting of the American Phytopathological Society, Pasadena, CA, August 1-5, 2015).
- 2- Adrian Unc, Mary Lucero, Conrad Nelson, **Mohammad E.W. Tahtamouni**, Curtis Monger, Stephen Thomas, Hildy Reiser, Pete Biggam. Do extreme environments harbour extreme microbiota? The case of oligotrophic xeric gypsum dunes. First Global Soil Biodiversity Conference. Dijon, France, December 2-5, 2014.
- 3- **Tahtamouni, M**, Unc, A, Lucero, M, Khresat, S. 2011. Discriminatory power of MicroResp™ analyses across variable spatial scales in semiarid ecological zones. Enzymes in the Environment: Activity, Ecology & Applications. July 17-2, Bad Nauheim, Germany
- 4- Schwab Uchanski, LK, **Tahtamouni, EW**, Lucero, M., Nalim, FA, Unc, A. 2011. Long term stability of microbial diversity and activity potential in severely disturbed arid lands, 4th Congress of European Microbiologists, June 26-30, Geneva, Switzerland
- 5- Unc A, Schwab, LK, Lucero M, Nalim FA, **Tahtamouni EW**. 2011. Community level microbial diversity, nitrogen cycling potential and physiological profiles in arid lands affected by natural gas extraction activities. Ecology of Soil Microorganisms. Microbes as Important Drivers of Soil Processes April 27-May 01, Prague, Czech Republic
- 6- **Tahtamouni, EM**, Unc, A. Arid soils microbial enzymatic activity profile as affected by geographical location and soil degradation status. 13th International Society for Microbial Ecology meeting (Biodiversity and Community Analysis section), Aug. 22-27, 2010. Seattle WA
- 7- Schwab, LK, **Tahtamouni, EM**, Lucero, M, Unc, A. 2010. Microbial Enzymatic Activity in Degraded Arid Soils: Implications for Plant Community Restoration, Wildland Shrub and Arid Land Restoration, May 15-16, Logan UT
- 8- Unc, A, **Tahtamouni, MEW**, Lucero, M, Khresat, S. 2012. Biogeographical evaluation of arid zone soils' microbial functional and genetic diversities; role of climate, vascular plant species, and disturbance induced variability. Eurosoil2012, July 3-8, Bari, Italy.

- 9- Unc, A, Sedillo, R, Lucero, ML, Lavine, B, Schwab-Uchanski, LK, **Tahtamouni, MEW**, Klass, J, Monger, C, Thomas, S, Bernard, E, Ruiz-Font, A, Sun, S, Chen, J, Beacham, J. 2012. Exploring crossscale interactions within and beyond microbiomes to advance understanding of plant adaptation. 17th Wildland Shrub Symposium, Humans in Changing Landscapes, May 22-24, 2012, Las Cruces, NM.
- 10- Unc, A, Lucero, M, **Tahtamouni, MEW**, Schwab Uchanski, LK. 2012. Microorganisms along the soil-plant continuum; opportunities and challenges. 17th Wildland Shrub Symposium, Humans in Changing Landscapes, May 22-24, 2012, Las Cruces, NM (Keynote Speaker).
- 11- The twentieth-fourth annual New Mexico Higher Education Assessment and Retention (NMHEAR) Conference 2018. February 22 and 23. Albuquerque, New Mexico

Workshops:

- 2nd Annual Argonne Soils Workshop. Chicago, IL October 2010.
- Strategies for Identifying and Understanding Plant-Microbe Interactions that Influence Adaptation to Change. 16 February 2011. Las Cruces, NM.
- Core Biology Assessment Workshop, EPCC. El Paso, Texas March 2018
- The twentieth-fourth annual New Mexico Higher Education Assessment and Retention (NMHEAR). February 22 and 23 2018. Albuquerque, New Mexico State

Teaching experience:

2019 -Current: Assistant Professor of Biology at Texas A&M University–Corpus Christi

- General Biology for Science Major I (Biology 1406)
- General Biology for Non Science Major (Biology 1308)
- General Microbiology (Biology 2421)

2018 – 2019: Assistant Professor of Biology at Northeast Texas College

- General Biology for Science Major I (Biology 1406)
- General Biology for Non Science Major I (Biology 1308)
- General Biology Lab I (Biology 1108)
- General Biology for Non Science Major II (Biology 1309)
- General Biology for Non Science Major Lab II (Biology 1109)
- **Online** General Microbiology Class/ Laboratory (Biol 2420)
- **Online** General Biology for Non Science Major I (Biology 1308 088)
- **Online** General Biology for Non Science Major Lab I (Biology 1108 088)
- **Online** General Biology for Non Science Major II (Biology 1309 088)
- **Online** General Biology for Non Science Major Lab II (Biology 1109 088)

2018 – 2019: Part time biology instructor at Kilgore College – Longview Texas

- General Biology for Non Science Major 1 (Biology 1408)

2017-2018 – Part time biology instructor at El Paso Collage / Texas

- General Biology Class (Biol 1306)
- General Biology Laboratory (Biol 1106)
- Human Biology Class (Biol 1309)

2015 - 2018 - Part time biology instructor at DACC-New Mexico State University

- General Microbiology class (Biol 221)
- General Microbiology Laboratory (Biol 221)
- General Biology Class (Biol 101)
- General Biology Laboratory (Biol 101)
- Cell Biology Laboratory (Biol 211)
- Conceptual Chemistry Class and Laboratory (Chem 110)
- Soil Science Introductory (Soil 252)

2007-2013 Teaching Assistant-New Mexico State University

- Environmental Science Laboratory (E110)
- General Microbiology Laboratory (Biol 311)
- Cell Biology laboratory (Biol 211)

2002-2005 Teaching assistant Jordan University of Science and Technology

- Plant Physiology Laboratory

Research/Work experience

- 1- Research assistant (Post doctorate) at Dr. Pietrasiak's Lab. Soil Microbiology (Department of Plant and Environmental Sciences, NMSU) July 2016 – Present, NMSU
- 2- Research assistant (Post doctorate) at Dr. Sanogo's Lab. Plant Microbial Interaction (Department of Plant Pathology, NMSU) Feb 2014 – May 2016, NMSU
 - Researched control methods for soil borne pathogens to mitigate disease in plants by biological control
 - Carried out all lab work and compiled results and communicated findings
 - Preparing research in a written format for journal submission
- 3- Research assistant at Dr. Unc's Lab. Soil microbial Ecology (Department of Plant and Environmental Sciences, NMSU 2010-2014).
 - Researched the microbial diversity of endophytes by general and molecular biology approaches
 - Collaborated with Arid Land Consortium international colleagues in Jordan
 - Carried out all sampling, planning, field work, and lab work
 - Supervised undergraduate student and directed their work and reported their progress to our supervisor
 - Performed all Micro-Resp soil physiological profiles and taught all following graduate students to understand and carry out method
- 4- Clerical Aide (Biology advising center, NMSU) (Summer 2008)
 - Advised undergraduate students with introductory and upper level biology courses
 - Prepared lab materials for students
 - Responsible for communicating student's progress to course professor
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- 5- Agricultural Field Assistant (Onion breeding Program, NMSU) (Summer 2008)
 - Helped carry out field work on several large projects with onion breeding
 - Carried out daily categorization of plant characteristics for a number of onion plots and collected data with the Project Investigator
 - Responsible for teaching new employees in their duties and overseeing their work

Volunteer Experience

-Guest Lecturer for Soil 252, Undergraduate Soil Science Intro Class, Fall 2014, Department of Plant and Environmental Sciences, NMSU.

Awards

1. **Graduate Assistantship Award.** NMSU, Department of Plant and Environmental Sciences, 2013.
2. **Outstanding Graduate Assistantship Award.** NMSU, Department of Plant and Environmental Sciences, 2011.
3. 2nd Annual Argonne Soils Workshop, **Travel Award**, 2010
4. **Graduate Assistant Tuition Fellowship Award.** NMSU, Department of Plant and Environmental Sciences, 2010.
5. **Preparing Future Faculty Teaching Internship Award.** NMSU, Biology Department, 2007.

Services

-Advising Learning Community students - Texas a & m University-corpus Christi

-A Member in the Hiring search Committee - Texas a & m University-corpus Christi

-Library liaison for the department of Life sciences - Texas a & m University-corpus Christi

-Representing the LSC in the Island Day (*Feb 2022*) Texas a & m University-corpus Christi

Associations:

-International Society for Microbial Ecology (ISME)

-Agricultural Engineers Association, Jordan.