J. Adam Langley
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Degrees

2005	Ph.D. in Biology, Northern Arizona University
2000	M.S. in Biology, Northern Arizona University
1998	B.S. in Microbiology, minor in Genetics, North Carolina State University

Professional Experience

2005- present	Postdoctoral fellow, Smithsonian Environmental Research Center
2001- 2005	Research Assistant, Ecology, Northern Arizona University
2000-2001	Mass Spectrometrist, Colorado Plateau Stable Isotope Laboratory
1998-2000	Teaching Assistant, Microbiology, Northern Arizona University
1996	Undergraduate Research Fellow, Microbial Ecology, Jornada LTER, New Mexico State University

Publications

Chapman SK, Langley JA, Koch GW, Hart SC. 2006. Plants actively control nitrogen cycling: uncorking the microbial bottleneck. ***New Phytologist*** 169: 27-34.

Langley JA, Johnson NC, Koch GW, 2005. Mycorrhizal status influences the rate but not the temperature sensitivity of soil respiration. ***Plant and Soil*** 277: 335-344.

Classen AT, Langley JA, 2005. Data-model integration is not magic: modeling ecosystem responses to global change. ***New Phytologist*** 166: 367-379.

Langley JA, Hungate BA, 2003. Mycorrhizal controls on belowground litter quality. ***Ecology*** 84: 2302-2312.

Langley JA, Drake BG, Dijkstra P, Hungate BA, 2003. Ectomycorrhizal colonization, biomass and production in a regenerating scrub oak forest in response to elevated CO_2. ***Ecosystems*** 5: 424-430.

Langley JA, Drake BG, Hungate BA, 2002. Extensive belowground carbon storage supports roots and mycorrhizae in regenerating Florida scrub oak. ***Oecologia*** 131: 542-548.

Hungate BA, Langley JA, Box S, Dijkstra P, Johnson DW, Hinkle CR, Drake BG. In press. Soil microbial carbon and nitrogen in a Florida scrub-oak ecosystem: responses to elevated atmospheric CO_2. ***Global Change Biology***.

In Submission or Preparation

Langley JA, Gehring CA, Hungate BA. *In submission*. Ectomycorrhizal colonization begets hyper-recalcitrant root litter.

Langley JA, Cavagnaro T, Koch GW, Jackson L. *In preparation*. Heterotrophic respiration in soils with mycorrhizal-defective tomato.

Langley JA, Johnson NC, Koch GW, Hungate BA. *In preparation*. Mycorrhizal colonization suppresses SOM decomposition.

Recent Presentations

- Langley JA, Koch GW, Johnson NC, Hungate BA. Arbuscular mycorrhizal status influences rate and source partitioning of belowground respiration in sunflower microcosms. *International Conference on Mycorrhiza 2003, Montreal, Canada*.
- Langley JA, Koch GW, Johnson NC, Hungate BA. Mycorrhizal influences on soil carbon processing: the fate of root and hyphal inputs. *Ecological Society of America Annual Meeting 2002, Tucson, Arizona.*
- Langley JA, Drake BG, Dijkstra P, Hungate BA, Ectomycorrhizal colonization, biomass and production in a regenerating scrub oak forest in response to elevated CO_2. *International Conference on Mycorrhizal 2001, Adelaide, Australia.*

Invited speaker

- ESA organized session: Oaks and mycorrhizae: partners in diversity, Portland, OR, August, 2004
- Common Mycorrhizal Networks project meeting, Ashland, OR, May, 2004

Grants and Awards

- Student Travel Award, Terrestrial Ecosystem Responses to Atmospheric and Climatic Change (TERACC) Meeting, Ft. Myers, FL (2005)
- Outstanding Student Publication, Northern Arizona University (2002)
- Mycorrhizal influence on soil carbon processing. Mellon Foundation (2000)