

Select scientific publications and theses:

- Sulzman, E.W., J.B. Brant, R.D. Bowden, and K. Lajtha. 2005. Contribution of aboveground litter, belowground litter, and rhizosphere respiration to total soil CO₂ efflux in an old growth coniferous forest. *Biogeochemistry*, in press.
- Lajtha, K., S. Crow, Y. Yano, S.S. Kaushal, E.W. Sulzman, P. Sollins, and J.D.H. Spears. 2005. Detrital controls on soil solution N and dissolved organic matter in soils: a field experiment. *Biogeochemistry*, in press.
- Yano, Y., K. Lajtha, P. Sollins, and B.A. Caldwell. 2005. Chemistry and Dynamics of Dissolved Organic Matter in a Temperate Coniferous Forest on Andic Soils: Effects of Litter Quality. *Ecosystems*, in press.
- Yano, Y., K. Lajtha, P. Sollins, and B.A. Caldwell. 2004. Chemical and Seasonal Controls on the Dynamics of Dissolved Organic Matter in a Coniferous Old-Growth Stand in the Pacific Northwest, USA. *Biogeochemistry* 71:197-223.
- Yano, Y., J. Spears, K. Lajtha. Soil solution chemistry in an old-growth coniferous forest: a comparison of two lysimeter designs. In prep for *Communications in Soil Science and Plant analysis*.
- Spears, J.D.H. and K. Lajtha. 2004. The imprint of coarse woody debris on soil chemistry in the western Oregon Cascades, *Biogeochemistry* 71:163-175.
- Johnston, C.A., P. Groffman, D.D. Breshears, Z.G. Cardon, W. Currie, W. Emanuel, J. Gaudinski, R.B. Jackson, K. Lajtha, K. Nadelhoffer, D. Nelson Jr., W. Mac Post, G. Retallack, R. Stallard, L. Wielopolski. 2004. The frontier below: Carbon cycling in soil. *Frontiers in Ecology and the Environment* 2: 522-528.
- Nadelhoffer, K. J., R.D. Boone, R. D. Bowden, J. D. Canary, J. Kaye, P. Micks, A. Ricca, J. A. Aitkenhead, K. Lajtha, and W.H. McDowell. 2004. The DIRT experiment: litter and root influences on forest soil organic matter stocks and function. Chapter 15 *in*: D. Foster and J. Aber (eds.), *Forests in Time: The Environmental Consequences of 1000 Years of Change in New England*. Yale University Press, pp. 300-315.
- Nadelhoffer, K., R. Bowden, R. Boone, and K. Lajtha. 2000. Controls on forest soil organic matter development and dynamics: chronic litter manipulation as a potential international LTER activity. Pp. 3-9 *in*: Lajtha, K. and K. Vanderbilt, eds. *Cooperation in Long Term Ecological Research in Central and Eastern Europe: Proceedings of the ILTER Regional Workshop, 22-25 June, 1999, Budapest, Hungary*. Oregon State University, Corvallis, OR.
- Holub, S.M. and K. Lajtha. 2003. Mass loss and nitrogen dynamics during the decomposition of a ¹⁵N-labeled N₂-fixing epiphytic lichen, *Lobaria oregana*. *Canadian Journal of Botany* 81:698-705.
- Holub, S.M. and K. Lajtha. 2004. The fate and retention of organic and inorganic ¹⁵N-nitrogen in an old-growth forest soil in Western Oregon. *Ecosystems* 7:368-380.
- Spears, J.D.H., S.M. Holub, M.E. Harmon, and K. Lajtha. 2003. The influence of decomposing logs on soil biology and nutrient cycling in an old-growth mixed coniferous forest in Oregon, USA. *Canadian Journal of Forest Research* 33: 2193-2201.
- Holub, S.M., J.D.H. Spears, K. Lajtha. 2001. A reanalysis of nutrient dynamics in coniferous coarse woody debris. *Canadian Journal of Forest Research* 31: 1894-1902.

Spears, J.D.H., K. Lajtha, B. A. Caldwell, S. B. Pennington, and K. Vanderbilt. 2001. Species effects of Ceanothus velutinus versus Pseudotsuga menziesii, Douglas-fir, on soil phosphorus and nitrogen properties in the Oregon Cascades. *Forest Ecology and Management* 149:205-216.

Theses using the H.J.A. DIRT plots:

Susan Crow, Ph.D. Botany, expected 2006.

Justin Brant Ph.D. Crop and Soil Science 2005. "Litter Controls of Microbial Community Composition and Function in Forest Soils."

Sarah Beldin, M.S. Env. Soil. Sci. 2005. "Cation Exchange Capacity of Density Fractions from Paired Conifer/Grassland Soils."

Heith Keirstead, M.S. Crop and Soil Science. 2004. "Quantifying C and N contents and isotope signatures of SOM pools in the H.J. Andrews DIRT plots."

John J Dixon, M.S. Env. Soil. Sci. 2004. "Applying GIS to soil-geomorphic landscape mapping in the Lookout Creek valley, western Cascades, Oregon."

Julie Spears, Ph.D. Botany 2002. "The imprint of coarse woody debris on soil chemical and biological properties in the Western Oregon Cascades"

Scott Holub, Ph.D. Botany 2002. "The fate of organic and inorganic nitrogen inputs in an old-growth forest of the Central Oregon Cascade Range"

Yuriko Yano, Ph.D. Forest Sciences 2002. "Characteristics of Dissolved Organic Matter (DOM) and Its Stabilization in a Forest Soil"