



Soil Flux Pro

Publications List

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Alice, C. E., S. Clément, B. Benoit, V. den Berge Joke, B. Daniel, B. Laëtitia, S. J. Larned, A. Nicola, P. Josep and J. I. August "Automatic high-frequency measurements of full soil greenhouse gas fluxes in a tropical forest."

Barba, J., R. Poyatos and R. Vargas (2019). "Automated measurements of greenhouse gases fluxes from tree stems and soils: magnitudes, patterns and drivers." *Scientific reports* 9(1): 1-13.

Boyd, A. (2020). "Reducing Topramezone Injury to Bermudagrass Utilizing Micronutrients."

Bréchet, L. M., W. Daniel, C. Stahl, B. Burban, J.-Y. Goret, R. L. Salomón and I. A. Janssens (2021). "Simultaneous tree stem and soil greenhouse gas (CO_2 , CH_4 , N_2O) flux measurements: a novel design for continuous monitoring towards improving flux estimates and temporal resolution." *New Phytologist*.

Calvo-Rodriguez, S., R. Kiese and G. A. Sánchez-Azofeifa (2020). "Seasonality and budgets of soil greenhouse gas emissions from a tropical dry forest successional gradient in Costa Rica." *Journal of Geophysical Research: Biogeosciences* 125(9): e2020JG005647.

Capooci, M., J. Barba, A. L. Seyfferth and R. Vargas (2019). "Experimental influence of storm-surge salinity on soil greenhouse gas emissions from a tidal salt marsh." *Science of the total environment* 686: 1164-1172.

Chatterjee, A., A. Roy, S. Chakraborty, A. K. Karipot, C. Sarkar, S. Singh, S. K. Ghosh, A. Mitra and S. Raha (2018). "Biosphere atmosphere exchange of CO_2 , H_2O vapour and energy during spring over a high altitude Himalayan forest in eastern India." *Aerosol and Air Quality Research* 18(10): 2704-2719.

Courtois, E. A., C. Stahl, B. Burban, J. V. d. Berge, D. Berveiller, L. Bréchet, J. L. Soong, N. Arriga, J. Peñuelas and I. A. Janssens (2019). "Automatic high-frequency measurements of full soil greenhouse gas fluxes in a tropical forest." *Biogeosciences* 16(3): 785-796.

de Sousa Lima, J. R., J. E. da Silva Oliveira, C. Hammecker, G. P. Duda, É. V. de Medeiros, A. C. D.

Antonino and R. M. S. Souza (2020). "Biochar increases soil water content and total organic carbon but has no effects on soil respiration in a Regosol of Caatinga." *Revista Brasileira de Geografia Física* 13(07): 3448-3458.

Fiedler, D. J., D. E. Clay, D. R. Joshi, A. Engel, S.-Y. Marzano, D. Jakubowski, D. Bhattachari, C. L. Reese, S. A. Bruggeman and S. A. Clay (2021). CO_2 and N_2O emissions and microbial community structure from fields that include salt-affected soils.

Fleming, N. A., T. A. Morais, K. U. Mayer and M. C. Ryan (2021). "Spatiotemporal variability of fugitive gas migration emissions around a petroleum well." *Atmospheric Pollution Research*: 101094.

Ford, H., J. R. Healey, B. Webb, T. F. Pagella and A. R. Smith (2021). "Hedgerow effects on CO_2 emissions are regulated by soil type and season: Implications for carbon flux dynamics in livestock-grazed pasture." *Geoderma* 382: 114697.

Griffiths, M., S. Roy, H. Guo, A. Seethepalli, D. Huhman, Y. Ge, R. E. Sharp, F. B. Fritschi and L. M. York (2021). "A multiple ion-uptake phenotyping platform reveals shared mechanisms affecting nutrient uptake by roots." *Plant Physiology* 185(3): 781-795.

Griffiths, M., X. Wang, K. Dhakal, H. Guo, A. Seethepalli, Y. Kang and L. M. York (2021). "Interactions among rooting traits for deep water and nitrogen uptake in upland and lowland ecotypes of switchgrass (*Panicum virgatum* L.)." *bioRxiv*.

Griffiths, M. D., S. Roy, H. Guo, A. Seethepalli, D. Huhman, Y. Ge, R. E. Sharp, F. B. Fritschi and L. M. York (2020). "A multiple ion-uptake phenotyping platform reveals shared mechanisms that affect nutrient uptake by maize roots." *BioRxiv*.

Habtewold, J. Z., B. L. Helgason, S. F. Yanni, H. H. Janzen, B. H. Ellert and E. G. Gregorich (2021). "Warming effects on the structure of bacterial and fungal communities in diverse soils." *Applied Soil Ecology* 163: 103973.

Harris, E., E. Diaz-Pines, E. Stoll, M. Schloter, S. Schulz, C. Duffner, K. Li, K. L. Moore, J. Ingrisch and D. Reinthaler (2021). "Denitrifying pathways dominate

- nitrous oxide emissions from managed grassland during drought and rewetting." *Science advances* 7(6): eabb7118.
- Heimsch, F. F. "Carbon Fluxes and Pools in a Montane Rainforest in Sulawesi, Indonesia."
- Kega, S. (2021). EVALUATING THE POTENTIAL FOR INCREASED FORAGE PRODUCTIVITY AND SOIL CARBON SEQUESTRATION IN STRIP-THINNED SILVOPASTURES PhD Thesis, Department of Natural Resource Sciences, Thompson Rivers University.
- Linton, N. (2020). Microbial Communities in Agricultural Soil—Diversity, Abundance and Activity Impacted by Fertilization, Cropping and Tillage Practices PhD Thesis.
- Linton, N. F., P. V. F. Machado, B. Deen, C. Wagner-Riddle and K. E. Dunfield (2020). "Long-term diverse rotation alters nitrogen cycling bacterial groups and nitrous oxide emissions after nitrogen fertilization." *Soil Biology and Biochemistry* 149: 107917.
- Liu, Y., Y. Li, P. Harris, L. M. Cardenas, R. M. Dunn, H. Sint, P. J. Murray, M. R. F. Lee and L. Wu (2018). "Modelling field scale spatial variation in water runoff, soil moisture, N₂O emissions and herbage biomass of a grazed pasture using the SPACSYS model." *Geoderma* 315: 49-58.
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- Perez-Quezada, J. F., P. Urrutia, J. Olivares-Rojas, A. Meijide, E. P. Sánchez-Cañete and A. Gaxiola (2021). "Long term effects of fire on the soil greenhouse gas balance of an old-growth temperate rainforest." *Science of The Total Environment* 755: 142442.
- Perreault, L. (2020). "Quantifying the Contribution of Deadwood and Canopy Openings to Biodiversity and Ecosystem Function in Second-growth Northern Hardwood Forest."
- Perreault, L. (2020). Shifting Influence of Experimental Deadwood and Canopy Openings on Ecosystem Function and Biodiversity in a Second-Growth Northern Hardwood Forest PhD Thesis, North Carolina State University.
- Petrakis, S., J. Barba, B. Bond-Lamberty and R. Vargas (2018). "Using greenhouse gas fluxes to define soil functional types." *Plant and soil* 423(1): 285-294.
- Ray, R. L., R. W. Griffin, A. Fares, A. Elhassan, R. Awal, S. Woldesenbet and E. Risch (2020). "Soil CO₂ emission in response to organic amendments, temperature, and rainfall." *Scientific reports* 10(1): 1-14.
- Reicks, G. W., D. E. Clay, S. A. Clay, D. R. Joshi, J. Moriles-Miller, S. Westhoff, A. L. M. Daigh and S. A. Bruggeman (2021). "Winter cereal rye cover crop decreased n₂o-n emissions during early spring." *Agronomy Journal*.
- Reis, L., M. S. Patrício, S. Diegues, G. Poggere and M. Feliciano (2019). Avaliação de fluxos de CO₂ do solo de um sistema agroflorestal do Nordeste de Portugal, Politécnico de Portalegre.
- Reis, L. B. (2021). Estudo comparativo dos fluxos de CO₂ na interface solo-atmosfera em sistema agroflorestal com manejo contrastante no nordeste de Portugal PhD Thesis.
- Salim, M. G. (2020). "Sucessão ecológica microbiana em solos de recuo de geleira na Antártica sob a perspectiva dos ciclos do Carbono e Fósforo."
- Soba, D., T. Shu, G. B. Runion, S. A. Prior, F. B. Fritsch, I. Aranjuelo and A. Sanz-Saez (2020). "Effects of elevated [CO₂] on photosynthesis and seed yield parameters in two soybean genotypes with contrasting water use efficiency." *Environmental and Experimental Botany* 178: 104154.
- Somlai, C., J. Knappe and L. Gill (2019). "Spatial and temporal variation of CO₂ and CH₄ emissions from a septic tank soakaway." *Science of the Total Environment* 679: 185-195.
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- Stubbs, A. R. (2020). Enhanced Weathering and Carbonation of Kimberlite Residues from South African Diamond Mines: Implications for CO₂ Sequestration PhD Thesis, Trent University (Canada).
- Thies, S. (2018). "Greenhouse gas emissions from soil applied nitrogen fertilizers."

- Thies, S., S. Bruggeman, S. A. Clay, U. Mishra, G. Hatfield, S. Kumar and D. E. Clay (2019). "Midmorning point sampling may not accurately represent nitrous oxide emissions following fertilizer applications." *Soil Science Society of America Journal* 83(2): 339-347.
- Thies, S., D. R. Joshi, S. A. Bruggeman, S. A. Clay, U. Mishra, J. Morile-Miller and D. E. Clay (2019). "Fertilizer timing affects nitrous oxide, carbon dioxide, and ammonia emissions from soil." *Soil Science Society of America Journal* 84(1).
- Tipton, Z. (2018). "Soil Organic Carbon and Mineralization Rates at the Woolsey Wet Prairie Mitigation Site in Fayetteville, Arkansas."
- Van der Linden, F. C., J. L. Tison, W. Champenois, S. Moreau, G. Carnat, M. Kotovitch, F. Fripiat, F. Deman, A. Roukaerts and F. Dehairs (2020). "Sea ice CO₂ dynamics across seasons: Impact of processes at the Interfaces." *Journal of Geophysical Research: Oceans* 125(6): e2019JC015807.
- Yanni, S. F., B. L. Helgason, H. H. Janzen, B. H. Ellert and E. G. Gregorich (2020). "Warming effects on carbon dynamics and microbial communities in soils of diverse texture." *Soil Biology and Biochemistry* 140: 107631.
- Zaman, M., K. Kleineidam, L. Bakken, J. Berendt, C. Bracken, K. Butterbach-Bahl, Z. Cai, S. X. Chang, T. Clough and K. Dawar (2021). *Automated Laboratory and Field Techniques to Determine Greenhouse Gas Emissions. Measuring Emission of Agricultural Greenhouse Gases and Developing Mitigation Options using Nuclear and Related Techniques*, Springer, Cham: 109-139.
- Zapata, D., N. Rajan, J. Mowrer, K. Casey, R. Schnell and F. Hons (2021). "Long-term tillage effect on within season variations in soil conditions and respiration from dryland winter wheat and soybean cropping systems." *Scientific Reports* 11(1): 1-10.
- Zapata Rojas, D. M. (2019). *Impact of Cropping Practices and Tillage on Greenhouse Gas Emissions and Soil Properties Dynamics in South Central Texas* PhD Thesis.



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