

Micro-meteorology of Gas Exchange in Cover Crop Systems

Graduate Student Position Announcements Applied Soil Ecology Laboratory of the Department of Soil Science, University of Manitoba, Canada

The laboratory for Applied Soil Ecology at the University of Manitoba (<http://soilecology.ca/>; [@soilecologyUMan](https://twitter.com/soilecologyUMan)) is seeking highly motivated and talented candidates for training leading to M.Sc. or Ph.D. degrees. Students will undertake graduate research in the area of development of cover cropping systems in the Red River Valley region of Manitoba and benefit to fertilizer nitrogen use efficiency of crops. Benefits to be examined include reduced emissions of the greenhouse gas nitrous oxide (N₂O), net CO₂ uptake by soil, lowered residual fall soil nitrate tests, and improved coincidence of nitrogen mineralization and crop uptake. Methods of N₂O flux determination include the flux-gradient, automated chamber and static-vented chamber techniques. Candidates will have excellent oral and written skills in English and have completed a 4-year equivalent BSc in the agricultural or natural sciences, or engineering. Candidates with experience or course work in micro-meteorology are encouraged to apply. Salary is \$19,500/yr for two years to MSc students and \$22,000/yr for four years to Ph.D. students. Students who already have scholarships are encouraged to apply as a salary is available to them. The training is funded by government, and industry sources to projects lead by the Applied Soil Ecology Laboratory.

The Applied Soil Ecology Lab is very active in soil ecological research with state-of-the-art facilities and a diverse array of multidisciplinary projects in nutrient management, plant disease management, and soil ecology of major field and horticultural crops in Manitoba. The laboratory employs 4 permanent technicians, and routinely 2-3 Research Associates, 5-10 graduate students, and 10-15 summer students/term technicians. The University of Manitoba is in the City of Winnipeg, with a vibrant metro area of 750,000 people and is less than an hour by car to Prairie, Boreal and Canadian Shield landscapes, and the U.S.A.

For more information on this opportunity please send a detailed CV, statement of relevant experience, availability, and list of three referees and their contact information by email to Dr. Mario Tenuta, Professor of Applied Soil Ecology at mario.tenuta@umanitoba.ca. Please use the subject heading "Graduate Studies Cover Crops". The Applied Soil Ecology Laboratory is committed to a training environment with gender equality, diversity, and encouragement of participation of First Nations and Metis peoples and minorities.