

THE SOILED PROFILE



NEWSLETTER DEPARTMENT OF SOIL SCIENCE UNIVERSITY OF MANITOBA “bringing you the latest dirt”



UNIVERSITY
OF MANITOBA

For general inquiries or if you have material to include in the newsletter:

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Past issues of the Soiled Profile are now on our
webpage: [umanitoba.ca/afs/soil science/](http://umanitoba.ca/afs/soil%20science/)

6 January 2017

Upcoming:

**** Please note change of date **** Monday, Jan 9, 12:30 p.m., Room 346 Ellis Building – Department of Soil Science seminar. Melody Caron, M.Sc. student. “Integration of sediment fingerprinting techniques and comparison of the accuracy of colour coefficients as tracers.”

Tuesday, Jan 10, 1:00 p.m., Room 346 Ellis Building – Department of Soil Science, M.Sc. thesis defence, Mick Runzika. “Nitrification Rate Effect on Cumulative Nitrous Oxide Emission from Soil.”

Wednesday, Jan 18, 3:30 p.m., Room 130 Agriculture Building – Faculty seminar. Dr. Brian Amiro, Department of Soil Science. “Challenges and Opportunities for Mitigating Agricultural Greenhouse Gases” (refreshments served at 3:00 pm).

Wednesday, Jan 25, 12:30 p.m., Room 346 Ellis Building – Two conference-length Department of Soil Science seminars.
Justice Zhanda, M.Sc. student. “Modeling phenological development of corn: Do Corn Heat Units work in the Prairies.”
Matthew Wood, M.Sc. student. “A comparison of Enhanced Efficiency Nitrogen Fertilizers and Products to Reduce Nitrous Oxide Emissions in Manitoba.”

Wednesday, Feb 15, 12:30 p.m., Room 346 Ellis Building – Two conference-length Department of Soil Science seminars.
Masoud Goharrokhi, Ph.D. student. “Assessing some of the issues associated with the time-integrated fine sediment sampler (TIFSS).”
Mayowa Adelekun, Ph.D. student. “Simulation of greenhouse gas fluxes from perennial forage grasses and annual crops using the DNDC model.”

News:

New Faces around the Department

We have several new graduate students joining the department this term.

Olayinka (Yinka) Funmilayo Adamolekun (M.Sc. student with Wole Akinremi)

Kristy Anderson (M.Sc. student with Annemieke Farenhorst)

Marufa Fatema (Ph.D. student with Annemieke Farenhorst)

Dickson Tran (M.Sc. student with Don Flaten)

Fangzhou Zheng (Ph.D. student with David Lobb)

Also, Hailey Wright has joined the Manitoba Ag Weather program. She will be working in the same office as Timi (Room 348) in the winter months. During the field season, Hailey will be working from the Glenlea Field Station where the Ag Weather Program Field Program is located.

Magda is featured in a UM News interview

Magda Rogalsky did a great interview in UM News with lots of good photos. Have a look. You'll love it!

<http://news.umanitoba.ca/candid-magdalena-rogalsky/>

Paper of the week:

S. Braman, **M. Tenuta**, M.H. Entz. 2016. Selected soil biological parameters measured in the 19th year of a long term organic-conventional comparison study in Canada. *Agriculture, Ecosystems and Environment* 233: 343–351.

Opportunities:

Research Scientist–Soil Fertility-Nutrient Management, Agriculture & Agri-Food Canada, Lethbridge, AB

Seeking a research scientist with expertise and experience to lead a research program that will improve the efficiency of nutrient use in Canadian prairie farming systems, thereby maintaining productivity, enhancing soil health, bolstering economic viability, and minimizing environmental threats. The research will adopt a systems perspective, considering soil, air, plant, and animal components of the farming ecosystems, and will consider the long-term, multi-decadal benefits of proposed management practices.

The candidate must be able to work in a multi-cultural setting and create an environment that fosters collegiality, diversity and teamwork. The successful candidate will provide scientific advice and transfer technology to partners and clients that will assist the agriculture industry in fostering economic viability and preserving the environmental health of prairie agro-ecosystems, in particular through efficient management of nutrients from fertilizers, organic amendments, and biological processes. The research scientist will work closely with a multidisciplinary group of scientists across the prairie region, including soil scientists, animal scientists, agronomists, environmental chemists, and other scientists seeking improvements in agro-ecosystem productivity and health.

Deadline: **January 12, 2017**. Apply online. [More Information](#).

Technician 5 - 4R NITROGEN AGRONOMIST, Department of Soil Science, University of Manitoba

Key Responsibilities:

- Plan, establish, manage and monitor 4R nitrogen fertilizer trials throughout agricultural Manitoba, in response to dynamic environmental conditions such as weather, crop and pest conditions as they occur.
- Develop and implement sample collection, preparation, storage and analyses protocols for soil and plant samples.
- Work with other Soil Science staff and staff of crop diversification centres, industry research staff and crop consultants to implement the systems and protocols.
- Develop and manage a dataset for soil and plant data. Prepare statistical analyses, tables, graphs and figures.
- Write research reports, peer-reviewed manuscripts and extension publications.
- Recruit, hire, train and supervise summer students.
- Coordinate field and lab activities among researchers and students working at field experiment plots and labs.
- Communicate relevant decisions, activities, opportunities, and challenges to scientists, staff and industry through tours, extension meetings, field tours and social media (e.g. Twitter) on behalf of the Soil Ecology Laboratory.
- Perform other related duties as assigned or required.

Qualifications:

- Minimum Education required is a Master of Science degree in Agronomy, Soil Science or other relevant discipline with substantial depth in soil, crop and nutrient management is required.
- Prairie Certified Crop Advisor preferred.
- Two years of directly related experience is required.
- Experience in experimental design, designing and implementing field crop research protocols, project management, statistical analyses, and writing of research reports, is required.
- Substantial experience in agricultural and field operations required, including intensive production and protection of crops is required.
- Experience in supervising staff and publishing peer-reviewed manuscripts is preferred.
- Experience in recruiting, hiring, training, and supervising the work of staff and students is required.
- An acceptable equivalent combination of education and experience may be considered.

Estimated Weekly Hours 35; Salary (Hourly) \$25.84 - \$34.42; Salary (Annual) \$47,028.80 - \$62,644.40

Application deadline: 2017-01-23; Proposed Start Date: 2017-02-01. More info: [click here](#).

This position is under the supervision of Dr. Mario Tenuta, Soil Ecology Lab. For inquiries please contact Dr. Tenuta at Mario.Tenuta@umanitoba.ca.

Summer 2017 NSERC-USRA Awards

For a complete listing of NSERC USRA eligibility criteria, please see: http://www.nserc-crsng.gc.ca/Students-Etudiants/UG-PC/USRA-BRPC_eng.asp.

Deadline to apply: January 27, 2017. The application form has now been posted on the Faculty of Agricultural and Food Sciences awards webpage: <http://umanitoba.ca/afs/awards/> or directly at http://www.umanitoba.ca/faculties/afs/pdf/2017_FAFS_USRA_Application.pdf. All applications should be e-mailed to agawards@umanitoba.ca.

Stewart Pugh External Study Scholarships

A number of scholarships, valued up to a maximum of \$2,000, are available to defray transportation costs for undergraduate and graduate students who plan to travel to another university or institution, in Canada or abroad, to further their studies in agricultural or food sciences. This may involve study or research for one academic term or participation in a short-duration study tour used as a credit course towards their degree or diploma.

The scholarships will be offered to students who:

(1) are enrolled full-time (minimum 24 credit hours) in the third or fourth year of study in a degree program, second year of study in the diploma program, or have completed one year of an MSc program or PhD program in the Faculty of Agricultural and Food Sciences at the University of Manitoba;

(2) have achieved a minimum degree grade point average of 3.0.

Candidates must provide: (1) an outline of the course of study they wish to pursue including (a) justification for the external study, (b) their goals with respect to professional and personal development as a result of the external study, and (c) estimated transportation cost; (2) a letter of support from their thesis advisor or undergraduate program committee chairperson indicating that he/she approves of the institution at which the candidate will undertake his/her program of study/research. Institutions where the term of study would be conducted and the work study course in which the student would participate must be approved by the student's thesis advisor or undergraduate program committee chairperson

To be eligible for this scholarship, please fill out and submit the Stewart Pugh External Study Scholarships application form available on the Faculty of Agricultural and Food Sciences awards webpage:

<http://umanitoba.ca/afs/awards/>.

Deadline to apply: **January 29, 2017**.

Graduate Student Summer Opportunity, Ottawa ON and Montreal QC

A program called "Science Outside the Lab," is a week-long immersion into the world of science policy and decision making. Through the program, students have a chance to meet experts ranging from science journalists & museum curators to federal funders & science advisors. They'll also gain a richer understanding of how policy is made, how to communicate with funders and decision-makers, and how science shapes - and is shaped by - government decisions.

Session A: April 29th to May 5th Session B: May 6th to May 12th

Both take place in Ottawa, Ontario & Montréal, Quebec

Apply by **February 15**. Program Fee: \$900. Fee includes program, lodging, breakfast/lunch, and during-program transportation. For more information and to apply, visit SotLnorth.ca or email info@SotLnorth.ca.

Events:

Soil Fertility Refresher, Jan 24 -25, 2017, Carman Research Station, University of Manitoba, Carman, MB

- Do you miss those Thursday/Friday afternoon Soil Fertility Labs?
- Brushing up for your CCA exam?
- Join us for 2 days of detailed soil fertility training!

Tuesday January 24 and Wednesday January 25, 2017, 9:00 am – 4:00 pm,

University of Manitoba, Carman Research Station

Instructors: Dr. Don Flaten (University of Manitoba) and John Heard (Soil fertility Extension) and Marla Riekman (Soil Management), Manitoba Agriculture

Contents:

1. Basic soil properties and productivity
2. Nitrogen, Phosphorus, Potassium ,Sulphur, Micronutrients
 - a. Form and behaviour in soil
 - b. Nutrient uptake, function and deficiency symptoms
 - c. Fertilizer source, placement, timing and rate
3. Soil test interpretation and recommendations

Materials: Nutrient Management Modules, lecture notes

Cost: \$100 to Manitoba Soil Science Society, Limited to 30 participants.

Preregistration required to John Heard, John.Heard@gov.mb.ca , 204 745-8093

9 Nutrient Management CEUs and 3 Soil and Water Management CEUs available.

Sponsored by Manitoba Soil Science Society

Alberta Soil Science Workshop, February 15 to 17, 2017, Lethbridge, Alberta

Conference theme: What is Soil Health? Concepts to Applications.

Additional information and registration is available at: <http://www.soilsworkshop.ab.ca/>.

60th Annual Manitoba Soil Science Society Meetings, Feb. 2-3, 2017, Holiday Inn – Winnipeg South

The MSSS Executive will be meeting in early January to set the program agenda – presenters can expect to be notified of their speaking date/time by January 12th. A registration form is attached. **Early bird deadline is January 19, 2017.** Please contact marla.riekman@gov.mb.ca if you have any questions about registration. Note, Department of Soil Science participants can fill in a registration form and provide a valid budget number to have it charged directly.

Registration Form – 60th Annual MSSS Meetings
February 2nd and 3rd, 2017
Holiday Inn South - 1330 Pembina Highway, Winnipeg, MB

<i>Contact Information</i>			
Name			
Affiliation/ Company			
Address			
	City:		Province:
	<i>Postal Code</i>		Country:
Phone	Bus:		
	Fax:		
E-mail*			

*Please note that we will be using e-mail as the primary means of contact.

If you do not have access to email, please indicate your preferred means of contact.

	Registration Options & Fees Refunds will be provided if written notice is given by January 19, 2017. Receipts will be issued to all registrants.	Early	Late	Total
		on or before Jan. 19/17	after Jan. 19/17	
		Please circle option		
Two Day	Registration Regular	\$185	\$205	
	Registration Student/Retirees	\$125	\$145	
One Day	Registration Regular – Feb 2	\$120	\$135	
	Registration Regular – Feb 3	\$95	\$110	
	Registration Student/Retirees – Feb 2	\$85	\$100	
	Registration Student/Retirees – Feb 3	\$60	\$75	
Total		<i>Indicate Total Amount</i>		\$

Notes: Registration includes continental breakfast, lunch and nutrition breaks on both days. Registration also includes a 60th Anniversary Celebration the evening of Feb 2.

Please advise of any special dietary requirements: _____

Please make cheque or money order payable to **MSSS** and send with completed registration form to:

MSSS C/O Marla Riekman
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 University of Manitoba, Winnipeg, MB R3T 2N2