



Call for Abstracts

69th MSSS Annual General Meeting
February 5-6, 2026 | Winnipeg, MB

The Manitoba Soil Science Society (MSSS) holds an Annual General Meeting to provide industry professionals and academics with a place to share their research findings and network. This year's plenary session theme is *"Soil Health Strategies for Manitoba Soils"*.

Both oral and poster presentation submissions are welcome. Please submit contact information and abstracts to MSSS by **noon December 15, 2025**. Abstracts are to include the Title, Authors, Author Affiliations, and Abstract Text of less than 300 words. A sample abstract with the required formatting is included on the next page. **Note: Do not put an asterisk after your name unless you are a graduate student presenter.**

Graduate Students: Graduate student presentations are judged with awards for best oral and poster presentations. **Please put an asterisk after your name on the submitted abstract to be considered for an award.**

Contact & Presentation Information

| | | |
|-----------------------------|--|--|
| Presenter Name | | |
| Company/Affiliation | | |
| Mailing Address | | |
| Phone | | |
| Email | | |
| Graduate Student Submission | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Presentation Type | <input type="checkbox"/> Oral presentation | <input type="checkbox"/> Poster presentation |
| Presentation Title | | |

Please email the above information and abstract as a .doc or .docx file to: executive@mbsoils.ca

SAMPLE ABSTRACT

Nitrogen Uptake by Barley Grown in Chernozemic Soils Amended with Anaerobically Digested Manure

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Anaerobically digested manure (ADM) is a nutrient rich substrate co-generated during biogas production from anaerobic digestion of livestock manure. Currently, the separated solid fraction of ADM (SS) is commonly applied to cropland at rates equivalent to those for raw manure. We hypothesize that biophysicochemical changes occurring during anaerobic digestion may result in a digested product with a different N supplying power. We tested this using five, 6-wk cycles of forage barley (*Hordeum Vulgare L.*) grown in a Dark Brown and a Black Chernozem amended with raw beef cattle (*Bos taurus*) feedlot manure, SS, pelletized SS (PSS) and synthetic fertilizer (urea + monoammonium phosphate, UMP). Amendments were applied at rates calculated to supply 400 and 800 mg total N kg⁻¹ soil, with a control included for comparison. At each harvest, plant roots and shoots were harvested separately and analyzed for total N. Amendment-derived N content of total biomass was highest for UMP and manure, and lowest for PSS at both rates. The difference between manure and SS was higher at the higher amendment rate, while both PSS rates depressed N uptake relative to non-amended soils. Amendment-derived N also increased with increasing rate for all amendments except PSS. We conclude that anaerobic digestion does not alter N availability and uptake from beef cattle manure while pelletization of the solid fraction of digested manure can cause N immobilization and depress plant N uptake.