



ses

school of environmental sciences

The Research Seminar Presentation by

Jared Lapierre

will be held on

Tuesday November 28, 2017

At 2:00 pm

ALEXANDER HALL 337

Title:

Implications of a diverse crop rotation with cover crop mixtures, and winter warming for soil nitrate leaching: A lysimeter approach using two soils.

Abstract

The continued use of nitrogen fertilizers in agriculture is required to feed the growing global population. With current farming practices, there is a risk of excess nitrogen being leached through soils in the form of nitrate. Leached nitrates contaminate groundwater, leading to environmental and human health concerns. Climate change models are predicting warmer winters, and increased freeze-thaw cycle magnitude and frequency. Warmer winters could potentially increase the concentration of nitrate in the soil and drainage events, leading to increased nitrate leaching. This research project is designed to investigate diverse crop rotation and cover crops as a strategy to reduce nitrate leaching by extending the growing season. Positive results from this project means farmers can start employing diverse crop rotations with confidence that this strategy will help them reduce nitrate leaching in the non-growing season, as well as maintain stable crop yields in a changing climate.

Everyone is welcome to attend

(This is a Research Proposal presentation by students in ENVS*6900)