The Research Seminar Presentation by

Amy Pawlick

will be held on

Wednesday March 16, 2016

At 11:20 am

ALEXANDER HALL 337

Title: An assessment of the use of slow-release fertilizers and improved fertilizer timing to reduce nitrate leaching associated with corn (*Zea mays* L.)

Abstract

Contamination of ground and surface water by nitrate leaching from agricultural ecosystems is a global concern because it has negative environmental and health consequences. The major contributor to nitrate leaching losses is the conventional application of nitrogen fertilizers. Slow-release fertilizers applied at planting provide a solution to minimize nitrate leaching by synchronizing nitrogen availability with plant demand. In the proposed study, water samples will be collected using ceramic cup lysimeters at the field scale to estimate nitrate leaching losses associated with corn. The objectives of this study are to: 1) evaluate how timing of fertilizer application (planting vs. 6^{th} leaf stage), product (slow-release vs urea ammonium nitrate) and a combination of these affects nitrate leaching, and 2) evaluate how drainage estimates through the root zone influence the estimate of total nitrogen leached. The research from this project will provide information to more efficiently manage nitrogen and protect our clean water reserves.

Everyone is welcome to attend

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