

SES Seminar Series

Guest Speaker: Dr. Ranjith Udawatta

(Center for Agroforestry in the School of Natural Resources, University of Missouri, Columbia, MO)

*Water and Soil Quality benefits
of Agroforestry"*



The primary objective of Udawatta's research is to quantify environmental benefits of agroforestry. Currently, he is conducting research on influences of agroforestry, grass buffer, and other conservation practices on water and soil quality. In addressing this issue he is examining how trees and grasses change surface and subsurface water quality by reducing runoff, nutrients and sediment when integrated in rowcrop agriculture and grazing management practices. Changes in soil physical properties, soil water dynamics, and competition for resources, root length density, nutrient accumulation, and microclimate are evaluated to examine soil and water benefits of these practices. These studies have shown significant reductions in non-point source pollution to water bodies due to the integration of agroforestry. Model simulation have further proved long-term benefits of agroforestry in cropping and grazing practices. These studies also showed improved soil quality parameters including soil carbon, enzymes, bulk density, geometrical soil pore parameter, and water dynamics.

March 21, 2019– 12:00pm–1:00pm
Alexander Hall Rm 265

All are welcome to attend!

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school of environmental sciences

