

SES Guest Seminar

Guest Speaker: Dr. Humberto Blanco

(Professor of Soil Management and Applied Soil Physics)

Department of Agronomy and Horticulture, University of Nebraska–Lincoln)

“Can Cover Crops Pull Multiple Ecosystem Services?”

While cover crops are considered to provide multiple ecosystem services, research suggests that cover crop performance can be highly site-specific. For example, cover crops could provide more services when added to sloping, sandy, and tilled soils than when added to nearly-level, fine-textured soils under no-till systems. Furthermore, the delivery of multiple ecosystem services can be a function of cover crop biomass production, which, in turn, depends on management and climatic conditions. Recent studies suggest that cover crops may have limited or no significant impacts on improving soil properties if cover crop biomass production is <1 Mg/ha. Current cover crop management practices often lead to variable and low amounts of biomass production. If cover crops will be grown to deliver multiple ecosystem services, stable and high amounts of CC biomass production are needed. Improved cover crop management strategies should be developed and adopted to increase biomass production and sustainably meet feed, fuel, fiber, and food production demands. Dr. Blanco will discuss some of the strategies that his team has been evaluating in rainfed and irrigated cropping systems in the central Great Plains to increase CC biomass production and enhance soil ecosystem services. He will highlight challenges and opportunities of potential strategies including adjusting planting and termination dates of cover crops, adapting cropping systems, and using flexible cropping systems, and others for intensifying agroecosystems and enhancing the delivery of multiple ecosystem services from cover crops.

May 2, 2019– 1:30pm–2:30pm
Alexander Hall Rm 265

All are welcome to attend!

ses

school of environmental sciences

