AGRONOMY SEMINAR SERIES FALL 2024

Contaminated Urban Soils: Remediation and Community Action for Healthier Cities

Monday, September 30th 2:30 p.m. LILY 2-425

Attend virtually via Zoom Seminar links will be posted at: purdue.ag/agryseminars

ANNA PALTSEVA

CLINICAL ASSISTANT PROFESSOR AGRONOMY AND HORTICULTURE AND LANDSCAPE ARCHITECTURE DEPARTMENTS AT PURDUE UNIVERSITY

Urban soils are often contaminated with heavy metals, posing serious risks to public health and food safety. This talk synthesizes research on soil contamination in New York City and Lafayette, LA, with a focus on lead (Pb) hotspots, particularly in socioeconomically disadvantaged areas. Dr. Paltseva examines the risks posed by urban agriculture, where contaminated soils lead to toxic metal accumulation in crops. Effective remediation strategies, such as organic amendments and raised beds, are discussed for reducing these risks. The role of community involvement is central, highlighting citizen science initiatives that enabled residents to test soils and identify contamination in their neighborhoods. The Urban Soil Guide is introduced as a practical tool for translating scientific findings into actionable solutions. This talk offers a framework for integrating scientific and community efforts to mitigate urban soil contamination and improve environmental health.



Agronomy



Anna Paltseva is a clinical assistant professor in the agronomy and horticulture and landscape architecture departments at Purdue University. Previously, she was an endowed assistant

professor at the University of Louisiana at Lafayette, where she founded The Delta Urban Soils Laboratory. She holds a Ph.D. in Earth and Environmental Sciences from The Graduate Center at CUNY. Her research focuses on soil contamination, remediation, and sustainable urban agriculture, with a focus on heavy metals like lead and arsenic. Passionate about community engagement, Anna incorporates citizen science to empower local communities in soil health monitoring. Her "Urban Soil Guide: A Field and Laboratory Manual" makes soil science accessible to a wider audience. At Purdue, she aims to create a global urban soil science program that merges research with community-driven solutions.