Soil and Water Resource Management in Cropping Systems of the Sacramento-San Joaquin Delta Region

By: Dr. Michelle M Leinfelder-Miles

Day/Time: Friday 6/17, 3 - 4 PM

Join Zoom Meeting:
https://ucmerced.zoom.us/j/93722796133?pwd=a2FsKzBTUGVtOEovSTNVanRSNjZMdz09
Meeting ID: 937 2279 6133; Passcode: 92837

Speaker Bio: Dr. Michelle Leinfelder-Miles is the Delta Crops Resource Management Advisor with UC Cooperative Extension, serving San Joaquin, Sacramento, Yolo, Solano, and Contra Costa counties. Michelle grew up on a farm in San Joaquin County, and she received her B.S. in Crop Science and Management from UC Davis. Michelle attended Cornell University where she received her M.S. and Ph.D. in Horticulture, studying soil management in apple orchards. In her role as Delta farm advisor, she conducts a research and extension program that addresses agronomic crop production and water and soil resource management.

Abstract: The Delta region of California is located at the confluence of the Sacramento and San Joaquin rivers. While the region is known for its waterway configuration, the Delta is also unique for its fertile soils. The Delta is approximately 738,000 acres, where over 400,000 acres is agricultural land, producing over 70 crops. Corn and alfalfa are the most common crops by acreage, and processing tomatoes and winegrapes are the leading crops by revenue. Delta crop revenue is approximately $1 billion annually. Delta farmers face unique challenges that bridge the agricultural and environmental sciences. Peat soils are subject to carbon oxidation and subsidence, and surface water used for irrigation is from upstream runoff interfacing with seawater. Approximately half of the state’s runoff flows through the Delta to the San Francisco Bay, making the Delta appear water-rich, but the quality of the water is often degraded, especially in drought years. This presentation will describe research and extension programming in soil and water resource management. Projects in cover cropping, compost amendment, soil health under deficit irrigation, and drought management will be described and illustrate the inextricable nature of these resources.

Host: Safeeq Khan & Ellen Bruno, CE Specialists UC ANR