

**UC Davis Agricultural Sustainability Institute's
Russell Ranch Sustainable Agriculture Field Day 2014**

Wednesday, May 28th, 8 am – 1:30 pm

8 Registration

8:25 Welcoming remarks

Introductions, Thomas P. Tomich, Director of Agricultural Sustainability Institute (ASI)
Kate Scow, Director of Russell Ranch Sustainable Agriculture Facility
Dennis Chessman, State Agronomist, USDA Natural Resources Conservation Service

8:45 Presentations

Nitrate leaching, drought and irrigation management in agriculture

Ahmad Moradi (Post-doc, Land, Air and Water Resources (LAWR)): Water and nitrate fluxes in soil below winter fallow and bean or triticale cover crop rotations

Matt Dumlao (Graduate student, LAWR): Cover crops with contrasting root systems: nitrate movement during the winter (rainy) season

Daoyuan Wang (Visiting scholar, LAWR): The Impact of Drought and Wet-dry Cycles on Soil Nutrient Leaching

Soil biology: Microbial communities and impact on farming systems

Annie Bossange (Graduate student, LAWR): Microbial communities in long-term no tillage systems

Radomir Schmidt and Fungai Mukome (Post-docs, LAWR): Impacts of N Fertilizer Addition on Soil Structure, C and N Dynamics, and Microbial Populations in Conventional and Organic Farming Systems

Kelly Gravuer and Priyashiela Singh (Graduate students, LAWR): Differences in soil microbial communities among management systems

Johan Leveau (Faculty, Plant Pathology): A microbial census of soils and plants in tomato fields

Steve Meek (Farmer, J.H. Meek and Sons): Soil biology impacts in processing tomatoes

Biochar: Carbon sequestration and nutrient impacts

Deirdre Griffin (Graduate student, LAWR): Impacts of biochar amendment on soil nutrient availability and crop growth

Sanjai Parikh (Faculty, LAWR): Can biochar be used to enhance native soil carbon stocks?

Soil nutrient budgets and management

Mark Lundy (UCCE Farm Advisor): Calibrating in-field diagnostic tools for improved N management in wheat

Martin Burger (Research Manager, Russell Ranch): Urease and nitrification inhibitors

Sonja Brodt (Academic Coordinator, ASI): Solution Center for Nutrient Management

Gabriel Maltais Landry (Graduate student, Stanford University): Phosphorus budgets of organic, conventional, mixed and no-input management at Russell Ranch

Marsha Campbell Mathews (UCCE Farm Advisor): N Ledger program for N Management

11:40 Posters and open discussion

12 Lunch

12:40 Growers' panel: "Soil Matters: Underground at the Century Experiment"

1:30 Evaluations and adjourn