



2012 UC Soil Fertility Short Course

February 22, 2012 • Buehler Alumni & Visitors Center, UC Davis

- 8:00-8:30 AM **Welcome, introduction**
Instructors • *Tim Hartz*, Dept. of Plant Sciences, UC Davis
• *Stu Pettygrove*, Dept. of Land, Air and Water Resources, UC Davis
- 8:30-10:00 AM **Soil sampling and analysis**
Topics: soil sample collection and handling for accuracy and repeatability • selecting the right laboratory analytical techniques to fit specific agronomic needs
- 10:00-10:30 Break
- 10:30-12:00 PM **Soil test evaluation**
Topics: relationship of physiochemical parameters to soil fertility • predicting soil N mineralization from lab parameters; calibrating crop response to analytical results • nutrient ratios • micronutrient availability
- 12:00-1:00 Lunch
- 1:00-2:30 **Selecting fertilizers and application strategies**
Topics: crop nutrient uptake patterns • N fertilizer forms, mechanisms of stabilization and loss • choosing P and K fertilizers—soil reactions, salt index, availability over time
- 2:30-3:00 Break
- 3:00-4:30 PM **Developing crop nutrient management plans**
Topics: crop-specific nutrient requirements • irrigation effects • environmental considerations