

Geospatial Imaging/Unmanned Aerial System Based Remote Sensing for Water Conservation and Crop Management Workshop

When: Wednesday, May 20, 2015 (7:30 AM to 12 PM)
Where: University of California Desert Research & Extension Center
1004 E. Holton Rd., Holtville, CA 92250

Agenda

- 7:30-8:00 Registration and Refreshments
- 8:00-8:15 Combined Use of Ground Measurements and Remote Sensing Techniques to Enhance Agricultural Water Management - Daniele Zaccaria, UCCE, UC Davis.
- 8:15-8:45 Low Cost Scientific Data Drones: from Data to Decision to Action to Data and a Call for Round-Robin Competition for Crop Water Stress Quantification - YangQuan Chen, University of California, Merced
- 8:45-9:15 Unmanned Aerial Systems in Agriculture - Frank Taylor, Community Safety Consulting Group
- 9:15-9:40 Hyperspectral Crop Health Imaging, Technical Aspects and Comparisons to Multispectral, NDVI and Infrared - Nate Taylor, Agricultural Business Development and Sales Manager, for AgVu by Advanced Reconnaissance Corp. (ARC)
- 9:40-10:00 Applications of AgVu imaging in Agriculture - Keith Gorzell, Western US Representative for AgVu by Advanced Reconnaissance Corp. (ARC)
- 10:00-10:15 Break
- 10:15-10:45 Using Reflectance Profiling in ecological Studies of Crop Stress Detection and Host Selection by Arthropod Pests - Christian Nansen, UC Davis, Department of Entomology and Nematology
- 10:45-11:00 Remote Sensing and Deficit Irrigation on Alfalfa - Khaled Bali and Daniel Putnam, UCCE Imperial County and UCCE, UC Davis
- 11:00-11:25 Using Satellites and UAVs to Assess Crop Water Use and Water Stress - Ray Anderson, USDA-ARS, U.S. Salinity Laboratory, Riverside, CA
- 11:25-11:50 Coarse and High Resolution Daily Evapotranspiration Mapping Program for California using Surface Energy Balance Algorithm - George Paul, Formation Environmental LLC.
- 11:50-12:00 Aerial Imaging to Track Nematode Problems in Sugar Beet Production Areas of the Low Desert; a Proposal – Oli Bachie, Steve Kaffka & Antoon Ploeg, UCCE & UCD

To keep the group size manageable we would like to limit the workshop to 30 participants. **Please RSVP in advance** by sending an email to aiestrada@ucanr.edu with full name of attendee(s).

A glance at the workshop: This workshop is the first of its kind to be hosted by the UC Cooperative Extension, here in the Imperial Valley. Geospatial Imaging, particularly the use of unmanned drones is expected to be the future approach/tool for water conservation and crop health. We will offer in depth use of geospatial imaging/drones in agriculture, more specifically for tracking crop water stress and crop health assessment. A number of scientists and industries with extensive experience in geospatial imaging and/or drone technology are invited to speak on this workshop. Speakers will use PowerPoint slides and videos to show the extent of the technology. For additional information on the workshop, please contact Oli Bachie, obachie@ucanr.edu or Khaled Bali, kmbali@ucanr.edu or call the office at (760) 352-9474.

*Approved CEU's: Certified Crop Adviser (CA 53271 – 3.5 hrs.) & CA CEU's (M-0745-15 – 1.5 hrs.)
Please feel free to contact us if you need special accommodations.*

Sponsors:

UCCE – Imperial County

California Department of Water Resources

