

Monday: July 24, 2006

(Numbers in parentheses are assigned poster board location. Posters can be set up Monday morning after 7:00 AM and must be taken down by Tuesday evening at 6:30 PM)

Information Management

- Roloff (2) – Establishing the Relations Between Soybean Yield and Spatially-Variable Soil Attributes on a Clayey Oxisol
- Schwarz (3) – Pre Agro II - Linking Research on Technical Aspects of Precision Agriculture with Sustainability Issues of the Value Chain of Food Production

Natural Resources Variability

- Gregoret (4) – Corn Nitrogen Response Models for Management Zones In Semiarid Environments
- Marchesi (5) – Association Between Rice Grain Quality, Grain Moisture and Soil Characteristics
- Pepo (6) – New Issues of Fertilization in Precision Agriculture of Wheat (*Triticum aestivum* L.)

Precision Management

- Cora (7) – Spatial Variability of Soil Properties Before and After Liming and Phosphorus Fertilizer Application at Variable Rates in Sugarcane
- Franzen (8) – Management Zone Delineation Methods
- Huluka (9) – Airborne Imagery for Rapid Corn Productivity Assessments
- LeClerc (10) – Effect of the Within-Field Pedodiversity on the Efficiency of Management Zone Delineation with Soil Electrical Conductivity
- Merrill (11) – Developing Site-Specific Management Zones Loss Factors and Economic Injury Levels for Economically Important Pests of Corn in Colorado
- Stelford (12) – Improving Irrigation Water Management: Use of High Resolution Soil Information in Multiple Crops
- Zaman (13) – Impact of Variable Rate Fertilization on Nitrate Leaching in a Citrus Orchard

Profitability

- Gandonou (14) – Evaluating the Economic Impact of Field Area Measurements

- Salim (15) – Profit Maximization Under Risk Reducing Behavior Using Variable Cutting Timings for Kentucky Alfalfa
- Shibusawa (16) – Community-Based Precision Agriculture with Branded-Produce for Small Farms

Remote Sensing

- Bausch (17) – Comparison of Active and Passive Optical Sensors for Assessment of Plant Nitrogen
- El-Sebai (18) – Spectral Reflectance of Cotton Leaves Under Water Stress
- Groell (19) – Use of Leaf-Based Sensor Technologies to Assess the Effects of Various Plant Diseases on Crop Growth and Development
- Jacobi (20) – Site-Specific Identification of Fungal Infection in Wheat Crop Using Remote Sensing
- Prince (21) – Utility of Multispectral Imagery for Soybean (*Glycine Max*) and Weed Species Differentiation

Tuesday: July 25, 2006 (AM Session)

Crop Quality

- Reimer (23) – Terrain-Soil-Climate Interactions with Yields on a North German Farm
- Sasaki (24) – Variable Fertilization Technology for Protein Control of Winter Wheat in Southwestern Japan
- Suzuki (25) – Estimation of Grass Nutritive Values in Meadows Using Hyper Spectral Imaging System

Education/Outreach

- Williams (26) – OpenAg.info: A Geospatial Technology and Precision Agriculture Information and Education Resource

Engineering Technology

- Cavani/Porto (27) – Image Segmentation of Orange Tress with JSEG
- Chosa (28) – Development of a Platform to Test the Dynamic Accuracy of a GPS Receiver
- Domingue (29) – Development of a Real-Time Nitrate System
- Khakberdiev (30) – A new approach for systematic seeding and cultivation
- Li (31) – Study and Exploitation on Farmland Information Acquisition Based on 3S Technology

- Vieira de Sousa/Inamasu (32) – Mechanotronic Design and Implementation of a Modular Robotic Agricultural Platform
- Paciancia Godoy/Inamasu (33) – Applied Simulation to Evaluate Data Link Parameters of CAN-Based Networks for Agricultural Machinery
- Rocha de Carvalho/Inamasu (34) – Performance Analysis of a CAN-Based Network for Agricultural Machinery Using Colored Petri Nets
- Okayama (35)- Sensor-Fusion of Real-time Soil Sensor for Predicting Soil Parameters
- Umeda (36) - Proposal for a soil diagnosis technique using polarized NIR spectroscopic analysis and investigation of adaptive flexibility

Environment

- Hong (37)– Economically Optimal N Rate Reduces Soil Residual Nitrate
- Matejkova (38) – Oat Yield Population Response to Variable Rate N Fertilization
- Matejkova (39) – Assessment of Effects of Field Spatial Variability on Winter Wheat Yield Population

Geostatistics

- McBride (40) – Relationships Between Soil Properties and Yield Variability and the Potential for Establishing Management Zones for Site-Specific Management in North Carolina
- Thomsen (41) – Mobile TDR Unit for Mapping Soil Water Content and Electrical Conductivity

New Applications Worldwide

- Balasundram (42) – A Non-Destructive Technique for Estimating Oil Palm Quality
- Gutierrez Castillo (43) – Use of management zones to reduce the overuse and degradation of water in pecan orchards of Northern Mexico
- Main (44) – Variation in Sweet Potato Development and Yield

Tuesday July 25, 2006 (PM Session)

Modeling

- Hank (45) – Simulation of a Winter Wheat Site Using the Physically-Based SVAT Model WHNSIM
- Juan (46) – Visualization of Growing Cotton Based on NURBS and VC++ 6.0
- Link (47) – Can Site-Specific Nitrogen Strategies be Regionalized Based on Underlying Soil Properties?
- Sanderson (48) – Using Land Surface Temperature Measured by Satellites for Pest Management Degree-Day Models

Precision Management/Conservation

- Casey (49) – Comparison of Nitrogen Management Zone Delineation Methods for Corn Grain Yield
- Chung (50) – Reducing Fertilizer Application and Rice Growth and Yield Mapping by Variable Rate Treatment in Paddy Fields
- Graeff (51) – Fusion of Soil and Crop Data to Delineate Management Zones and Predict Crop Yield Under Precision Farming Conditions
- Peterson (52) – Effect of Grain Characteristics on Yield Monitor Accuracy
- Tremblay (53) – Respective Effects on Wheat and Corn Growth of Nitrogen Fertilization, Soil Electrical Conductivity and Elevation
- Wiles (54) – Mapping Weed Presence in Dryland Copping Systems

Remote Sensing

- Inamasu (55) – Active Sensor Readings for assessing Sugarcane Crop Canopy Chlorophyll Status
- Johnson (56) – Utilization of Leaf Reflectance Measurements in Louisiana Sugarcane Disease, Variety and Harvest Management Systems
- Kato (57) – Grassland Classification with NDVI Analysis by Satellite Remote Sensing
- Klem (58) – Weed Detection and Assessment of Competitive Ability Using Chlorophyll Fluorescence Imaging and Artificial Neural Network
- Liu (59) – Predicting Within-Field Soil Drainage Indicators Using High Resolution Remote Sensing Data
- Prince (60) - Utility of Hyperspectral Reflectance for Differentiating Soybean (*Glycine max*) and Six Weed Species
- Shaker (61) – Measuring Spectral Reflectance of Wheat at Different Nitrogen Application Rates, Using Various Remote Sensing Techniques

- Van Arndt (62) – An Overview of the IS-HS Project: Integration of In-Situ Data and Hyperspectral Remote Sensing for Plant Production Modeling