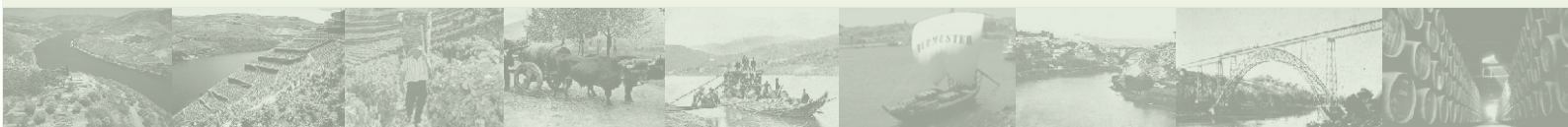


EFITA WCCA 2005

Joint Conference

5th Conference of the
European Federation for Information Technology in Agriculture, Food and Environment
3rd World Congress on Computers in Agriculture and Natural Resources

July 25-28, 2005
Vila Real, Portugal



Programme



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Conference program - Mainstream Overview

24-28 July 2005, Universidade de Trás-os-Montes e Alto Douro, Portugal

July 24, 2005 (Sunday)

- 09:30 Porto sightseeing tour, visit to Taylor's wine cellars and lunch. (Departure by Bus from Hotel Fénix in Porto)
- 16:00 Bus transfer from Porto to Vila Real (estimated travel time: 1h30min)
- 20:00 Registration and Welcome evening (Hotel Mira Corgo)

July 25, 2005 (Monday)

morning

- 09:00-10:00 **REGISTRATION**
- 10:00-10:30 **OPENING CEREMONY**
Chairmen: Andy Offer and Seishi Ninomiya
Room: Aula Magna
- 10:30-11:00 **PLENARY SESSION**
AGROffice a WinGIS based application for Agriculture, Forestry, Ecology and planning rural areas - **WALTER MAYER**
Chairman: Andy Offer
Room: Aula Magna
- 11:00-11:30 **PLENARY SESSION**
Information Technology: Driver, Enabler and Integrator – Challenges and Potential - **GERHARD SCHIEFER**
Chairman: Andy Offer
Room: Aula Magna
- 11:30-12:00 coffee break
- 12:00-12:45 **PARALLEL SESSIONS**
- | | |
|---|------------------|
| DSS and Modelling: Farm Management
Chairman: Fedro Zazueta | Room: Aula Magna |
| e-AgBusiness and Production Chain Management
Chairman: Andy Offer | Room: Aud. Geo |
| Food Safety and Control /Tracking-Tracing
Chairman: Melanie Fritz | Room: A.1 |
| ICT Adoption and Extension
Chairman: Ehud Gelb | Room: A.2 |
| Instrumentation, Modelling and Control
Chairman: José Boaventura | Room: Aud. Bibl. |
- 12:45-14:00 **LUNCH**

14:10-14:40 **PLENARY SESSION**

Prospects in RFID - Technical progress and commercial applications-An Overview - **NICK SIGRIMIS**

Chairman: José Boaventura

Room: Aula Magna

14:45-16:00 **PARALLEL SESSIONS**

DSS and Modelling into Practice: Environment and Scientific

Room: Aula Magna

Chairman: Caroline Parker

e-AgBusiness and Production Chain Management

Room: Aud. Geo

Chairman: Andy Offer

ICT Adoption and Extension

Room: A.1

Chairman: Ehud Gelb

New Information Technologies in Animal Production

Room: A.2

Chairman: Vasco Fitas da Cruz

Information Systems and Databases

Room: Aud. Bibl.

Chairman: Iver Thysen

16:00-16:25 [Porto break - sponsored by Instituto dos Vinhos do Douro e do Porto](#)

16:25-17:15 **POSTER SESSIONS**

17:15-17:25 **DOURO TOUR** (departure by Bus from the University)

08:45-10:00	PLENARY SESSION - ICT adoption for Agriculture - Ehud Gelb Chairman: Mick Harkin	Room: Aula Magna
08:45-08:50	Introduction of main issues	
08:50-09:00	Is ICT Adoption for Agriculture still an issue? – Prof. G. Schiefer	
09:00-09:10	Rapporteur reports	
09:10-09:25	Fata's ICT Adoption Experience and Initiative – A. A. Lima	
09:25-10:00	Discussion and Summary. Background subject matter at http://departments.agri.huji.ac.il/economics/gelb-main.html	
10:05-11:05	PARALLEL SESSIONS	
	Internet Services Chairman: Iver Thysen	Room: Aula Magna
	Grid Applications Chairman: Ian Houseman	Room: Aud. Geo
	DSS and Modelling into Practice: Environment and Scientific Chairman: Caroline Parker	Room: A.1
	GIS and Precision Agriculture / GPS in Agriculture Chairman: Francis Henault	Room: A.2
	6th AOS Workshop - Use of information management tools in development of Information systems in Agriculture Chairman: Sofia Pinto	Room: Aud. Bibl.
11:05-11:30	Coffee break	
11:30-12:45	PARALLEL SESSIONS	
	Internet Services Chairman: Mick Harkin	Room: Aula Magna
	DSS and Modelling into Practice: Environment and Scientific Chairman: Caroline Parker	Room: Aud. Geo
	DSS and Modelling: Farm Management Chairman: Alexander Sideridis	Room: A.1
	GIS and Precision Agriculture / GPS in Agriculture Chairman: António Pinheiro	Room: A.2
	6th AOS Workshop - Development of domain ontologies Chairman: Anita Liang	Room: Aud. Bibl.
12:45-14:00	LUNCH	

- 14:00-14:30 **PLENARY SESSION - EFITA PRIZE**
Chairman: A. Offer
Room: Aula Magna
- 14:30-15:00 **PLENARY SESSION**
Towards the Collaborative University - **FEDRO ZAZUETA**
Chairman: A. Offer
Room: Aula Magna
- 15:05-16:05 **PARALLEL SESSIONS**
- DSS and Modelling: Farm Management** Room: Aula Magna
Chairman: Fedro Zazueta
- Food safety and Control / Tracking-Tracing** Room: Aud. Geo
Chairman: Gerhard Schiefer
- Information Systems and Databases** Room:A.1
Chairman: Jiannong Xin
- Rural and Environmental Development and Policy** Room: A.2
Chairman: Luís Santos Pereira
- Internet Services** Room:A.3
Chairman: Pedro Aguiar Pinto
- 6th AOS Workshop - Thesaurus enrichment and facilitating interoperability through mapping** Room: Aud. Bibl.
Chairman: Howard Beck
- 16:05-16:30 **Coffee break**
- 16:30-17:30 **PARALLEL SESSIONS**
- DSS and Modelling: Farm Management** Room: Aula Magna
Chairman: Alexander Sideridis
- e-AgBusiness and Production Chain Management** Room: Aud. Geo
Chairman: Andy Offer
- Instrumentation, Modelling and Control** Room: A.1
Chairman: Nick Sigrimis
- Rural and Environmental Development and Policy** Room: A.2
Chairman: Guy Waksman
- Gis and Precision in Agriculture / GPS in Agriculture** Room: A.3
Chairman: Francis Henault
- 6th AOS Workshop - Use of Ontologies in Applications** Room: Aud. Bibl.
Chairman: Dagobert Soergel
- 17:50-18:45 **EFITA GENERAL ASSEMBLY**
Chairman: A. Offer
Room: Aula Magna
- 18:45-18:50 **Departure from University - Gala dinner**

09:00-10:15 **PARALLEL SESSIONS****DSS and Modelling: Farm Management**

Chairman: Fedro Zazueta

Room: Aula Magna

Education/Training and Distance Learning/Professional Accreditation

Chairman: Miklós Herdon

Room: Aud. Geo

Information Systems and Databases

Chairman: Jiannong Xin

Room: A.1

Instrumentation, Modelling and Control

Chairman: Miguel Neto

Room: A.2

Modeling Agricultural Systems Using the Object-Oriented Paradigm and the Model Driven Architecture Approach

Chairman: Petraq Papajorgji

Room: A.3

6th AOS Workshop - Use of Standards in Information Management Systems for Agriculture

Chairman: Asanee Kawtrakul

Room: Aud. Bibl.

10:15-11:00 **POSTER SESSIONS**11:00-11:30 [Coffee break](#)11:30-12:45 **PARALLEL SESSIONS****Field Data Acquisition and Recording / Wireless and Sensor Networks**

Chairman: Seishi Ninomiya

Room: Aula Magna

Farm management in Europe for Farmers and AGRO IT companies

Chairman: Walter Mayer

Room: Aud. Geo

Dairy and Animal Production Systems

Chairman: Jorge Azevedo

Room: A.1

Education/Training and Distance Learning/Professional Accreditation

Chairman: Miklós Herdon

Room: A.2

Modeling Agricultural Systems Using the Object-Oriented Paradigm and the Model Driven Architecture Approach

Chairmen: Petraq Papajorgji, Ryan Clark, Eric Jallas

Room: A.3

6th AOS Workshop - Ontology creation, extraction and maintenance

Chairman: Johannes Keizer

Room: Aud. Bibl.

12:45-14:00 **LUNCH**

14:00-15:30 **PARALLEL SESSIONS**

Field Data Acquisition and Recording / Wireless and Sensor Networks Chairman: Joachim Spilke	Room: Aula Magna
Farm management in Europe for Farmers and AGRO IT companies Chairman: Walter Mayer	Room: Aud. Geo
Aquatic Resource Management Chairman: João Cabral	Room: A.1
Instrumentation, Modelling and Control Chairman: Paulo Oliveira	Room: A.2
6th AOS Workshop - Ontology mapping, merging, and alignment Chairman: Anita Sini	Room: Aud. Bibl.
INFITA board meeting	Room: CPCC

15:35-16:20 **PLENARY SESSION - CLOSING CEREMONY**

Chairman: New President
Room: Aula Magna

16:45-16:55 **Bus transfer to Porto and Airport**

July 28, 2005 (Thursday)

07:50-08:20 **Visit to UNICER and Bus transfer to Porto and Airport** (minimum number of participants 40 and maximum 100)

Parallel Sessions by time slots

25 July 2005, 12:00-12:45

DSS and Modelling: Farm Management		Chairman: Fedro Zazueta	Room Aula Magna
Time	Authors	Title	
12:00	Caroline G. Parker	PA325- Technology Acceptance and the Uptake of Agricultural DSS	
12:15	Tamer Shahwan and Frank Lemke	PA155- Forecasting Commodity Prices for Predictive Decision Support Systems	
12:30	Vincent Abt, Frédéric Vigier, Henri Pierreval, Jean-Baptiste Bigeon and Cédric Durand	PA191- Using enterprise modeling methodologies for modeling agricultural activities and identifying information requirements. A Case Study of a Livestock Farm	
12:45			

e-AgBusiness and Production Chain Management		Chairman: Andy Offer	Room: Aud. Geo
Time	Authors	Title	
12:00	Reiner Doluschitz, Markus Emmel, Fabian Kaiser, Jens Pape and Michael Roth	PA104- The Emerging Role of E-Agribusiness - State of the Art and Perspectives in Germany	
12:15	Yutaka Sasaki, S. Bocchi, F. Pagliari and M. Suzuki	PA145- Construction of E-AgBusiness Model for High-Class Japonica Rice in EU	
12:30	Jan Jarolímek, J. Vanek and M. Adamek	PA148- Electronic exchange trade with agrarian commodities in the Czech Republic	
12:45	Guy Waksman and Sylvie Masselin-Silvin	PA602- Traceability and cross compliance: towards common data descriptions	

Food Safety and Control /Tracking-Tracing		Chairman: Melanie Fritz	Room: A. 1
Time	Authors	Title	
12:00	Ludwig Theuvsen and Thorsten Hollmann-Hespos	PA106- The Economics of Traceability: A Model of Investments in Tracking and Tracing Systems in Agriculture and the Food Industry	
12:15	Amots Hetzroni, D. Shapira, I. Esquira and Y. Edan	PA107- Data capture in an agricultural setting for traceability and management	
12:30	Rui Pitarma, J. E. Ramos, N. Lima and M. G. Carvalho	PA157- Simulation of Air-Supply Systems Efficiency in Refrigerated Vehicles to Prevent Food Spoilage	
12:45			

ICT Adoption and Extension		Chairman: Ehud Gelb	Room: A. 2
Time	Authors	Title	
12:00	Antonio P. Volpentesta, Nicola Frega, Franco Papandrea and Salvatore Ammirato	PA127 - An analysis of the adoption of E-commerce in the agribusiness sector of Calabria	
12:15	Karin Roskopf and Peter Wagner	PA146 - Knowledge Management of Farmers - From Data Generation to Knowledge Sharing	
12:30	Nicole Taragola and Ehud Gelb	PA119- Information and Communication Technology (ICT) Adoption in Horticulture: A comparison to the EFITA Baseline	
12:45			

Instrumentation, Modelling and Control		Chairman: José Boaventura	Room: Aud. Bibl.
Time	Authors	Title	
12:00	Alain A. Viau, Jae-Dong Jang, V. Payan and A. Devost	PA307- The use of airborne LIDAR and multispectral sensors for Orchard Trees inventory and characterization	
12:15	Federico Hahn and Guadalupe Hernandez	PA160- Comparison of maturity detection of "Ataulfo" mangoes using thermal imaging and NIR	
12:30	Francesc Solanelles, A. Escola, S. Planas, J. Rosell, F. Camp and F. Gràcia	PA183- An electronic control system for proportional pesticide application to the canopy volume in tree crops	
12:45	António Nogueira, Edgar Ataíde, Maria J. Martins, Sandra Enoch, David Loureiro, A. Costa, Á. Ramalho, J. Santos	PA116- Simulation and control strategies for an energetically efficient wood drying process	

25 July 2005, 14:45-16:00

DSS and Modelling into Practice: Environment and Scientific

Chairman: Caroline Parker

Room: Aula Magna

Time	Authors	Title
14:45	Inés Santé Riveira and Rafael Crecente Maseda	PA120- Decision Support System for Agroforestry Land Use Modelling
15:00	Pedro Silva-Santos, Miguel Á. Pardal, Ricardo J.Lopes, Tiago Múrias, Mário Santos and João Alexandre Cabral	PA149- Modelling trophic interactions in an eutrophic estuary using a Stochastic Dynamic Methodology (SDM)
15:15	Domingos Lopes, JoséGomes-Laranjo, Nigel Walford, José Aranha and Neil Lucas	PA186- The estimation of the climate change impact on the Eucalyptus globulus and Pinus Pinaster NPP using the FOREST-BGC
15:30	J. M. Gonçalves, M.G. Horst, L.S. Pereira, J. Rolim, A. Muga	PA224- SADREG, a DSS for Improving Surface Irrigation Systems
15:45	J. Rolim and L.S. Pereira	PA235- Design and Evaluation of Traveling-Gun Systems: the Simulation Model TRAVGUN

e-AgBusiness and Production Chain Management

Chairman: Andy Offer

Room: Aud. Geo

Time	Authors	Title
14:45	A. Matopoulos, M. Vlachopoulou, V. Manthou and B. Manos	PA179- A conceptual framework for e-business adoption and development for enterprises in the agri-food industry
15:00	Alexander Sideridis, C.I. Costopoulou, Ch.Z. Patrikakis, N. Manouselis, G. Stalides	PA211- An eServices System to support information exchange among the agricultural community
15:15	Ilias Vlachos	PA251- Policy, Economic, and Industry Repercussions of Current E-Business Diffusion Rate In European Food Industry
15:30	Róbert Szilágyi, Miklós Herdon and Péter Lengyel	PA274- Development tools for mobile devices in market price information systems
15:45	Melanie Fritz, Tobias Hausen and Gerhard Schiefer	PA279- Trust and e-commerce in agrifood networks: Configuration of an electronic trust environment

ICT Adoption and Extension

Chairman: Ehud Gelb

Room: A1

Time	Authors	Title
14:45	Jacques Wolfert, Herman B. Schoorlemmer, Peter G.A. Pree, Wouter Zunneberg and Jan Paul C. van Hoven	PA238 - KodA: from knowledge to practice for Dutch arable farming
15:00	Mamy Soumaré, Michel Vaksman, Bazile Didier and Mamoutou Kouressy	PA269- Linking GIS and Crop Modeling to expect sorghum cultivars diffusion area in Mali
15:15	V. Samathrakisa, M. Salampasis, Ch. Batzios, M. Adroulidakis, G. Arabatzis	PA283- Adoption of ICT in the Greek Livestock Sector: Results of a survey in the Prefecture of Thessaloniki
15:30	E.S. Sepúlveda, F. S. Zazueta, P. Vergot III and R.A. Bucklind	PA401- Use of Handheld Computers for Hydraulic Calculations of Microirrigation Subunits
15:45	Guy Waksman and Rémy Coffion	PA601- Promotion of the use of ICT by the agro-food sector

25 July 2005, 14:45-16:00

Parallel Sessions by time slots (continued)

New Information Technologies in Animal Production		Chairman: Vasco Fitas da Cruz	Room: A.2
Time	Authors	Title	
14:45	Christian Schulze, J. Spilke and W. Lehner	PA126- Hybrid modelling of operational and analytical data at Precision Dairy Farming	
15:00	C. Roquete, P. Fonseca, P. Pinheiro, P. Carreira, T. Prata, E. Barbosa	PA333- IDEA (Portugal) – Efficiency of the Electronic Identification on Livestock Animals	
15:15	Maarit Puumala, Kim Kaustell and Pekka Jauhiainen	PA363- Assessing the Surface Properties of Floors in Animal Production Buildings	
15:30	Patrícia de Sousa, Rubens B.Souza and Arlei Coldebella	PA400- Image control of growing pig behaviour in two housing environment	
15:45	Mariângela Amendola, Mário Mollo Neto and Vasco Fitas Cruz	PA405- Using Fuzzy Sets theory to analyze environmental condition in order to improve animal productivity	

Information Systems and Databases		Chairman: Iver Thysen	Room: Aud. Bibl.
Time	Authors	Title	
14:45	Reiner Doluschitz, Martin Kunisch, Thomas Jungbluth and Carsten Eider	PA111- AgroXML – A Standardised Data Format for Information Flow in Agriculture	
15:00	Jiannong Xin, G. S. Christy and B. Barfield	PA128- Development of a Web-base State Agricultural Emergency Response System	
15:15	Inci Sentarli and Arif Orçun Sakarya	PA130- Modelling a Queuing System for a Virtual Agricultural Call Center	
15:30	Marianna Salgáné Medveczki	PA239- Bibliographic informations in our days - Metadata formats in Hungary	
15:45	Kleber X. S. de Souza, Joseph Davis, Silvio R. M. Evangelista, Marcia I. F. Souza, M. F. Moura and Adriana D. dos Santos	PA255- The Evolution of Knowledge Representation within Embrapa's Information Agency	

26 July 2005, 10:05-11:05

Internet Services		Chairman: Iver Thyssen	Room: Aula Magna
Time	Authors	Title	
10:05	Jens Peter Hansen, Nicolai Fog Hansen, Annette Høring and Ejnar Schultz	PA175- Landmand.dk – a personal portal for farmers	
10:20	R. P. Branco, P. R. Teodoro and L. S. Pereira	PA227- WEBISAREG – Web Based Decision System Support for Irrigation Management	
10:35	Annette Høring, Jens Peter Hansen, Nicolai Fog Hansen and Ejnar Schultz	PA253- A Common Internet Platform for the Danish Agricultural Advisory Service	
10:50	A K. Papastavrou, P D. Lefakis, Z S. Andreopoulou, S E. Vassiliadou, K S. Ioannou and A I. Lazaridou	PA291- Web Application for Regional Presentation and Development	

Grid Applications		Chairman: Ian Houseman	Room: Aud. Geo
Time	Authors	Title	
10:05	Szabolcs Bella, Á. Németha and S. Szalaia	PA147- Application of GIS Tools: Drought vulnerability in Somogy County, Hungary	
10:20	Miklós Herdon, Péter Salga, Balázs Kónya and Róbert Szilágyi	PA240- Thinking in Grid - Initiatives for Hungarian AgriGrid System	
10:35	S. Ninomiya, M. Laurenson and M. Hirafuji	PA329- An Approach to Agricultural Information System based on Grid Concept	
10:50			

DSS and Modelling into Practice: Environment and Scientific		Chairman: Caroline Parker	Room: A. 1
Time	Authors	Title	
10:05	Sergej Arhipov	PA264- Ontological metamodeling of grain drying processes	
10:20	S. Van Passel, J. Wolfert, J. Lepoutre, H.B. van der Veen, W. Hennen, W. Dol and F. Bouma	PA280- The MicroWave approach for improving the farm modelling process	
10:35	Andy Offer, David Parsons, Audrey Mayes, Paul Meakin	PA281- Getting Decision Support Systems Used	
10:50	M-H. Jeuffroy and Y. Sohbi	PA299- Azodyn: a crop model and a graphic interface as a decision tool to manage wheat spring nitrogen fertilization	

GIS and Precision Agriculture / GPS in Agriculture		Chairman: Francis Henault	Room: A. 2
Time	Authors	Title	
10:05	Rainer Laudien, Georg Bareth and Reiner Doluschitz	PA108- Geotracking and –tracing from farm to factory – Case study: Sugar Beet Management Information System (SuMIS)	
10:20	Christian Ammon and J. Spilke	PA131- Comparison of fixed- and random-regression models using different functional approaches of lactation curves for milk yield forecasts	
10:35	M. Tristany and J. Coelho	PA162- GIS as a tool for the evaluation of land consolidation projects and land-use alternatives: the case-study of Aldeia da Luz	
10:50	Helena Ramos	PA195- Automation of Forest Investment Projects' Cartography	

6th AOS Workshop - Use of Information management tools in development of Information systems in Agriculture		Chairman: Sofia Pinto	Room: Aud. Bibl.
Time	Authors	Title	
10:05	Opening and Welcome speeches		
10:20	Olena Medelyan and Ian H. Witten	PA371- Thesaurus-Based Index Term Extraction for Agricultural Documents	
10:35	R.P. Coito and P.E. Duarte	PA288-Development of Integrated Technological Information Systems to Support Land Management Projects in Portugal	
10:50			

26 July 2005, 11:30-12:45

Internet Services		Chairman: Mick Harkin	Room: Aula Magna
Time	Authors	Title	
11:30	Ludwig Theuvsen	PA105- Electronic Commerce Readiness in the Food Industry: Development and Application of an Assessment Tool	
11:45	James W. Oltjen and Abbas Ahmadi	PA110- An Internet-Based Web Camera System To Observe Processing, Heat Detection, Breeding, Calving, And Other Cattle Behavior at Remote Rangeland and Field Station Locations	
12:00	Poul Lassen and Jens Grønbech Hansen	PA188- EUCABLIGHT Database: Collecting, storing and analysing data related to Potato Late Blight	
12:15	Fokke de Jong	PA193- ZIEZO.biz, the Dutch agricultural portalsite	
12:30	Bader D. Mahaman, Maria S. Ntaliani, and Constantina I. Costopoulou	PA213- E-Government for Rural Development: Current Trends and Opportunities for Agriculture	

DSS and Modelling into Practice: Environment and Scientific		Chairman: Caroline Parker	Room: Aud. Geo
Time	Authors	Title	
11:30	Nina K. Detlefsen	PA332- Analysis of weather forecasts	
11:45	João P. Carvalho, João P. Moura and Manuel C. Reis	PA340- QPYRENAICA – A computer simulator for management of Pyrenean oak forests	
12:00	S. Pinto Teixeira, P. B. de Moura Oliveira, J. M. Moutinho Pereira and J. Boaventura Cunha	PA347- Biological Inspired Algorithms Applications in Life Sciences	
12:15			
12:30			

DSS and Modelling: Farm Management		Chairman: Alexander Sideridis	Room: A. 1
Time	Authors	Title	
11:30	Didier Bazile, Christophe Le Page, Souleymane Dembele and Géraldine Abrami	PA229- Perspectives of modelling the farmer' seed system for in situ conservation of sorghum varieties in Mali	
11:45	F. Mosseddaq, S. Dnidane and M. Lahlou	PA295- Integrated Wheat N Nutrition Management in Morocco: A Decision Support Model	
12:00	François Guerrin and Jean-Michel Médoc	PA305- A simulation approach to evaluate supply policies of a pig slurry treatment plant by multiple farms	
12:15	A. Atri, E. Zand, M. Baghestani, J. khalghani and M.Partovi	PA315- A decision support system for post- emergence weed management in winter wheat	
12:30			

26 July 2005, 11:30-12:45

Parallel Sessions by time slots (continued)

GIS and Precision Agriculture / GPS in Agriculture

Chairman: António Pinheiro

Room: A. 2

Time	Authors	Title
11:30	Honghao Zuo and Xiong Fanlun	PA163- Object Oriented Automation Model for Virtual Plant Growth— a Novel Morphogenetic Model
11:45	Ákos Németh and Szabolcs Bella	PA217- Delimitation of Frost-risk territories with GIS tools
12:00	Pedro Mateus, João Rolim, Luís S. Pereira	PA234- HidroGest, a GIS application for irrigation projects management and model integration
12:15	Karel Charvat, Milan Kocáb, Ivana Valdova, Tomas Cajthaml, Milan Konecny, Karel Stanek, Stanislav Holy, Stepan Kafka	PA249- Geospatial Web Data Sharing in Agriculture
12:30		

6th AOS Workshop - Development of domains ontologies

Chairman: Anita Liang

Room: Aud. Bibl.

Time	Authors	Title
11:30	Sini	Managing domain ontologies within the AOS
11:45		
12:00	C. Comejo, H.W. Beck, D.Z. Haman and F.S. Zazueta	PA378- Development and Application of an Irrigation Ontology
12:15		
12:30	João Graça, Márcio Mourão, Orlando Anunciação, Pedro Monteiro, H. Sofia Pinto and Virgílio Loureiro	PA322- Ontology building process: The wine domain

26 July 2005, 15:05-16:05

DSS and Modelling: Farm Management		Chairman: Fedro Zazueta	Room: Aula Magna
Time	Authors	Title	
15:05	Margit S. Jørgensen, Nina K. Detlefsen and Nicholas J. Hutchings	PA338- FarmN: A Decision Support Tool for Managing Nitrogen Flow at the Farm Level	
15:20	Rui P. Ribeiro and José G. Borges	PA154- MetaForest - a web-based decision system to support forest management involving multiple-ownership	
15:35	Tagir Z. Ibragimov, Irina T. Ibragimova and Sergey S. Sanin	PA168- Decision Support Systems for Cereal Crop Disease Control	
15:50			

Food Safety and Control /Tracking-Tracing		Chairman: Gerhard Schiefer	Room: Aud. Geo
Time	Authors	Title	
15:05	Julie Shields and Caroline Parker	PA326- GrainPlan; The virtual grain store manager	
15:20	Mana Saito, Roel Jansen, Yoshihiko Usui, Kazuhiro Nakano, Willem Hoogmoed, Harm Bartholomeus	PA348- Development of non-destructive detection systems for Phytophthora infected potato tubers	
15:35	J. Maia, G. Gaiolas, M. Mira da Silva, L. Mira da Silva	PA254- An Information System to Trace Fresh Food Products from Farmers to Retailers	
15:50	E. J. Camp, A. Offer, B. Merrell and R. Keatinge	PA314- Electronic Identification of Sheep – a pilot study	

Information Systems and Databases		Chairman: Jiannong Xin	Room: A. 1
Time	Authors	Title	
15:05	L. Pitlik, I. Pető, M. Pásztor, A. Popovics, L. Bunkóczi, V. K. Bálint, I. Kochetkov, A. Pisartsov, P.K. Petz and L. Papócsi	PA219- "eFARMER"~CAP-related and country-specific eContent Management	
15:20	E. Annevelink, F.A. Geerling-Eiff, G.H. Kroeze, H.A.B. van der Meulen, H. Stormink, H.C. Holster, K.J. Poppe, R. Schreuder, and R.A.F. van Paassen	PA267- Information architecture models for the reduction of administrative burdens: using available information in agro chains	
15:35	Allan Leck Jensen, Iver Thysen and Margrethe B. Høstgaard	PA273- Management in Fruit and Vegetable Production with Mobile Internet	
15:50	T. Rafoss, M. Grøntoft, M. Laurenson, S. Ninomiya, I. Thysen and T-E. Skog	PA328- Draft proposal standard: XML-schema for agrometeorological data	

Rural and Environmental Development and Policy		Chairman: Luís Santos Pereira	Room: A. 2
Time	Authors	Title	
15:05	Bernd Weinmann, R. Borresch, F. Kuhlmann and P.M. Schmitz	PA192- Model based Assessment of Multifunctionality	
15:20	J. Orin and R. Pöldaru	PA215- The Farmers Assessments to Internet Benefits in Estonia	
15:35	M. J. Calejo, J.L. Teixeira , L. S. Pereira and N. Lamaddalena	PA221- Modeling the Irrigation Demand Hydrograph in a Pressurized System	
15:50	J. M. Gonçalves, André P. Muga, Pedro Mateus, A.A.Campos and Luis S. Pereira	PA225- SEDAM, a DSS for Demand and Distribution Simulation and Scenarios Evaluation in a Surface Irrigation District	

26 July 2005, 15:05-16:05

Parallel Sessions by time slots (continued)

Internet Services		Chairman: Pedro Aguiar Pinto	Room: A. 3
Time	Authors	Title	
15:05	Miguel C. Neto and Pedro A. Pinto	PA294- Mobile computing potential to deal with the last mile issue in farmers' information delivery	
15:20	J.F. Juliá, G. García-Martínez and E. Silvestre	PA331-Information Provided and Presence of the Spanish Agrifood Companies in the Internet	
15:35	N. Manouselis, C.I. Costopoulou, C.Z. Patrikakis and A.B. Sideridis	PA170- Using metadata to bring buyers closer to agricultural e-markets	
15:50	Jorge Maia, Miguel Castro Neto and Isaurindo Oliveira	PA165- Supporting Irrigation Management Strategies trough the Web: an application to the Portuguese Alentejo region	

6th AOS Workshop - Thesaurus enrichment and facilitating interoperability through mapping

Chairman: Howard Beck

Room: Aud. Bibl.

Time	Authors	Title	
15:05	Asanee Kawtrakul, A. Imsombut, A. Thunyakijjanukit, D. Soergel, Anita Liang, M. Sini, G. Johannsen, J. Keizer	PA372- Automatic Term Relationship Cleaning and Refinement for AGROVOC	
15:20			
15:35	A. Liang, M. Sini, Chang Chun, Li Sijing, Lu Wenlin, He Chunpei and J.Keizer	PA364- The Mapping Schema from Chinese Agricultural Thesaurus to AGROVOC	
15:50			

26 July 2005, 16:30-17:30

DSS and Modelling: Farm Management **Chairman: Alexander Sideridis** **Room: Aula Magna**

Time	Authors	Title
16:30	Alexej Lissitsa and Elena Kovtoun	PA181- The Balanced Scorecard as a strategic management instrument for agricultural enterprises in transition – a case study from Ukraine
16:45	M. M. Gibbons, C.P. Fawcett, R.J. Waring, K. Dearne, P.M.R. Dampney, S.J. Richardson	PA190- PLANET Nutrient Management Decision Support System – a standard approach to fertiliser recommendations
17:00	Carreira D., Teixeira J.L., Oliveira I. and Fabião M.	PA197- The SIGIRA-Part II. Irrigation Scheduling Service
17:15	Cor N. Verdouw, J. Wolfert and A.J.M. Beulens	PA199- Enhancing transformational and incremental innovation with ICT
17:30		

e-AgBusiness and Production Chain Management **Chairman: Andy Offer** **Room: Aud. Geo**

Time	Authors	Title
16:30	Gerhard Schiefer	PA292- Information Management Schemes in Agri-Food Chains
16:45	Sotiris T. Karetos and Constantina I. Costopoulou	PA320 e-Negotiations in Agricultural B2B e-Commerce
17:00	Maurizio Canavari, Alessandro Farneti, Marco Lucchi and Martyn Warren	PA360- E-business and terroir-linked products in Italy: a case study on Romagna wine producers
17:15	Canavari M., Fritz M., Hausen T., Rivaroli S. and Schiefer G.	PA237- Trust Building in agri-food markets with computer-mediated business relationships
17:30	Paul Mc Carthy and Dr. Hugh Melvin	PA287- A Supply Chain Framework to Secure the Future of the Irish Beef Farming Sector

Instrumentation, Modelling and Control **Chairman: Nick Sigrimis** **Room: A. 1**

Time	Authors	Title
16:30	Atsushi Hashimoto, Toshito Niwa, T. Yamamura, Mizanur Rahman, Kenichi Nakanishi, Takaharu Kameoka, Takao Kumon and Katsutoshi Hosoi	PA173- X-Ray Fluorescent and Mid-Infrared Spectroscopic Measurement of Leaf Model
16:45	Maria João Calejo, N. Lamaddalena, and L. S. Pereira	PA250- Pressurized Irrigation Network Modeling:a Flow Driven Analysis Approach.
17:00	C.M. Correia, J.M. Moutinho-Pereira, E.A. Bacelar, B. Gonçalves and J. Boaventura Cunha	PA290- Stomatal behaviour, photosynthesis and leaf anatomy in grapevines grown at an elevated CO2 concentration in the field
17:15	D. Lambrou, K.G. Arvanitis, A. Anastasiou and N. Sigrimis	PA388- A Multi-layer approach to a Multi-Agent system for integrated management of greenhouse crop production
17:30		

26 July 2005, 16:30-17:30

Parallel Sessions by time slots (continued)

Rural and Environmental Development and Policy		Chairman: Guy Waksman	Room: A.2
Time	Authors	Title	
16:30	Martyn Warren	PA298- E-governance, e-democracy and rural citizens	
16:45	István Forgó, Ágnes B. Simon	PA303- Classification of the grassland farmers from Eastern Hungary with fuzzy method	
17:00	J.F. Juliá, G. García-Martínez and E. Silvestre	PA330- An Evaluation for the Digital Divide in Rural Areas	
17:15	R.P. Coito and P.E. Duarte	PA288- Development of Integrated Technological Information Systems to Support Land Management Projects in Portugal	
17:30			

GIS and Precision Agriculture / GPS in Agriculture		Chairman: Francis Henault	Room: A.3
Time	Authors	Title	
16:30	Jesus Soria-Ruiz and Yolanda Fernandez-Ordonez	PA260- Optical and Radar Images Analysis for Determining Land Cover in Mexico	
16:45	Jean-Pierre Chanet, Daniel Boffety, Géraldine André, Thierry Humbert, Philippe Rameau, A. Amamra, Gil De Sousa, E. Piron, Kun Mean Hou, F. Vigier	PA285- Wireless Technologies for Field Data Acquisition	
17:00	F. Henault and B. Brouant	PA308- Accuracy of 10 Guidance Systems for Farming under the same conditions at the same time	
17:15			

6th AOS Workshop - Use of Ontologies in Applications		Chairman: Dagobert Soergel	Room: Aud. Bibl.
Time	Authors	Title	
16:30	Nicole J.J.P. Koenderink, J. Lars Hulzebos, Hajo Rijgersberg and Jan L. Top	PA380- Food Informatics: Sharing Food Knowledge for Research & Development	
16:45			
17:00	Howard W. Beck, Soonho Kim and Diana Hagan	PA373- A Crop-Pest Ontology for Extension Publications	
17:15			

27 July 2005, 09:00-10:15

DSS and Modelling: Farm Management		Chairman: Fedro Zazueta	Room: Aula Magna
Time	Authors	Title	
09:00	Rainer M. Sodtke	PA202- A multi-objective DSS for cover crop management processing fuzzy expert knowledge	
09:15	R. Pöldaru and J. Roots	PA216- The Estimation of the Econometric Model of Milk Yield per Cow: A Support Vector Machine Regression Approach	
09:30	Oded Achilea, Eyal Ronen and Gad Elharrar	PA101- "Haifa Nutri-Net" - a comprehensive crop Nutrition software, operated over the web	
09:45	Suárez de Cepeda, M., Recio, B., Rubio, F.	PA354- Decision Support System for Farm Mechanization	
10:00			

Education/Training and Distance Learning/Professional Accreditation		Chairman: Miklós Herdon	Room: Aud. Geo
Time	Authors	Title	
09:00	Luis Gurovich and I. Casas	PA121- UC Virtual: A new educational platform for professional updating and accreditation programs	
09:15	Peggy Walther, Peter Giebler, Joachim Spilke and Regina Meyer	PA125- Standardization of e-learning – stage of development and importance for agriculture	
09:30	Jane Bech Larsen, Dorthe Christensen and Nadarajah Sriskandarajah	PA243- Synergies through Blending 'On Site' Learning with E-learning Internationally - Evaluating the Global Seminar on Environment and Sustainable Food Systems	
09:45	Lhoussaine Moughli	PA309-Agronomy teaching innovation using Information and Communication Technology	
10:00	Otilia Holgado and Patrick Mayen	PA387- Building a Distance Learning Training System in GIS Based on the Didactical and Pedagogical Study of the Classical Face-to-Face Type of Training	

Information Systems and Databases		Chairman: Jiannong Xin	Room: A. 1
Time	Authors	Title	
09:00	Ján Brindza, Pavol Podhradský, Ján Grolmus, Dezider Tóth, Peter Popik, Peter Brindza	PA336- AGRIEDUCA – specialized courses for education and advisory purposes	
09:15	P.L.P. Corrêa, T.T. Nagamine, V. H. Suzuki, R. G. Guimarães and M. Carvalhaes	PA341- A Service Oriented Information System to Manage Bromelia Distributed Database	
09:30	L. Várallyai, B. Kovács, and J. Prokisch	PA342- Strategic decisions on the basis of the Hungarian Soil Information Database using by Internet technology	
09:45	G. Hampel and M. Nagy	PA345- Preparing a survey of food industry companies in Hungary's Southern Great Plain Region	
10:00	P. Leone and C. Sala	PA152- RARITA: an information system for the exchange of research and technical information on Italian animal breeds	

27 July 2005, 09:00-10:15

Parallel Sessions by time slots (continued)

Instrumentation, Modelling and Control		Chairman: Miguel Neto	Room: A.2
Time	Authors	Title	
09:00	P. M. Ferreira and A. E. Ruano	PA346- Soft-Computing methods in Greenhouse Environmental and Crop Modelling	
09:15	Hannu E. S. Haapala	PA353- Testing procedure for precision combined drilling	
09:30	A. Rouboa, E. Monteiro and J. Vieira	PA293- Computational fluid dynamics analysis of greenhouses with artificial heat tube	
09:45	Inacio Maria Dal Fabbro, Silvestre Rodrigues and Roberto Alves Braga Jr	PA402- Applications of the Moiré Optical Technique in Agricultural Engineering Problems	
10:00	Norton, T., Grant, J., Lenehan, J.J, Fallon, R., Da-Wen Sun and Dodd, V.A.	PA605-Ensuring the accurate prediction of airflow patterns in a climatic calf house by CFD	

Modeling Agricultural Systems Using the Object-Oriented Paradigm and the Model Driven Architecture Approach		Chairman: Petraq Papajorgji	Room: A.3
Time	Authors	Title	
09:00	Ram Ranjan and Petraq Papajorgji	PA232-Using UML to model the economic impact of invasive species: a case study of Pink Hibiscus Mealybug	
09:15	Ryan Clark and Petraq Papajorgji	PA263- Model Driven Architecture for Software Application Generation	
09:30	Petraq Papajorgji and Ryan Clark	PA208- Using Model Driven Architecture principles to develop crop simulation models	
09:45	Juan Carlos Molina and Emilio Iborra	PA319- The OLIVANOVA MDA-approach to Applications Development	
10:00	WORKSHOP WORKING SESSION		

6th AOS Workshop - Use of Standards in Information Management Systems for Agriculture		Chairman: Asanee Kawtrakul	Room: Aud. Bibl.
Time	Authors	Title	
09:00	Laszlo Gabor Papocsi and Ferenc Kulcsar	PA379- Establishing basic infrastructural and methodological background of Semantic Web in the domain of food and agriculture in Hungary	
09:15			
09:30	Hamidreza Mokhtari, Behrooz Arastoo and Omid Jahanshahi	PA265- Overview of an efficient knowledge management model for improving the role of agriculture educational system in the process of developing a knowledge-based agriculture: the case of Iran	
09:45			
10:00	Yolanda Fernandez-Ordonez and Jesus Soria-Ruiz	PA261- Design Approach for a Crop Information System in Mexico	

27 July 2005, 11:30-12:45

Field Data Acquisition and Recording / Wireless and Sensor Networks

Chairman: Seishi Ninomiya

Room: Aula Magna

Time	Authors	Title
11:30	Jaume Casadesus, Carme Biel and Robert Savé	PA201- Turf color measurement with conventional digital cameras
11:45	Sergio R. M. Canovas, Marlon G. Chermont and Carlos E. Cugnasca	PA209- Remote Monitoring and Actuation based on LonWorks Technology
12:00	Antonio Mauro Saraiva, James C. Nieh, and Etienne Américo Cartolano Junior	PA245-EthoLog: a tool for data acquisition on behavioral studies
12:15	Karel Charvat, Milan Konecny, Karel Stanek, PAvel Dvorak, Zbynek Kribvanek, Jaroslav Jansa, Milan Kocab, Pavel VANis, Pavel Gnip	PA248-Mobile agriculture
12:30	João M. Serrano, José O. Peça and Fernando Santos	PA297- Draft and fuel requirements in tillage operations: modelling for optimizing tractor-implement systems

Farm management in Europe for farmers and AGRO IT companies

Chairman: Walter Mayer

Room: Aud. Geo

Time	Authors	Title
11:30	Algimantas Kurlavicius and G. Kurlavicius	PA137- A Web-Based Decision Support Environment for Farmers
11:45	Toth - Novitech Plc	PA606 - One common CAP window for an EU farmer for: Information retrieval and Claim submission
12:00	Alonso Dominguez	PA607- Agrooffice - The Integral Solution in Management of the Agrarian Developments and Rural areas
12:15	Stefan Mössler	PA608- WinGIS the basic spatial engine for various markets within the rural area
12:30		

Dairy and Animal Production Systems

Chairman: Jorge Azevedo

Room: A. 1

Time	Authors	Title
11:30	Abbas Ahmadi and Peter H. Robinson	PA113- PcDairy for Windows: Ration Formulation and Analysis Programs for Dairy Cattle
11:45	Heli Kiiman, Elli Pärna, Merike Henno, and Olev Saveli	PA176- About somatic cell count in dairy production system
12:00	Diederik Pietersma, René Lacroix, Roger Cue, Daniel Lefebvre and Kevin M. Wade	PA241- Use of data mining to characterize dairy herds with poor heifer growth
12:15	Fievez, V., Van Looveren, J., Wanzele, W., Vlaeminck, B., Van Straalen, W., Wade, K., Lacroix, R	PA246- Knowledge discovery in milk fatty acid databases applied to suboptimal milk production
12:30	Albert de Vries	PA262- A Network Model of Dairy Cow Replacement under Herd Constraints

27 July 2005, 11:30-12:45

Parallel Sessions by time slots (continued)

Education/Training and Distance Learning/Professional Accreditation		
	Chairman: Miklós Herdon	Room: A.2
Time	Authors	Title
11:30	Luis A. Gurovich and O. Saggé	PA 311- Fine tuning irrigation scheduling with phytomonitoring technology in Chile
11:45	Miklos Herdon	PA324- Experiences in Curriculum Development for Agricultural Informatics Specialists at BSc and MSc level – Towards European Masters
12:00	Nadarajah Sriskandarajah, Dorthe Christensen and Geir Lieblein	PA358- Experiential Learning Online – Experiences from Designing and Running a Nordic Course in Agroecology
12:15	Jerzy Weres, Piotr Boniecki, Wojciech Mueller and Adam Krysztofiak	PA600- Information technology in agriculture as a successful curriculum for agricultural engineering students
12:30		

Modeling Agricultural Systems Using the Object-Oriented Paradigm and the Model Driven Architecture Approach	
	Chairmen: Petraq Papajorgji, Ryan Clark, Eric Jallas
	Room: A.3
Time	
11:30	WORKSHOP WORKING SESSION
11:45	
12:00	
12:15	
12:30	

6th AOS Workshop - Ontology creation, extraction and maintenance	
	Chairman: Johannes Keizer
	Room: Aud. Bibl.
Time	
11:30	
11:45	The issues covered in this session will include:
12:00	<ul style="list-style-type: none">• CS maintenance: who and how (infrastructure and tools)• Sub-domain ontologies maintenance (interaction with the CS)
12:15	<ul style="list-style-type: none">• Sub-tree / Sub-domain extraction• Versioning
12:30	

27 July 2005, 14:00-15:30

Field Data Acquisition and Recording / Wireless and Sensor Networks

Chairman: Joachim Spilke

Room: Aula Magna

Time	Authors	Title
14:00	P. Mestre, E. Peres and C. Serôdio	PA282- Agricultural Monitoring and Control System using Low-Cost Wireless Sensors Networks
14:15	Raul Morais, A. Valente and C. Serôdio	PA344- A Wireless Sensor Network for Smart Irrigation and Environmental Monitoring: A Position Article
14:30	Jan W. Hopmans, A. P. Mortensen, J. Simunek ,Y. Morid and A. Tuli	PA381- Multi-functional heat pulse probe measurements of coupled vadose zone flow and transport
14:45		

Farm management in Europe for farmers and AGRO IT companies

Chairman: Walter Mayer

Room: Aud. Geo

Time	Authors	Title
14:00	Alfred Pitterle	PA609- FOMUMIS a new method to objectively evaluate production capacities of natural land resources
14:15	Eduardo Moreira	PA610- Spatial data for rural areas in Portugal
14:30	L. Pitlik, I. Pető , M. Pásztor, A. Popovics, L. Bunkóczi and I. Szűcs	PA218- Consistency controlled future generating models
14:45	Speaker to be announced	AGROCOM - Germany
15:00		

Aquatic Resource Management

Chairman: João Cabral

Room: A. 1

Time	Authors	Title
14:00	Fred S. Conte and Abbas Ahmadi	PA112- AQUARIUS: A Computer Program for Water Quality Closure Rule Evaluation and Shellfish Sanitation Simulation
14:15	Monteiro, S., Garcia-Santos, S., Carrola, J., Pires, E., Boaventura Cunha, J. and Fontainhas-Fernandes, A.	PA343- The effect of waste water on histological alterations in fish: A monitoring experimental system using renewable energies
14:30	João Carrola, António Fontainhas-Fernandes, Sandra Monteiro, Sofia Garcia-Santos and José Aranha	PA361- Fish Biomonitorization in Douro Watershed: Jales Mines Area
14:45		

Instrumentation, Modelling and Control

Chairman: Paulo Oliveira

Room: A. 2

Time	Authors	Title
14:00	Paulo Salgado, Paulo Afonso and J. Boaventura Cunha	PA334- Clustering of a Greenhouse Fuzzy Model
14:15	Rafael A. de Oliveira, Daniel Albiero, Inacio M. Dal Fabbro, Kil J. Park and Kil J.B. Park	PA368- Thermal Stress Analysis Based on Shadow Moiré Technique in a Convective Dryer
14:30	Inacio Maria Dal Fabbro, Silvestre Rodrigues and Daniel Albiero	PA370- Moiré assisted fruit packing
14:45	Murat O. Balabana and Asli Z. Odabasi	PA604- Color Measurement with Machine Vision, and Comparison with Hand-Held Colorimeters
15:00		

27 July 2005, 14:00-15:30

Parallel Sessions by time slots (continued)

6th AOS Workshop - Ontology mapping, merging and alignment

Chairman: Anita Sini

Room: Aud. Bibl.

Time

14:00

14:15

The issues covered in this session will include:

14:30

- Formats and Tools
- Exploit the results

14:45

15:00

15:15

Session: INFITA board meeting

Room: CPCC

Time

14:00

INFITA board meeting

to

15:25

Poster Sessions

25 July 2005, 16:25-17:15

and

27 July 2005, 10:15-11:00

Exhibition Room - *Biblioteca Central Building*

P01

PA109- **Investigation of mechanical properties variation of apples during the storage with Uniaxial test**
Hassan Mas'oudi, Ahmad Tabatabaefar and Ali Mohammad Borghaee

P02

PA114- **New Information and Communication Technologies on European Rural Development: some considerations about their use and potentiality**
Javier Calatrava

P03

PA115- **Monitoring and control of an energetically efficient wood drying process**
Maria Martins, António Nogueira, Edgar Ataíde, Sandra Enoch, David Loureiro, Arnaldo Cruz Costa, Álvaro Ramalho, José Santos and Luís Pestana

P04

PA118- **The Kohonen Type Neural Network in the Process of Identification of Orchard Pests**
Piotr Boniecki, Weres J., Krzysztof A. and Mueller W.

P05

PA132- **Service delivery systems for natural resource stakeholders: Targeting, information and communication functions and policy considerations**
R. Ramirez and R.A. Lee

P06

PA138- **Variable rate application of fertilizer in a permanent**
José M. N. O. Peça, João M. P. R. Serrano, João Roma, José R. M. Silva, Jorge Mendes, Paulo Palma, Mário Carvalho, David Crespo and Casas Novas

P07

PA151- **Phomadidacte: a computer-aided training program for the assessment of phoma stem canker severity of oilseed rape**
Jean-Noël Aubertot, Y Sohbi, H. Brun and A. Penaud

P08

PA153- **Development of a stochastic dynamic model for ecological indicators' prediction in changed Mediterranean agroecosystems of north-eastern Portugal**
Mário Santos, Pedro Santos and João Alexandre Cabral

P09

PA164- **Longevity trait aspects in dairy production system**
Elli Pärna, Heli Kiiman and Olev Savelic

P10

PA169- **Spreading Matter Management in France within Sigemo**
Vincent Souliagnac, François Gibold, François Pinet and Frédéric Vigier

P11

PA171- **A framework for a knowledge support system within a portal for rural e-Agricultural communities in Southern Africa**
Albertus AK Buitendag and Jacobus S van der Walt

P12

PA196- **Determination of the limitante photosynthetic water potential in order to advise an irrigation modelling system in almond trees**

J. Gomes-Laranjo, L.F. Grácio and J. P. Coutinho

P13

PA203- **Use of information and communication tools for social and institutional development : principles, analysis and limits. The ISIMM project case**

Sergio Vallejo, Michel Soulié, Jean-Louis Couture, Yunona Videnina, Brigitte Février and Tom Soo

P14

PA206- **Towards an agricultural ontology in France : Contributions of the Farm Information Management project (GIEA)**

Thomas Brun, P. Poyet , M. Bopp and F. Vigier

P15

PA230- **A use-case driven domain analysis for milk production information systems**

Andrea C. A. Borim, Antônio Mauro Saraiva and Carlos Alberto Ramos Pinto

P16

PA231- **The SIGIRA - Part I – Inventory of Small and Private Irrigation Schemes in Alentejo**

Isaurindo Oliveira, Marta S. Fabião, José Luís Teixeira, Duarte Carreira and Manuel Silva

P17

PA236- **Evaluation of photosynthesis modelling with neural networks**

Madeleine L. B. Puente de la Vega, Antonio Mauro Saraiva, Hernán Prieto Schmidt and Marcos Silveira Buckeridge

P18

PA242- **Fuzzy model for soil compaction classification in conservation agriculture**

Augusto G. Araújo, Antonio Mauro Saraiva and Marco T. C. Andrade

P19

PA244- **Decision Support System related to the Biodiesel Program in Brazil**

Ronaldo Perez, Aziz G. Silva Júnior, Carlos Arthur da Silva, G. Machado, M. C. Borges, João F. A. Júnior , E. Carmélio, A. F. Teixeira

P20

PA252- **Using Mobile Devices to Improve Communication with Farmers in Common Irrigation Schemes**

Gonçalo Gaiolas, João Maia, M. Mira da Silva and L. Mira da Silva

P21

PA256- **Agriculture and the IEEE 1451 Smart Transducer Interface Standards**

Fernando K. Tani and Carlos E. Cugnasca

P22

PA259- **Application of LonWorks Distributed Control Technology in Greenhouses**

Gilberto A. Pereira and Carlos E. Cugnasca

P23

PA276- **Analysis of Farmer´s Information – Decision System with Stochastic Linear Programming**

Tomaz Dentinho and Luísa Calado

P24

PA277- **Information systems supporting education processes and research management in agricultural engineering**

W. Mueller, J. Weres, A. Kryzstofiak and P. Boniecki

P25

PA304- **Managing Data Integration in Information Systems for heterogeneous Supply Chains**

Th. Hannus, O. Poignée and G. Schiefer

P26

PA306- **Using fluorescence for the detection of nitrogen deficiency in potato plants**

Marie-Christine Bélanger, Alain A. Viau, Guy Samson and Martin Chamberland

P27

PA313- **A model for farm environment impact assessment**
P. Spugnoli, A. Parenti and F. Baldi

P28

PA323- **Information system for plant genetic resources recording and evaluation of Cornelian cherry (*Cornus mas L.*)**
Ján Brindza, Peter Brindza, Dezider Tóth, Beáta Stehlíková, Andrej Urbanovič, Jana Holecová and Janka Nůžková

P29

PA327- **Continuous Monitoring System for Wine Fermentation**
Margarida Seixas, R. Morais, A. Valente and C. Couto

P30

PA338- **FarmN: A Decision Support Tool for Managing Nitrogen Flow at the Farm Level**
Margit S. Jørgensen, Nina K. Detlefsen and Nicholas J. Hutchings

P31

PA351- **An integrated framework for clinical problem solving in agriculture**
Silvia M.F.S. Massruhá, Sandra Sandri, Jacques Wainer and Marcelo A.B. Morandi

P32

PA352- **Solar Irradiation Forecast Model Using Time Series Analysis and Sky Images**
Jorge Casa Nova, José Boaventura Cunha and P. B. de Moura Oliveira

P33

PA355- **Influence of the ICT on the decision making in the Agriculture**
Šilerová Edit, Lang Karel, Havlíček Zdeněk

P34

PA357- **The Level of Information and Communication Technology Using and Information Sources of Growers in Greenhouse Production in Antalya Province, Turkey**
Orhan Ozcatalbas

P35

PA369- **Experimental Design to Calculate Young's Modulus and Poisson Ratio of Bintje Potatoes**
Park. K. J. B., Dal Fabbro. I. M., Cornejo. F. E. P., Park. K. J. and Oliveira R. A.

P36

PA382- **Management of metadata in an interdisciplinary environmental research project**
C. Mückschel, G. A. Schachtel and W. Köhler

P37

PA384- **GIS framework for intensive farming system management at the NW Portugal Nitrate Vulnerable Zone**
Joaquim Alonso, Jorge Agostinho, Juan Rey-Graña, Sónia Santos, Cláudio Paredes, Pedro Castro and Luís Martins

P38

PA404- **Synergies between collective cattle information systems and individual on farm information systems**
René Rognant

P39

PA603- **Prediction of Oyster Volume and Weight Using Machine Vision**
S. Damar, Y. Yagiz, M. O. Balaban, S. Ural, ACM Oliveira and CA Crapo

P40

PA318- **Assessment of computerized information system in agriculture on the basis of multifactoral assessment procedure**
T.Rózsa and R. Szilágyi

Exhibitors

PROGIS Software AG

Postgasse 6, 9500 Villach, Austria

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS UN-FAO

Information Management Officer

GILW, Room No. A-255

Viale delle Terme di Caracalla, 00100 Rome, Italy

Location of the Conference

Universidade de Trás-os-Montes e Alto Douro

Quinta de Prados, 5000-911 Vila Real, Portugal

Conference website: <http://www.agriculturadigital.org/efitaandwcca2005>