



**HAICTA2006**  
International Conference on:  
**Information Systems in Sustainable Agriculture, Agroenvironment and Food Technology**

**PROGRAMME**



20-23 September 2006  
Xenia Hotel, Volos, Greece

*Programme Editing Committee:*

Stergios Tzortzios, Professor, Vice-President of HAICTA and Chair of HAICTA2006 Organizing Committee

Nicolas Dalezios, Professor, Chair of HAICTA2006 Scientific Committee

Dimitrios Bampzelis, MSc, Secretariat of HAICTA2006

Marios Spiliotopoulos, MSc, Secretariat of HAICTA2006

**ROOM A****ROOM B****ROOM C****Wednesday, 20 September Hotel Main Hall**17:00-22:00 **Registration and Welcome Reception****Thursday, 21 September Assembly Hall: Opening Ceremony**09:00-09:30 **Greetings**

- ✚ **S. Tzortzios**, Chair of HAICTA2006 Organizing Committee
- ✚ **N. Dalezios**, Chair of HAICTA2006 Scientific Committee
- ✚ **B. Manos**, President of HAICTA-North Greece
- ✚ **Sideridis**, President of HAICTA-the Greek branch of EFITA
- ✚ **K. Bagiatis**, Rector of the University of Thessaly
- ✚ **Special Guests: Minister of Education, Minister of Agric. Development & Foods, Prefect of Magnesia, Mayor of the town of Volos**

09:30-11:00 **Invited Speakers**

- ✚ **Prof. Dr. Gerhard Schiefer**, "The challenge of integration in the agricultural and food sector: E-communities and e-networks" University of Bonn, Germany.
- ✚ **Dr Elizabeth Koch**, Chairperson of COST 725
- ✚ **Dr Hefin Jones**, "Presentation of the European Science Foundation (ESF)" ESF Standing Committee for Life, Earth and Environmental Sciences
- ✚ **Bioagro** Representative

11:00-11:30 **Coffee Break****SESSION 1: Information Technology**

(Chairperson: Nicolas Samaras, Greece-George Adamides, Cyprus)

11:30-11:45 **Kolyo Z. Onkov , Delyana D. Dimova**  
**"Information technology for creation and use of PC "Phytopharmacy" database"**  
 Agricultural University, Plovdiv, Bulgaria

11:45-12:00 **George Adamides**  
**"Bio@gro: A Multilingual Web-Based Application for Organic Agriculture"**  
 Agricultural Research Institute, Nicosia, Cyprus

12:00-12:15 **George Adamides, Natalie Biberian**  
**"The Penetration and Sustainability of ICT in the Cypriot Agricultural Sector"**  
 Agricultural Research Institute, Nicosia, Cyprus

11:30-13:00 **"Bioagro" Meeting****SESSION 5: AGROCLIMATOLOGY-PHENOLOGY WORKSHOP - CLOSED SESSION**

(Only for ESF Workshop Participants)

(Chairperson: Elizabeth Koch, Austria-Viera Remišová, Slovak Republic)

11:30-11:45 **Viera Remišová**  
**"Onset of the first May sprouts of Norway spruce (Picea abies (L.) Karst.) in Slovakia"**  
 Slovak Hydrometeorological Institute, Bratislava, Slovak Republic

11:45-12:00 **Luminita Cojocariu, Florina Radu**  
**"On the effect of genotype and ecologic conditions on yielding capacity in Dactylis glomerata"**  
 Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania

12:00-12:15 **Luminita Cojocariu, A. Moisuc**  
**"Phenophases study at the medicago sativa species in Timisoara – Romania"**  
 Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania

**ROOM A**

12:15-12:30 **Vojtech Merunka, Stergios Tzortzios, Roger P. Knott**  
**"Transformation of Relationships and Hierarchies during Object Oriented Analysis and Design of Information Systems"**  
 Dept. of Information Engineering, Czech University of Agriculture in Prague

12:30-12:45 **Zacharoula S. Andreopoulou, Antonis K. Kokkinakis, Basil Manos**  
**"Classification of Greek fish farming entities and evaluation of their presence in the Internet"**  
 Aristotle University of Thessaloniki, Thessaloniki, Greece

12:45-13:00 **Sophia E. Vassiliadou, Zacharoula S. Andreopoulou, Michalis Salampasis**  
**"A web-based information seeking and learning environment for the Greek forest flora"**  
 Aristotle University of Thessaloniki, Greece

13:00-13:15 **Vasileios I. Kyriatzis, Nicholas S. Samaras, Haifa Takruri-Rizk, Stergios Tzortzios, Dimitrios Kalfountzos**  
**"Intelligent Irrigation Scheduling System Employing Wireless Sensor Networks Technology"**  
 CNTR, School of Computing, Science and Engineering, University of Salford, UK

13:15-13:30 **Yiannis Ampatzidis, Stavros Vougioukas, Dionisis Bochtis**  
**"A Decomposition Framework for the Autonomous Navigation of Agricultural Vehicles"**  
 Aristotle University of Thessaloniki, Greece.

13:30-15:00 **Lunch**

**SESSION 1: Information Technology**

(Chairperson: Th. Tsiligiridis, Greece- Lazaros Iliadis, Greece)

15:00-15:15 **Eleni Kargioti, Maro Vlachopoulou, Vicky Manthou**  
**"Evaluating Customers' Online Satisfaction: The case of an agricultural website"**  
 University of Macedonia, Thessaloniki, Greece

**ROOM B****SESSION 4: AGRO-MANAGEMENT**

(Chairperson: -Miklos Herdon, Hungary - Liviu Gaceu, Romania)

15:00-15:15 **(Invited Speech). Romulus Gruia**  
**"Integrative Management and Informational Connections"**  
 Transilvania University of Brasov, Romania

**ROOM C**

12:15-12:30 **Pavel Stastny, Pavol Nejedlik**  
**"Some relations in selected phenological phases and temperature sums in northern Carpathian"**  
 Slovak Hydrometeorological Institute, Bratislava, Slovakia

12:30-12:45 **Helfried Scheifinger, Elisabeth Koch**  
**"The Spatial Gradient Law of Phenology"**  
 Zentralanstalt für Meteorologie und Geodynamik, Wien, Austria

12:45-13:00 **Marios Theofilou**  
**"Drought indices for the island of Cyprus"**  
 University of Cyprus

13:00-13:15 **Eeva Kotilainen, Mirva Leppälä, Jarmo Poikolainen, Ari Venäläinen and Eero Kubin**  
**"The Finnish National Phenological Network"**  
 Finnish Forest Research Institute, Muho, Finland.

13:15-13:30 **Vasile Turcu, Elena Mateescu, Oana Oprea**  
**"Romanian Agro-Meteorological Network – Monitoring, Data Processing, and Real-Time Information to Decision Factors and End-Users"**  
 National Meteorological Administration, Romania

**SESSION 5: AGROCLIMATOLOGY-PHENOLOGY WORKSHOP - CLOSED SESSION**

(Only for ESF Workshop Participants)

(Chairperson: Elizabeth Koch, Austria – Jiri Nekovar, Czech Rep.)

15:00-15:15 **Márta Gaál, Levente Horváth**  
**Geographical analogies in climate change research**  
 Corvinus University of Budapest, Hungary

**ROOM A**

15:15-15:30	<b>Argyroulis V. and Zotou V.</b> "Teaching English for Agriculture through agricultural English corpora and educational technology" University of Thessaly, Greece
15:30-15:45	<b>A.B. Sideridis, S.T. Karetzos, C.I. Costopoulou and C.P. Yialouris</b> "Alternatives to Traditional Farming by e-Government Services" Agricultural University of Athens, Greece
15:45-16:00	<b>S. Manitsaris, D. Glaroudis</b> "A Geographical Multimedia Management Information System for the local development" University of Macedonia, Greece
16:00-16:15	<b>Tania Pavlou, Bill Karakostas</b> "An Event-Driven Approach to Support Supply Chain Architectural Design" School Of Informatics, City University, London, EC1V 0HW, United Kingdom
16:15-16:30	<b>Tahmaseb Maghsoudi, Shahin Shadfar</b> "Regression Analysis of Factors Influencing on Potato Cultivation Sustainability a Case Study: Ferydonshahr County, Iran" Tehran Azad University, Iran
16:30-16:45	<b>A.Orçun Sakarya</b> "Potential CRM Implications for the Improvement of Wine Marketing: Example of Turkey" Çankaya University, Ankara, Turkey
16:45-17:00	<b>M. T. Maliappis</b> "Knowledge Management for Dissemination. The Case of Agricultural Sector" Informatics Laboratory, Agricultural University of Athens, 75, Iera Odos Str., Athens, Greece

17:00-17:30 **Coffee Break**

<b>SESSION 2: GIS &amp; REMOTE SENSING</b> (Chairperson: Christos Batzios, Greece-Inacio Maria Dal Fabbro, Brasil)	
17:30-17:45	<b>Antonio Carlos Loureiro Lino, Inacio Maria Dal Fabbro</b> "Digital Moiré Assisted Shape Survey of Plant Organs" FEAGRI, UNICAMP, Campinas, SP, Brasil

**ROOM B**

15:15-15:30	<b>N. Manouselis, C. Costopoulou, A. Sideridis</b> "Introducing Recommender Systems for Agricultural E-Commerce Applications" Agricultural University of Athens, Greece
15:30-15:45	<b>Adamantios Haritou, Alexandros Voyatzis</b> "A Model For Tourist Accommodation in EU-20" University of Macedonia, Thessaloniki, Greece
15:45-16:00	<b>Lazaros S. Iliadis, Fotis Maris</b> "A Fuzzy smart Database estimating the Torrential Risk of the "Panaitoliko" mountain watersheds" Dep. of Forestry and Management of the Environment and Natural Resources, Democritus University of Thrace, Orestiada, Greece
16:00-16:15	<b>E. Zafeiriou, Th. Koutroumanides and S. Sofios</b> "Empirical investigation of PPP in the agricultural products" Democritus University of Thrace, Department of Rural Development
16:15-16:30	<b>Ali Shams</b> "Educational Quality of Agricultural Master Courses: The perceptions of graduated students of agricultural college" Tehran University, Iran
16:30-16:45	<b>M. Ntaliani, S. Karetzos, J. Savvas, C. Costopoulou and A. Sideridis</b> "Current Status and Perspectives of e-Government in Greek Agriculture" Agricultural University of Athens, Greece
16:45-17:00	<b>Aristotelis Tagarakis, Athanasios Chatzinikos, Spyros Fountas, Theofanis Gemtos</b> "Delineation of management zones in precision viticulture" University of Thessaly, Greece

<b>SESSION 4: AGRO-MANAGEMENT</b> (Chairperson: Theofanis Gemtos, Greece- Agrita Briede, Latvia)	
17:30-17:45	<b>Antonio Carlos Loureiro Lino, Inacio Maria Dal Fabbro, Silvestre Rodrigues</b> "Moiré Assisted Soil-Tire Contact Area Evaluation" FEAGRI, UNICAMP, Campinas, SP, Brazil

**ROOM C**

15:15-15:30	<b>Danuta Romanovskaya, Eugenija Baksiene</b> "Influence of climate warming on development regularities of plants in Lithuania during 1961–2000" Voke Branch of Lithuanian Institute of Agriculture, Lithuania
15:30-15:45	<b>Nekovar Jiri, Hajkova Lenka, Striz Martin</b> "Selected Phenological characteristics of the Czech Republic" Czech Hydrometeorological Institute
15:45-16:00	<b>E. Tsiros, C. Domenikiotis, N.R. Dalezios</b> "Aridity Mapping with the Use of NDVI and Satellite Derived Degree Days" University of Thessaly, Greece
16:00-16:15	<b>Péter Salga, Marianna Medveczki, Levente Horvath</b> "Modeling climate change using Neural Networks" Corvinus University, Hungary
16:15-17:00	<b>Discussion</b>

<b>SESSION 5: AGROCLIMATOLOGY-PHENOLOGY</b> (Chairperson: Kolyo Z. Onkov, Bulgaria-Vagis Samathrakis, Greece)	
17:30-17:45	<b>Antonio Carlos Loureiro Lino, Inacio Maria Dal Fabbro, Silvestre</b> "Fourier Transform Assisted Phase Shift Moiré Technique" FEAGRI, UNICAMP, Campinas, SP, Brazil

**ROOM A**

17:45-18:00	<b>Antonio Carlos Loureiro Lino, Inacio Maria Dal Fabbro</b> "Application of Image Processing Techniques to Fruit and Vegetable Classification" FEAGRI, UNICAMP, Campinas, SP, Brasil
18:00-18:15	<b>P. Andriopoulos</b> "GIS-Based Visibility Analysis in Fire Management: An Application to Adritsaina-Alifeira Area in Greece " Agricultural University of Athens, Athens Greece
18:15-18:30	<b>L.G. Toullos, D. Doudoumopoulou, D.G. Hadjimitsis</b> "Combining Multitemporal Multispectral Satellite Data for Per-Parcel Classification" National Agricultural Research Foundation (NAGREF), Larissa, Greece
18:30-18:45	<b>Ag.T. Filintas, P.I. Dioudis, D. Pateras, J.N.Xatzopoulos, L. Toullos.</b> "Drip Irrigation Effects in Movement, Concentration and allocation of Nitrates and Mapping of Nitrates with GIS in an Experimental Agricultural Field" National Agricultural Research Foundation (NAGREF), Larissa, Greece
18:45-19:00	<b>Dimitrios Frossyniotis, Yannis Anthopoulos, Spiros Kintzios Antonis Perdikaris and Constantine P. Yialouris</b> "Detection of Plant Viruses Using Biosensors and Artificial Neural Networks" Agricultural University Of Athens, Greece
19:00-19:15	<b>D.G.Hadjimitsis and L.G. Toullos</b> "Satellite Remote Sensing for Crop Discrimination and Crop Monitoring" Frederick Institute of Technology, Nicosia, Cyprus

**ROOM B**

17:45-18:00	<b>George Adamides, Marianthi Giannakopoulou, Eirini Georgiadou</b> "Consumer's Supremacy on Sustainable Agriculture" Agricultural Research Institute, Nicosia, Cyprus
18:00-18:15	<b>E. Koskor, M. Mänd, R. Karise, V. Geherman, A.-J. Martin, R. Viiralt, A. Luik</b> "Diversity OF Bumble Bees and Their Food Resources on Ecological and Conventional Farms" Estonian University of Life Sciences, Kreutzwaldi 64, Tartu
18:15-18:30	<b>Eleni Antonopoulou</b> "Evolution of DSSs in sustainable agriculture" Agricultural University of Athens, Greece
18:30-18:45	<b>T. Bartzanas, A. A. Sapounas, Ch. Nikita – Martzopoulou, C. Kittas</b> "CFD and Agricultural Structures: a Review of Research Applications in Greece" University of Thessaly, Greece
18:45-19:00	<b>Dionisis Bochtis, Stavros Vougioukas, Constantinos Tsatsarelis, Yiannis Ampatzidis</b> "System Architectures for Dynamic Planning and Coordination of Machines Performing Agricultural Operations" Aristotle University of Thessaloniki, Greece
19:00-19:15	<b>G. Tsekouropoulos, I. Tzimitra - Kalogianni, B. Manos</b> "Logistics : Contemporary forms – prospects, logistics applied in Greek agricultural businesses and the correct process of supplying the market with products" Aristotle University of Thessaloniki, Greece

**ROOM C**

17:45-18:00	<b>George K. Tegos, Kolyo Z. Onkov</b> "Seasonality assessment based on embedded software in the PC time series database for Greek sea fishery" Agricultural University, Plovdiv, Bulgaria
18:00-18:15	<b>Thomas J. Glezakos, Fotis P. Maris, Lazaros S. Iliadis, Theodore A. Tsiligiridis, Constantinos P. Yialouris</b> "Neuro-Genetic modeling of torrential environmental risk: the case of the lakes Volvi and Koroneia" Agricultural University of Athens, Greece
18:15-18:30	<b>Katsiabani K., Mavrakis A., Cartalis C. and Theocharatos G.</b> "Estimation of the temporal evolution of drought episodes in Greece with the use of the SPI meteorological drought index" University of Athens, Greece
18:30-18:45	<b>H. Arzani, S. Yousefi1</b> "A GIS Model of Range Suitability Assessment for Sheep Grazing (Case Study Taleghan Region in Tehran Province)" University of Tehran, Iran
18:45-19:00	<b>Antonis K. Kokkinakis, Zacharoula S. Andreopoulou, Garyfallos D. Arabatzis</b> "Typology of northern Greece Rivers aiming to the proper management for the protection of their environmental sensitive fish fauna" Aristotle University of Thessaloniki, Greece
19:00-19:15	<b>H. Arzani, S. Yousefi</b> "A GIS Model of Range Suitability Assessment for Sheep Grazing (Case Study Taleghan Region in Tehran Province)" University of Tehran, Iran
19:15-19:30	<b>G. Metaxas, G. Karantounias and N. Spyropoulos</b> "Application of Contemporary Techniques in the Management of Land Reclamation Projects and Water Resources" Technological Education Institute of Piraeus, Athens, Greece

**ROOM A****ROOM B****ROOM C****Friday, 22 September**

<b>SESSION 1: Information Technology</b> (Chairperson: Romulus Gruia, Romania – Kostas Yalouris, Greece)	<b>SESSION 2: GIS &amp; REMOTE SENSING</b> (Chairperson: Maro Vlachopoulou -Chr. Domenikiotis, Greece)	<b>SESSION 3: MODELING</b> (Chairperson: N. Danalatos- Zeynel Cebeci, Turkey)
09:00-09:15 <b>(Invited Speech) Miklos Herdon, ( István FÜZESI, Tünde RÓZSA)</b> <b>"Food traceability solutions in information systems"</b> University of Debrecen Centre of Agricultural Sciences, Hungary	09:00-09:15 <b>Dionissios Minetos, Olga Christopoulou, Serafeim Polyzos</b> <b>"Investigating land use/ cover change and its dynamics by means of combining statistical techniques and remote sensing methodologies"</b> University of Thessaly, Greece	09:00-09:15 <b>M. J. Diamantopoulou</b> <b>"Comparative analysis of different methods for accurate diameter reduction factor estimation of fir trees bole"</b> Aristotle University of Thessaloniki, Greece
09:15-09:30 <b>M. Drougka</b> <b>"Aspects in Information Systems development for Agriculture Enterprises: A Case Study with an agriculture enterprise"</b> Agricultural University of Athens, Greece	09:15-09:30 <b>Despoina M. Maritsa., Panagiotis A. Kokkinidis., Kostantinos E. Pagonis, Othon N. Manis, Persa D. Barouti-Kyrtopoulou, Athanasios T. Hatzigaidas</b> <b>"A topic map based system for real time monitoring and managing surface water resources"</b> Technological Educational Institution of Thessaloniki	09:15-09:30 <b>M. J. Diamantopoulou, P.E. Georgiou &amp; D.M. Papamichail</b> <b>"An Artificial Neural Network Approach to Daily River Flow Forecasting"</b> Aristotle University of Thessaloniki, Greece
09:30-09:45 <b>Sergejs Arhipovs, Irina Arhipova</b> <b>"The System Modeling of Latvian Forest Management"</b> Faculty of Information Technologies, Latvia University of Agriculture, Latvia	09:30-09:45 <b>Ilias Karmiris, Anastasios Nastis, Dimitrios Dotas</b> <b>"Common use of Mediterranean rangelands by livestock and wildlife"</b> Aristotle University of Thessaloniki. Greece	09:30-09:45 <b>Costas Pontikakos, Konstantinos P. Ferentinos, Theodore A. Tsiligiridis, Alexander B. Sideridis</b> <b>"Natural ventilation efficiency in a twin-span greenhouse using 3D computational fluid dynamics"</b> Informatics Laboratory, Agricultural University of Athens, Greece
09:45-10:00 <b>Ioannis Manikas, Basil Manos, Maro Vlachopoulou, Vicky Manthou</b> <b>"Design of a Producer-Oriented Traceability Model for the Greek Fresh Produce Supply Chain"</b> Aristotle University of Thessaloniki, GREECE	09:45-10:00 <b>F. Amiri, M.R.Chaichi, A.Ariapour</b> <b>"RS and GIS application in site selection for artificial recharge in dry regions of Isfahan (central part of Iran)"</b> Azad University Bushehr Branch, Iran	09:45-10:00 <b>S.V. Archontoulis, P.C. Struik and N.G. Danalatos</b> <b>"Kenaf dark respiration as affected by temperature and leaf position"</b> Wageningen University, Wageningen, The Netherlands
10:00-10:15 <b>Th. A. Gialamas, D. Bochtis, Y. Ampatzidis, D. Kateris, Th. A. Gemtos, C. A. Tsatsarelis</b> <b>"Tractor Stability Estimation Using Adjusting Testing-Bench "</b> Laboratory for Off-Road Equipment, Technological Educational Institute of Larissa, Greece	10:00-10:15 <b>Sergejs Arhipovs, Vitalijs Osadcuks, Irina Arhipova</b> <b>"The Problem of the Geographical Data Control of Territorial Units in the Forest Inventory Information System"</b> Latvia University of Agriculture, Latvia	10:00-10:15 <b>S.V. Archontoulis, P.C. Struik and N.G. Danalatos</b> <b>"Diurnal leaf gas exchange rates of two kenaf genotypes at two leaf positions"</b> Wageningen University, Wageningen, The Netherlands
10:15-10:30 <b>Miklos Herdon, Krisztina ZIMÁNYI, Tünde RÓZSA</b> <b>"Factors of E-Commerce in the Agri-Food Sector"</b> University of Debrecen Centre of Agricultural Sciences, Hungary	10:15-10:30 <b>G. Vardoulis, A. Markinos, K. Aggelopoulou, S. Fountas, A. Gertsis, T. A. Gemtos</b> <b>"Crop variability in cotton fields"</b> University of Thessaly, Greece	10:15-10:30 <b>M. Younesi Alamouti, M. H. Khoshtaghaza, B. ghobadiyan, M. Zahedifar and A. Abbasi</b> <b>"Determination of Rewetting Properties of Wheat Straw for using in Mechanized Urea Treatment of Cereal Straw"</b> Tarbiat Modarres University, Tehran, Iran

**ROOM A**

10:30-10:45 **Péter Salga, Tünde Rózsa, Miklós Herdon**  
**"Functional evaluation and selection of ERP for SME-s"**  
 University of Debrecen, HUNGARY

10:45-11:00 **Liviu Gaceu, Daniel Danila**  
**"G-code programming software for studying the impact behaviour of vegetables. Application for potato tubers"**  
 Transilvania University of Braşov, Brasov, Romania

11:00-11:30 **Coffee Break**

**SESSION 3: MODELING**

(Chairperson: - Irina Arhipova, Latvia- Marika Mänd, Estonia)

11:30-11:45 **Vânia Rosa Pereira, José Teixeira Filho, Inácio Maria Dal Fabbro**  
**"Application of Landscape Metrics to Vegetation Covering Space and Temporal Characterization at Atibainha Watershed"**  
 FEAGRI, UNICAMP, Campinas, SP, Brazil

11:45-12:00 **Antonio Carlos, Loureiro Lino, Inácio Maria Dal Fabbro, Silvestre Rodrigues**  
**"Three Dimensional Shape Survey of Plant Organs Assisted by a Phase Shifting Moiré Technique and the Scilab Software"**  
 FEAGRI, UNICAMP, Campinas, SP, Brazil

12:00-12:15 **Serafeim Polyzos, Dionissios Minetos**  
**"Coastal urbanization and shoreline protection: A Cost-Benefit Analysis and Contingent Valuation Method in designing sustainable protection works"**  
 University of Thessaly, Greece

12:15-12:30 **Reet Karise, Marika Mänd, Eda Koskor, Ants Bender**  
**"The effect of Neem EC on pollen forage of the bumble bee *Bombus Terrestris* L"**  
 Estonian University of Life Sciences, Tartu, Estonia

12:30-12:45 **Petros Kerkides, Panagiotis Giannouloupoulos, Emmanouil Psomiadis**  
**" Land use change detection and possible effects: The case of Iria basin"**  
 Agricultural University of Athens, Greece

**ROOM B**

10:30-10:45 **I.V. Kirkenidis, C.V. Kirkenidis, Z.S. Andreopoulou, P.D.Lefakis**  
**" Pilot multimedia application of photographic documentation for the dams in Greece"**  
 Aristotle University of Thessaloniki, Greece.

**SESSION 4: AGRO-MANAGEMENT**

(Chairperson: Basilio Manos, Greece- Luminita Cojocariu, Romania)

11:30-11:45 **N. Palavitsinis, N. Manouselis, C. Costopoulou, A. Sideridis**  
**"Wine E-Markets in Greece"**  
 Agricultural University of Athens

11:45-12:00 **Sophia. E. Vassiliadou, Panagiotis. D. Lefakis**  
**"Environmental Database Management with Object-Oriented Methodology"**  
 Aristotle University of Thessaloniki, Greece

12:00-12:15 **Hamid Abbasdokht**  
**"Influence of foliar spray of urea on plant height, yield and protein content of wheat (*Triticum aestivum*)"**  
 Shahrood University of Technology, Shahrood, Semnan, IRAN

12:15-12:30 **S. Maddahhosseini and K. Poostini**  
**"Effect of source strength reduction on retranslocation of stem water soluble carbohydrates in three barley cultivars"**  
 Tehran University, IRAN

12:30-12:45 **Masoud Rezaei**  
**"Development of a Scale to Measure the Motivation of Local Extension Workers to participate in Agricultural Extension Activities"**  
 University of Tehran, Karaj, Iran

**ROOM C**

10:30-10:45 **R. Amini, F. Sharif-zadeh**  
**"The effect of osmopriming on germination and drought tolerance of Rye (*Secale montanum*)"**  
 University of Tehran, Iran

10:45-11:00 **A. Bagheri and A. Shams**  
**"Adoption Behavior of Sprinkler Irrigation among Farmers of Ardebil Province-IRAN"**  
 Tehran University, Iran

**SESSION 5: AGROCLIMATOLOGY-PHENOLOGY WORKSHOP - CLOSED SESSION**

(Only for ESF Workshop Participants)

(Chairperson: Pavol Nejedlik, COST Representative- Ákos Németh, Hungary)

11:30-11:45 **N. Gitsakis, M. Spiliotopoulos, Ch. Domenikiotis, G. Dimou and N. Dalezios**  
**"Cotton Yield Prediction Using Remotely Sensed Data and Neural Networks"**  
 University of Thessaly, Greece

11:45-12:00 **Ákos Németh**  
**"DEM based method for determination of potential frost-risk territories"**  
 Hungarian Meteorological Service, Climatology Division, Budapest, Hungary

12:00-12:15 **K. Pappas, N. Gitsakis and N. Dalezios**  
**"Clustering and Modelling Climate Zones in Greece"**  
 University of Thessaly, Greece

12:15-14:00 **Closing of Workshop**  
 Discussion (All participants)  
 Future developments - Follow-up Research  
 Collaborative actions  
**Posters (after lunch)**  
**E. Kanellou, Chr. Domenikiotis and N.R. Dalezios**  
**"Spatially Distributed Potential Evapotranspiration based on NOAA/AVHRR Satellite Data And GIS"**  
 University of Thessaly, Greece  
**M. Spiliotopoulos, A. Marinaki, H. Michalopoulou**  
**"Drought Estimation for Crete Island, Greece"**  
 University of Thessaly, Greece  
**Weihs P., Rischbeck P., Berger L., Besnard, T., Eitzinger, S., Haumann J., Huber, K., Kaiser, G., Linke R., Postl, W.,**

**ROOM A**

12:45-13:00 **N.G. Danalatos, I.I. Gintsioudis and S.V. Archontoulis**  
**"Biokenaf: A Crop Growth Dynamic Simulation Model for Kenaf under Greek Conditions"**  
 University of Thessaly, Greece.

13:00-13:15 **N.G. Danalatos, I.I. Gintsioudis, E. Skoufogianni, K. Giannoulis, M. Chatzidimopoulos, G. Gournezakis and S.V. Archontoulis**  
**"Three Years Kenaf Cultivation in central GREECE: Assessment and Future Perspectives"**  
 University of Thessaly, Greece

13:15-13:30 **N.G. Danalatos, S.V. Archontoulis, K. Giannoulis and S. Rosakis**  
**"Miscanthus and Cardoon as Alternative Energy Crops for Solid Fuel Production in Central Greece"**  
 University of Thessaly, Greece

**ROOM B**

12:45-13:00 **Morteza Molaei, Gh. Sharzeei, H. Hamidepour, H. Gholizadeh**  
**"Derivation of shadow price for CO2 using a distance function approach (Case Study: Iran)"**  
 Tehran University, IRAN

13:00-13:15 **Farhood Golmohammadi**  
**"Systematic Functional Pattern of Extension in accessing to Sustainable Agriculture Development in Iran"**  
 Islamic Azad University, Science and Research Branch – Tehran. IRAN

13:15-13:30 **M., Farzaneh, N., Vaghefi, & J., Hadian**  
**"Chemical composition and antifungal activity of cumin ( Cuminum cyminum) and fennel (Foeniculum vulgare ) against three postharvest pathogens "**  
 Tehran University, Karaj, Iran.

**ROOM C**

**Schneider, W.,**  
**"Determination of drought stress of wheat by thermal infrared measurements and modelling"**  
 University of Vienna, Austria  
**Agrita Briede and Gunta Grišule**  
**"Phenological features of the agricultural species in Latvia"**  
 University of Latvia, Faculty of Geography and Earth Sciences  
**D. Bampzelis, C. Domenikiotis and N. R. Dalezios**  
**Phenological and Agrometeorological Indices Related to Wheat Production for Central Greece.**  
 University of Thessaly, Greece  
**D. Bampzelis, A. Chatzipli, O. Dadali, N.R. Dalezios**  
**Frequency Analysis of Precipitation Characteristics in Different Climate Zones For Greece**  
 University of Thessaly, Greece  
**M.S. Castellazzi, K. Conrad, J. Matthews, J.N. Perry**  
**"Spatio-temporal modelling of crops in agricultural landscape"**  
 Rothamsted Research, Harpenden, UK  
**Christos Domenikiotis, Anna Blanta, Nicolas R. Dalezios**  
**"Transferability of the DEMETER Methodology"**  
 University of Thessaly, Greece  
**Ana Žust, Andreja Sušnik**  
**"Increased Spring Frost Risk for Fruit Growing Production in Slovenia"**  
 Environmental Agency of the Republic of Slovenia  
**Szabolcs Bella, Sándor Szalai**  
**"Drought Vulnerability, Changing of Vulnerability of Southern Transdanubium, Hungary"**  
 Hungarian Meteorological Service, H-1024 Budapest, Hungary

13:30-15:00 **Lunch**

**SESSION 3: MODELING**

(Chairperson: Miklos Herdon, Hungary-Liga Paura, Latvia)

15:00-15:15 **Liga Paura, Irina Arhipova**  
**"The applied statistics course content in agricultural study program"**  
 Latvia University of Agriculture, Latvia

15:15-15:30 **Liga Paura, Irina Arhipova**  
**"Experimental design of agricultural data"**  
 Latvia University of Agriculture

15:30-15:45 **M.Sakellariou-Makrandonaki, E.Papadakis, N.Papanikolaou, G.Zaggas**  
**"Subsurface Drip Irrigation of Sweet Sorghum with Municipal Wastewater"**  
 University of Thessaly, Greece

**SESSION 4: AGRO-MANAGEMENT**

(Chairperson: E. Bakšienė, Lithuania-N. Dagustu, Turkey)

15:00-15:15 **M. Pooryousef, D. Mazaheri and M.Nasiri**  
**"Seed dormancy and its breaking in bitter apple (Citrullus Colocynthis) (L) Schard"**  
 University of Tehran, Karaj, Iran

15:15-15:30 **N. Dagustu, R.M. Cooper**  
**"Detection of cell wall degrading enzymes produced by P. Viola in carrot"**  
 University of Uludağ, TURKEY

15:30-15:45 **E. Bakšienė**  
**"The effects of lakes sapropels on the changes in sandy loam cambisol properties and on the crop productivity"**  
 Voke Branch of the Lithuanian Institute of Agriculture, Lithuania

15:00-17:00 **COST 725 Meeting**

**ROOM A**

15:45-16:00	<b>Hasan Merdun</b> "Single- versus dual-porosity modeling of flow and transport in vadose zone and introduction of macro model" Kahramanmaraş Sütçüimam University, Turkey
16:00-16:15	<b>Ali Vardar, Bülent Eker</b> "Surface roughness map of Trakya region In terms of wind energy" Uludağ University, Bursa, Turkey
16:15-16:30	<b>Ahmad Ghanbari, Hosein Ghadiri, Mehrangiz Joker</b> "Intercropping of maize ( <i>Zea Mays L.</i> ) and cucumber ( <i>Cucumis sativus L.</i> ) as a non-chemical weeds control" University of Zabol, Iran
16:30-16:45	<b>Hülya ATIL</b> "A comparison of different selection indices for genetic improvement for milk traits in Holstein Friesian cattle in Turkey by using one standard deviation as relative economic weight" Ege University, Turkey
16:45-17:00	<b>Nazan Darcan, Zeynel Cebeci</b> "A short review on ict in evaluation of lamb carcass composition" Çukurova University, Adana, Turkey

17:00-17:30 **Coffee Break**

<b>SESSION 3: MODELING</b> (Chairperson: Michalis Salabasis, Greece-Laima Berzina, Latvia)	
17:30-17:45	<b>Sergejs Arhipovs</b> "Metanodeling in the system of grain quality analysis" Latvia University of Agriculture, Latvia
17:45-18:00	<b>Laima Berzina</b> "Assessment of Agricultural Point Source Polluters Using Cluster Analysis" Latvia University of Agriculture, Latvia

**ROOM B**

15:45-16:00	<b>Luminita Cojocariu, Florina Radu</b> "On the effect of genotype and ecologic conditionS on yielding capacity in <i>Dactylis glomerata</i> " Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania
16:00-16:15	<b>Luminita Cojocariu, A. Moisuc</b> "Phenophases study at the <i>Medicago Sativa</i> Species in Timisoara – Romania" Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara
16:15-16:30	<b>Ing. Radovan Ostrovský</b> "Morphologic characterization of Tokay viticulture region in Slovakia" Institute of Biodiversity_Conservation and Biosafety, Slovak Agricultural University, Nitra, Slovakia
16:30-16:45	<b>Mohsen B. Mesgaran, E. Zand, and Hamid R. Mashhadi</b> "Improvement of Iranian Wheat Cultivars Bred During 1956-1995; With and Without Wild Oat Competition" University of Tehran, Iran
16:45-17:00	<b>F Amiri, M.R. Chaichi</b> "The Effects of Range Enclosure on Vegetation Composition and Density" Azad University Bushehr Branch, Iran

<b>SESSION 4: AGRO-MANAGEMENT</b> (Chairperson: N.R. Dalezios, Greece- Mehmet Musa Özcan, Turkey)	
17:30-17:45	<b>Ján Brindza, Dezider Tóth, Jarmila Eftimova, Karol Kováč, Juraj Žadanský</b> "Slovak Tokay vine and viticulture e-encyclopaedia" Department of genetics and plant breeding, Tr. A. Hlinku 2, 949 76 Nitra, Slovakia
17:45-18:00	<b>Jean-Claude Chalchat, Derya Arslan, Mehmet Musa Özcan</b> "The flavour profile of young shoots, flower buds and unripe fruits of capers ( <i>capparis</i> spp.) growing wild in Turkey" Laboratoire de Chimie des Huiles Essentielles Université Blaise Pascal de Clermont,, 63177 Aubiere Cedex, France

**ROOM C**

<b>MIXED SESSION</b> (Chairperson: S. Tzortzios- Hülya Atıl, Turkey)	
17:30-18:00	<b>INVITED SPEECHES:</b> <b>Gheorghe Valentin Roman, Romania.</b> "Current status regarding the operation of OA sector through the support of internet tools and mechanisms in Romania" -Zeynel Cebeci and Kamil Okyay Sindir, Turkey. "Developments in Turkey regarding ICT in Agriculture, the Environment and Food Sciences"

ROOM A	ROOM B	ROOM C
18:00-18:15 <b>Seyed Reza Hassan-Beygi, Barat Ghobadian, Reza Amiri Chayjan &amp; Mohmmad-Hosein Kianmehr</b> "Prediction of a Power Tiller Sound Pressure Levels in Octave Frequency Bands Using Artificial Neural Networks" Tehran University, Iran	18:00-18:15 <b>Sezen Ocak, İnanç Güneyb, Hülya Atıl</b> "Goat Husbandry in Sustainable Agriculture; A Special Reference for Seyhan Basin in Turkey" Cukurova University, Adana, Turkey	18:00-18:15 <b>S.A.Javadi, H.Azarnivand, Seyed Jalil Alavi</b> "Investigation on germination of sage brush ( <i>Artemisia aucheri</i> )" Islamic Azad University of Iran
18:15-18:30 <b>Antonis K. Kokkinakis, Zacharoula S. Andreopoulou, Basil Manos</b> "Fishery Production Models of 'Grey Mullet' (fam. Mugilidae) as a Key Factor for the Sustainable Management of the Costal Lakes in River Nestos Delta" Aristotle Univ. of Thessaloniki, Thessaloniki, Greece	18:15-18:30 <b>Nazan DAĞÜSTÜ</b> "Heterosis for Yield and its Components in Diallel Cross of Seven Hexaploid Wheat ( <i>Triticum aestivum</i> L.)" University of Uludağ, Faculty of Agriculture, Field Crops Department, Görükle, Bursa, Turkey	18:15-18:30 <b>Dezider Tóth, Ján Brindza, Jarmila Eftimova, Karol Kováč, Juraj Žadanský, Katarína Mitická, Andrej Urbanovič, Peter Brindza</b> "TOKAYEDUCA – education and advisory information system" Slovak Agricultural University in Nitra
18:30-18:45 <b>Chernayk O.I. Stavtyskyy A.V.</b> "Application of Econometric Methods in Forecasting the Main Socio-Economic Parameters of Developing Ukrainian Agriculture" Kyiv National Taras Shevchenko University, Kyiv, Ukraine	18:30-18:45 <b>F), M.R.Chaichi</b> "Effects of Livestock Grazing on Soil Moisture and Rangeland Vegetation Cover in Hanna Station (center part of Iran)" Islamic Azad University Bushehr Branch. Iran	18:30-18:45 <b>Liviu Gaceu, Stergios Tzortzios, Romulus Guia</b> "Continuing education in agriculture-a challenge for Information Tehchnology" Transilvania University of Braşov, Romania
18:45-19:00 <b>Ioannis S. Arvanitoyannis &amp; Theodoros H. Varzakas</b> "Risk assessment of corn curl processing-An application of Failure Mode & Effect Analysis (FMEA), Cause & Effect Analysis and Pareto diagram in conjunction with HACCP" University of Thessaly, Greece	18:45-19:00 <b>Y. Bozkurt 1, S. Aktan and S. Ozkaya</b> "Prediction of Carcass Weight and Some Carcass Characteristics of Beef Cattle using Digital Image Analysis" Suleyman Demirel University, Isparta, Turkey	18:45-19:00 <b>K.G. Malkakis, E.E.Golia, I.G. Stamatopoulou, S.A.Floras, I.K. Mitsios</b> "Study of spatial variability of available phosphorus (Olsen), boron, nitrates and nitrites in Almyros region (Central Greece), using geostatistics" University of Thessaly, Greece
		19:00-19:15 <b>Psilovikos, N. Gitsakis, M. Kotopouli, M., Sapountzis and G. Dimou</b> "Time Series Models Using Recurrence Analysis and Neural Networks" University of Thessaly, Greece.
		19:15-19:30 <b>G. Sarlikioti, E. E. Golia, A. Dimirkou, I.G Stamatopoulou, and I. K. Mitsios</b> "Study of the Behavior of Physical Solid Materials for the Improvement of Polluted Soil With CD" University of Thessaly, Greece
19:30-20:30 <b>General Assembly – Closing Conference</b>		
<b>Panel:</b> <b>S. Tzortzios</b> , (Chair of HAICTA2006 Organizing Committee), <b>N. Dalezios</b> , (Chair of HAICTA2006 Scientific Committee), <b>E. Koch</b> , (Chair of COST 725) <b>M. Vlachopoulou</b> , (Vice-President of HAICTA-North Greece), <b>A. Sideridis</b> (Representative Bioagro-President of HAICTA)		
21:30 <b>Gala Dinner</b>		

**Saturday, 23 September Hotel Main Hall**

10:00 **Excursion to the famous mountain PELION by the small train "Mountzouris" - Lunch in the wonderful village "Milies".**

## POSTER SESSION

### A. Thursday, 11.30-19.30

<b>A.1</b>	<p><b>Pablo P.J.D Jimeno.</b>  <b>"Intelligent Decision Support Systems Applied to the Prediction, Diagnosis and Treatment of Fungal Diseases on Vineyards"</b>                  Inkoa sistemas S.L. I+ D Department. Spain</p>
<b>A.2</b>	<p><b>Giorgio Peri, Roberto Romaniello</b>  <b>"Quality inspection of industrial bread by image analysis"</b>                  Università degli Studi di Foggia, Dipartimento PR.I.M.E, Foggia, Italy</p>
<b>A.3</b>	<p><b>Eve Veromann, Anne Luik, Reelika Kevvõi</b>  <b>"Impact of nematode Steinernema feltiae on the abundance of a new generation of pollen beetle (Meligethes aeneus Fab.) and its larval endoparasitoid Diopsilus capito Nees in a spring oilseed rape field in Estonia "</b>                  Department of Plant Protection, Estonian University of Life Sciences, Estonia</p>
<b>A.4</b>	<p><b>G. Dimokas, C. Kittas and M. Tchamitchian</b>  <b>"Model-based Climate Management during Winter Period in Mediterranean Greenhouses"</b>                  University of Thessaly, Greece</p>
<b>A.5</b>	<p><b>H.R.Naseri, H.Azarnivand, F. Sefidkon, Y. Asri</b>  <b>"Essential oil composition of Artemisia absinthium L."</b>                  University of Tehran, Karaj, Iran</p>
<b>A.6</b>	<p><b>M. Musa Özcan , Jean-Claude Chalchat, Derya Arslan</b>  <b>"Comparative essential oil composition of bitter fennel (Foeniculum vulgare subsp. piperitum) fruit oils obtained during different vegetation"</b>                  University of Selcuk, Konya, Turkey</p>
<b>A.7</b>	<p><b>Luminita Livia Bârliba, C. Bârliba, S. Chiş</b>  <b>"The carrying out of the cadastral works for taking from the agricultural circuit of a plot situated in the extended rural area of the commune Moşniţa Nouă , Timiş County, Romania"</b>                  Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara,Romania</p>

### B. Friday, 11.30-19.30

<b>B.1</b>	<p><b>Luminita Livia Bârliba</b>  <b>"The application of property laws in the forestry Cadastre regarding the reconstruction of property right upon the forests from the locality Pişchia, Timiş County, romania"</b>                  Banat's University of Agricultural Sciences and Veterinary Medicine, Timişoara, România</p>
<b>B.2</b>	<p><b>Matsoukis, A. Kamoutsis, A. Chronopoulou-Sereli, C. Lilis and Z. Adamidou</b>  <b>"VITIS VINIFERA L. Phenology as affected by air temperature in Kavala, Greece"</b>                  Agricultural University of Athens, Greece</p>
<b>B.3</b>	<p><b>Vasileiou A , Maris F, Iliadis L</b>  <b>"Estimation of sediments' load in the "Lyra" forest-dam area using GIS"</b></p>
<b>B.4</b>	<p><b>Rohollah Rezaee</b>  <b>"Factor analysis of influencing factors on adoption of sustainable agriculture among wheat farmers of Zanjan province, Iran"</b>                  College of Agriculture, University of Tehran, Karaj – Iran</p>
<b>B.5</b>	<p><b>Zita Bihari, Sándor Szalai</b>  <b>"Estimation of daily pollen concentration of Ambrosia elatior by meteorological parameters"</b>                  Hungarian Meteorological Service</p>
<b>B.6</b>	<p><b>Szabolcs Bella, Sándor Szalai</b>  <b>"Drought Vulnerability, Changing of Vulnerability of Southern Transdanubium, Hungary"</b>                  Hungarian Meteorological Service</p>
<b>B.7</b>	<p><b>WATER BALANCE MODELING BASED ON NOAA/AVHRR SATELLITE DATA</b>  <b>E. Hondronikou , Chr. Domenikioths and N.R. Dalezios</b>                  University of Thessaly, Greece</p>