

CURRICULUM VITAE

SPYROS FOUNTAS

Date of birth: January 1971
Place of birth: Filiatra Messinias
Nationality: Greek; Married, two children
Telephone: +30 – 2105294035, E-mail: sfountas@aua.gr

CV Highlights

- Editor in Chief, ELSEVIER journal “Computers and Electronics in Agriculture (since March 2014)
- Editorial Board at “Precision agriculture” journal (since May 2012)
- Keynote speaker at the 9th European Conference on Precision Agriculture, Lleida, Spain, 7-11 July, 2013
- Invited speaker at the UK National Conference on Precision Agriculture, July 3-4, 2013, Harper-Adams University, UK
- Organizer of the 6th European Conference on Precision Agriculture in Skiathos, Greece, 2007
- Expert on the EU DG Agri EIP Focus Group on Precision Agriculture

Education

- Copenhagen University, Faculty of Life Sciences, Denmark** **04/2001 - 03/2004**
Ph.D. studies; Doctoral Thesis: “Systems Analysis of Precision Agriculture”
Supervisors: Professor Simon Blackmore & Professor Svend Christensen.
Fully Funded by Copenhagen University.
- Purdue University/Center of Precision Agriculture, IN, USA,** **02/2002 - 09/2002**
Visiting Scholar/Researcher
Research Project: Farmers’ experience on Precision Agriculture at US Eastern Corn Belt.
- Cranfield University at Silsoe, UK** **1997 - 1998**
MSc in Information Technology (Management Information Systems)
MSc Thesis: "Industry based project at Novartis, UK, “Implications of the new technology of Precision Farming for agrochemical companies”; *Grade: ‘A’*
Supervisor: Professor Simon Blackmore; Self-funded.
- Aristotelian University of Thessaloniki, Greece** **1988 - 1993**
BSc in Agricultural Sciences; Major: Soil, Water and Agricultural Engineering
BSc Thesis: Computational methods on Biological Oxygen Demand in Watersheds”

Professional Experience

I. Academic Experience

- Agricultural University of Athens** **Apr 2013- Today**
Department of Resource Management and Agricultural Engineering
Agricultural Engineering lab
Assistant Professor in Precision Agriculture
- University of Thessaly, School of Agricultural Sciences** **2005 – Mar 2013**
Department of Crop Sciences & Rural Environment
Agricultural Engineering lab
Assistant Professor in the application of new Technologies in Agricultural Engineering.
- Technological Institute of Larissa** **2006-2009**

Department of Biosystems Engineering

Adjunct Lecturer. Teaching Agricultural Engineering courses

The Royal Veterinary and Agricultural University (KVL), Denmark **03/2004 - 12/2004**
Post-Doctoral Researcher

Project: Development of software components for intelligent agricultural agents
Funded by Danish Technical Research Council (STVF)

The Royal Veterinary and Agricultural University (KVL), Denmark **09/2000 – 03/2001**

Full-time Researcher. Research project: Feasibility study for autonomous vehicles in agriculture. Funded by the Danish Environmental Protection Agency.

II. Industrial Experience

MONSANTO Hellas, Athens, Greece **08/1999 – 08/2000**
Assistant Product Developer (regulatory affairs, new product development)

AGRIPAN SA - Greek Distributor of Kubota tractors, Athens, Greece **11/1998 – 07/1999**
Coordinator for Kubota section (technical support, sales support)

Agricultural Corporation (E.A.S.), Messinias, Greece **02/1994 – 01/1995**
Agronomist (sales of agrochemical, seeds, fertilizers, machinery; advising farmers)

Hotel Acropolis View, Athens, Greece **1988-1996**
Receptionist (at family business) (during vacation periods)

IT skills

Programming languages (C++, Fortran); GIS and visualization packages (ArcView, Surfer); Systems modeling (UML, SSADM); Advanced skills in Microsoft Office 2000; Marketing packages (Pinpoint, SPSS), HTML design.

Teaching

Agricultural University of Athens (Assistant Professor) of • Farm mechanization **2013-today**
• Farm management
• Precision Agriculture technology

University of Thessaly (Assistant Professor) • Precision Agriculture technology & management **2005-2013**
• Farm mechanization & management
• Electronics and Automation in Agriculture

Technological Institute of Larissa (Invited Lecturer with contract) • Statistics for biological sciences **2006-2009**

The Royal Veterinary and Agricultural University (KVL) (PhD student / Post-Doctoral Researcher) • Management Information Systems **2001-2005**
• Precision Agriculture Technology and Management
• Traceability systems

PhD student Supervision

- PhD student Liakos Vasilis: The application of precision agriculture practices in apple orchards. Completed in 2014. Principal supervisor.
- PhD student Tsiropoulos Zisis: Data fusion between ISOBUS data, positioning and draft forces for the delineation of soil management maps. Started in 2011. Principal supervisor.
- PhD student Goula Ioanna. Determination of organic matter and greenhouse gases in different tillage methods. Started in 2012. Principal supervisor.
- PhD student Tagarakis Aristotelis: Precision Viticulture under Greek conditions. Started in 2008. Member of the PhD committee.
- PhD student Vatsanidou Anna: Environmental footprint for the application of precision agriculture in pear orchards. Started in 2010. Member of the PhD committee.
- PhD student Chatzinikos Athanasios: Crop instrumentation for the identification of crop health and growth. Started in 2009. Member of the PhD committee.

Research Record

Prizes/Awards/Academy memberships

- Editor in Chief, ELSEVIER journal “Computers and Electronics in Agriculture (since March 2014)
- Editorial Board at “Computers and Electronics in Agriculture” journal (January 2012-February 2014)
- Editorial Board at “Precision agriculture” journal (since May 2012)
- Keynote speaker at the 9th European Conference on Precision Agriculture, Lleida, Spain, 7-11 July, 2013
- Invited speaker at the UK National Conference on Precision Agriculture, July 3-4, 2013, Harper-Adams University, UK
- Douglas Bomford Paper Award for the paper Biosystems Engineering, No. 84 as a member of the Precision Agriculture team of Cranfield University, at Silsoe, July 2004.
- Keynote speaker at the International Workshop on “Intensive Farming and Integrated Resource Management: Traditional and Non-Traditional Approaches”. Rawalpindi, Pakistan, April 2004.
- EU Expert on Eco-functional intensification for the Technology Platform Organics (2010-2011)
- Ph.D. scholarship award from The Royal Veterinary and Agricultural University, Denmark for 3 years doctoral studies, 04/2001-03/2004
- Scholarship from the Danish Ministry of Education according to the bilateral and cultural agreement between Greece and Denmark for research in Precision Farming at The Royal Veterinary and Agricultural University, July 2000.
- Scholarship from the Greek National Institute of Scholarships (IKY) at the 4th year of the BSc studies with year's grade 8.70/10
- Country representative on the European Society of Precision Agriculture
- Member at the Greek Society of Agricultural Engineering
- Member at the European Society of Agricultural Engineering
- Member at the Greek Society of Information and Communication Technology in Agriculture
- Member at the Danish Agricultural Network in Engineering and Technology
- Member at the Danish Informatics Network in the Agricultural Sciences

Organisation of International conferences in the field of the applicant

1. Co-organizer of the 6th European Conference on Precision Agriculture in Skiathos, Greece, June 2007
2. Co-editor for the poster proceedings of the the 6th European Conference on Precision Agriculture in Skiathos, Greece, June 2007
3. Organizing Committee on the 5th Greek Conference on Agricultural Engineering (Treasurer)
4. Organizing Committee on the HAICTA Conference 2011, Skiathos, Greece, September 2011

International Research Consultancy

Senior Expert on cluster development for “Knowledge Intensive Services in Agriculture” in Vojvodina, Serbia. EU Expedition on Support to Enterprise Competitiveness and Export Promotion for the Republic of Serbia. 01/04/2001 – 31/12/2011.

Citations / h-index

980 Citations h-index: 15

(according to Scholar Google - Last accessed on February 2015)

Research Projects

Project Coordinator / Country Representative / Partner Officer / WP Leader

- **EU- ICT-AGRI II ERA-NET (2013-2015). Funding: 160,000 Euros.**

“Usability of Environmentally sound and reliable techniques in Precision Agriculture”. The aim of USER-PA project is to develop and demonstrate an integrated and reliable Precision Agriculture solution for orchards and vineyards considering spatial information on irrigation and harvest management. USER proposes a conceptual framework, an innovative technical architecture, and the enabling technologies that will allow integrating canopy and fruit sensors with mobile and static data acquisition systems, and farm management information systems, targeting a system that will serve farmers.

My Role: Country Officer of the project in Greece. I am responsible for the coordination of the project in the country and coordinating 3 researchers working on this project. I am **WP leader** in the WP related to the development of a Management Information Systems and a Decision Support System for Precision Agriculture with the application of yield potential and irrigation scheduling.
- **GGET – Synergasia II (2013-2015). Funding 150.000 Euros.**

“GREEN VINEYARD: Environmental Optimization of Viticulture with the use of Precision Agriculture Technologies. The aim of this project is to develop an innovative approach that integrates Precision Agriculture (PA) technologies and Integrated Crop Management (ICM) practices in order to protect natural resources and sustain a profitable future for grape and wine production”.

My Role: Partner Officer. I am responsible for the collection of the site-specific data for the field experiments; the spatial and temporal analysis as well as the delineation of management zones and the application of variable rate applications of fertilizers and irrigation water.
- **EU- ICT-AGRI I ERA-NET (2011-2013). Funding: 170,000 Euros.**

“Integrated robotic and software platform as a support system for farm level business decisions”.

ROBOFARM aims to create a technology platform that integrates and harmonizes existing software and hardware technologies into a single system and makes use of robots equipped with sensors and active vision systems to automatically collect data from the field, feeding a farm management DSS and considering the agronomical, environmental and food safety aspects. Our group is responsible for the following:

My Role: Country coordinator and WP leader on: “Systems analysis and specification requirements for a Farm Management Information System. WP leader on: Hardware integration, interface designs and modularization. WP leader on: Middleware distributed control system implementation to integrate a software package with the hardware on the augmented robotic platform to acquire data for DSS determined tasks and transmit data over the Internet in a format that follows current standards. I am responsible for the coordination of the project in the country and coordinating 4 researchers working on this project.
- **Bilateral cooperation between Greece and Romania (2012-2014). Country Coordinator. Funding: 15,000 Euros.**

“Economic and Environmental implications of the application of Precision Agriculture in apple orchards”. This project involves the following steps that will be studied in both countries and cross-comparisons will be derived: To assess soil variability within apple plantations; To assess crop, yield and quality variability within apple plantations; To assess the environmental implications of using precision agriculture in apple plantations

My Role: Scientific Officer of the project in Greece. I am responsible for the field experiments and the production of deliverables together with a hired new researcher.

➤ **EU/FP7 FutureFarm Project (2008- 2011). Funding: 330,000 Euros.**

The aim of the project was to tackle the current situation where although most people can see the benefits of using a more precise approach to manage crops with additional information, the tools provided by precision farming and other information technologies have not yet moved into mainstream agricultural management. The increased complexity of the systems inhibits easy adoption and makes calculations as to the financial benefits uncertain. These issues were studied and tried to be resolved by improving the decision making process through better Management Information Systems, improved data interchange standards and clear management methods.

The role of our group was **WP leader** on: Analysis of management strategies and required compliance to standards; WP partner on: Analysis and specification of knowledge based farm management; WP partner on: Knowledge management in the FMIS of tomorrow; WP partner on: Socio-economic, environmental impact and technology assessment.

My Role: Scientific Officer of the project in Greece. I was **WP Leader** on the analysis of management strategies and coordinated a group of 5 researchers. Additionally, I was personally involved in the other WPs listed above.

➤ **Monsanto Hellas (2008-2010): 12,700 Euros. Coordinator. Scientific Officers: Theofanis Gemtos – Spyros Fountas.**

“Application of Precision Agriculture in Olive Trees for weed control”

The project examined the application of precision agriculture in olive tree plantations over 4 years. It evaluated two different weed control systems; chemical application treatment and mechanical weeding. It also evaluated the implications of variable rate fertilization for P and K. This project involved the local agency of crop protection; farmer groups and local agronomists.

My Role: Co-Scientific Officer. I was in charge of the field experiments and the analysis of data and generation of reports and communication with the company.

Participant in Research Projects

• **Baltic Sea Economic Cooperation (2009-2010). Funding: 15,000 Euros.** Scientific Officer: Prof. Theofanis Gemtos

“Feasibility Study for Precision Agriculture for Irrigation in the Black Sea region: Economical and Environmental Benefits”

The project conducted a feasibility study of precision irrigation application (variable rate application) in the Black Sea area. The study revealed the water saving potential of up to 7% could be achieved. **My Role: Researcher.** I carried out the scenarios for variable rate application in the region of Thessaly.

• **Innovation Pole of Thessaly, Greek Secretariat of Research and Technology (2006-2008). Funding: 1,000,000 Euros.** Scientific Officer: Prof. Theofanis Gemtos

“Production of Biofuels in Thessaly”. The consortium studied the feasibility of Biofuels production from the energy crops to the final used. Three energy crops (rape seed, sunflower and sweet sorghum) were studied for their adaption to Thessalian climatic and soil conditions. The in the farm production of vegetable oils were studied and their use to power farm tractors at different mixture with diesel with or without heating were tested in an attempt to develop a power self-sufficient farm. **My Role: Researcher.** I was in charge of the data analysis of the collected data for the soil management and the preparation of reporting.

• **Greek General Secretariat of Research and Technology, Greece (2005-2006). Funding: 50,000 Euros.** Scientific Officer: Prof. Theofanis Gemtos.

Pythagoras II: “Protocols for the analysis of spatial and temporal variability in agriculture. Applications in cotton and apple orchards”.

The project studied the application of precision agriculture in apples orchards and in cotton fields. Yield mapping, ECA mapping, soil properties mapping were carried out for two years

Management zones were formed from the collected data. Suggestions for variable rate fertiliser applications in both crops were made. **My Role: Post Doctoral Researcher.** I was in charge of the field experiments, data analysis and the preparation of reporting.

- **Danish Technical Research Council, Denmark** (04/2004– 12/2004). **Funding: 150,000 Euros.** Scientific Officer: Prof. Simon Blackmore.

“Development of software components for intelligent agricultural agents”.

The project developed a new systems architecture and derived appropriate standards that explicitly address the need for sensible autonomous behaviour in given contexts of biosystems production, while retaining the ability to be self-aware and show graceful degradation when in unknown conditions or when sub systems fail and ensure that the machine control retains a safe integrity.

My Role: Post Doctoral Researcher. I was programming an autonomous vehicles and worked on management codes for the new mechanization system.

- **Danish Agricultural Research Council, Denmark** (12/2000–03/2001). Researcher. Funding: 90.000 Euros. Scientific Officer: Prof. Simon Blackmore

“Feasibility study for autonomous vehicles in agriculture”. This project conducted a techno-economic feasibility study of developing an autonomous weeder for Christmas trees, both for the mechanical designs, the operational modes and the environmental benefits compared to the present practice of using herbicide applications. **My Role: Researcher.** I worked on the specification requirements for the autonomous Christmas tree weeder.

Research Papers

THESES

- Modelling of biological oxygen demand (BOD) in watersheds. B.Sc. Thesis in the School of Agriculture, Department of Agricultural Engineering Soil Sciences and Hydraulics, Aristotle University, Thessaloniki, Greece, June 1993.
- Implications of the new technology of precision farming for agrochemical companies. M.Sc. Thesis. Cranfield University at Silsoe, UK, September 1998.
- Systems Analysis of Precision Agriculture. Ph.D. Thesis. The Royal Veterinary and Agricultural University, March 2004.

BOOK CHAPTERS

1. Gemtos T., Fountas S., Bourazanis, G., 2000. Farm Mechanization in Agriculture. Institute of Pedagogics, Athens.
2. Fountas, S., Blackmore, S., Pedersen, S. M., 2005. Information and Telecommunication Technologies (ICT) in Precision Agriculture. In the e-book, E.Gelb and A. Offer (eds.), ICT in Agriculture: perspectives of technological innovation. Center for Agricultural Economic Research, Hebrew University of Jerusalem. <http://departments.agri.huji.ac.il/economics/gelb-pedersen-5.pdf>, 15 pages
3. Blackmore, S., Griepentrog, H.W., Pedersen, S.M., Fountas, S., 2006. Precision Farming in Europe. In “Handbook of Precision Agriculture: Principles and Applications”. The Haworth Press, Inc., USA, 567-614.
4. Fountas, S., Gemtos, T.A., Blackmore, S., 2010. Robotics and sustainability in soil engineering (edited by Dedousis, A., Bartzanas, T.), Springer. pages 69-80.
5. Fountas, S., Bartzanas, T. and Bochtis, D., 2011. Emerging Footprint Technologies in Agriculture, from Field to Farm Gate, in Intelligent Agrifood Chains and Networks (eds M. Bourlakis, I. Vlachos and V. Zeimpekis), Wiley-Blackwell, Oxford, UK, pages 67-85.
6. Fountas, S., Werner, A., Gemtou, M., Gnip, P., Charvat, K., Wurbs, A., Vatsanidou, A., Apostolidi, K.. Knowledge Management in European Farms: Looking into the future of European farming. In: Agricultural information and communication technologies in future farms (eds Werner, A., Apostolidi, K., Blackmore, S., Wurbs, A., Sorensen, C., Fountas, S., Gemtos, T.), Springer, NL. In Press.

INTERNATIONAL PEER-REVIEWED JOURNAL PAPERS

1. S. Blackmore, R. Godwin, S. Fountas, 2003. The analysis of spatial and temporal trends in yield map data over six years. *Biosystems Engineering* 84 (4), 455-466.
2. S.M. Pedersen, S. Fountas, B.S. Blackmore, M. Gylling, J.L. Pedersen, 2003. Adoption and perspectives of precision farming in Denmark. *Acta Agricultura Scandinavica; Section B. Soil and Plants*, 54 (1), 2-6.
3. S. Blackmore, S. Fountas, L. Tang, H. Have, 2004. Systems requirements for small autonomous agricultural vehicles. *Journal of the International Commission of Agricultural Engineering (CIGR)*. Manuscript PM 04 001. Vol. VI. July 2004.
4. Fountas, S., Blackmore, S., Ess, D., Hawkins, S., Blumhoff, G., Lowenberg-Deboer, J., Sorensen, C. G., 2005. Farmer Experience with Precision Agriculture in Denmark and the US Eastern Corn Belt. *Precision Agriculture*, 6, 121-141.

5. S. M. Pedersen, S. Fountas, H. Have and B. S. Blackmore, 2005. Agricultural robots – system analysis and economic feasibility. *Precision Agriculture* 7(4) 295-308.
6. S. Vougioukas, S. Fountas, S. Blackmore, Lie Tang, 2005. Combining Reactive and Deterministic Behaviours for Mobile Agricultural Robots. Special Issue on Information Systems and Innovative Technologies in Agriculture, Food and Environment. *Operational Research – an International Journal*, 5(1).
7. S. Vougioukas, S. Blackmore, J. Nielsen and S. Fountas, 2006. A Two-Stage Route Planning System for Autonomous Agricultural Vehicles. *Precision Agriculture* 7(5) 361-377.
8. S. Fountas, D. Wulfsohn, S. Blackmore, H. L. Jacobsen, S.M., Pedersen, 2006. A model of decision making and information flows for information-intensive agriculture. *Agricultural Systems* 87, 192-210.
9. S. Fountas, B. S. Blackmore, S. Vougioukas, L. Tang, C. G. Sørensen and R. Jørgensen, 2007. “Decomposition of Agricultural Tasks into Robotic Behaviours”. *Agricultural Engineering International: the CIGR Ejournal*. Manuscript PM 07 006. Vol. IX. October, 2007.
10. S. Blackmore, H.W. Griepentrog, S. Fountas, T.A. Gemtos, 2007. Specifications for an autonomous crop mechanization system. *Agricultural Engineering International: the CIGR Ejournal*. Manuscript PM 06 032. Vol. IX. September, 2007.
11. S. Fountas, M. Kyhn, H. Lipczak Jakobsen, S. Blackmore, H.W., 2009. Griepentrog. Systems analysis and information management of a university research farm. *Precision Agriculture*, 10(3), 247-261.
12. Blackmore, B.S., Fountas, S., Gemtos, T.A. and Griepentrog, H.W., 2009. A specification for an autonomous crop production mechanization system. *Acta Hort. (ISHS)* 824: 201-216
13. A. Aggelopoulou, D. Wulfsohn, S. Fountas, G. Nanos, T. Gemtos, S. Blackmore, 2010. Spatial Variability of yield and quality in an apple orchard. *Precision Agriculture* 11, 538-556.
14. C. Sørensen, S. Fountas, E. Nash, L. Pesonen, D. Bochtis, S. Pedersen, B. Basso, S. Blackmore, 2010. Conceptual model of a future farm management information system. *Computers and Electronics in Agriculture*, 72(1), 37-47.
15. C.G. Sorensen, L. Pesonen, S. Fountas, P. Suomi, D. Bochtis, P. Bildsøe and S.M. Pedersen, 2010. A user-centric approach for information modelling in arable farming. *Computers and Electronics in Agriculture*, 73(1), 44-55.
16. D.D. Bochtis, C.G. Sørensen, O. Green, T. Bartzanas, and S. Fountas, 2010. Feasibility of a modelling suite for the optimised biomass harvest scheduling. *Biosystems Engineering*, 107, 283-293.
17. Fountas, S., Aggelopoulou, A., Bouloulis, C., Nanos, G., Wulfsohn, D., Gemtos, T., Paraskevopoulos, A., Galanis, M., 2011. Site-specific management in olive tree plantation. *Journal of Precision Agriculture*, 12(2), Pages 179-195
18. Natsis, A., Fountas, S., Gemtos, T., 2011. Transplanting Machine Operation Analysis. *Agricultural Mechanization in Asia, Africa and Latin America*, 42 (2), 33-36.
19. Kutter, T., Tiemann, S., Siebert, R., Fountas, S., 2011. The role of communication and cooperation in the adoption of Precision Farming in Europe. *Journal of Precision Agriculture*, 12 (1), 2-17.
20. Aggelopoulou, A., Pateras, D., Fountas, S., Nanos, G., Gemtos, T., 2011. Yield and soil data analysis on orchards. *Journal of Precision Agriculture*, 12(1), 118-129.
21. Aggelopoulou, A., Bochtis, D., Koutsostathis, A., Fountas, S., Gemtos, T., Nanos, G., 2011. Yield prediction in apple orchards based on image processing. *Journal of Precision Agriculture*, 12 (3), 448-456.

22. Balafoutis, A., Fountas, S., Natsis, A., Papadakis, G., 2011. Performance and Emissions of Sunflower, Rapeseed, and Cottonseed Oils as Fuels in an Agricultural Tractor Engine. *ISRN Renewable Energy* Volume 2011, Article ID 531510, doi:10.5402/2011/531510.
23. Turker U., T Erdem, A. Tagarakis, S. Fountas, G. Mitev, B. Akdemir and T.A. Gemtos, 2011. A Feasibility Study of Variable Rate Irrigation in Black Sea Area: Water and Energy Saving from the Application. *Journal of Information Technology in Agriculture*, 4(1), 1-8.
24. Lawson, L. G., Pedersen, S.M., Sorensen, C.G., Pesonen, L., Fountas, S., Werner, A., Oudshoorn, F. W., Herold, L., Chatzinikos, T., Kirketerp, I. M., Blackmore, S., 2011. A four nation survey of farm information management and advanced farming systems: A descriptive analysis of survey responses. *Computers and Electronics in Agriculture* 77(1), 7-20.
25. Nash, E., Wiebensohn, J., Nikkila, R., Vatsanidou, A., Fountas, S., Bill, R., 2011. Towards automated compliance checking based on a formal representation of agricultural production standards. *Computers and Electronics in Agriculture* 78, 28-37.
26. Basso, B., Sartori, L., Cammarano, D., Grace, P.R., Fountas, S., Sorensen, C., 2012. Environmental and economic evaluation of N fertilizer rates 1 in a maize crop in Italy: a spatial and temporal analysis. *Biosystems Engineering* 113, 103-111.
27. Tagarakis, A., Liakos, V., Fountas S., Koundouras, S., Gemtos, T., 2013. Management zones delineation using fuzzy clustering techniques in grapevines. *Precision Agriculture*, 14, 18–39.
28. Fountas, S., Paraforos, D., Cavalaris, C., Karamoutis, C., Gemtos, T.A., Abu-Khalaf, N., Tagarakis, A. A., 2013. Five-point penetrometer with GPS for measuring soil compaction variability. *Computers and Electronics in Agriculture*, 96, 109-116.
29. Gravalos, I., Moshou, D., Loutridis, S., Gialamas, T., Kateris, D., Bompolas, E., Tsiropoulos, Z., Xyradakis, P., Fountas, S., 2013. 2D and 3D Soil Moisture Imaging Using a Sensor-Based Platform Moving Inside a Subsurface Network of Pipes. *Journal of Hydrology*, 499, 146-153.
30. Gemtos, T.A., Cavalaris, C., Tagarakis, A., Fountas, S., 2013. Energy analysis of three energy crops in Greece. *Agricultural Engineering International: CIGR Journal* 15 (4), 52-66.
31. Gemtos, T., Fountas, S., Tagarakis, A., Liakos, V., 2013. Precision Agriculture Application in Fruit Crops: Experience in Handpicked Fruits. *Procedia Technology* 8, 324-332.
32. Balafoutis, AT, Papageorgiou, E., Dikopoulou, Z., Fountas, S., Papadakis, G., 2014. Sunflower Oil Fuel for Diesel Engines: An Experimental Investigation and Optimum Engine Setting Evaluation Using a Multi-Criteria Decision Making Approach. *International Journal of Green Energy* 11 (6), 642-673
33. Ntogkoulis, PA, Bochtis, DD, Fountas, S., Berruto, R., Gemtos, TA., 2014. Performance of cotton residue collection machinery. *Biosystems Engineering* 119, 25-34.
34. Vatsanidou, A., Fountas, S., Nanos, G., Gemtos, T., 2014. Variable Rate Application of Nitrogen Fertilizer in a commercial pear orchard. *Fork to Farm: International Journal of Innovative Research and Practice* 1 (1).
35. Tagarakis, A., Koundouras, S., Papageorgiou, EI, Dikopoulou, Z, Fountas, S., 2014. A fuzzy inference system to model grape quality in vineyards. *Precision Agriculture*, 15, 555-578.
36. Fountas, S., Sorensen, C.G., Tsiropoulos, Z., Cavalaris, C., Liakos, V., Gemtos, T., 2015. Farm Machinery Management Information System. *Computers and Electronics in Agriculture*, 110, 131-138.

GREEK PEER-REVIEW JOURNAL PAPERS

37. Γέμτος, Θ., Φουντάς Σ., Μαρκινός Α., Αγγελοπούλου, Α Χατζηνίκος Α., 2006. Εφαρμογές και προοπτική γεωργίας ακριβείας στην Ελλάδα (Application and perspectives of Precision

Agriculture in Greece). Καινοτόμες εφαρμογές της πληροφορικής στον αγροτικό τομέα και στο περιβάλλον (Innovative applications of Informatics in agriculture and rural environment). Τόμος επιστημονικών εργασιών της ΕΠΕΓΕ-Παράρτημα Β. Ελλάδα, σελ 41-51.

38. Φουντάς, Σ., Μουρτζίνης Σ., Γέμτος, Θ. Υιοθέτηση Γεωργίας Ακριβείας (Adoption of Precision Agriculture). Τόμος επιστημονικών εργασιών της ΕΠΕΓΕ-Παράρτημα Β. Ελλάδα. Σεπτέμβριος 2007.
39. Αγγελοπούλου Α., Φουντάς Σ., Γέμτος Θ. Α. Γεωργία Ακριβείας σε καλλιέργεια μήλων (Precision Agriculture in apple plantations). Τόμος επιστημονικών εργασιών της ΕΠΕΓΕ-Παράρτημα Β. Ελλάδα. Σεπτέμβριος 2007.

KEYNOTE PAPERS

1. S. Fountas, S. Blackmore, 2004. Precision Agriculture: A dynamic process. International workshop on “Intensive Farming and Integrated Resource Management: Traditional and Non-Traditional Approaches”. Rawalpindi, Pakistan, April 2004.
2. S. Fountas, S. Blackmore, 2004. New trends in Agricultural Engineering. International workshop on “Intensive Farming and Integrated Resource Management: Traditional and Non-Traditional Approaches”. Rawalpindi, Pakistan, April 2004.

INTERNATIONAL CONFERENCE PAPERS ON PROCEEDINGS

1. S. Fountas, 2001. Farmers’ attitude towards Precision Farming. 3rd Conference on Precision Agriculture, Montpellier, France, June 18-20, 2001.
2. S. Blackmore, H. Have, S. Fountas, 2002. Proposed system architecture to enable behavioural control of an autonomous tractor. ASAE Conference on Automation Technology for Off-road Equipment, Chicago, USA, July 26-26, 2002.
3. S. Blackmore, H. Have, S. Fountas, 2002. A specification of behavioural requirements for an autonomous tractor. ASAE Conference on Automation Technology for Off-road Equipment, Chicago, USA, July 26-26, 2002.
4. H. Have, S. Blackmore, B. Keller, S. Fountas, H. Nielsen, F. Theilby, 2002. Autonomous weeder for Christmas tree plantations – A feasibility study. European Conference of Agricultural Engineering, Budapest, Hungary, June 30-July 4, 2002, Paper No. 02-AE-023.
5. S. Fountas, S.M. Pedersen, S. Blackmore, 2002. A new methodology for decision analysis on precision farming based on users' experience. 6th International Conference on Precision Agriculture, Minneapolis, USA, July 14-17, 2002, CD.
6. C.G. Sorensen, S. Fountas, H.H. Pedersen, S. Blackmore, 2002. Information sources for decision making on precision farming. 6th International Conference on Precision Agriculture, Minneapolis, USA, July 14-17, 2002, CD.
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