

# CURRICULUM VITAE

## SPYROS FOUNTAS

Date of birth: January 1971

Place of birth: Filiatra Messinias

Nationality: Greek; Married, two children

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### 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

### Professional Experience

#### I. Academic Experience

**Agricultural University of Athens**

**Apr 2013- Today**

**Department of Natural Resources Management and Agricultural Engineering**

**Farm mechanization lab**

Assistant Professor in Farm Machinery with emphasis on Precision Agriculture

**University of Thessaly, School of Agricultural Sciences**

**Sept. 2009 – Mar 2013**

**Department of Crop Sciences & Rural Environment**

**Agricultural Engineering lab**

Assistant Professor in farm machinery with emphasis on the application of new technologies

**University of Thessaly, School of Agricultural Sciences**

**Feb. 2005-Aug. 2009**

**Department of Crop Sciences & Rural Environment**

**Agricultural Engineering lab**

Adjunct – Contractual Assistant Professor / Post-Doctoral researcher on Farm machinery and precision agriculture

**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)

**Agripa S.A.**

**09/1998-08/1999**

Kubota tractors, agricultural engineer

**Agricultural Corporation (E.A.S.), Messinias, Greece**

**02/1994 – 01/1995**

Agronomist (sales of agrochemical, seeds, fertilizers, machinery; advising farmers)

## **Teaching Courses**

### **Bachelor Level courses**

Agricultural University of Athens  
(Assistant Professor)  
2013 – today

- Farm mechanization for Department of Crop Production (Compulsory) 3 semesters Co-teaching for theory and lab
- Farm mechanization for Department of Natural Resources management and Agricultural Engineering – Specializations of Soil & Water Sciences (Compulsory) 3 semesters Only teacher for Theory (co-teaching for lab)
- Farm mechanization for Department of Natural Resources management and Agricultural Engineering – Specializations of Agricultural Engineering (Compulsory) 4 semesters Co-teaching for theory and lab
- Pumps – electric motors (Compulsory) 1 semester Co-teaching for theory and lab (teaching pumps part)
- Turbine pumps – pump systems 1 semester Co-teaching for theory and lab (teaching pumps part)
- Precision Agriculture (Selective) 3 semesters Only teacher for Theory and lab

University of Thessaly  
(Assistant Professor & Adjunct)

- Farm machinery basics (Compulsory) 7 semesters Co-teaching for

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|---|---|--|
| Assistant Professor)<br><u>2005-2013</u>  | <ul style="list-style-type: none"> <li>• Farm machinery management (Compulsory)</li> <li>• Mechanical Harvesting (Selective)</li> <li>• Applications of new technologies in farm machinery (Selective)</li> </ul> | theory and lab<br><br>7 semesters<br>In 3 semesters only teacher for theory and lab<br><br>7 semesters<br>Co-teaching for theory and lab<br><br>7 semesters.<br>Co-teaching for theory and lab |
| Technological Institute of Larissa<br>(Invited Lecturer with contract)<br><u>2006-2009</u>        | <ul style="list-style-type: none"> <li>• Statistics for biological sciences</li> </ul>  | 6 semesters<br>Only teacher for theory and lab   |
| <b><u>Master courses</u></b>  | <u>Participation in two Master program at the Department of Crop Production and rural Environment for 8 years (2005-2013)</u>   |  |
| University of Thessaly<br>(Assistant Professor & Adjunct Assistant Professor)<br><u>2005-2013</u> | <ul style="list-style-type: none"> <li>• Advanced farm machinery technology and management</li> <li>• Farm machinery for field crops</li> </ul>   | 7 semesters<br>Co-teaching for theory and lab<br><br>7 semesters<br>Co-teaching for theory and lab   |

## **PhD student Supervision as principal supervisor**

1. PhD student Yiorgos Mpourodimos. The study of spray drift in mist-blower sprayers. Principal supervisor. Agricultural University of Athens.
2. PhD student Evangelos Anastasiou. The application of precision agriculture for high value crops. Principal supervisor. Agricultural University of Athens.

## **PhD student Supervision as member of the committee**

1. PhD student Liakos Vasilis: The application of precision agriculture practices in apple orchards. Member of the PhD committee. Completed in 2014. University of Thessaly.
2. PhD student Tagarakis Aristotelis: Precision Viticulture under Greek conditions. Member of the PhD committee. Started in 2008. Completed in 2013. University of Thessaly.
3. PhD student Tsiropoulos Zisis: Data fusion between ISOBUS data, positioning and draft forces for the delineation of soil management maps. Member of the PhD committee. On-going. Started in 2011. University of Thessaly.
4. PhD student Goula Ioanna. Determination of organic matter and greenhouse gases in different tillage methods. Member of the PhD committee. On-going. Started in 2012. University of Thessaly.
5. PhD student Vatsanidou Anna: Environmental footprint for the application of precision agriculture in pear orchards. Member of the PhD committee. Started in 2010. University of Thessaly.
6. PhD student Chatzinikos Athanasios: Crop instrumentation for the identification of crop health and growth. Member of the PhD committee. On-going. Started in 2009. University of Thessaly.

7. PhD student Dimitris Pyromalis. Integrated Ενσωματωμένα υστήματα αυτοματισμού και ασύρματα δίκτυα στη γεωργία. Member of the PhD committee. On-going. Started in 2013. Agricultural University of Athens.
8. PhD student Christina-Eirini Pantazi. Development of Artificial Intelligent methods for data fusion in the field of Biosystems engineering. Member of the PhD committee. On-going. Started in 2014.

## **MSc student Supervision as principal supervisor**

13 Completed MSc dissertations in the University of Thessaly

## **BSc student Supervision as principal supervisor**

12 Completed BSc dissertations in the University of Thessaly

8 Completed BSc dissertations in the Agricultural University of Athens

## **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 9<sup>th</sup> 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 (President in the period 2015-2017)
- 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 5<sup>th</sup> Greek Conference on Agricultural Engineering (Treasurer)
4. Organizing Committee on the HAICTA Conference 2011, Skiathos, Greece, September 2011

## **Administrative duties**

- Member of the Committee for the Farm Mechanization of the University Farms. It takes active role in the selection of new farm machinery, estimation of the remaining value of existing machinery in the University Farms.
- Responsible for the students' placement in the Specialization of Farm Structures and Farm Mechanization in the Department of Natural Resources Management and Agricultural Engineering.

## **Research Projects**

### **Project Coordinator / Country Representative / Partner Officer / WP Leader**

#### ➤ **EU- ICT-AGRI II ERA-NET (2013-2015).**

“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 for Precision Agriculture with the application of yield potential, variable rate applications and irrigation scheduling.

#### ➤ **GGET – Synergasia II (2013-2015).**

“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 was 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).**

“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 an farm machinery off-road vehicle. I was 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.**  
 “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 was responsible for the field experiments and the production of deliverables together with a hired new researcher.
- **EU/FP7 FutureFarm Project (2008- 2011).**  
 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). 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 See Economic Cooperation (2009-2010).** 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).** 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). 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). 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. 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.

### Citations / h-index

**1043 Citations (excluding self-citations) / h-index: 17**

(according to Scholar Google - Last accessed January 1st , 2016)

## **Research Papers**

### **THESES**

- Systems Analysis of Precision Agriculture. Ph.D. Thesis. The Royal Veterinary and Agricultural University, March 2004.  
*Citations: 5 (excluding self-citations)*
- Implications of the new technology of precision farming for agrochemical companies. M.Sc. Thesis. Cranfield University at Silsoe, UK, September 1998.
- Programming the diffusion 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.

### **BOOK CHAPTERS**

1. Gemtos T., Fountas S., Bourazanis, G., 2000. Farm Tractors and implements. In: Farm Mechanization in Agriculture. Institute of Pedagogics, Athens. In Greek.
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  
*Citations: 22 (excluding self-citations)*
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.  
*Citations: 1 (excluding self-citations)*
4. S. M. Pedersen, S. Fountas, S. B. Blackmore, 2008. Agricultural Robots — Applications and Economic Perspectives. Service Applications and Economic Perspectives. Service Robot Applications (ed. Yoshihiko Takahashi), pp. Robot Applications (ed Yoshihiko Takahashi), 369-382. InTech Education and Publishing.  
*Citations: 7 (excluding self-citations)*
5. Fountas, S., Gemtos, T.A., Blackmore, S., 2010. Robotics and sustainability in soil engineering (edited by Dedousis, A., Bartzanas, T.), Springer. pages 69-80.  
*Citations: 2 (excluding self-citations)*
6. 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.
7. Fountas, S., Aggelopoulou, K. and Gemtos, T. A., 2016. Precision Agriculture: crop management for improved productivity and reduced environmental impact or improved sustainability, in Supply Chain Management for Sustainable Food Networks (eds. E. Iakovou, D. Bochtis, D. Vlachos and D. Aidonis), Wiley-Blackwell, Oxford, UK.

### **INTERNATIONAL PEER-REVIEWED JOURNAL PAPERS**

1. 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.  
*Citations: 40 (excluding self-citations)*
2. 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.

*Citations: 130 (excluding self-citations)*

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.

*Citations: 13 (excluding self-citations)*

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.

*Citations: 48 (excluding self-citations)*

5. 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).

*Citations: 5 (excluding self-citations)*

6. 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.

*Citations: 74 (excluding self-citations)*

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.

*Citations: 27 (excluding self-citations)*

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.

*Citations: 108 (excluding self-citations)*

9. 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.

*Citations: 28 (excluding self-citations)*

10. 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.

*Citations: 8 (excluding self-citations)*

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.

*Citations: 8 (excluding self-citations)*

12. 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.

*Citations: 12 (excluding self-citations)*

13. 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.

*Citations: 43 (excluding self-citations)*

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.

*Citations: 105 (excluding self-citations)*

15. A. Aggelopoulou, D. Wulfsohn, S. Fountas, G. Nanos, T. Gemtos, S. Blackmore, 2010. Spatial Variability of yield and quality in an apple orchard. Journal of Precision Agriculture 11, 538-556.

*Citations: 34 (excluding self-citations)*

16. 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.
- Citations: 34 (excluding self-citations)*
17. 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.
- Citations: 13 (excluding self-citations)*
18. 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.
- Citations: 13 (excluding self-citations)*
19. 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.
20. 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.S.
- Citations: 9 (excluding self-citations)*
21. Tagarakis, A., Liakos, V., Fountas, S., Koundouras, S., Gemtos, T., 2011. Using soil and landscape properties to delineate management zones in vines. *Journal of Agricultural Machinery Science*, 7(1), 33-38.
- Citation: 1 (excluding self-citations)*
22. Natsis, A., Fountas, S., Gemtos, T., 2011. Transplanting Machine Operation Analysis. *Agricultural Mechanization in Asia, Africa and Latin America*, 42 (2), 33-36.
23. Aggelopoulou, A., Pateras, D., Fountas, S., Nanos, G., Gemtos, T., 2011. Soil spatial variability and site-specific fertilization maps in an apple orchard *Journal of Precision Agriculture*, 12(1), 118-129.
- Citations: 7 (excluding self-citations)*
24. Fountas, K. Aggelopoulou, C. Bouloulis, G. Nanos, D. Wulfsohn, T. Gemtos, A. Paraskevopoulos, M. Galanis, 2011. Site-specific management in olive tree plantation. *Journal of Precision Agriculture*, 12(2), Pages 179-195.
- Citations: 7 (excluding self-citations)*
25. 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.
- Citations: 42 (excluding self-citations)*
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.
- Citations: 9 (excluding self-citations)*
27. Tagarakis, A., Liakos, V., Fountas S., Koundouras, S., Gemtos, T., 2013. Management zones delineation using fuzzy clustering techniques in grapevines", which you submitted to Precision Agriculture. *Precision Agriculture*. *Precision Agriculture*, 14, 18-39.
- Citations: 17 (excluding self-citations)*
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.
- Citations: 7 (excluding self-citations)*

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.  
*Citation: 1 (excluding self-citations)*
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, A.T., 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.  
*Citations: 3 (excluding self-citations)*
33. Ntogioulis, P.A., Bochtis, DD, Fountas, S., Berruto, R., Gemtos, TA., 2014. Performance of cotton residue collection machinery. *Biosystems Engineering* 119, 25-34.  
*Citations: 2 (excluding self-citations)*
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, E.I., Dikopoulou, Z, Fountas, S., 2014. A fuzzy inference system to model grape quality in vineyards. *Precision Agriculture*, 1-24. Online, March 2014.  
*Citations: 3 (excluding self-citations)*
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.  
*Citations: 7 (excluding self-citations)*
37. Fountas, S., Carli, C., Sørensen, C. G., Tsiropoulos, Z., Cavalaris, C., Vatsanidou, A., Liakos, B., Canavari, M., Wiebensohn, J., Tisserye, B., 2015. Farm Management Information Systems: Current situation and future perspectives. *Computers and Electronics in Agriculture*, 115, 40-50.  
*Citations: 2 (excluding self-citations)*

## **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.  
*Citations: 15 (excluding self-citations)*
3. T. Gemtos, S. Fountas, S. Blackmore, H.W. Griepentong, 2002. Precision Farming in Europe and the Greek potential. 1st Greek Conference on Information and Communication Technology in Agriculture, Athens, Greece, June 4-7, 2002.  
*Citations: 6 (excluding self-citations)*
4. S. Fountas, C.G. Sorensen, H.H. Pedersen, S. Blackmore, 2002. Information sources for decision making on precision farming. NJF Seminar, Skara, Sweden , June 10-12, 2002  
*Citations: 1 (excluding self-citations)*
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.  
*Citations: 1 (excluding self-citations)*

6. 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.  
*Citations: 15 (excluding self-citations)*
7. 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.  
*Citations: 9 (excluding self-citations)*
8. S. Fountas, S.M. Pedersen, S. Blackmore, 2002. A new approach for decision analysis on Precision Farming based on user experience. NJF Seminar, Skara, Sweden, June 10-12, 2002
9. 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.  
*Citations: 26 (excluding self-citations)*
10. S. M. Pedersen, S. Fountas, B. S. Blackmore, M. Gylling, J. L. Pedersen, 2003. Adoption of precision agriculture in Denmark. 4th European Conference on Precision Agriculture, Berlin, Germany, June 15-18, 2003, 533-538.  
*Citations: 7 (excluding self-citations)*
11. S. Fountas, D.R. Ess, C.G. Sorensen, S. Hawkins, S.B. Blackmore, J. Lowenberg-Deboer, 2003. Information Source preferences in Denmark and USA. 4th European Conference on Precision Agriculture, Berlin, Germany, June 15-18, 2003, 211-216.  
*Citations: 9 (excluding self-citations)*
12. S. Vougioukas, S. Fountas, S. Blackmore, L. Tang, 2004. Navigation task in agricultural robotics. 2nd International Conference on Information and Communication Technology in Agriculture, Thessaloniki, Greece, March 18-20, 2004, vol. 2, pp. 55-64.
13. S. Fountas, S. Blackmore, T. Gemtos, T. Markinos, 2004. Trend maps in Greece and the UK. 2nd International Conference on Information and Communication Technology in Agriculture, Thessaloniki, Greece, March 18-20, 2004.  
*Citations: 2 (excluding self-citations)*
14. S. Fountas, H. Lipczak Jakobsen, S. Blackmore, 2004. Participative research to develop a model for decision making in precision agriculture. 6th European Conference on Farming Information Systems. Porto, Portugal, April 6-9, 2004, pp 735-744.  
*Citation: 1*
15. S. Vougioukas, S. Blackmore, J. Nielsen, S. Fountas, 2005. A two-stage planning system for autonomous agricultural vehicles. 5<sup>th</sup> European Conference on Precision Agriculture, edited by J. Stafford, Uppsala 9-12, pp. 597-604.  
*Citations: 4 (excluding self-citations)*
16. S.M., Pedersen, S. Fountas, H. Have, S. Blackmore, 2005. Agricultural robots: an economic feasibility study. 5<sup>th</sup> European Conference on Precision Agriculture, edited by J. Stafford, Uppsala 9-12, pp. 589-596.  
*Citations: 15 (excluding self-citations)*
17. T. A. Gemtos, S. Fountas, T. Markinos, S. Blackmore, J. R. Marques da Silva, 2005. Trend yield maps in irrigated and rain fed crops. ITAFE'05 - International congress on information technology in agriculture, food and environment. 12-14 October 2005, Adana, Turkey
18. A. Tagarakis, T. Chatzinikos, S. Fountas, T. Gemtos, 2006. Delineation of management zones in precision viticulture. 3rd HAICTA, International Conference on: Information Systems in Sustainable Agriculture, Agroenvironment and Food Technology, 20-23 September, Volos, Greece.  
*Citations: 6 (excluding self-citations)*

19. Vardoulis G., Markinos A., Aggelopoulos A., Fountas S., Gertsi A., Gemtos T., 2006. Crop variability in cotton fields. 3rd HAICTA, International Conference on: Information Systems in Sustainable Agriculture, Agroenvironment and Food Technology, 20-23 September, Volos, Greece.

*Citation: 1 (excluding self-citations)*

20. K. D. Aggelopoulos, S. Fountas, T. A. Gemtos, G. D. Nanos, D. Wulfsohn, 2006. Precision farming in small apple fields of Greece. 8th International Conference on Precision Agriculture. Minneapolis, MN, USA. In CD.

21. Blackmore, B. S., Fountas, S., Gemtos, T., and Vougioukas, S. (2006). EcoBots; Improved energy utilisation through smaller smarter machines. September 9-10, 2006, Sapporo Convention Center, Sapporo, Japan, 3rd IFAC International Workshop on Bio-Robotics, Information Technology and Intelligent Control for Bioproduction Systems.

22. S. Blackmore, H.W. Griepentrog, S. Fountas, 2006. A specification for an autonomous mechanization system. September 9-10, 2006, Sapporo Convention Center, Sapporo, Japan, 3rd IFAC International Workshop on Bio-Robotics, Information Technology and Intelligent Control for Bioproduction Systems.

23. S. M. Pedersen, S. Fountas, B. S. Blackmore, 2007. Economic potential of robots for high value crops and landscape treatment. 6th European Conference on Precision Agriculture, June 3-6, Skiathos, Greece, 457-464.

*Citations: 4 (excluding self-citations)*

24. K. D. Aggelopoulos, D. Pateras, S. Fountas, T. A. Gemtos, G. D. Nanos, 2007. Soil spatial variability in small Greek apple orchards. 6th European Conference on Precision Agriculture, June 3-6, Skiathos, Greece, 71-78.

*Citations: 3 (excluding self-citations)*

25. K. Aggelopoulos, S. Fountas, T. Gemtos, G. Nanos, 2008. Temporal variability of yield and quality in two apple orchards. AWICTSAE, Alexandroupoli. July, 2008. In CD.

26. C. Cavalaris, C. Karamoutis, S. Fountas and T.A. Gemtos, 2008. Sunflower oil energy budget for in-farm oil production under four tillage systems. EurAgEng '08. Hersonisos, Crete.

*Citations: 4 (excluding self-citations)*

27. S. Fountas, K. Aggelopoulos, S. Blackmore, T. Gemtos, 2008. A framework to analyse precision agriculture data. EurAgEng '08. Hersonisos, Crete.

28. S. Fountas, S. Pedersen, S. Blackmore, T. Gemtos, 2008. Agricultural robots – Applications and economic perspectives. AWICTSAE, Alexandroupoli. July, 2008. In CD.

29. Aggelopoulos, A.D., Bochtis, D., Koutsostathis, A., Fountas, S., Gemtos, T.A. and Nanos, G.D., 2009. Flower spatial variability in an apple orchard. 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009, 287-292.

*Citation: 1 (excluding self-citations)*

30. Fountas, S., Pedersen, S., Sorensen, C., Chatzinikos,A., Pesonen, L., Basso, B., Vougioukas, S., Nash, E., Gemtos, T., Blackmore, S. 2009. Management strategies and practices for precision agriculture operations. 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009, 893-898.

31. Pedersen S.M., Ørum J.E., Sørensen C.G., Fountas S., Pesonen L. Blackmore B.S. and Basso B., 2009. Potential savings and economic benefits in arable farming from better precision farming and information Management. 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009, 919-926.

32. Fountas, S., Aggelopoulos, K., Bouloulis, C., Nanos, G., Wulfsohn, D., Gemtos, T., Paraskevopoulos, A., Galanis, M., 2009. Precision agriculture in an olive tree plantation in Southern Greece. 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009, 549-556.

33. B. Basso, Fountas, S., Sartori L., Cafiero G., Pedersen, S. M., Sorensen, C., Pesonen, L., A. Werner, A.,Blackmore, 2009. Farmer's risk in decision making: the case of nitrogen application rates. 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009,927-933.

34. Nash, E., Vatsanidou, A., Fountas, S., 2009. Can compliance to crop production standards be automatically assessed? 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009, 899-906.
- Citations: 4 (excluding self-citations)*
35. C.G. Sørensen, S. Fountas, B. Basso, L. Pesonen, S.M. Pedersen, E. Nash, 2009. System analysis of management information systems for the future. 7th European Conference of Precision Agriculture. Wageningen, The Netherlands. 6-8 July, 2009, 943-950.
36. Nash, E., Wiebensohn, J., Nikkila, R., Vatsanidou, A., Fountas, S., Bill, R., 2010. Ontology Engineering to Support Assessment of Compliance to Agricultural Production Standards. EurAgEng 2010. Clermont-Ferrand, September 6-8, 2010, France.
37. Turker, U., Erdem, T., Tagarakis, A., Fountas, S., Mitev, G., Akdemir, B., Gemtos, T.A., 2010. A Feasibility study of variable rate irrigation in Black Sea Area: Design characteristics of a boom type traveler irrigator. 3rd International Congress on Information and Communication Technologies in Agriculture, Food, Forestry and Environment (ITAFFE'10), edited by Cebeci, A., Sideridis, A., Onder, H., Cankaya, S., 178-185. June 14-18, Samsun, Turkey.
38. Fountas, S., Bochtis, D.D., Sorensen, C.G., Green, O., Bartzanas, T., Jorgensen, R.N., 2010. Spatial-temporal management zones for biomass moisture. 10th International Conference on Precision Agriculture. July 18-21, Denver, Colorado, USA. In CD.
39. Nash, E., Wiebensohn, J., Nikkila, R., Pesonen, L. Seilonen, I., Oetzel, K., Kluger, S., Sorensen, C., Fountas, F., Vatsanidou, A., 2010. A Service-Oriented Architecture for Knowledge about Agricultural Production Standards. EurAgEng 2010. Clermont-Ferrand, September 6-8, 2010, France.
40. Nash, S., Wiebensohn, J., Nikkilä, R., Vatsanidou, A., Fountas, S., 2010. Formal Representation of Agricultural Production Standards. CIGR XVIIth World Congress – Québec City, Canada – June 13-17, 2010.
41. Blackmore, S., Apostolidi, K., Fountas, S., 2010. FutureFarm: Addressing the needs of the European farm of the future: Findings of the first two years. Agrocontrol, 2010 (edited by Organized by N. Kondo). 6-8 December, 2010. Kyoto, Japan.
42. Tagarakis, A., Liakos, V., Fountas, S., Koundouras, S., Aggelopoulou, K. and Gemtos, T. 2011. Management zones delineation using fuzzy clustering techniques in vines. In: Proceedings of the 8th European Conference on Precision Agriculture, Edited by J.V. Stafford (Wageningen Academic Publishers, Wageningen, The Netherlands), p.191-200.
43. Tagarakis, A., Liakos, V., Perlepes, L., Fountas, S., Gemtos, T., 2011. Wireless Sensor Network for Precision Agriculture. IEEE Conference on Informatics, 397-402.
- Citations: 8 (excluding self-citations)*
44. A. Tagarakis, S. Koundouras, V. Liakos, S. Fountas, T. Gemtos, 2012. Variability in soil and topography as indicators of the variation in grapevine physiology. In B. Bois (ed) Proceedings of the 9th International Terroir Congress, 25-29 June 2012, Dijon-Reims, Vol. II, pp. 75-79.
45. Fountas, S., Sorensen, C., Tsiropoulos, Z., Cavalaris, C., Liakos, V., Vatsanidou, A., Gemtos, T., Blackmore, S., 2012. Farm machinery management information system. CIGR-AgEng 2012, Valencia, Spain, July 8-12, In CD.
46. Sykas, D., Karathanassi, V., Fountas, S., 2013. A new methodology for the spectral discrimination of plant species and their varieties using hyperspectral data: application on vetch and lentil. First International Conference on Remote Sensing and Geoinformation of Environment 8-10 April 2013 Paphos, Cyprus.
- Citation: 1 (excluding self-citations)*
47. C. Cavalaris, C. Karamoutis, T. A. Gemtos, S. Fountas, 2013. Fossil Fuel Deficit - Conservation Tillage and on Farm Biofuel Production to Cope with the Problem. FaBE 1st International Conference on Food and Biosystems Engineering, 30 May – 2 June 2013, Skiathos, Greece, Volume: Proceedings of the FaBE 1st International Conference on Food and Biosystems Engineering - Vol1.

48. Tsiropoulos, Z., Fountas, S., Liakos, V., Tekin, A. B., Aygun, T., Blackmore, S., 2013. Web-based Farm Management Information System for Agricultural Robots. EFITA, WCCA, CIGR 2013 Conference, Torino, Italy, 23-27 June, 2013. In CD.
49. A. B. Tekin, H. Yurdem, S. Fountas, Z. Tsiropoulos, T. Aygun, 2013. Design and implementation of RoboTurk robotic platform. EFITA, WCCA, CIGR 2013 Conference, Torino, Italy, 23-27 June, 2013. In CD.
50. Chatzinikos, A., Gemtos, T.A., Fountas, S., 2013. The use of a laser scanner for measuring crop properties in three different crops in Central Greece. Precision agriculture'13, 129-136 (Citation: 1)
51. Liakos, V., Tagarakis, A., Vatsanidou, A., Fountas, S., Nanos, G., Gemtos, T., 2013. Application of variable rate fertilizer in a commercial apple orchard. Precision agriculture'13, 633-639.
52. V. Liakos, A. Tagarakis, S. Fountas, T. Gemtos, 2013. Yield prediction in a commercial apple orchard by analyzing digital and multispectral images of trees during flowering period.
53. A Tagarakis, V Liakos, T Chatzinikos, S Koundouras, S Fountas, 2013. Using laser scanner to map pruning wood in vineyards. Precision agriculture'13, 633-639.

*Citations: 3 (excluding self-citations)*

54. A. Tagarakis, S. Koundouras, E. Papageorgiou, Z. Dikopoulou, S. Fountas, T .A. Gemtos, 2013. Development and validation of a fuzzy inference system to delineate grape quality zones in vineyards. GiESCO.
  55. Tsiropoulos, Z., Fountas, S., Gemtos, T., Gravalos, I., Paraforos, D., 2013. Management information system for spatial analysis of tractor-implement draft forces. Precision agriculture'13, 349-356.
  56. S. Fountas, E. Anastasiou, A. Balafoutis, S. Koundouras, S. Theoharis, N. Theodorou, 2014. The influence of vine variety and vineyard management on the effectiveness of canopy sensors to predict winegrape yield and quality. International Conference of Agricultural Engineering, AgEng 2014, Zurich, July 6-10, 2014.
  57. S. Fountas, A. Balafoutis, E. Anastasiou, G. Kotseridis, E. Kallithraka, M. Kyraleou, S. Koundouras, 2014. Site-specific variability of grape composition and wine quality. 12th International Conference of Precision Agriculture, Sacramento California, USA July 20-24, 2014V.
  58. Gravalos, I., Tsiropoulos, Z., Kateris, D., Gialamas, D., Xyradakis, P., Augoustis, A., Georgiadis, A., Fountas, S., 2014. Soil moisture remote monitoring from an agricultural tractor. Second International Conference on Robotics and Associated High-Technologies and Equipment for Agriculture and Forestry. Madrid, 22-23, 2014, 289-298.
  59. Z. Tsiropoulos, S. Fountas, 2015. Farm Management Information System for Fruit Orchards. ECPA2015, Tel Aviv, Israel, 429-436.
  60. Z. Tsiropoulos, S. Fountas, I. Gravalos, A. Augoustis, S. Arslan, P. Misiewicz, T. Gemtos, 2015. Importance of draft forces measurements for reduced fuel consumption, increased efficiency and optimization of tillage operations. ECPA2015, Tel Aviv, Israel, 353-360.
  61. S. Fountas, E. Anastasiou, G. Xanthopoulos, G. Lambrinos, E. Manolopoulou, S. Apostolidou, D. Lentzou, Z. Tsiropoulos, 2015. Precision Agriculture in watermelons. ECPA2015, Tel Aviv, Israel, 207-216.
- Citations: 3 (excluding self-citations)*
62. V. Liakos, A. Tagarakis, S. Fountas, G. Nanos, Z. Tsiropoulos, T. Gemtos, 2015. Use of NDVI to predict yield variability in a commercial apple orchard. ECPA2015, Tel Aviv, Israel, 553-560.
  63. Bourodimos, G., Gemtos, T., Kladis, G, Fountas, S., Aidonis, S., 2015. Analyzing the inspection process and results of in use field crop sprayers in Greece. In: 3rd Olympus International Conference on Supply Chains, Athens, November, 7-8, 2015.

## **GREEK CONFERENCE PAPER ON PROCEEDINGS (in Greek)**

1. S. Fountas, 2000. The role of Precision Farming in crop management. 2nd Greek Conference of Agricultural Engineering, Volos, Greece, 28-30, September 2000.
2. S. Fountas, T. Gemtos, S. Blackmore, 2003. Autonomous vehicles in agriculture. 3rd Greek Conference on Agricultural Engineering, Thessaloniki, Greece, May 27-29, 2003
3. S. Fountas, Pedersen, S., Blackmore, S., Γέμτος, Θ., 2005. Τεχνικο-οικονομική μελέτη αυτο-οδηγούμενων οχημάτων στη γεωργία. 4<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής. Αθήνα, 6-7 Οκτωβρίου, 2005. Σε CD. In Greek.
4. Τρέσσος Κ.Δ., Ανδρέου Ι.Α., Blackmore S. , Φουντάς Σ., Γέμτος Θ.Α., 2007. Σχεδιασμός και Υλοποίηση Ρομποτικής Πλατφόρμας Χαμηλού Κόστους Για Την Υποστήριξη Γεωργικών Πρακτικών. 5<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 18-20 Οκτωβρίου, Λάρισα.
5. Θ.Α. Γέμτος, Σπ. Φουντάς, Χρ. Παπανικολάου, Ν. Νάνμος, Β. Βλάχος, 2007. Θόρυβος και κραδασμοί κατά τη λειτουργία γεωργικών ελκυστήρων στο χωράφι. 5<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 18-20 Οκτωβρίου, Λάρισα.
6. Σ. Μουρτζίνης, Σ. Φουντάς, Θ. Γέμτος, 2007. Αντίληψη ελλήνων αγροτών για τη γεωργία ακριβείας. 5<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 18-20 Οκτωβρίου, Λάρισα.
7. Α. Τάνος, Α. Αγγελοπούλου, Σ. Φουντάς, Θ.Α. Γέμτος, Γ.Δ. Νάνος και Α. Χατζηνίκος, 2007. Ζώνες διαχείρισης βάσει χαρτών παραγωγής, ποιοτικών χαρακτηριστικών και ηλεκτρικής αγωγιμότητας. 5<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 18-20 Οκτωβρίου, Λάρισα.
8. Α. Δ. Αγγελοπούλου , S. Blackmore, Σ. Φουντάς, Θ. A. Γέμτος και Γ. Δ. Νάνος, 2007. Μελέτη χωρικής και χρονικής παραλλακτικότητας παραγωγής και ποιότητας σε οπωρώνες μηλιάς. 5<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 18-20 Οκτωβρίου, Λάρισα.
9. Κουτσοστάθης, Α., Μπόχτης, Δ., Αγγελόπουλου, Α., Φουντάς, Σ., Γέμτος, Θ., 2009. Πρόβλεψη και χωρική παραλλακτικότητα στην παραγωγή σε καλλιέργεια μηλιάς με εκτίμηση της ανθοφορίας μέσω επεξεργασίας ψηφιακών εικόνων. 6<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, Θεσσαλονίκη, 6-8 Οκτωβρίου 2009
10. Φουντάς, Σ., Μπουλουλής, Κ., Αγγελοπούλου, Κ., Γιαννόπουλος, Ν., Γέμτος, Θ., Νάνος, Γ., Παρασκευόπουλος, Α., Γαλάνης, Μ., 2009. Καταπολέμηση ζιζανίων στην ελιά: εφαρμογή πρακτικών γεωργίας ακριβείας. 6<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, Θεσσαλονίκη, 6-8 Οκτωβρίου 2009.
11. Γ. Στουγιάννης, Λ. Περλεπές, Σ. Φουντάς, Θ.Α. Γέμτος, Π. Κίκιρας, 2009. Εφαρμογή τεχνολογιών γεωργίας ακριβείας σε αμπελώνα. 6<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, Θεσσαλονίκη, 6-8 Οκτωβρίου 2009
12. Α. Περιστερόπουλος, Γ. Βελλίδης, Σ. Φουντάς, Θ.Α. Γέμτος, 2009. Χρήση ανιχνευτή εγγύς υπέρυθρου φωτός για την πρόγνωση του σταδίου ωριμότητας της αραχίδας.
13. Παστόπουλος Σ., Φουντάς Σ., Γέμτος Θ., 2009. Έρευνα πεδίου διαχείρισης γεωργικού εξοπλισμού. 6<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, Οκτώβριος 2009, Θεσσαλονίκη. Υπό δημοσίευση.
14. Θ.Α. Γέμτος, Χρ. Καβαλάρης, Χρ. Καραμούτης, Σπ. Φουντάς, 2009. Η προσαρμοστικότητα τριών ενεργειακών καλλιεργειών στη Θεσσαλία. 6<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, Οκτώβριος 2009, Θεσσαλονίκη. Υπό δημοσίευση.
15. Θ. Α. Γέμτος, Α. Ταγαράκης, Χρ. Καραμούτης, Χρ. Καβαλάρης, Σ. Φουντάς, 2011. Χρήση Φυτικών Ελαίων Σε Μηχανές Diesel. 7<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 24-27 Νοεμβρίου, Αθήνα.
16. Β. Λιάκος, Α. Ταγαράκης, Κ. Αγγελοπούλου, Σ. Φουντάς, Θ. Γέμτος, 2011. Πρόβλεψη Παραλλακτικότητας Παραγωγής Σε Οπωρώνα Μήλων Αναλύοντας Φωτογραφίες Των Δένδρων Σε Περίοδο Πλήρους Άνθησης. 7<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 24-27 Νοεμβρίου, Αθήνα.
17. Π. Ντογκούλης, Δ. Μπόχτης, Π. Γιαννακού, Σ. Φουντάς, Θ. Γέμτος, 2011. Καταγραφή Απόδοσης Γεωργικών Μηχανήματων Κατά Τη Συλλογή Υπολειμμάτων Καλλιέργειας Βαμβακιού. 7<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 24-27 Νοεμβρίου, Αθήνα.
18. Α. Ταγαράκης, Β. Λιάκος, Σ. Φουντάς, Σ. Κουνδουράς, Κ. Αγγελοπούλου, Θ. Α. Γέμτος, 2011. Χρησιμοποίηση Τεχνικών ‘Fuzzy Clustering’ Για Καθορισμό Ζωνών Διαχείρισης Σε Αμπέλια. 7<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 24-27 Νοεμβρίου, Αθήνα.
19. Α. Δ. Αγγελοπούλου, S. Blackmore, Σ. Φουντάς, Θ. Α. Γέμτος, 2011. Χρονικές Τάσεις Στην Παραγωγή Καλλιέργειας Σιτηρών. 7<sup>o</sup> Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 24-27 Νοεμβρίου, Αθήνα.

20. Δ. Β. Αναγνωστόπουλος, Σ. Φουντάς, Θ. Α. Γέμτος, 2011. Διαχείριση Γεωργικού Εξοπλισμού Στην Ελλάδα: Έρευνα Πεδίου 2011. 7ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 24-27 Νοεμβρίου, Αθήνα.
21. X. Καβαλάρης, X. Καραμούτης, Δ. Αναγνωστόπουλος, Σ. Φουντάς, Θ. Α. Γέμτος, 2013. Συστηματική Διερεύνηση Της Χρονικής Διακύμανσης Της Αντίστασης Του Εδάφους Στη Διείσδυση Σε Ένα Μακροχρόνιο Πείραμα Κατεργασιών. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
22. Δ. Β. Αναγνωστόπουλος, X. Καβαλάρης, Σ. Φουντάς, Θ. Α. Γέμτος, 2013. Συμβολή Κόστους Συντήρησης Και Επισκευών Στο Συνολικό Κόστος Λειτουργίας Του Γεωργικού Ελκυστήρα. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
23. E. Σαμούρης, Δ. Σταφυλά, Π. Μαντά, Σ. Φουντάς, X. Καβαλάρης Θ. Α. Γέμτος, 2013. Εκτίμηση Κόστους Χρήσης Ελκυστήρα Και Παρελκομένων Για Παραγωγή Σιτηρών Και Βάμβακος Στην Περιοχή Της Θεσσαλίας. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
24. Δ. Β. Αναγνωστόπουλος, Σ. Φουντάς, Σ. Παστόπουλος, Α. Φυντανής, Θ. Α. Γέμτος, 2013. Διαχείριση Γεωργικού Εξοπλισμού Στην Ελλάδα Και Η Συμβολή Της Στο Κόστος Παραγωγής. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
25. Θ. Α. Γέμτος, X. Καβαλάρης, X. Καραμούτης, Σ. Φουντάς, 2013. Η Εξέλιξη Της Οργανικής Ουσίας Στο Έδαφος Σε Ένα Μακροχρόνιο Πείραμα Σύγκρισης Κατεργασιών Εδάφους. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
26. A. Χατζηνίκος, Θ. Α. Γέμτος, Σ. Φουντάς, 2013. Χρήση Σαρωτή Λέιζερ Για Τη Μέτρηση Βιομάζας Και Ύψους Φυτών Σε Τρεις Καλλιέργειες. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
27. Z. Τσιρόπουλος, Σ. Φουντάς, I. Γράβαλος, Θ. Α. Γέμτος, A. Αυγουστής, Δ. Κατέρης, Π. Ξυραδάκης, B. Λιάκος, 2013. Λογισμικό Χαρτογράφησης Της Κατανάλωσης Καυσίμου Γεωργικού Ελκυστήρα. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
28. Π. Ντογκούλης, Δ. Μπόχτης, X. Νάκας, Σ. Φουντάς, Θ. Α. Γέμτος, 2013. Μοντέλα Για Την Πρόβλεψη Του Χρόνου Λειτουργίας Των Μηχανημάτων Που Εμπλέκονται Στη Συγκομιδή Υπολειμάτων Βαμβακιού. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
29. B. Λιάκος, A. Ταγαράκης, A. Βατσανίδου, Z. Τσιρόπουλος, Σ. Φουντάς, Γ. Νάνος, Θ. Α. Γέμτος, 2013. Εφαρμογή Μεταβλητών Δόσεων Λιπάσματος Σε Οπωρώνα Μήλων. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
30. A. Ταγαράκης, B. Λιάκος, A. Χατζηνίκος, Σ. Φουντάς, Σ. Κουνδουράς, Θ. Α. Γέμτος, 2013. Χαρτογράφηση Του Χειμερινού Ξύλου Σε Αμπελώνα Με Χρήση Σαρωτή Λέιζερ. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
31. A. Ζάχου, B. Λιάκος, A. Βατσανίδου, Σ. Φουντάς, Θ. Α. Γέμτος, 2013. Γεωργία Ακρίβειας Στα Αχλάδια: Συσχέτιση Χαρτών Παραγωγής Με NDVI Και Ανθοφορία. 8ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 25-26 Σεπτεμβρίου, Βόλος.
32. E. Αναστασίου, Δ. Βλαχοστέργιος, Σ. Φουντάς, A. Μαυρομάτης, Θ. Γέμτος, 2014. Αξιολόγηση Του Δείκτη NDVI Στην Μελέτη Της Παραλλακτικότητας Ποικιλιών Βίκου Και Φακής. 15Ο Συνέδριο Ελληνικής Επιστημονικής Εταιρείας Γενετικής Βελτίωσης Φυτών, 15-17 Οκτωβρίου, Λάρισα.
33. E. Αναστασίου, Σ. Φουντάς, A. Μπαλαφούτης, Σ. Κουνδουράς, Σ. Θεοχάρης, N. Θεοδώρου, 2015. Η Επίδραση Της Ποικιλίας Και Της Διαχείρισης Της Αμπέλου Στην Πρόβλεψη Της Ποιότητας Και Της Ποσότητας Παραγωγής Με Την Χρήση Αισθητήρων Φυλλώματος. 1ο Συνέδριο Γεωγραφικών Πληροφοριακών Συστημάτων και Χωρικής Ανάλυσης στη Γεωργία και στο Περιβάλλον, 28-29 Μαΐου, Αθήνα.
34. A. Μικρούλης, E. Αναστασίου, Σ. Φουντάς, H. Τραυλός, Z. Τσιρόπουλος, A. Μπαλαφούτης, 2015. Παρακολούθηση Της Ανάπτυξης Καλλιεργειών Με Την Χρήση Φασματικού Αισθητήρα Και RGB Κάμερας. 1ο Συνέδριο Γεωγραφικών Πληροφοριακών Συστημάτων και Χωρικής Ανάλυσης στη Γεωργία και στο Περιβάλλον, 28-29 Μαΐου, Αθήνα.
35. A. Καββαδίας, E. Αναστασίου, E. Γκαλά, Σ. Φουντάς, S. Μίχας, S. Αλεξανδρής, 2015. Αξιοποίηση Εικόνων NDVI Και Θερμοκρασίας Στη Γεωργία Ακρίβειας Με Τη Χρήση Μη Επανδρωμένου Εναέριου

Οχήματος. 1ο Συνέδριο Γεωγραφικών Πληροφοριακών Συστημάτων και Χωρικής Ανάλυσης στη Γεωργία και στο Περιβάλλον, 28-29 Μαΐου, Αθήνα.

36. Σ. Φουντάς, Α. Μπαλαφούτης, Ε. Αναστασίου, Σ. Κουνδουράς, Γ. Κοτσερίδης, Σ. Καλλίθρακα, Δ. Καλύβας, 2015. Μεταβλητότητα Των Χαρακτηριστικών Των Σταφυλιών Και Της Ποιότητας Οίνου Σε Επίπεδο Αγρού Σε Αμπελώνα Αγιωργίτικου Στη Νεμέα. 1ο Συνέδριο Γεωγραφικών Πληροφοριακών Συστημάτων και Χωρικής Ανάλυσης στη Γεωργία και στο Περιβάλλον, 28-29 Μαΐου, Αθήνα.
37. Γ. Μπουροδήμος, Θ. Γέμτος, Γ. Κλαδής, Σ. Φουντάς, 2015. Αξιολόγηση Εν Χρήσει Ψεκαστικών Μηχανημάτων Μεγάλων Καλλιεργειών Σύμφωνα Με Την Οδηγία 2009.128/EK. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
38. Γ. Κυριακόγγονας, Σ. Φουντάς, Α. Μπαλαφούτης, Χ. Κασίμης, Α. Νάτσης, Κ. Ντανίκας, Ε. Αναστασίου, 2015. Στοιχεία Διαχείρισης Γεωργικών Εκμεταλλεύσεων Και Μηχανημάτων Με Έμφαση Στο Ανθρώπινο Δυναμικό. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
39. Α. Νάτσης, Μ. Χάμου, Σ. Φουντάς, , Γ. Παπαδάκης, 2015. Προσδιορισμός Τοποθέτησης Επιχειρήσεων Συντήρησης – Επισκευής Γεωργικού Εξοπλισμού Μέσω Μαθηματικών Μεθόδων. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
40. Δ. Αναγνωστόπουλος, Χ. Καβαλάρης, Χ. Καραμούτης, Σ. Φουντάς, Θ. Γέμτος, 2015. Επίδραση Κατεργασιών Σε Ενεργειακές Καλλιέργειες. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
41. Δ. Αναγνωστόπουλος, Χ. Καβαλάρης, Χ. Καραμούτης, Σ. Φουντάς, Θ. Γέμτος, 2015. Επίδραση Πέντε Συστημάτων Κατεργασίας Σε Εδαφικές Παραμέτρους (Συμπίεση, Οργανική Ουσία). 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
42. Δ. Αναγνωστόπουλος, Χ. Καβαλάρης, Χ. Καραμούτης, Σ. Φουντάς, Θ. Γέμτος, 2015. Συγχέτιση Φαινομενικής Ηλεκτρικής Αγωγιμότητας Με Την Συμπίεση Του Εδάφους. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
43. Σ. Αποστολίδη, Δ. Λέντζου, Ε. Μανωλοπούλου, Γ. Λαμπρινός, Σ. Φουντάς, Γ. Ξανθόπουλος, Ε. Αραβαντινός-Καρλάτος, 2015. Επίδραση Της Σύστασης Του Εδάφους Στη Συντήρηση Του Καρπουζιού. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
44. Α. Μικρούλης, Ε. Αναστασίου, Σ. Φουντάς, Α. Μπαλαφούτης, Η. Τραυλός, 2015. Παρακολούθηση Της Ανάπτυξης Καλλιεργειών Με Την Χρήση Φασματικού Αισθητήρα Και RGB Κάμερας. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
45. Ε. Αναστασίου, Σ. Φουντάς, Α. Μπαλαφούτης, Σ. Κουνδουράς, Σ. Θεοχάρης, Ν. Θεοδώρου, Α. Χατζηνίκος, 2015. Αξιολόγηση Μεθόδων Μέτρησης Σαρωτή Λείζερ Για Χαρτογράφηση Χειμερινού Ξύλου Σε Δυο Οινοποιήσιμες Ποικιλίες Αμπέλου. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
46. Δ. Αράπης, Ε. Αναστασίου, Ζ. Τσιρόπουλος, Α. Μπαλαφούτης, Σ. Φουντάς, 2015. Λογισμικό Γεωαναφοράς Μετρήσεων Σαρωτή Λείζερ – Χρήση Σε Πειραματικό Αμπελώνα Και Δενδρώδεις Καλλιέργειες. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
47. Ν. Τσούλιας, Α. Μπαλαφούτης, Ε. Αναστασίου, Σ. Φουντάς, 2015. Διερεύνηση Εφαρμογής Γεωργίας Ακρίβειας Σε Αμπελώνα Μαλαγουζιάς Στην Αττική. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
48. Σ. Αποστολίδη, Σ. Φουντάς, Ε. Αναστασίου, Γ. Ξανθόπουλος, Γ. Λαμπρινός, Ε. Μανωλοπούλου, Δ. Λέντζου, Ζ. Τσιρόπουλος, 2015. Μέτρηση Παραγωγής Και Ποιότητας Καρπουζιών Με Τη Χρήση Γεωργίας Ακρίβειας. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.
49. Γ. Πιτικάρης, Α. Μπαλαφούτης, Ζ. Τσιρόπουλος, Ε. Αναστασίου, Σ. Φουντάς, 2015. Κατασκευή Τροχήλατου Μετρητικού Συστήματος Ζύγισης Και Ανάπτυξη Κατάλληλου Λογισμικού Για Την Γεωχωρική Μέτρηση Της Παραγωγής. 9ο Πανελλήνιο Συνέδριο Γεωργικής Μηχανικής, 8-9 Οκτωβρίου, Θεσσαλονίκη.