

CURRICULUM VITAE

NAME DIMITRIOS KARPOUZAS
DATE AND PLACE OF BIRTH 22 APRIL 1971
MARITAL STATUS Married with two children
TELEPHONE +30-2410-565294
FAX +30-2410-565290
EMAIL dkarpouzas@bio.uth.gr
Website <https://plantenvlab.bio.uth.gr>

STUDIES

01/01/96 – 01/10/99 PhD in microbial metabolism of pesticides, University of Reading.
01/10/95 – 01/10/96 MSc in Technology of Crop Protection, University of Reading.
05/09/89 – 14/10/94 BSc in Agriculture, Aristotle University of Thessaloniki.

RESEARCH – WORK EXPERIENCE

Sep 2019 – Now Head of the Department of Biochemistry and Biotechnology, University of Thessaly
Feb 2019 - Now Professor of Environmental Microbiology and Biotechnology, Department of Biochemistry & Biotechnology, University of Thessaly
Jan 2015 – Now Director of the Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, Greece
Sept 2018 – 2020 Deputy Head of the Department of Biochemistry and Biotechnology, University of Thessaly
July 2016 - 2020 Director of the Program of Postgraduate Studies "Biotechnology - Quality of Nutrition and of the Environment"
21/7/14 - 2018 Associate Professor of Environmental Microbiology and Biotechnology, Department of Biochemistry – Biotechnology, University of Thessaly
6/7/10 – 20/7/14 Assistant Professor of Environmental Microbiology and Biotechnology, Department of Biochemistry – Biotechnology, University of Thessaly
15/3/06 – 5/7/10 Lecturer in Environmental Microbiology and Biotechnology, Department of Biochemistry – Biotechnology, University of Thessaly.
1/7/05 – 31/8/05 Visiting researcher, The Macaulay Institute, Aberdeen, UK (Training on different molecular biological techniques like DGGE, TRFLP).
3/6/05 – 15/3/06 Research Fellow in the research program Pythagoras II University of Thessaly, Volos, Greece, *Study of the environmental fate, efficacy and ecotoxicity of the organophosphorus nematicide fosthiazate.*

- 01/12/03 – 2/6/05 Postdoctoral MARIE CURIE Fellow, Universita Cattolica del Sacro Cuore, Istituto di Chimica Agraria ed Ambientale, Piacenza, Italy.
- 1/12/02-30/11/03 Postdoctoral fellow sponsored by the State Scholarship Foundation of Greece, Aristotle University of Thessaloniki, Pesticide Science Laboratory working on Enhanced biodegradation of nematicides in soils in Greece
- 1/11/2001 – 30/11/02 Contract researcher, Aristotle University of Thessaloniki, Pesticide Science Laboratory working on the development of analytical methods for the detection and quantification of pesticides in environmental samples
- 1/04/99 – 31/03/00 Contract researcher, Horticulture Research International, UK working on the degradation and adsorption mechanisms of different pesticides in soil

RESEARCH INTERESTS

- Isolation and characterization of microorganisms degrading pesticides and veterinary drugs, study of their genetic make up and ecology via multi-omic approaches
- Toxicity of pesticides and other contaminants on the ecology and function of the soil microbial community
- Interactions of plants with their epiphytic, endophytic and rhizospheric microbiome
- Environmental fate and behaviour of pesticides in laboratory and field studies with focus on microbial degradation and enhanced biodegradation

ACADEMIC EXPERIENCE

- Associate Editor of the peer review journals BIODEGRADATION, FRONTIERS IN MICROBIOLOGY, AGRICULTURAL SCIENCE AND TECHNOLOGY
- Member of the IUPAC scientific subcommittee on Crop Protection Chemistry since 2007
- Secretary and President of the Hellenic Scientific Society of Mikrobiokosmos 2015-2017 and 2017-19 respectively
- Member of the National Scientific Committee for Pesticides since 2012
- Regular reviewer of the international scientific journals *Agronomy for Sustainable Development*, *Chemosphere*, *Pest Management Science*, *Australian Journal of Soil Research*, *Soil Biology & Biochemistry*, *Journal of AOAC International*, *FEMS Microbiology Reviews*, *Environmental Toxicology*, *Journal of Agricultural and Food Chemistry*, *Agricultural Water Management*, *Vadose Zone Journal*, *Applied Soil Ecology*, *International Journal of Environmental and Analytical Chemistry*, *Ecotoxicology and Environmental Safety*, *Journal of Environmental Management*, *Journal of Hazardous Materials*, *Bioresource Technology*, *European Journal of Soil Science*, *European Journal of Soil Biology*, *Chemistry and Ecology*, *Annals of Microbiology*, *Journal of Applied Microbiology*, *Science of the Total Environment*, *Journal of Environmental Quality*, *Trends in Biotechnology*, *Biotechnology Progress*, *FEMS Microbiology Ecology*, *Environmental Microbiology*, *Environmental Pollution*
- Member of the International Society of Microbial Ecology (ISME), American Society of Microbiology (ASM), Society of Applied Microbiology (SfAM)

TRAINING EXPERIENCE

- Supervisor of 9 PhD students working on the following subjects: (1) Chiara Perruchon: *Isolation and characterization of bacteria able to rapidly degrade pesticides contained in wastewaters from the fruit-packaging industry* (awarded), (2) Panagiotis Karas: *Biological treatment of pesticide-contaminated wastewaters from the fruit-packaging industry* (awarded) 3) Konstantina Rousidou: *Study of the dynamics of bacterial genes involved in the degradation of organophosphate and carbamate insecticides* (writing up) (4) Athanasia Katsoula *Study of the function and diversity of microbial communities in plant phyllosphere and interactions with the environment* (5) Marco Campos *Microbial degradation of iprodione and its metabolite 3,5-dichloroaniline by rhizobacteria and their application for bioaugmentation of biobeds* (awarded, co-supervisor) (6) Chirstina Papazlatani *Study of the efficiency and microbiology of biobed systems used for the depuration of wastewaters from various processing agro-industries* (7) Stamatis Vasilakis *Study of the impact of soil solarization in the function and diversity of the soil microbial community: Implications for soil fertility and the agricultural production* (8) Katsivelou Eleni *Environmental fate and interactions of veterinary antibiotics with the soil microbial community: Resistance, biodegradation or ecotoxicity?* (9) Papadopoulou Elena *Study of the role of the microbiome of local vines varieties and vinification on the quality of wine products*
- Opponent in the PhD thesis examination of Karin Onneby (2013) Agricultural University of Sweden, Uppsala, Sweden, Title: *Bioaugmentation for Reduction of Diffuse Pesticide. A Bioprophylactic Concept* (<http://www.slu.se/en/research-schools/focus-on-soils-and-water/all-events/phd-defences/20131/61/phd-defense-april/>)
- External examiner of the PhD thesis of Giorgia Pertile (2017), Universita Cattolica del Sacro Cuore, Piacenza, Italy.
- Coordinator of the short courses TRAINRICE 2004 Predicting pesticide environmental concentrations in rice crop and TRAINRICE 2005 Pesticide Risk assessment in rice paddies, Universita Cattolica del Sacro Cuore, Piacenza, Italy

LANGUAGES

Greek: Mother tongue

English: Fluent

Italian: Fluent

RESEARCH FUNDING

1. Research Project PYTHAGORAS II, *Study of the environmental fate, efficacy and ecotoxicity of the organophosphorus nematicide fosthiazate*, Funding Body: General Secretariat of Research and Technology, Greece. Duration 1/1/2004 – 30/10/2007, Role: Experienced Researcher.
2. Research Project DESMI, Title: *Study of the glucosinolate content of Brassicas and their use for soil biofumigation* Funding Body: Research Promotion Foundation of Cyprus. Total Duration: 1/1/2007 – 31/12/2009, Role: Partner.
3. Marie Curie International Reintegration Grand "ECOMYCORRHIZA - The effects of agronomic practices conducive to organic agriculture on the diversity and function of arbuscular mycorrhizal fungi", Benefited Fellow: Dr I. Ipsilantis, Funding Body: European Commission FP7 Proposal Number 204792, Duration 1/10/2007 – 30/9/2010, Role: Coordinator, Website: <http://ecomycorrhiza.bio.uth.gr/>

4. Research Project DESMI, *Evaluation of biobeds for the decontamination of wastewater of agroindustrial origin*, Funding Body: Research Promotion Foundation of Cyprus, Duration: 1/12/2008 – 31/3/2011, Role: Partner, Website: <http://biobeds.foodlab.com.cy/>
5. Research Activities supported by the Research Committee of the University of Thessaly, Title: *The isolation and characterization of fenamiphos and oxamyl – degrading bacteria*. Funding Body: University of Thessaly, Duration: 1/10/2009-30/9/2011 Role: Coordinator
6. Innovative Research Vouchers for SMEs, Title: *Evaluation of arbuscular mycorrhizal fungi as a biotechnological tool for the optimization of P uptake by plants*. Funding Body: General Secretariat of Research and Technology, Duration 18/4/2011 – 18/8/2011, Role: Coordinator.
7. SEE.ERA-NETplus, Title: *Development and implementation of innovative tools to estimate the ecotoxicological impact of low dose pesticide application in agriculture on soil functional microbial diversity – ECOFUN-MICROBIODIV*. Funding Body: EU/DLR, Duration: 1/11/2010-30/9/12, Role: Partner. Website: http://www4.inra.fr/ecofun_microbiodiv_eng/
8. THALIS project, Title: *Contribution of Mycorrhizae to the sustainability of marginal Mediterranean ecosystems – development of mycorrhizal inocula*. Funding Body: General Secretariat of Research and Technology/Ministry of Education, Funding 600,000 €. Duration: 1/2/2012 – 31/6/2015, Role: Partner.
9. CARIPO project, Title: *Synthetic and Natural Agrochemical compounds: ecological impacts on the soil ecosystem and effects on plant production*. Funding Body: The CARIPO Foundation, Funding 400,000 € (80,000 € the budget of the University of Thessaly, Department of Biochemistry and Biotechnology). Duration: 1/2012 – 12/2014, Role: External Expert, Coordinator: Università Cattolica del Sacro Cuore, Sede di Piacenza.
10. IAPP Marie Curie project, Title: *Pesticides – Felicity or curse for the soil microbes (Acronym LOVE-TO-HATE)*. Funding Body: European Commission, FP7, Total Funding 1.8 M €. Duration: 1/1/2013 – 31/12/2016, Role: Coordinator, Website <http://lovetohate.bio.uth.gr>
11. Support of New SMEs for Research and Technology Activities, Title: *Isolation of indigenous arbuscular mycorrhizal fungi and development of mycorrhizal inocula used for rhizosphere inoculations and the production of soil improvers*. Funding Body: General Secretariat of Research and Technology, Greece, Funding: 37000 €, Duration: 1/1/2013-31/12/2015, Role: Partner
12. Targeted Research Activities Call, Title: *Biobeds: minimizing point source contamination of natural water resources of Thessaly by the wastewaters of the fruit packaging plants*. Funding body: Research Committee of the University of Thessaly: 13000 €, Duration: 1/6/2013-31/5/2015, Role: Coordinator
13. EXCELLENCE II, *The microbial detoxification of pesticides from the fruit-packaging industry: using omics in bioremediation (BIOREMEDIAT-OMICS)*. Funding Body: General Secretariat of Research and Technology, Greece. Funding: 180000 €, Duration: 1/2/2014-31/7/2015, Role: Coordinator, website: <http://bioremediatomic.bio.uth.gr/>
14. IKY-DAAD project: *Do we isolate via in vitro enrichment cultures the right pesticide-degrading bacteria? Mechanisms involved and web-food C transfer*. Funding Body: IKY, Collaborating Institute UFZ-Leipzig (Dr A. Chatzinotas), Duration: 1/1/2014-31/12/2015
15. EXCELLENCE II, Title: *Essential-oil mediated plant-microbe interactions in the Mediterranean environment: in search of a role and novel applications (ESEPIPMENT)*, Funding Body, General Secretariat of Research and Technology, Greece, Duration 2014-2015, Coordinator: Aristotle University of Thessaloniki.
16. IUPAC project. Title: *Advances on the Assessment of Pesticides' Soil Microbial toxicity: New research and regulatory aspects in light of the recent methodological advances*. Funding body:

- IUPAC Division of the Environment, Funding: 5000 USD, Duration: May 2015 - May 2018, Role: Coordinator, Website: <http://www.iupac.org/project/2014-032-1-600>
17. HCPA project. Title: *Water protection Best Management Practices establishment emphasizing in Vegetative Buffer Strips: Feasibility demonstration, in Thessaly, Central Greece – AgriBMPs*. Funding Body: Hellenic Crop Protection Association, Total Funding: 73000 €, Duration: 2015-2017, Role: Partner
 18. Contest for Business Plan for Research and Innovation, Title: *Development of novel services for the estimation of soil borne plant pathogenic fungi and nematodes in agricultural soils*. Funding Body: K+N Efthymiadis S.A. Agrochemical Company (2nd price in the Contest), Funding 9000 €
 19. Marie Curie Individual Fellowship, Title: *Exploring microbial networking in pesticides biodegradation: novel inocula and biocatalysts for biodepuration of agro-industrial effluents (EMIGRATE)*. Funding Body: European Commission H2020, Total Funding 160000 €. Duration: 2017– 2019, Role: Coordinator
 20. Research Infrastructure project, Title: *The research infrastructure of Synthetic Biology in Agro-Nutrition*. Funding Body: Ministry of Development, Finance and Tourism. Total Funding: 1,600,000 €. Duration 2017-2019, Role: Member of the Coordinating Committee
 21. RESEARCH-CREATE-INNOVATE call, Title: *Development and implementation of novel biobased methods for the treatment of pesticide-contaminated wastewaters from agro-industries (MINOTAUR)*. Funding Body: General Secretariat of Research and Technology, Greece. Funding: 729,000 €, Duration 2018-2021, Role: Partner
 23. State Scholarship Foundation of Greece, Call Siemens Postdoctoral Fellowships, Title: *Evaluation of biobeds for the biological detoxification of pesticides contained in agro-industrial effluents*. Funding body: State Scholarship Foundation of Greece, Funding 18000 €, Duration 1.1.2017-31.8.2017, Role: Coordinator (Benefited Fellow: Dr P. Karas)
 24. State Scholarship Foundation of Greece, Call PhD students fellowships, Title: *Study of the function and diversity of the microbial community in plant phyllosphere and interactions with adjacent environmental compartments*. Funding Body: State Scholarship Foundation of Greece, Total Funding: 13500 €. Duration: 2018-2020, Role: Coordinator (Benefited Student: A. Katsoula)
 26. Call of ELIDEK for the support of postdoctoral fellows, Title: *Looking up for novel nitrification inhibitors: New stories with old compounds*. Funding Body: Hellenic Foundation for Research and Innovation (ELIDEK), Greece. Total Funding 200000 €. Duration: 2018-2021, Role: Leader of the Group Hosting Postdoctoral Fellow Dr E. Papadopoulou
 27. Emblematic Action Routes of Olives, Funding Body: Ministry of Education, Greece. Total Funding 120000 €, Duration: 2018-2020, Role: Partner
 28. RESEARCH-CREATE-INNOVATE call, Title: *Mixed microbial inocula for vegetable production in the Western Peloponnese – application to soil, propagating material, hydroponics, enhanced growth substrates*. Total Funding 350,000 €. Duration: 2018-2020, Role: Partner
 29. Emblematic Action Routes of Vineyards, Funding Body: Ministry of Education, Greece. Total Funding 70000 €, Duration: 2019-2021, Role: Partner
 30. State Scholarship Foundation of Greece, Call PhD students fellowships, Title: *Study of the efficiency and microbiology of biobed systems which receive wastewaters from diverse processing agro-food industries*. Funding Body: State Scholarship Foundation of Greece, Duration: 2018-2021, Role: Coordinator (Benefited Student: Christina Papazlatani)
 31. Call of ELIDEK for the support of PhD students, Title: *The biodegradation of veterinary drugs as a mean to prevent and avert environmental degradation*. Funding Body: Hellenic Foundation for Research and Innovation (ELIDEK), Greece. Duration: 2019-2022, Role: Coordinator (Benefited Student: Stathis Lagos)

32. Call EDBM of small projects for the support of young researchers, Title: *Environmental fate and interactions of veterinary antibiotics ceftiofur and tiamulin with the soil microbial community: Resistance, biodegradation or ecotoxicity?*, Funding Body: Hellenic Ministry of Education, Greece. Total Funding 50,000 € Duration: 2019-2020, Role: Coordinator
33. Support of Research, Development and Innovation Projects in the Priority Sector of RIS3 – AgroFood, Region of Western Greece, Title *Microbe Terroir – The role of microbial terroir in the production of high quality wine from local vine varieties*. Funding Body: Region of Western Greece, Duration 2019-2021, Role: Partner (Participating organizations: Wineries Krokidas and Rouvalis, Un. Patras)
34. MSCA-ITN-EID-H2020, Title: *The European Industry - Academia Network for Revising and Advancing the Assessment of the Soil Microbial TOxicity of Pesticides* (ARISTO). Total Funding 2.5 million €, Duration: 2020-2024, Role: Coordinator
35. Call of ELIDEK for the support of postdoctoral fellows, Title: *INteractions of Veterinary antibiotics with soil microorganisms: exploiting microbial degradation to avert Environmental contamination and ResisTance dispersal* (INVERT). Total Funding 180,000 €, Duration 2021-2023, Role: Advisor (Coordinator Dr. S. Vasileiadis, benefited fellow)
36. Croatian Science Foundation Call, Title: *Structure and function of microbial communities as a missing link for quality assessment of anthropogenically disturbed coastal zones* (MicroLink). Total Funding: 200,000 €, Duration 2021-24, Role: Partner

INDUSTRIAL PROJECTS

1. *Estimation of the adsorption/desorption of a soil insecticide*, Total Funding 7000 €,., Funding Body: Agrochemical Company. Role: Coordinator
2. *A survey of the degradation of the soil insecticide fipronil, fosthiazate, chlorpyrifos and ethrophophos in potato cultivation areas in Greece*. Funding body: Agrochemical Company, Total Funding 15000 €, Duration: 1/7/2013-31/5/2014, Role: Coordinator
3. *Investigating the effect of a novel fumigant on the population of soil-borne fungal pathogens via qPCR analysis*. Funding body: Agrochemical company. Total Funding: 10300 €, Duration: 1/8/2013- 31/3/2014. Role: Coordinator
4. *Investigation of the population dynamics of soil-borne fungal pathogens via q-PCR*. Funding body: Agrochemical Company. Total Funding: 3700 €, Duration: 1.1.2017-31.12.2017. Funding body: Agrochemical Company. Role: Coordinator
5. *Investigation of the fungal infestations of trees in the park of the Stavros Niarchos Foundation using molecular diagnostics*. Funding Body: Stavros Niarchos Foundation. Total Funding: 15000 €, Duration: 1.9.2017-31.12.2107. Role: Coordinator
6. *Bioinformatic analysis of NGS data*. Funding Body: University of South Australia. Total Funding: 9700 €, Duration 2017-2019. Role: Coordinator
7. *Investigation of the residuals of anthelmithic compounds in milk*. Funding Body: Chemical Company. Total Funding: 3500 €, Role: Coordinator

BOOKS

1. **D.G. Karpouzas** (2003). Lecture notes for Agricultural Pharmacology for the students of the University of Thessaly, Department of Crop Production and Rural Environment (In Greek).
2. E. Capri, **D.G. Karpouzas** (2008). *Pesticide risk assessment in rice paddies: Theory and Practice*, Elsevier BV, Amsterdam, The Netherlands, ISBN: 978-0-444-53087-5.

3. **D.G. Karpouzas** (2012-13). Notes for Laboratory Practicals for students in Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly. (available at <http://eclass.uth.gr>) (In Greek).

CHAPTERS IN BOOKS

1. **Karpouzas, D.G.**, and Miao, Z. (2008). Higher tier exposure assessment in rice paddy areas: a European perspective. In *Pesticide risk assessment in rice paddies: Theory and Practice*, Capri E., and D.G. Karpouzas Eds., Elsevier BV, The Netherlands, ISBN: 978-0-444-53087-5, pp. 125-164.
2. **Karpouzas, D.G.**, and Singh B.K., (2009) Chapter 5: Application of fingerprinting molecular methods in bioremediation studies. In *Bioremediation, Methods in Molecular Biology* 599, Cummings S.P. Ed., Humana Press Inc., pp 69-88.

REFEREED PUBLICATIONS (5-year impact factor):

Total Citations Scopus: 2200 (excluding self-citations), **h-index:** 29

Total Citations Google Scholar: 3800, **h-index:** 37

1. **Karpouzas, D.G.**, Walker, A., Froud-Williams, R.J., and Drennan D.S.H. (1999) Evidence for the enhanced biodegradation of ethoprophos and carbofuran in soils from Greece and the UK. *Pesticide Science* **55**: 301-311 (IF: 3.750).
2. **Karpouzas, D.G.**, Giannakou, I.O., Walker, A., and Gowen, S.R. (1999) Reduction in biological efficacy of ethoprophos in a soil from Greece due to enhanced biodegradation: comparing bioassay with laboratory incubation data. *Pesticide Science* **55**: 1089-1094 (IF: 3.750).
3. **Karpouzas, D.G.**, and Walker, A. (2000). Factors influencing the ability of *Pseudomonas putida* strains epI and II to degrade the organophosphate ethoprophos. *Journal of Applied Microbiology* **89**: 40-48 (IF: 3.066).
4. **Karpouzas, D.G.**, and Walker, A. (2000). Factors influencing the ability of *Pseudomonas putida* epI to degrade ethoprophos in soil. *Soil Biology & Biochemistry* **32**: 1753-1762 (IF: 5.795).
5. **Karpouzas, D.G.**, Morgan, J.A.W., and Walker, A. (2000). Isolation and characterisation of ethoprophos-degrading bacteria. *FEMS Microbiology Ecology* **33**: 209-218 (IF: 3.675)
6. **Karpouzas, D.G.**, Morgan, J.A.W., and Walker, A. (2000). Isolation and characterization of 23 carbofuran-degrading bacteria from soils from distant geographical areas. *Letters in Applied Microbiology* **31**: 353-358 (IF: 2.173).
7. **Karpouzas, D.G.**, and Walker, A. (2000). Aspects of the enhanced biodegradation and metabolism of ethoprophos in soil. *Pest Management Science* **56** : 540-548 (IF: 3.750).
8. **Karpouzas, D.G.**, Walker, A., Drennan, D.S.H., and Froud-Williams, R.J. (2001). The effect of initial concentration of carbofuran on the development and stability of its enhanced biodegradation in top-soil and sub-soil. *Pest Management Science* **57** : 72-81 (IF: 3.750).
9. **Karpouzas, D.G.**, and Giannakou, I.O. (2002). Biodegradation and Enhanced Biodegradation: A Reason for Reduced Biological Efficacy of Nematicides. *Russian Journal of Nematology* **10**: 59-78 (IF: 0.393).
10. Giannakou, I.O., and **Karpouzas D.G.**, (2003). Evaluation of chemical and integrated strategies as alternatives to methyl bromide for the control of root-knot nematodes in Greece. *Pest Management Science* **59** : 883-892 (IF: 3.750).

11. Giannakou, I.O., **Karpouzas, D.G.**, and Prophetou-Athanasiadou, D., (2004). A novel non-chemical nematicide for the control of root-knot nematodes. *Applied Soil Ecology* **26**: 69-79 (IF: 3.187).
12. Papadopoulou-Mourkidou, E., **Karpouzas, D.G.** Patsias, J., Kotopoulou, A., Milothridou, K., Kintzikoglou, K., and Vlachou, P., (2004). The potential of pesticides to contaminate the groundwater resources of the Axios river basin in Macedonia, Northern Greece. Part I. Monitoring study in the north part of the basin. *Science of the Total Environment* **321**: 127-146 (IF: 6.750).
13. Papadopoulou-Mourkidou, E., **Karpouzas, D.G.** Patsias, J., Kotopoulou, A., Milothridou, K., Kintzikoglou, K., and Vlachou, P., (2004). The potential of pesticides to contaminate the groundwater resources of the Axios river basin. Part II. Monitoring study in the south part of the basin. *Science of the Total Environment* **321**: 147-164 (IF: 6.750).
14. **Karpouzas, D.G.**, and Capri, E., (2004). Higher tier risk assessment for pesticides applied in rice paddies: filling the gap at European level. *Outlooks on Pest Management* **15**: 36-41 (no IF).
15. **Karpouzas, D.G.**, Hatziapostolou, P., Papadopoulou-Mourkidou, E., Giannakou I.O., Georgiadou, A., (2004). The enhanced biodegradation of fenamiphos in soils from previously-treated sites and the effect of soil fumigants. *Environmental Toxicology & Chemistry* **23**: 2099-2107 (IF: 3.152).
16. **Karpouzas, D.G.**, Karanasios, E., Menkissoglou-Spiroudi, U., (2004). Enhanced microbial degradation of cadusafos in soils from potato monoculture: Demonstration and characterization, *Chemosphere* **56**: 549-559 (IF: 5.778).
17. **Karpouzas, D.G.**, Karanasios, E., Giannakou I.O., Georgiadou, A., and Menkissoglu-Spiroudi, U., (2005) The effect of soil fumigants methyl bromide and metham sodium on the microbial degradation of the nematicide cadusafos. *Soil Biology & Biochemistry* **37**: 541-550 (IF: 5.795).
18. **Karpouzas, D.G.**, Capri, E., and Papadopoulou-Mourkidou, E. (2005). Application of the RICEWQ-VADOFT model to simulate leaching of propanil in rice paddies in Greece. *Agronomy for Sustainable Development* **25**: 35-44 (IF: 4.531).
19. **Karpouzas, D.G.**, Ferrero A, Vidotto F, Capri E. (2005). Application of the RICEWQ-VADOFT model for simulating the environmental fate of pretilachlor in rice paddies. *Environmental Toxicology & Chemistry* **24** (4): 1007-1017 (IF: 3.152).
20. Ferrari, F., **Karpouzas, D.G.**, Trevisan, M., Capri, E. (2005). Measuring and predicting environmental concentration of pesticides in air after application to paddy water systems. *Environmental Science and Technology* **39** (9): 2968-2975 (IF: 7.864).
21. **Karpouzas, D.G.**, Fotopoulou, A., U. Menkissoglu-Spiroudi, and Singh, B.K. (2005). Non-specific biodegradation of the organophosphorus pesticides, cadusafos and ethoprophos, by two bacterial isolates. *FEMS Microbiology Ecology* **53** (3): 369-378 (IF: 3.675).
22. Giannakou, I.O., **Karpouzas, D.G.**, Anastasiades, I., Tsiropoulos, N.G., and Georgiadou, A., (2005). Factors affecting the efficacy of non-fumigant nematicides for controlling root-knot nematodes. *Pest Management Science* **61** (10): 961-972 (IF: 3.750).
23. Tsiropoulos, N.G., Lykas, D.T., and **Karpouzas, D.G.** (2005) Liquid chromatographic determination of fosthiazate residues in environmental samples and application of the method to a fosthiazate field dissipation study. *Journal of AOAC International* **88** (6): 1827-1833 (IF: 1.510).
24. **Karpouzas, D.G.**, Capri, E. and Papadopoulou-Mourkidou, E. (2006) Basin-scale risk assessment in rice paddies: An example based on the Axios river basin in Greece. *Vadose Zone Journal* **5** (2): 273-282 (IF: 3.634).
25. **Karpouzas, D.G.** and Capri, E. (2006) Risk analysis of pesticides applied to rice paddies using RICEWQ 1.6.2v and RIVWQ 2.02. *Paddy and Water Environment* **4** (1): 29-38 (IF: 1.262)

26. **Karpouzas, D.G.** and Singh, B.K. (2006) Microbial degradation of organophosphorus xenobiotics: metabolic pathways and molecular basis. *Advances in Microbial Physiology* **51**: 119-186 (IF: 4.875).
27. **Karpouzas, D.G.,** Cervelli, S, Watanabe H, Capri E, and Ferrero A. (2006) Pesticide exposure assessment in rice paddies in Europe: a comparative study of existing mathematical models. *Pest Management Science* **62** (7) : 624-636 (IF: 3.750).
28. **Karpouzas, D.G.,** Riparbelli C., Pastori, M., Capri, E. (2006) Landscape risk analysis for pesticides applied to rice paddies. *Agronomy for Sustainable Development* **26**: 167-177 (IF: 4.531).
29. Pantelelis, I. **Karpouzas, D.G.,** Menkissoglu-Spiroudi, U., and Tsiropoulos, N.G. (2006). Influence of soil physicochemical and biological properties on the degradation and adsorption of the nematicide fosthiazate. *Journal of Agricultural and Food Chemistry* **54**: 6783-6789 (IF: 4.192)
30. **Karpouzas, D.G.,** Pantelelis I., Menkissoglu-Spiroudi U., Golia E., Tsiropoulos, N.G. (2007). Leaching of the organophosphorus nematicide fosthiazate. *Chemosphere* **68**: 1359-1364 (IF:5.778)
31. Dolaptsoglou, C., **Karpouzas, D.G.,** Menkissoglu-Spiroudi, U., Eleftherohorinos I., and Voudrias, E.A (2007). Influence of different organic amendments on the degradation, metabolism and adsorption of terbutylazine. *Journal of Environmental Quality* **36**:1793-1802. (IF:2.142)
32. Inao, K., Watanabe, H., **Karpouzas, D.G.,** Capri, E., (2008) Simulation models of pesticide fate and transport in paddy environment for ecological risk assessment and management. *Japan Agricultural Research Quarterly* **42**(1): 13-21 (no IF)
33. Dolaptsoglou, C., **Karpouzas, D.G.,** Menkissoglu-Spiroudi, U., Eleftherohorinos I., Voudrias, E.A (2009).Influence of different organic amendments on the leaching and dissipation of terbutylazine in a column and a field study. *Journal of Environmental Quality* **38**: 782-791 (IF:2.142)
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