

1. PERSONAL INFORMATION

Dr Michalakakis Christoforou

Nationality: Cypriot

Date of Birth: 6th January 1981

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Cyprus

2. EDUCATION

- **PhD Plant Pathology - Nematology**, Cyprus University of Technology (CUT) 2008-2013.
- **MSc Geographical information Systems and Geospatial technologies**, CUT, 2017 – 2021
- **MSc in Horticulture**, University of Reading 2006-2007.
- **BSc in Crop sciences (Plant Protection)**, Aristotelian University of Thessaloniki 2000-2005.

3. PROFESSIONAL - WORK EXPERIENCE

- **Special Teaching Staff**, (CUT, Jan 2022 -)
- **Research Fellow on EIT FOOD project “Black to the Future”** (Oct 2021 - Dec 2021)
- **Research Fellow on Timing project “Excelsior”** (Sept 2021 – Jan 2022)
- **Research Fellow on “PotatoNemCy” project** (Aug 2021 – Aug 2022)
- **Research Fellow on ESA PECS-SWSOIP** (Oct 2019 – Jan 2022)
- **Research Fellow on Interreg Balkan-Met project “Agroinnoecco”** (Nov 2018 – Aug 2019)
- **Research Fellow on a Life project “Green Grapes” LIFE16-ENV-IT-566**, (Jan 2018 – June 2021)
- **Agricultural Zoology and Nematology Special Scientist (SS)**, CUT, (2011- 2021).
- **Agricultural Machinery, Livestock Equipment and GIS systems, SS**, CUT (2019 - 2021)
- **Parasitology SS**, European University Cyprus (EUC) (September 2017 - 2021)
- **Mycology SS**, EUC (September 2016 - 2020)
- **Agricultural Machinery Advisor of Smyrillis Agrochemicals (2007 - 2021)**
- **Research Fellow on FP7 EU project “Cascade”**, CUT (2013- 2017)
- **Research Fellow in Plant Pathology – Nematology PENEK**, , CUT, (2009 - 2011).
- **Agricultural Director at “Tsakistos Farm” (Groexport ltd, Agriplant ltd and Oliada ltd)** (2014 – 2016)
- **External collaborator at Agrobblue Hellas LTD (2014)**. Study of the effectiveness of new nematicides produced by Dupont for the control of Banana nematodes.
- **External collaborator at Pioneer Italy (2014)**. Study the emergence of 28 corn hybrid seeds covered with fungicide and insecticide under Cyprus winter climatic conditions.
- **Potato Inspector**, Nicosia Potato Packing Factory, (2005-2014).

4. TEACHING EXPERIENCE

- **Introduction to Agricultural Sciences (2020-2021)**
- **Agronomy (Field Crops)**, CUT (Jan 2021 -June 2021)

- **Parasitology**, EUC (January 2017 – 2021)
- **Mycology**, EUC (September 2016 – 2020)
- **Agricultural Zoology and Nematology**, CUT (2011 - 2021).
- **Weeds Science**, CUT (2012-2013).
- **Agricultural Machinery, Livestock Equipment and GIS systems**, CUT (2013, 2019 and 2021).

Laboratory Teaching Assistant at CUT (2009-2012) in the following courses:

- | | |
|--------------------------|------------------------------|
| ○ Entomology – Acarology | ○ Pest and Diseases |
| ○ Weed Science | ○ Mycology |
| ○ Microbiology | ○ Plant Anatomy & Morphology |
| ○ Phytopathology | ○ Botany |

Undergraduate Student Supervision

- Supervisor of 1 BSc Final Year Project, European University Cyprus (2017-2018).
- Co-supervision of 26 BSc Final Year Projects, Cyprus University of Technology (2009-2021).
- Co-supervision of 2 MSc Final Year Projects, Cyprus University of Technology (2014-2018).

5. FUNDING & RESEARCH GRANTS

- **AGROBOFOOD Researcher (Robotics in Agri-food) Cyprus Contact Point**
- **Researcher, “ESA PECS-SWSOIP”**
- **Researcher, “Life Green Grapes” LIFE16-ENV-IT-000566**
- **Researcher, Balkan Med Interregional Innovation Ecosystem for maturing and mainstreaming innovative entrepreneurial ideas in Agrifood sector, ‘AGROINNOECO’ PROJECT MIS: 5008139**
- **Researcher, “Sudden and catastrophic regime shifts in dryland ecosystems” FP7: CASCADE, FP7-ENV-2011-1. Agrem. No.283068 Budget: €5,6 mil.**
- **Researcher, “Exploitation of resistance as a tool for control of potato cyst nematodes in Cyprus”. Research Promotion Foundation – PENEK. Duration: 3 years, Budget: 90.000€.**
- **Researcher, “Sustainable Control of grapevine trunk diseases” COST ACTION: ECOST-STSM-FA1303-070416, Florence, Italy, Mini workshop, Budget: 2.500€.**

6. AWARDS

- **Best student paper presentation at “Advances in Nematology”. Association of Applied Biologists (AAB), London UK (2009).**

7. PUBLICATIONS

Publications in Book Chapters

- **Michalakis Christoforou**, Michael Orford and Dimitris Tsaltas (2017). Molecular Diagnostic Tools for Nematodes, Nematology - Concepts, Diagnosis and Control, Dr. Mohammad Manjur Shah (Ed.), InTech,

DOI: 10.5772/intechopen.69075. Available from: <https://www.intechopen.com/books/nematology-concepts-diagnosis-and-control/molecular-diagnostic-tools-for-nematodes>

Publications in Scientific Journals

- Danezis, C., Kakoullis D., Christoforou M., ... et al. (2022). CyCLOPS: A National Integrated GNSS/InSAR Strategic Research Infrastructure for Monitoring Geohazards and Forming the Next Generation Datum of the Republic of Cyprus. In: International Association of Geodesy Symposia. Springer, Berlin, Heidelberg. https://doi.org/10.1007/1345_2022_161
- Erik Elsen, L. C Stringer,..... **M. Christoforou** et al. 2020, Advances in understanding and managing sudden ecosystem shifts in Mediterranean drylands. Ecology and Evolution
- Jucker Riva M, Baeza J, Bautista S, **Christoforou M**, et al. 2018. How does land management contribute to the resilience of Mediterranean forests and rangelands? A participatory assessment. *Land Degrad Dev*. 2018; 29: 3721–3735. <https://doi.org/10.1002/ldr.3104>
- Papoutsas, C., Kouhartsiouk, D., Themistocleous, K., **Christoforou, M.**, Hadjimitsis, D., "Monitoring of Land Degradation from Overgrazing using Spaceborne Radar and Optical Imagery: case study in Randi Forest, Cyprus", SPIE, Edinburgh International Conference Centre Edinburgh, United Kingdom, September 26 – 29 (2016).
- Kanetis L., Tsimouris D. and **Christoforou M.** 2016. "Characterization of *Rhizoctonia solani* Associated with Black Scurf in Cyprus". Plant Disease. (doi: <http://dx.doi.org/10.1094/PDIS-10-15-1238-RE>).
- Themistocleous K., Agapiou A, Papadavid G., **Christoforou, M.**, Hadjimitsis D. G. 2015. "The use of UAV to document sloping landscapes to produce digital elevation models to examine environmental degradation". Proc. SPIE 9644, Earth Resources and Environmental Remote Sensing/GIS Applications VI, 96440N (20 October 2015); doi: [10.1117/12.2195623](https://doi.org/10.1117/12.2195623)
- Themistocleous K., Papadavid G., **Christoforou, M.**, Agapiou A., Andreou K., Tsaltas D., Hadjimitsis D. G. " Use of remote sensing and UAV for the management of degraded ecosystems: the case study of overgrazing in Randi Forest, Cyprus ", *Proc. SPIE* 9229, Second International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2014), 92291V (August 12, 2014); doi:10.1117/12.2069515; <http://dx.doi.org/10.1117/12.2069515>.
- **Christoforou, M.**, Pantelides I. S., Kanetis L., Ioannou N. and Tsaltas, D. 2014. "Rapid detection and quantification of viable potato cyst nematodes using qPCR in combination with propidium monoazide" Plant Pathology Doi: 10.1111/ppa.12193.
- Papayiannis, L.C., **Christoforou, M.**, Markou, Y.M. and Tsaltas, D. 2013."Molecular typing of cyst-forming nematodes *Globodera pallida* and *G. rostochiensis*, using real-time PCR and evaluation of five methods for template preparation". Journal of Phytopathology. doi: 10.1111/jph.12091.

Monographs (Dissertations & Thesis)

- **Christoforou M., 2020.** Artificial farm lake detection using spectroradiometric and satellite data . CUT, Faculty of Engineering and Technology, Department of Civil Engineering and Geomatics, MSc Thesis.
- **Christoforou M., 2013.** The Potato Cyst Nematodes: An holistic investigation for the molecular characterization, quantification and mapping of the plant parasitic nematodes populations, *Globodera rostochiensis* and *G. pallida*, in Cyprus and their integrated management. Cyprus University of Technology, Faculty of Geotechnical Sciences and Environmental Management, Department of Agricultural Sciences, Biotechnology and Food Science. PhD Thesis (pp 240).
- **Christoforou M., 2007.** Evaluation of the tolerance of *Trigonella foenum-graecum* (Fenugreek) to pre-emergence herbicides. The University of Reading, UK, Faculty of Science and Life Sciences Department of Horticulture. MSc Thesis.
- **Christoforou M., 2005.** Environmental research: The effect of Rainbow Bleaching and Dyeing factory wastes on the underground irrigation water. Aristotelian University of Thessaloniki. BSc Thesis.

Articles Local Journals

- **Christoforou M., D. Tsaltas, L. Papayiannis, G. Ioannou, G. Neofytou, P. Fellas, and N. Ioannou, 2011.** Identification and mapping of the potato cyst nematodes in Cyprus. Agrotis Journal. ISSN 0256-8519. Vol: 450.
- **Christoforou M., G. Neofytou, D. Tsaltas, G. Ioannou, P. Fellas, and N. Ioannou, 2012.** Identification and mapping of the potato cyst nematodes in Cyprus. Agrotis Journal. ISSN 0256-8519. Vol: 453.

8. PARTICIPATION IN SCIENTIFIC CONFERENCES, DAY SEMINARS & WORKSHOPS

- 33rd Symposium of the European Society of Nematologists 9-13th September 2018, Ghent, Belgium
- XIV Congress of the Italian Phytopathological Society, 5-7 September 2018
- Q-GIS Workshop. Sixth International Conference on Remote Sensing and Geo-information of Environment, RSCy2018 Cyprus, 26 - 29 March, 2018 – Paphos, Cyprus
- Drone Seminars, DJI Cyprus, January 2018
- SPIE, Edinburgh International Conference Centre Edinburgh, United Kingdom, September 2016.
- 18th Phytopathological Conference, Crete, Greece.
- GTD: Grape vine trunk disease, University of Florence, Department of Agriculture and Environment, 10 days' workshop on symptomatology, epidemiology, identification and control of GTD, 2016.
- 3rd International Conference on remote sensing and geoinformation of environment, Paphos, 2015.
- WOCAT methods for documentation and assessment of Sustainable Land Management (SLM), Bern University, Swiss, 2014.
- Training on Landscape assessments on thresholds dynamics and Landscape and Functional Analysis (LFA), University of Alicante, Spain, 2014.
- 2nd International Conference on remote sensing and geoinformation of environment, Paphos, 2014.
- 1st International Conference on remote sensing and geoinformation of environment, Paphos, 2013.

- One day conference “Advances in Nematology”, AAB, London, UK (2011).
- 25th Hellenic Horticultural conference (2011).
- One day conference “New technologies for early pest and disease detection”. Association of Applied Biologists (AAB), Marston, Lincs, UK (2011).
- 15th Hellenic Phytopathological Conference (2010).
- 13th Congress of the Mediterranean Phytopathological Union. CRA Plant Pathology Research Center. Italy, Rome, June 20-25, (2010).
- One day conference “Advances in Nematology”. A.A.B., London, UK (2009).
- 14th Hellenic Phytopathological Conference (2010).
- 12th Hellenic Entomological Conference (2007).
- Seminars and training workshops on Sequencing, Real – Time PCR, Primer and Taqman probe design, Cyprus University of Technology (2009-2010).
- Seminars and training workshops on Potato Cyst nematodes (PCNs), Agri-Food and Biosciences Institute, Belfast, UK (2008).
- Seminars and training workshops on Plant Parasitic Nematodes (PPNs), Agri-Food and Biosciences Institute, Belfast, UK (2007).

9. CONFERENCE PAPERS

- Christiana Papoutsas, Christos Theodoridis, Maria Prodromou, George Papadavid, Dimitris Sykas, Silas Michailides, **Michalakis Christoforou**, George Kountios, Anastasis Kounoudes, M: arios Milis and Diofantos G. Hadjimitsis Smart water management for irrigation purposes: The SWSOIP project HAICTA 2020 (9th International Conference on Information and Communication Technologies in Agriculture, Food & Environment)
- Pacetti, A; Burroni F; Carella, G; **Christoforou M.**; Pierucci M.; Tsaltas D.; Perria R.; Storch P.; L. Mugnai. Impact of strategies with reduction in fungicide use on grapevine diseases. XIV Congress of the Italian Phytopathological Society, 5-7 September 2018
- **Christoforou M**, and Tsaltas D, 2018. ‘Due to drought, could irrigation increase plant parasitic nematode populations in Grape Vines?’ 33rd Symposium of the European Society of Nematologists 9-13th September 2018, Ghent, Belgium
- **Christoforou M**, and Tsaltas D. 2016. Monitoring Grapevine Trunk Diseases in Cyprus. 18th Phytopathological Conference, Crete, Greece.
- Papoutsas, C., Kouhartsiouk, D., Themistocleous, K., **Christoforou, M.**, Hadjimitsis, D., "Monitoring of Land Degradation from Overgrazing using Spaceborne Radar and Optical Imagery: case study in Randi Forest, Cyprus", SPIE, Edinburgh International Conference Centre Edinburgh, United Kingdom, September 26 – 29 (2016).
- K. Themistocleous, G. Papadavid, **M. Christoforou**, A. Agapiou, K. Andreou, D. Tsaltas and D.G. Hadjimitsis. Use of remote sensing and UAV for the management of degraded ecosystems: The case

study of overgrazing in Randi Forest, In proceedings of the third International Conference on Remote Sensing and Geoinformation of Environment - Rscy2014, April 10, 2014, Paphos, Cyprus.

- Papadavid, G., K. Themistocleous, **M. Christoforou**, D. Tsaltas, B. Carmen, Hadjimitsis D.G., Use of Remote Sensing for detecting land cover changes sourcing from overgrazing: The case study of Cyprus' In proceedings of the first International Conference on Remote Sensing and Geoinformation of Environment - Rscy2013, April 8-10, 2013, Paphos, Cyprus.
- **Christoforou, M.**, Pantelides, I.S., Kanetis, L., Tsaltas, D. and Ioannou, N. 2012. Detection and quantification of viable eggs and juveniles of potato cyst nematodes using propidium monoazide. 31st International Symposium of the European Society of Nematologists. Adana, Turkey, P.21.
- **Christoforou M.**, Tsaltas D., Papayiannis L, Ioannou G, Neofytou G, Fellas P., and Ioannou N., 2011. An holistic investigation for the characterization of potato cyst nematode populations in Cyprus and their integrated management. In proceedings of the Congress of the Association of Applied Biologists, Advances in Nematology, London UK, December 13th.
- **Christoforou M.**, Arestopoulou I., Tsaltas D., L., Neofytou G. and Ioannou N, 2011. Evaluation of resistant potato varieties with the use of nematicides for the control of Potato Cyst nematodes in Cyprus. 25th Hellenic Horticultural conference, page 93.
- **Christoforou M.**, Tsaltas D., Neofytou G., Fellas P., and Ioannou N **2011**. Differentiation of Potato Cyst nematode pathotypes in Cyprus. 25th Hellenic Horticultural conference, page 299.
- **Christoforou M.**, Kanetis, L., Tsaltas, D. and Ioannou, **2011**. Live/dead distinction of potato cyst nematodes: A duplex Real-time PCR based method using propidium monoazide (PMA). Conference "New technologies for early pest and disease detection". Association of Applied Biologists (AAB), Marston, Lincs, UK (2011).
- **Christoforou M., L. Papayiannis, D. Tsaltas, G. Neophytou and N. Ioannou, 2010**. Identification and quantification of the population of potato cyst nematodes in Cyprus. 14th Panhellenic Phytopathological Conference – Kerkyra – Hellas, October 2010. page 93.
- **Christoforou M., L. Papayiannis, D. Tsaltas, G. Neophytou and N. Ioannou 2008**. Identification of potato cyst nematodes in Cyprus using RT-PCR. 14th Panhellenic Phytopathological Conference – Nafplio – Hellas, October 2008.
- **Christoforou M., D. Tsaltas, L. C. Papayiannis, G. Neophytou, P. Fellas and N. Ioannou, 2010**. Identification and mapping of potato cyst nematodes in Cyprus using multiplex TaqMan[®] Real – Time PCR and Geographical Information Systems. 13th Congress of the Mediterranean Phytopathological Union. CRA Plant Pathology research center. Italy, Rome, June 20-25, page 23.
- **Christoforou M., D. Tsaltas, G. Neophytou, L. Papayiannis, P. Fellas, L. Pittas and N. Ioannou 2009**. Identification and Mapping of Potato Cyst Nematodes in Cyprus using Molecular Tools and Geographical Information Systems. (IPM 2009, Portland - Oregon, USA).
- **Christoforou M., D. Tsaltas, L. Papayiannis, G. Ioannou, G. Neofytou, P. Fellas, and N. Ioannou, 2009**. Identification and Mapping of Potato Cyst Nematodes in Cyprus using Molecular Tools and

Geographical Information Systems, In proceedings of the Congress of the Association of Applied Biologists, Advances in Nematology, London UK, December 15th, page 12.

10. RESEARCH EXPERIENCE

- Ecology: Understanding of discontinuous changes in ecosystems and soil biology.
- Potatoes, Grapevine and Pomegranate cultivation techniques
- Nematode biology and beneficial Entomopathogenic Nematodes
- Soil mycology
- Wood diseases
- Geographical Information Systems and Remote Sensing in Agriculture
- Farm Machinery Applications
- UAV (Spray and Observation Drones) multispectral and RGB image processing

11. OUTREACH

- Consultant at the Cyprus Department of Agriculture for the control of Potato Cyst Nematodes
- Invited speaker at the Cyprus Department of Agriculture, “Distribution and Management of Potato Cyst Nematodes in Cyprus” (September 2011).
- Invited speaker at the Cyprus Department of Agriculture, “Identification of Potato Cyst Nematodes” (April 2009).
- Researchers Night 2009. Theme: “Information Technologies”. Activity presented Precision Agriculture Platforms & Information Dissemination in Agriculture.

12. PARTICIPATION IN SCIENTIFIC SOCIETIES GOVERNING BOARDS & PROFESSIONAL ASSOCIATIONS

- Member of the Eratosthenes Centre of Excellence (2020 -)
- Member of the European Society of Nematologists (2011-)
- Member of the COST ACTION FA1303 Management Committee for the Sustainable control of Grapevine Trunk Diseases (2016 -)
- Member of the Association of Applied Biologists (2007-)
- Member of the Hellenic Phytopathological Society (2008-)
- Member of the Agronomists Council of Cyprus (2005-)

13. OTHER SKILLS

- **Professional Operator for Agricultural Machinery and Equipment**
- **UAV operator**
- **Arc-GIS Pro USER**

Dr. MICHALAKIS CHRISTOFOROU

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- **Autocad Civil USER**
- **Terra DJI and Pix4D USER**
- **Snap USER and Erdas imagine**
- **Scuba Diving**

14. LANGUAGE

- **Greek (native)**
- **English (excellent)**