

**PERSONAL
INFORMATION**



Antonios Michaelakis
Αντώνιος Μιχαηλάκης

Benaki Phytopathological Institute
Department of Entomology and Agricultural Zoology
8, S. Delta str., 14561 Kifissia
Athens - Greece

☎ +302108180212/+302108180215/+302108180248

✉ a.michaelakis@bpi.gr; amichaelakis@hotmail.com

Sex Male | Date of birth 1975 | Nationality Greek

WORK EXPERIENCE

Business or sector
Research

2014 - present: **Associate Research Scientist**
Benaki Phytopathological Institute, Department of Entomology & Agricultural Zoology

Principal subjects:

- Surveillance in possible points of entry for invasive species for early detection and elimination of their populations
- Chemical ecology of insects including pheromones and secondary plant compounds (mainly essential oils)
- Natural products (as potential insecticides or repellents)
- Integrated Pest Management (IPM)
- Entomological courses to agronomists and student supervision

2010 - 2014: **Senior Research Scientist**
Benaki Phytopathological Institute, Department of Entomology & Agricultural Zoology

2007 - 2010: **Research Scientist**
Benaki Phytopathological Institute, Department of Entomology & Agricultural Zoology

EDUCATION AND TRAINING

- 2008 Postdoctoral Fellowship Program (Short-Term, 2 months)
Japan Society for the Promotion of Science. Tokyo University of Agriculture and Technology, Graduate School of Bio-Applications and Systems Engineering (BASE)
- 2001 – 2006 Ph.D. in Agricultural Sciences
Agricultural University of Athens, Department of Chemistry
- 2001 – 2005 Post-graduate scholar
National Centre for Scientific Research, “Demokritos”, Institute of Physical Chemistry. Laboratory of Natural Product Synthesis and Bioorganic Chemistry
- 2002 Post Graduate specialization program in Total Quality Management (TQM)
Technological Educational Institute of Piraeus, Department of Business Administration
- 1994 – 2000 Diploma in Agronomy (BSc)
Agricultural University of Athens, Department of Agricultural Biotechnology

PERSONAL SKILLS

- Communication skills** Good communication skills gained through my experience as a) a Collaborating Partner in a Department of Public Relationships, b) a Collaborating Partner in a Department of Scientific Publications, c) an invited speaker and d) an instructor of agronomists and supervisor of students

Organisational / managerial skills

- Publications (Peer Reviewed Journals) (>52)
- Book chapters (4)
- Presentations in International (>30) and National conferences (>60)
- Member of national and international congress organization committees (10)
- Invited speaker (>60)
- As a Head of Research in projects (9)
- Participation in competitive international (5) and national projects (9)
- As a group leader in national project (1)
- Awards for innovative products (2)
- Patents (7)
- Supervisor of students (3 PhD, 3 MSc and >16 BSc)

Other skills (selected)

- Member of the Management Committee for COST862 (1)
- Member of the Members of WG5 of the COST Action TD1303
- Member of the National Committee for the Prevention and Control of Tropical Diseases (under the supervision of Greek Ministry of Health)
- Associate editor for the Hellenic Plant Protection Journal (ISSN 1791-3691)
- EU SHIPSAN ACT Joint Action. Ad hoc working group to prepare “Interim guidance on maritime transport and Zika virus disease”
- TC Project RER/5/022 Establishing Genetic Control Programmes for *Aedes* Invasive Mosquitoes
- INT5155/9001/01: First Coordination Meeting on Sterile Insect Technique for Area-Wide Integrated Pest Management. Mexico, Tapachula, 4th-8th July 2016.
- Referee in national and international scientific journals
- Member of EMCA
- Member of the Management Committee of the Hellenic Entomological Society

ADDITIONAL INFORMATION

Peer Reviewed Journals (selected)

- Tsiodras, S., Pervanidou, D., Papadopoulou, E., Kavatha, D., Baka, A., Koliopoulos, G., Badieritakis, E., Michaelakis, A., Gavana, E., Patsoula, E., Tsimpos, I., Gioksari, T., Kyriazopoulou, E., Vakali, A., Pavli, A., Maltezos, H. C., Georgakopoulou, T., Hadjichristodoulou, T., Kremastinou, J., Papa, A. Imported Chikungunya fever in Greece in June 2014 and Public Health response. *Pathogens and Global Health* 2016 110, 68-73.
- Vacas, S., Melita, O., Michaelakis, A., Milonas, P., Minuz, R., Riolo, P., Abbass, M. K., Lo Bue, P., Colazza, S., Peri, E., Soroker, V., Livne, Y., Primoa J. and Navarro-Llopis, N. Lures for Red Palm Weevil trapping systems: aggregation pheromone and synthetic kairomone. *Pest Management Science* 2016 (in press).
- Bellini, R., Bonilauri, P., Puggioli, A., Lelli, D., Gaibani, P., Landini, M. P., Carrieri, M., Michaelakis, A., Papachristos, D., Giatropoulos, A., Badieritakis, E., Maccagnani, B., Calzolari, M., and Dottori, M. Chikungunya and dengue risk assessment in Greece. *Vector Biology Journal* 1:2 2016.
- Michaelakis, A., Papachristos, D.P., Chytas, D. A., Antonopoulou, P. D., Milonas, P.G., and Avtzis, D. N. First record of *Dryocosmus kuriphilus* in Greece. *EPPO Bulletin* 2016 46, 290–294, doi: 10.1111/epp.12305.
- Korsch, K., Bataka, A., Kodona, M., Sioulas, S., Tsiakiris, R., Michaelakis, A. and Avtzis, D. N. Quaternary changes in the Aegean Sea level and how they affected the phylogeography of *Thaumetopoea pityocampa* (Notodontidae, Lepidoptera) in Greece. *Open Life Sci.* 2015 10, 372–378.
- Giatropoulos, A., Papachristos, D., Koliopoulos, G., Michaelakis, A., Emmanouel, N. Asymmetric mating interference between two related mosquito species: *Aedes (Stegomyia) albopictus* and *Aedes (Stegomyia) cretinus*. *PlosOne* 2015 10(5): e0127762. doi:10.1371/journal.pone.0127762
- I. Kioulos, Michaelakis, A., Kioulos N., Samanidou-Voyadjoglou A., Koliopoulos G. Mosquito (Diptera: Culicidae) fauna in natural breeding sites of Attica basin, Greece. *Hellenic Plant Protection Journal*. 2014, 7, 31-34.
- Andreadis, S.S., Milonas, P.G. and Michaelakis, A. Applications of Synthetic Pheromones for Pest Control in Greece: the use of mating disruption technique. Pheromones and other semiochemicals. *IOBC-WPRS Bulletin*. 2014, 99, 69-73.
- E. Evergetis, A. Michaelakis, and S. A. Haroutounian. Exploitation of Apiaceae family essential oils as potent biopesticides and rich source of phellandrenes. *Industrial Crops and Products*, 2013, 41, 365– 370.
- Giatropoulos, A., Emmanouel, N., Koliopoulos, G., and Michaelakis, A. A Study on Distribution and Seasonal Abundance of *Aedes albopictus* (Diptera: Culicidae) Population in Athens, Greece. *Journal of Medical Entomology*, 2012, 49, 262-269.
- P. Milonas, D. Kontodimas, A. Michaelakis, D. Raptopoulos, M. Konstantopoulou. Optimization of pheromone trapping method for click beetles, *Agriotes* sp. (Coleoptera: Elateridae) in Greece. *Phytoparasitica* 2010, 38, 429-434.

Presentations
(selected, only international)

- V. Paschalidis, C. Drakou, M. S. Sengul, S. Onder, L. Anagnou, P. Liggri, K. Tsitsanou, A. Michaelakis, P. Zoumpoulakis, E. Eliopoulos, S. Zographos. The crystal structure of odorant binding protein 1 from the Asian malaria mosquito, *Anopheles stephensi* in complex with HEPES reveals a novel binding site for piperazine and piperidine derivatives. The International Conference HeCrA-HSCBB-16, organised by the Hellenic Crystallographic Association & the Hellenic Society for Computational Biology and Bioinformatics. Athens, Greece, 7th – 9th October 2016.
- Michaelakis, A. and Bellini, R. Thirteen years of living with the Asian tiger mosquito (*Aedes albopictus*) in Greece. EMCA Symposium, Speyer, Germany. 13-15 March 2016.
- Termentzi A., Ahluwalia V., Tsafantakis N., Milonas P., Michaelakis A., Papachristos D., Karasali H., Aligiannis N., Fokialakis N. and Skaltsounis A.-L. Insecticidal plant extracts from the Greek biodiversity: Biological activity and phytochemical characterization. 63rd International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA). Budapest, Hungary. 23-27 August 2015.
- Milonas P., Anastasaki E., Balagianis G., Papanikolaou N. and Michaelakis A. Use of oviposition induced volatiles in tomato plants by *Trichogramma* parasitoids. ISCE2015 International Society of Chemical Ecology Stockholm, Sweden. 29th June - 3rd July 2015
- R.E.P. Sotiropoulou, Tagaris E., Sotiropoulos A., Spanos I., Milonas P. and Michaelakis A. Impact of climate change on invasive mosquito species in S.E. Europe, European Geosciences Union (EGU) General Assembly, Vienna, Austria, 27 April – 02 May 2014.
- K. Aggelakopoulos, A. Karataraki, V. Gkounti, Michaelakis A., F. Karamaouna, D.C. Kontodimas. Establishment of a trap network in the east border of the dispersal of *Rhynchophorus ferrugineus* (Olivier) (Col.: Curculionidae) in Crete. “Semio-chemicals: The essence of green pest control” a conference of the IOBC/WPRS. Working Group “Pheromones and other semiochemicals in integrated production”. Bursa, Turkey, 1-5 October 2012.
- A. Michaelakis, A. Fytrou, N. Bonelis, P.G. Milonas, D.P. Papachristos, A. Giatropoulos and G. Koliopoulos. Behavioral studies with oviposition pheromone in *Culex* mosquitoes and study of the OBP1 gene expression in adult males and females. 28th annual meeting of the International Society of Chemical Ecology, Vilnius, Lithuania, 22-26 July 2012.
- D.P. Papachristos, N.T. Papadopoulos, E. Maglaras, A. Michaelakis, S. Antonatos. Susceptibility of kiwi fruit (*Actinidia* spp) varieties to *Ceratitidis capitata* (Diptera: Tephritidae) infestation. 2nd International Meeting of Tephritid Workers of Europe, Africa and the Middle East (TEAM) for “Biological invasions of Tephritidae: ecological and economic impacts”. Kolymbari, Greece, 3-6 July 2012.

- Research visits**
- 2015.** Department of Molecular Biology and Genetics (M. Senay Sengul, Assistant Professor), Gaziosmanpasa University, Tokat, Turkey.
- 2014.** Department of Zoology of Plant Protection Institute, Centre for Agricultural Research, Hungarian Academy of Sciences. Training demonstration concerning the use of a gas chromatograph equipped with an electroantennographic detector (GC-EAD) for insect semiochemical research.
- 2012.** European and Mediterranean Plant Protection Organization (EPPO). Pest Risk Analysis training for beginners. During the training course we perform a PRA for a pest of concern for Greece (*Dryocosmus kuriphilus* Yasumatsu). Headquarters of EPPO- Paris (FR).
- 2012.** Professor Angharad Gatehouse, School of Biology, Newcastle University, Newcastle upon Tyne, UK. The visit was aimed at training on biotechnological techniques and was part of the Europea program entitled “Development of Benaki Phytopathological Institute as a Centre of Excellence in Plant Health and Crop Protection- FP7-REGPOT-2008-1”.
- 2009.** Professor Luciano Süß, Agricultural University of Milano (Italy), Department of Agricultural Entomology. Training in integrated management of mosquitoes in outdoor urban and suburban environment with emphasis on the Asian tiger mosquito (*Aedes albopictus*).
- 2008.** Professor Cezary Tkaczuk, University of Podlasie (Siedlce of Poland), Plant Protection Department. The visit was aimed at training in culture and identification of entomopathogenic fungi and was part of the trans-national program between Poland and Greece (General Secretariat for Research and Technology, Greek Ministry of Development) under the title: Use of entomopathogenic fungi for the control of arthropod pests of glasshouse pests.

- Projects**
(current projects, selected)
- Development & demonstration of management plans against -the climate change enhanced- invasive mosquitoes in S. Europe (LIFE CONOPS- LIFE12 ENV/GR/000466) (Project Manager)
- «Pest Practice – Advancing work safety for pest control workers».
EU program “Lifelong Learning Programme” (2013-1-GR1-LEO05-13904).
Φορέας χρηματοδότησης: EU program “Lifelong Learning Programme” in “Leonardo da Vinci” action, Transfer of Innovation 2013 (Project Manager)
- National survey program for the recognition and maintenance of “protected zones” against some organisms harmful to plants (quarantine pests, 2009-2014. Ministry of Rural Development and Food. (Deputy Coordinator)
- Strategies for the eradication and containment of the invasive pests *Rhynchophorus ferrugineus* Olivier and *Paysandisia archon* Burmeister. 2012-2015. European Union (FP7-EU Project)
- Development of Benaki Phytopathological Institute as a Centre of Excellence in Plant Health and Crop Protection- FP7-REGPOT-2008-1
- Development of nano-emulsions as a new material for the delivery and Management of pesticides, reducing the burden on the environment. National Hellenic Research Foundation (NHRF, GR)

Invited speaker
(selected)

- A. Michaelakis. "LIFE CONOPS: Preliminary results on the impact of climate change on invasive mosquito species in South East Europe". Info day in the framework of CIVMME project - «Climate impacts on vector-borne disease in the Eastern Mediterranean and the Middle East». Cyprus Institute, Nicosia (Cyprus), 20 February 2015.
- A. Michaelakis. «Mosquito: a noisy roommate». 1^o Athens Science Festival, Technopolis - Gazi, 1st May 2014.
- S.S. Andreadis and Michaelakis A. *Culex* sp oviposition pheromone: a review on its synthesis and behavioural studies. "Semio-chemicals: The essence of green pest control" a conference of the IOBC/WPRS. Working Group "Pheromones and other semiochemicals in integrated production". Bursa, Turkey, 1-5 October 2012.
- A. Michaelakis. Distribution and seasonal abundance of *Aedes albopictus* population in Athens. Association of Supervisors of Public Health. Conference: "Mosquitoes and public health." Hotel Athens Imperial, Athens, 30 March 2011.
- A. Michaelakis. New invasive pests: current status and emerging risks. Hellenic Entomological Society. Workshop entitled "New entomological pests in Greece: *Tuta absoluta* & *Rhynchophorus ferrugineus*: experience, recent data and useful conclusions". Agricultural University of Athens, Athens, 18 February 2011.
- A. Michaelakis. Mosquitoes and Man: a difficult symbiosis. Agriculturalist Society of Argolida prefecture & Department of Rural Development (Department of Plant Protection). Workshop entitled "Mosquito control: an individual and collective effort". Cultural Center of Nea Kiou, Argolida, 17 October 2010.
- A. Michaelakis. Integrated management and control of the new tomato leaf miner *Tuta absoluta*. Agriculturalist Society of Ilia prefecture. Conference center of Ilia prefecture, Pirgos Ilias 7th July 2010.
- A. Michaelakis. *Tuta absoluta* a lepidopterous in tomato and other Solanaceae species. Agriculturalist Society of Argolida prefecture & Department of Rural Development (Department of Plant Protection). Workshop for *Tuta absoluta*. Cultural Center of the Municipality of Midea municipality, 6 June 2010.
- A. Michaelakis. The tomato leaf miner, *Tuta absoluta*. Agriculturalist Society of Lakonia prefecture. Phytopathological Workshop for *Tuta absoluta* and tristeza virus (CTV). Cultural Center of the Municipality of Skalas Lakonias, 27 April 2010.
- A. Michaelakis. Entomological pests. Integrated pest management (principles, tools, methods). As part of the training for the program LIFE EcoPest. Municipality of Chaeronea. 12 March 2010.

Honours and awards

Fleriana: Natural Moth Killer.

Competition for Applied Research and Innovation "Greece Innovates!" www.kainotomeis.gr. July 2011. Among the best 92 unelected candidates (of a total 300 submitted proposals): reference to a special album for the best proposals.

Madras-Tips and Buds.

Certified Greek wild herbs. Quality award from Magazine's "Gastronomy" Kathimerini. June 2012. Entrepreneurship Award and Exports.

Rotary Club of Chania, 2470 ROTARY INTERNATIONAL DISTRICT.

November 2016. Prize for scientific contributions in research on mosquito control.