

CURRICULUM VITAE OF VASSILIS G. MAVRAGANIS

Occupation : Research Scientist in the Institute of Hellenic Agricultural
Organisation –DEMETER
Address : S. Venizelou 1, 14123 Likovrisi, Athens, Greece
Telephone : 210 2816974, 210 2832032, 210 2817302, 210 2827202
Fax : 210 2842129
E-mail : mavrag1a@otenet.gr

A-Levels:

1972-1974- College of Hackney Technical College of London), A-Levels: Chemistry, Physics and Pure Mathematics.

Degree:

1974-1977- University of Cardiff, Wales, U.K., Degree: Chemistry Honours B.sc.

Ph.D. Degree:

1977- January 1981- University of Cardiff, Wales U.K. Organic Chemist of Natural Products; Ph.D.thesis with the title: Structural studies of *Erythrina* alkaloids. Sponsored with a Scholarship by the Krukof Memorial Fund.

Post Doctor Experience:

1. 1981- August 1981- University of Cardiff, Wales U.K. February (Subject: Synthesis of petroporphyrines).
2. 1984-1986- Agricultural University of Athens, Departement of General Chemistry, (Subject: New way of synthesis of the main constituent of the pheromone of the olive fruit fly (*Bactrocera oleae*) the 1,7-dioxaspiro[5.5]undecane.
3. 1986-1992- National Center for Scientific Research - Demokritos, Institute of Biology, with subjects: a) The synthesis of analog compounds of the main constitute of olive fruit fly pheromone 1,7-dioxaspiro[5.5]undecane such us the 1,5,7-trioxaspiro[5.5]undecane with similar biological action us the Olive fruit fly pheromone in the lab and in the olive orchard. b) Research and development on attracting compounds of the Chery fruit fly (*Rhagoletis cerasi*) and the Mediterranean fruit fly (*Ceratitis capitata*).
4. 1997-Today- Occupation in National Institute of Agricultural Foundation as a research scientist analytical organic chemist on natural products: a) Chemical analysis of organic compounds with biological importance, soil improving additives and organic fertilizers b) Protection of soil c) Studies of insect attractants (food attractants derived from fertilizers and sex pheromones) on the Mediterranean fruit fly *Ceratitis capitata* and olive fruit fly *Bactrocera oleae* d) Development of food attractants for insects with economical

importance from fertilizers e) Use of Integrated Pest Management for the Mediterranean fruit fly *Ceratitis capitata* and olive fruit fly *Bactrocera oleae*.

Teaching Experience:

1984-1997- In private colleges (Moraitis, C.A.S.E., S.E.C., etc.) on G.C.S., A-Level. Chemistry: Organic –Physical –Inorganic in english.

Knowledge of languages:

English and Greek

Research Experience:

1. Organic Chemistry on Natural Products (Isolation, Identification and synthesis organic natural products with important biological action)
2. Gas Chromatography (GC), Gas Chromatography and Mass Spectroscopy (GC-MS), High Pressure Liquid Chromatography (HPLC), Infrared (IR), Ultraviolet (UV), Nuclear Magnetic Spectroscopy (NMR), etc.
3. Identification of toxic organic compounds in soil samples and soil improving additives with the method of Gas Chromatography and Mass Spectroscopy.
5. Studies of the behaviour of insects with agricultural importance of the family Tephritidae. Long standing experience directed at the efficiency of controlling the Mediterranean fruit fly *Ceratitis capitata* and olive fruit fly *Bactrocera oleae* without using insecticides by the Integrated Pest Management technique with minimum effect on the beneficial insects.
6. Participation on programs concerning analytical organic studies on organic wastes and on Integrated Pest Management techniques to avoid environmental hazards.

Publications:

1. G.E. Haniotakis, and **V.G. Mavraganis**. 1991. Sex pheromones of the olive fruit fly, *Dacus oleae*: Structure/activity relationship second International Symposium "Insect Pheromones", I.O.B.C./E.P.R.S., Kishinev, Moldavia, October, 20-25 1991, Invited presentation
2. Liaropoulos C., **V. G. Mavraganis**, T. Broumas, G.E. Haniotakis. 2002. Field tests on efficacy of mass trapping combined and parasite releases for the control of the olive fruit fly *Bactrocera oleae* (Diptera-Tephritidae). VIIth European Congress of Entomology, 7-13. October
3. Liaropoulos C., **V. G. Mavraganis**, T. Broumas & N. Ragoussis 2003. Field tests on the combination of mass trapping with the release parasite *Opius concolor* (Hymenoptera: Braconidae), for the control of the olive fruit fly *Bactrocera oleae* (Diptera: Tephritidae). 1st European Meeting of the IOBC/WPRS study group. "Integrated protection of Olive Crops" Chania, Greece, May, 29-31.

4. D. Argyropoulos, T Varzakas, Ch. Psallidas, M. Bocari, **V. G. Mavraganis** and C. Israilides 2007. Possible gene transfer from transgenic plants to nitrogen fixing bacteria in soil and insect microbiota. Proceedings of the International Conference on Environmental Management, Engineering, Planning and Economics Skiathos, June 24-28.
5. M. Doula, K. Elaiopoulos, V. Kavavadias, **V. Mavraganis** 2010. Use of Clinoptilolite to improve and protect soil quality from the disposal of olive oil mills wastes. 2nd International Conference on Hazardous and Industrial Waste Management Crete p. 481- 483.
6. **V.G. Mavraganis**, N.T. Papadopoulos, N.A. Kouloussis, P.Ch. Kouloumbis. 2011. Environmentally friendly bait for the Mediterranean fruit fly *Ceratitis capitata* (Diptera: Tephritidae). 7th International Symposium MGPR "Paolo Cabras", Thessaloniki, Greece, 9-11 November.
7. **V.G. Mavraganis**, N.T. Papadopoulos, N.A. Kouloussis, P.Ch. Kouloumbis. 2012. Non-toxic bait for the Mediterranean fruit fly *Ceratitis capitata* (Diptera: Tephritidae). TEAM 2nd International Meeting, Kolymbari, Crete, Greece . July 3-6, 2012 p.101.
8. C. Liaropoulos, G. Zervas, **V.G. Mavraganis**, T. Broumas, G. Tsiropoulos, V. Tsirogiannis & P. Kouloumbis. 2003. Comparison of different traps and attractants for the Mediterranean fruit fly *Ceratitis capitata* Wied. in field tests on fall. 10th of Hellenic Entomological Symposium Iraclium, Crete, Greece.
9. V. Kavadias, M. Karagianni-Christou, K. Seintos, Sid. Theocharopoulos, S. Petsas, E. Baboulidou, **V.G. Mavraganis** & A. Telios. 2009. 20-33. Greenhouse cultivation of lettuce with the technique of hydroponic float. The contribution of the vegetables in the national economy and health to the humans. 24th Scientific Symposium E.E.E.O. Verias p. 24.
10. **V.G. Mavraganis**, N.T. Papadopoulos, N.A. Kouloussis, P.Ch. Kouloumbis. 2011. Attraction of the Mediterranean fruit fly *Ceratitis capitata* (Diptera: Tephritidae), by a new bait. 14th Hellenic Entomological Symposium. 11-14 October, Nafplio, Greece.
11. Liaropoulos C., Zervas, G., **V. G. Mavraganis**, T. Broumas, Tsiropoulos, G., Tsirogiannis, V., 2003. Comparative field studies of various traps and attractants for the Mediterranean fruit fly *Ceratitis capitata* Wied. In fall. *Entomologia Hellenica*, 15: 39-52.
12. **V. G. Mavraganis**, , N.T. Papadopoulos, and N.A. Kouloussis. 2010. Extract of olive fruit fly males (Diptera: Tephritidae) attract virgin females. *Entomologia Hellenica*, 19: 14-20
13. **V. G. Mavraganis** (1981). Structural studies of Erythrina alkaloids. Thesis. University of Cardiff Wales, U.K.
14. M. I. Abdullah, I.E. Barakat, D. E. Games, P. Ludgate, **V. G. Mavraganis**, V.U. Ratnayake, and A.H. Jackson. Studies of Erythrina Alkaloids. 1979. Part III. G.C./M.S. Investigations of Alkaloids in the seeds of a further fourteen species. *Ann. Missouri Bot. Gard.* 66: 533.
15. A.H. Jackson, P. Ludgate, **V.G. Mavraganis**, and F. Redha. Studies of *Erythrina* Alkaloids. 1982. Part V. G.C./M.S. Investigations of Alkaloids in the seeds of *E.*

- subumbrans*, *E. lanata*, *E. rubrinervia*, *E. acanthoca-rpa*, *E. variegata*, and *E. melanacantha*. Erythrina Symposium IV. *Allertonia* 3 [1]: 47.
16. G. E. Haniotakis, **V.G. Mavraganis**, and V. Ragoussis. 1989. 1,5,7-Trioxaspiro [5.5] undecane, a Pheromone Analog with high biological activity for the olive fruit fly, *Dacus oleae*. *J. of Chemical Ecology*, Vol. 15, No. 3: 1057
 17. G.E. Haniotakis, and **V.G. Mavraganis**. 1991. Sex pheromones of the olive fruit fly, *Dacus oleae*: Structure/activity relationship second International Symposium "Insect Pheromones", I.O.B.C./E.P.R.S., Kishinev, Moldavia, October 20-25, 1991, Invited Presentation
 18. D. Raptopoulos, G.E. Haniotakis, A. Koutsafikis, D. Kelly and **V.G. Mavraganis** 1995. Biological activity of chemicals identified from extracts and volatiles of male *Rhagoletis cerasi*. *J. of Chemical Ecology*, Vol. 21, No. 9. 1995.
 19. K. Liaropoulos, G. Zervas, **V.G. Mavraganis**, T. Broumas, G. Tsiropoulos and V. Tsirogiannis 2003. Comparative field studies of various traps and attractants for the Mediterranean fruit fly, *Ceratitis capitata*, Wied, in fall. *Entomologia Hellenica* , **15**:39-52.
 20. **V. G. Mavraganis**, C. Liaropoulos, N. T. Papadopoulos, N. A. Kouloussis & T. Broumas. 2008. Whole body extract of Mediterranean fruit fly males elicits high attraction in virgin females. *Entomologia Experimentalis et Applicata*. **127**: 20–29.
 21. **V. G. Mavraganis**, N. T. Papadopoulos, N. A. Kouloussis. 2010. Extracts of olive fruit fly males (Diptera: Tephritidae) attract of virgin females. *Entomologia Hellenica* **19**: 14-20.
 22. Maria K.Doula, Kyriakos Elaiopoulos, Victor A. Kavvadias, **Vasilis Mavraganis** 2011. Use of clinoptilolite to improve and protect soilquality from the disposal of olive oil mills wastes. *Journal of Hazardous Materials*. HAZMAT-13012; p. 1-8.

Patents:

23. Greek patent with the number 1007507 on 17-01-2012 **V.G. Mavraganis** with the title: Preparations of synthetic mixtures of organic substances with food attraction and thereof for attracting insects of economical importance in field conditions.
24. The work has been published on the World International Property Organisation (WIPO) at 3-5-2012 with International Number of Publication WO 2012/56257 A2 with the title: MAILLARD REACTION PRODUCTS ATTRACT INSECTS.