



CURRICULUM VITAE

Paschalis C. Harizanis

Laboratory of Sericulture & Apiculture
Agricultural University of Athens
75 Iera Odos Street
GR-118 55 Athens, Greece
Telephone: +30-210-5294561
FAX: +30-210-3466692
E-mail: melissa@aua.gr

I. CURRENT POSITION HOLDED

Professor of the Laboratory of Sericulture and Apiculture, Agricultural University of Athens, Greece.

II. EDUCATION

- B.S. General Agriculture. Aristotelian University of Thessaloniki, Greece, 1978.
- Master of Science, Entomology. University of California, Davis, California, USA. 1981.
- Doctor of Philosophy, Entomology. University of California, Davis, California, USA. 1983.

III. LANGUEGES

Greek (fluently), English (fluently), Russian (Basic elements)

IV. EMPLOYMENT

- University of California 1980 – 83. Graduate Research Assistant. Laboratory and field research.
- University of California 1979 – 80. Teaching Assistant for the Classes:
 - a) Apiculture (Laboratory)
 - b) Production of Cultivated Plants.
- Technological Educational Institution (TEI) of Thessaloniki, Thessaloniki, Greece, 1984-93. Professor. Teaching and research in Plant Protection and Apiculture.
- University of Thessaly, Volos, Greece, 1993 – 1995. Assistant Professor. Teaching Apiculture–Sericulture and Zoology.
- Agricultural University of Athens, Greece 1995 to present. Professor. Research, teaching, and public service in Apiculture and Sericulture.

V. BOOKS and TEACHING NOTES

1. **Harizanis, P.C. 1988.** Plant Protection. Teaching Notes. Technological Educational Institution (TEI) of Thessaloniki, Thessaloniki, Greece. 168 pp.
2. **Harizanis, P.C. 1996.** The Honey Bee and the Beekeeping Techniques. Second Edition. Thessaloniki. 263 pp. (Silver medal on Beekeeping book contest at the Apimondia International Beekeeping Congress, Belgium 1997).
3. **Harizanis, P.C. 2010.** Pathology of Productive Insects (Diseases and enemies of bees).

Teaching Notes. Agricultural University of Athens. 148 pp.

4. **Harizanis, P.C. 2011.** Manual of Sericulture. Ministry of Agricultural Development and Food, Directorate of Animal Production, Athens. 26 pp. (in Greek, English and Turkish).
5. **Harizanis, P.C. 2017.** The Honey Bee and the Beekeeping Techniques. Fourth Edition. Athens. 277 pp.

VI. PROFESSIONAL ORGANIZATION AFFILIATION

1. Apitherapy Society of America
2. Entomological Society of America
3. Geotechnical Chamber of Greece.
4. Hellenic Entomological Society
5. International Sericultural Commission
6. Greek Scientific Society of Apiculture-Sericulture

VII. TEACHING VIDEOS

A total of 41 videos were made (duration from 5 to 30 minutes) on Apiculture, Cultivated plants, Sericulture and Environment.

VIII. VOCATIONAL SEMINARS TO FARMERS

A total of 145 vocational seminars were taught to Greek and Cypriot Farmers ranging from one to twelve days. Also lectures were given on bees to University of Kinshasa, Congo and Agricultural College of Enugu, Nigeria.

IX. MISSIONS TO AFRICA

- A. Two missions to Tunisia (April 2004 and December 2007) to establish mulberry plantations for the silkworm project "**Innovative System for High Quality Cocoon Production (I.S.CO.P.)**". Funded by: European Union.
- B. Three missions to Congo (February 2011, January 2013 and May 2013) to establish apiaries in the jungle by transferring bees from trees to modern hives. Also organized a farm to cultivate corn, cassava and vegetables. Funded by: Dounis Company.
- C. One mission to Nigeria (October 2016) to establish apiaries in the woods by transferring bees from trees to modern hives.

X. SCIENTIFIC PROJECTS (Funded by international and national sources)

- A. A total of 14 Scientific projects as coordinator.
- B. A total of 9 Scientific projects as partner.
1. (1981) "**Study on the Biology of Reproduction**". Funded by: United States Public Health Service (HD 4906) to study the biology of reproduction on insects. Member of a research team.
2. (1982) "**Study of Queen Quality**". Funded by: California Bee Breeders Association. For my PhD Thesis.
3. (1984) "**Effect of *Varroa jacobsoni* on Queen Rearing**". Funded by: California State Beekeepers Association. Project coordinator.
4. (1991) "**Study on the overwintering of Mediterranean Frut Fly (*Ceratitis capitata*)**". Funded by: California Citrus Research Board. Member of a research

- team.
5. (1992) "**Study on the overwintering of Mediterranean Frut Fly (*Ceratitis capitata*)**". Funded by: California Department of Food and Agriculture. Member of a research team.
 6. (1997) "**Organization for Economic Cooperation and Development**". Funded by: OECD for a 6 weeks visit to University of California, Davis, USA to study the genetics of Greek and Africanized (killer bees) honey bees using the morphometric "FABIS" analysis and mitochondrial DNA analysis. Project coordinator.
 7. (2000-2001) "**Chemical, spectroscopic and microscopic study of pollen in honey**". Funded by: European Union and Greek Ministry of Agriculture. Member of a research team.
 8. (2000-2002) "**Study of different types of hives**". Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
 9. (2000-2002) "**Breeding and production of queen bees for high honey production and resistant to Varroa mite**". Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
 10. (2000-2002) "**Laboratory collaboration on honey analysis to complete the identity of Greek honey**". Funded by: European Union and Greek Ministry of Agriculture. Member of a research team.
 11. (2000-2002) "**Laboratory support for honey analysis**" (Economic support for equipment). Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
 12. (2001-2002) "**Study of genetic structure of Greek bee populations**" (PLATON PROGRAMM: Collaboration between Greek and French laboratories). Funded by: European Union. Member of a research team.
 13. (2003-2005) "**Innovative System for High Quality Cocoon Production (I.S.CO.P.)**". Funded by: European Union. Project coordinator.
 14. (2005-2017) "**Alternative methods of waxmoth control**". Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
 15. (2010, 2011, 2013, 2015) "**Quality standards, principles and hygiene practices for honey, pollen and royal jelly**". Specialized seminars to inspectors of Greek Food Authority, Ministry of Agriculture. Funded by: Greek Ministry of Agriculture. Instructor.
 16. (2011, 2013, 2015) "**Specialized seminars on bee management, queen rearing and bee pests**". Specialized seminars to professional beekeepers of Cyprus. Funded by: Cypriot Ministry of Agriculture. Instructor.
 17. (2014 to date) "**Studies on impact of wasps to bees and their control**". Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
 18. (2014 to date) "**Breeding and preservation of genetic material of Greek populations of bees**". Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
 19. (2016-2017) "**The effect of DioFarm formulation on the colony development (brood and bee population), honey production and control of Nesema disease**". Funded by: Attiki Bee Company. Project coordinator.

20. (2015-2019) **Recharging Greek Youth to Revitalize the Agriculture and Food Sector of the Greek Economy-Apiculture.** Funded by: Stayros Niarchos Foundation. Project coordinator.
21. (2018-2019) **Program application of supervision and opportune detection of Small Hive Beetle.** Funded by: European Union and Greek Ministry of Agriculture. Project coordinator.
22. (2018-2019) **Field trials to test the efficacy of Apivar strips on the control of the mite *Varroa destructor*** Funded by: Veto Pharma, France. Project coordinator.
23. (2018-2019) **Detection and control of beekeeping problems of the Islands of Cyclades.** Funded by: Prefecture of Islands of Southern Aegean. Project coordinator.

XI. PUBLICATIONS (See below for selected publications)

- A. A total of 28 Scientific Publications on refereed international journals with Science Citation Index (SCI).
- B. A total of 20 Scientific Publications on refereed international journals with no Science Citation Index (SCI).
- C. A total of 45 Scientific Publications presented on international and national congresses.
- D. More than 195 practical articles on bees in Greek Agricultural Magazines.

XII. SELECTED PUBLICATIONS

Harizanis, P. 1983. Biology and Activity of Honey Bee Sperm: Migration, Concentration, and ATP Analysis. Ph.D. dissertation. University of California, Davis. 85 pp.

1. **Harizanis, P.C.** and Gary N.E. 1984. The quality of insemination of queen honey bees mated under commercial conditions. *American Bee Journal* 124(5):385-387.
2. **Harizanis, P. 1985.** Two methods for counting insect spermatozoa. Proceedings of First Greek Congress of Entomology. Athens, Greece, 6-8 November p. 97-106.
3. **Harizanis, P.C.,** Gary N.E. and Hedrick J.L. 1987. Analysis and content of ATP in spermatozoa of honey bees. *Journal of Apicultural Research* 26 (3):150-155.
4. **Harizanis, P.C. 1991.** Infestation of queen cells by the mite *Varroa jacobsoni*. *Apidologie* 22:533-538.
5. **Harizanis, P.C., 1995.** The time of day as related to the efficiency of instrumental insemination of queen honey bees (*Apis mellifera* L.). Proceedings XXXIVth International Apicultural Congress of Apimondia, Lozane Switzerland. p. 101.
6. Androulidakis, S. and **P. Harizanis, 1996.** Identification of Greek beekeepers' educational needs, a case study. *European Journal of Agricultural Education and Extension* 3(1): 47-54.
7. **Harizanis, P.C.,** M.E. Vassarmidaki and L. Santas 1997. Chrysomelid pests of honey plants. Proceedings XXXVth International Apicultural Congress of Apimondia, Adwerp Belgium. P. 289-290.
8. **Harizanis, P.C.,** C.I. Costopoulou, N.A. Lorentzos, A.B. Sideridis, C.P. Yialouris and I.V. Fillis 1999. MELInet: a network for beekeeping activities in Greece. Proc. of the 2nd European Conference of the European Federation for Information Technology in Agriculture, Food and the Environment on "Role and potential of IT, Intranet and Internet for advisory services" (U. Rickert, R. Helbig, G. Schiefer, Eds), pp. 99-106, organized by the European Federation for Information

- Technology in Agriculture, Food and the Environment, University of Bonn, Germany, 27-30 September 1999.
9. Costopoulou, C.I., M.A. Lambrou and **P.C. Harizanis** 2000. A framework for electronic trading of hive products. *Bee World* 81(4):172-181.
 10. Vassarmidaki, M.E., **P. C. Harizanis** and S. Katsikis 2000. Effects of Applaud on the growth of silkworm (Lepidoptera: Bombycidae). *Journal of Economic Entomology* 93(2):290-292.
 11. Mahaman, B.D., **P. Harizanis**, I. Filis, E. Antonopoulou, C.P. Yialouris and A.B. Sideridis 2002. A diagnostic expert system for honeybee pests. *Computers and Electronics in Agriculture* 36:17-31.
 12. Bouga, M., **P. Harizanis**, G. Kiliass. and S. Alahiotis 2002. Study of Genetic Structure of Honeybee populations *Apis mellifera*. ICSEB VI Sixth International Congress of Systematic and Evolutionary Biology "Biodiversity in the Information Age", Patras, Greece, Abstracts, p.278.
 13. Alissandrakis, E and **P. C. Harizanis** 2002. Perspectives of the analysis of honey volatile compounds for its botanical origin determination. Proceedings VIIth European Congress of Entomology, Thessaloniki, Greece.
 14. Porichi, A.E. E., **P.C. Harizanis** and M.I. Bouga 2002. Study of two mtDNA genes in honeybee populations *Apis mellifera* of three different areas of Greece. Proceedings VIIth European Congress of Entomology, Thessaloniki, Greece.
 15. Vassarmidaki, M.E., and **P. C. Harizanis** S. Katsikis 2003. The effect of gibberellic acid on the growth and economic parameters of silkworm, *Bombyx mori* L. *Agricultural Research* 26(1):61-64.
 16. Alissandrakis, E., D. Daferera, P.A. Tarantilis, M. Polissiou and **P.C. Harizanis** 2003. Ultrasound-assisted extraction of volatile compounds from citrus flowers and citrus honey. *Food Chemistry* 82:575-582.
 17. Pappas, C.S., P.A. Tarantilis, **P.C. Harizanis** and M.G. Polissiou 2003. New method for pollen identification by FT-IR spectroscopy. *Applied Spectroscopy* 57(1):23-27.
 18. **Harizanis,P.** and M. Bouga (2003). Genetic structure of the Bee from Crete Island (Greece). Selected papers *Apiacta*.
 19. Alissandrakis, E., P.A. Tarantilis, **P.C. Harizanis** and M. Polissiou 2005. Evaluation of four isolation techniques for honey aroma compounds. *Journal of the Science of Food and Agriculture* 85:91-97.
 20. Batsoulis, A.N., N.G. Siatis, A.C. Kimbaris, E. Alissandrakis, C.S. Pappas, P.A. Tarantilis, **P.C. Harizanis** and M. Polissiou 2005. FT-Raman spectroscopic simultaneous determination of fructose and glucose in honey. *Journal of Agricultural and Food Chemistry* 53:207-210.
 21. Alissandrakis, E., A.C Kibaris, P.A. Tarantilis, **P.C. Harizanis** and M. Polissiou 2005. Flavour compounds of Greek citton honey. *Journal of the Science of Food and Agriculture* 85:1444-1452.
 22. Bouga, M., **P.C. Harizanis**, G. Kiliass and S. Alahiotis 2005. Genetic divergence and phylogenetic relationships of Honey Bee *Apis mellifera* (Hymenoptera: *Apidae*) populations from Greece and Cyprus using PCR - RFLP analysis of three mtDNA Segments. *Apidologie* 36:335-344.
 23. Bouga, M., G. Kiliass, **P. C. Harizanis**, V. Papatotiropoulos and S. Alahiotis 2005. Allozyme Variability and Phylogenetic Relationships in Honey Bee *Apis mellifera* (Hymenoptera: *Apidae*) populations from Greece and Cyprus. *Biochemical*

- Genetics* 43:471-483.
24. **Harizanis, P. C.**, D. I. Nielsen, and M. Bouga 2006. Diagnostic Molecular Markers discriminating Africanized Honey Bees from Greek and Cypriot Honey Bees (*Apis mellifera*, Hymenoptera: Apidae). *Journal of Apicultural Research* 45(3):197–202).
 25. Lykoudis, D., **P. Harizanis** and M. Bouga 2006. Molecular markers as a tool for selection of honey bee queen's resistant to *Varroa destructor*. International Apimondia Symposium: Selection and Queen Breeding, Scientific Program of International Symposium Bulgaria 1-3 September, 2006. (Abstract p. 20).
 26. Kekecoglu, M., M. Bouga, **P.C. Harizanis** and. M.I Soysal 2006. Genetic diversity of bee ecotypes in Turkey-Greece boarder line using morphometric and molecular markers. 2nd European Conference of Apidology, Prague, Czech Republic, 10-14 September. (Abstract p. 61).
 27. Ntaliani, M., S. Karetos, C. Costopoulou, **P. Harizanis**, S. Kaloudis and H. Passam 2006. Supporting agricultural e-governance. 2nd National Conference with International Participation on "Electronic Democracy:Challenges of the digital era", pp. 143-151, Athens, Greece, 16-17 March 2006.
 28. Tzitzinakis, M. and **P. Harizanis** 2006. Conservation and identification of silkworm genetic resources at the Sericultural Laboratory of Athens. Problems of maintainance and utilization of mulberry and silkworm genetic resources. International Jubilee Scientific Conference. Proceedings pp. 214-220, Vratza, Bulgaria, 25-29 September, 2006.
 29. Tzitzinakis, M., C. Bougioukos and **P. Harizanis** 2006. A silkworm rearing method for reducing the labor, the amount of leaves supplied and the feeding frequency. Problems of maintenance and utilization of mulberry and silkworm genetic resources. International Jubilee Scientific Conference. Proceedings pp. 338-345, Vratza, Bulgaria, 25-29 September, 2006.
 30. Alissandrakis, E., P.A. Tarantilis, **P.C. Harizanis** and M. Polissiou 2007. Aroma investigation of unifloral Greek citrus honey using solid-phase microextraction coupled to gas chromatographic-mass spectrometric analysis. *Food Chemistry* 100:396-404.
 31. Alissandrakis, E., P.A. Tarantilis, **P.C. Harizanis** and M. Polissiou 2007. Comparison of the volatile composition in thyme honey from several origins in Greece. *Journal of Agricultural and Food Chemistry* 55:8152-8157.
 32. **Harizanis, P.C.**, E. Alissandrakis, P. A. Tarantilis, P. C. and M. Polissiou 2008. Solid – phase micro extraction/gas-chromatography.mass spectrometric analysis of p-dichlorobenzene and naphthalene in honey. *Food Additives and Contaminants* (DOI: 10.1080/02652030802007546).
 33. Kekecoglu, M., M. Bouga, M.I. Soysal and **P.C. Harizanis** 2007. Morphometrics as a tool for the study of genetic variability of honey bees. *Journal of Tekirdag Agricultural Faculty* 4:7-15.
 34. **Harizanis, P.**, M. Goliomytis and M. Tzitzinakis 2008. The use of ultraviolet radiation in silkworm rearing. 21st Congress of International Sericultural Commission. Athens, Greece 3-6 November, 2008. Oral presentation.
 35. Tzitzinakis, M., **P. Harizanis** and A.K. Perdikaris 2008. Sericulture in Greece and in the EU, facts of today and prospects for tomorrow. 21st Congress of International Sericultural Commission. Athens, Greece 3-6 November, 2008. Oral presentation.
 36. Kandylis, K., I. Hadjigeorgiou and **P. Harizanis** 2009. The nutritive value of

mulberry leaves (*Morus alba*) as a feed supplement for sheep. *Tropical Animal Health Production* 41:17-24.

37. Grounta, A., **P. Harizanis**, E. Mylonakis, G.J.E. Nychas and E.Z. Panagou 2016. Investigating the effect of different treatments with lactic acid bacteria on the fate of *Listeria monocytogenes* and *Staphylococcus aureus* infection in *Galleria mellonella* larvae. PLoS ONE 11(9): e0161263. doi:10.1371/journal.pone.0161263.

XIII. DNA SEQUENCES DEPOSITED IN THE GENE BANK

1. Bouga, M., **Harizanis P.** and Lykoudis D.
Marchallina hellenica 12S ribosomal RNA gene, partial sequence; mitochondrial
Bankit 784820 DQ381509
2. Bouga, M., **Harizanis P.** and Lykoudis D.
Marchallina hellenica 12S ribosomal RNA gene, partial sequence; mitochondrial
Bankit 784820 DQ381510
3. Bouga, M., **Harizanis P.** and Lykoudis D.
Marchallina hellenica 12S ribosomal RNA gene, partial sequence; mitochondrial
Bankit 784820 DQ381511
4. Bouga, M., **Harizanis P.** and Lykoudis D.
Marchallina hellenica 12S ribosomal RNA gene, partial sequence; mitochondrial
Bankit 784820 DQ381512
5. Bouga, M., **Harizanis P.** and Lykoudis D.
Marchallina hellenica 12S ribosomal RNA gene, partial sequence; mitochondrial
Bankit 851085 EF088648
6. Bouga, M., **Harizanis P.** and Lykoudis D.
Marchallina hellenica 12S ribosomal RNA gene, partial sequence; mitochondrial
Bankit 856024 EF088649