



4th International Symposium
Mediterranean Vineyards and Climate Change
4ο Διεθνές Συμπόσιο
Μεσογειακός Αμπελώνας και Κλιματική Αλλαγή

SYMPOSIUM PROGRAM

Friday, 12 May 2017

- 08.30 - 09.30 Registration
- 09.30 - 10.30 **Opening**
Coordinators:
K. Konstantinidis, Managing Director, Heliotopos Conferences
M. N. Stavrakakis, Conference Chairman, Professor Emeritus, Laboratory of Viticulture, Department of Crop Science, Agricultural University of Athens
- Welcome Addresses - Officials**
E. Argyris, President EDOAO
C. Markou, President KEOSOE
Y. Voyatzis, Vice President, Greek Wine Federation
S. Mamalis, President of the Geotechnical Chamber of Greece
G. Papadoulis, Rector of the Agricultural University of Athens
N. Zorzos, Mayor of Thira
Representative of the South Aegean Region
S. Kavalaris, Vice President of the Association Cooperatives of Theraic Products (SantoWines)
- 10.30 - 11.00 Session 1
Opening Speech
The Greek vineyard under the new environmental conditions
M. N. Stavrakakis
Professor Emeritus, Laboratory of Viticulture, Department of Crop Science, Agricultural University of Athens, Greece
- 11.00 - 11.30 Keynote Presentation
The global adaptation challenge for viticulture
H.R. Schultz
Professor, President, Hochschule GEISENHEIM University, Germany
- 11.30 - 12.00 Coffee break

12.00 - 14.00

Session 2

Coordinators: N. Nikolaou - J. Rochard

Climate change and impacts in the Mediterranean and specifically in Greece

P. Nastos

*Professor of Climatology, Department of Geography and Climatology,
Department of Geology and Geoenvironment, National and Kapodistrian
University of Athens, Greece*

Identifying current and future climate analogues to assist management of viticulture in Mediterranean climates

R.M.B Harris¹, L. Ratnarajah¹, T. Remenyi¹, D. Kriticos,^{2,3} N.L. Bindoff^{1,4,5,6}

¹Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC), University of Tasmania, ²Health and Biosecurity, CSIRO, Canberra, ACT, ³University of Queensland, School of Biological Sciences, ⁴Centre for Australian Weather and Climate Research (CAWCR), CSIRO Marine and Atmospheric Research, ⁵Institute for Marine and Antarctic Studies (IMAS), University of Tasmania, ⁶ARC Centre of Excellence for Climate Systems Science, University of Tasmania, Australia

Adaptation to climate change of the French wine industry: A systemic approach - main outcomes of the project laccave

N.Ollat¹, H. Quéno², G. Barbeau³, C. Van Leeuwen¹, P. Darriet⁴, I. Garcia De Cortazar Aauri⁵, B. Bois⁶, H. Ojeda⁷, E. Duchéne⁸, E. Lebon⁹, P. Vivin¹, L. Torregrosa¹⁰, J. M. Sablayrolles¹¹, G. Teil¹², P. Lagacherie¹³, E. Giraud-Héraud⁴, P. Aigrain¹⁴, J.M. Touzard¹⁵

¹UMR EGFV, ISVV-INRA-Bordeaux Sciences Agro, ²UMR Costel, CNRS-Univ de Rennes, Rennes, ³UVV, INRA, ⁴Laboratoire Œnologie, ISVV-Univ Bordeaux, ⁵AgroClim, INRA, Domaine Saint Paul, ⁶Institut Universitaire de la Vigne et du Vin - Université de Bourgogne, ⁷Experimental Unit of Pech Rouge, INRA, ⁸UMR SVQV, INRA-Univ Strasbourg, ⁹UMR LEPSE, INRA-Supagro, ¹⁰UMR AGAP, INRA-Supagro-CIRAD, ¹¹UMR SPO, INRA-Supagro, ¹²UMR SAD APT, INRA-Agroparitech, ¹³UMR LISAH, INRA-IRD-SupAgro, ¹⁴FranceAgriMer, Service Etude et Prospective, ¹⁵UMR Innovation, INRA-Supagro, France

Previous and future climate change impacts on vitiviniculture: the case of Burgundy

B. Bois¹, S. Zito¹ and J. Pérard²

*¹CRC/ Biogéosciences UMR 6282 CNRS/Univ. Bourgogne Franche-Comté,
²Chaire UNESCO «Culture et Traditions du Vin», Université de Bourgogne,
France*

Indigenous varieties and carbon sequestration for “zero emissions”

grapes?

V.D. Litskas, T. Irakleous, N. Tzortzakis and M.C. Stavrinides¹

¹Cyprus University of Technology, Department of Agricultural Sciences, Biotechnology and Food Science, Cyprus

14.00- 15.30 Lunch break

15.30 - 17.30

Session 3

Coordinators: E. Soufleros - N. Katis

Hellenic Vineyards

D.Grammatikos

Hellenic Ministry of Rural Development and Food, General Directorate of Sustainable Plant Production, Directorate of Cultivation Systems, Section of Vine & Olive, Greece

Non-Saccharomyces yeasts to address climate change impacts and current trends in winemaking

A. Nisiotou¹, C. Tassou¹ and G.J. Nychas²

¹Institute of Technology of Agricultural Products (Former Wine Institute), Hellenic Agricultural Organization 'DEMETER', ²Laboratory of Microbiology & Biotechnology of Foods, Department of Food Science & Human Nutrition, School of Food, Biotechnology and Development, Agricultural University of Athens, Greece

Temporal dynamic of anthocyanin accumulation in climate change conditions monitored by Proximal sensing

O. Unamunzaga¹, U. Leibar^{1,2}, A. Castellón¹, I. Pascual³, F. Morales⁴ and A. Aizpurua¹

¹Neiker-Tecnalia, Plant Production Department. Bizkaia Technological Park ²Sectorial Analysis and Paying Agency's Technical Services, ³Universidad de Navarra, Plant Stress Physiology Group (Environmental Biology Department), Associated Unit to CSIC, EEAD, Zaragoza and ICVV, Logroño. ⁴Faculties of Sciences and Pharmacy, ⁴CSIC, Department of Plant Nutrition, Aula Dei Experimental Station, Spain.

New philosophy and new techniques in the wine-growing sector in view of the upcoming climate change

O.E. Soufleros¹ and E. Soufleros²

¹Postgraduate student at the Master 2. Institut des Sciences de la Vigne et du Vin, Université de Bordeaux, ²Emeritus Professor of Oenology and Spirits, Department of Agriculture, Aristotle University of Thessaloniki, Greece

The cluster of visitable cellars in Siatista "Oinoefrosini" - The solutions to climate change for the natural preservation of wines from the wisdom of Macedonian architecture

E. Batianis¹, K. Bonta² and A. Maxairidou³

¹Agronomist–Enologist M.Sc. (A.U.Th.), Department of Plant and Animal Production, Regional Administration of Western Macedonia, ²Teacher, Centre of Environmental Education of Siatista, ³Agronomist engineer, Alexander Technological Educational Foundation of Thessaloniki, Greece

Measures to address the effects of climate change on a vineyard to ensure the typicalness of the produced wines

S. Georgiou, M. Tsviki, V. Stergiopoulou, I. Katsoula, K. Mpouloukostas and E. Soufleros

Laboratory of Food Engineering and Processing, Dept. of Food Science & Technology, Faculty of Agriculture, Aristotle University of Thessaloniki, Greece

17.30 - 18.15 Poster Session - Coffee break

Poster presentations

Investigation of practices that reduce the negative impact of grapevine trunk diseases and flavesence dorée in a climate - changing environment

M. Bubola, K. Diklić, D. Poljuha, I. Palčić
Institute of Agriculture and Tourism, Croatia

Kaolin benefits on grapevine physiology and oxidative damage as a tool to mitigate climate change

L.-T. Dinis¹, A. Luzio¹, S. Bernardo¹, A.C. Malheiro¹, H. Fraga¹, I. Gonçalves², G. Pinto³, C.M. Correia¹ and J. Moutinho-Pereira¹

¹Centre for the Research and Technology of Agro-Environmental and Biological Sciences (CITAB), Universidade de Trás-os-Montes e Alto Douro, ²ADVID Associação para o Desenvolvimento da Viticultura Duriense, ³Department of Biology & CESAM – Centre for Environmental and Marine Studies, Universidade de Aveiro, Portugal

Influence of storage conditions on quality characteristics of red wines

S. Agriopoulou, E. Stamatelopoulou

Department of Food Technology, Technological Educational Institute of Peloponnese, Greece

Environmental Impact on Production Traditional Semi Sweet Wines in Lechkhumi

L. Ujmajuridze, M. Mirvelashvili, G. Ghambashidze, I. Amirkhanashvili
Scientific Research Center of Agriculture, Georgia

Vine performance and Wine Quality of Muscat Hamburg cultivar after a Specific Inactivated Dry Yeast application as Adaptation Strategy to Climate Change

D. Petoumenou¹, E. Xyrafis¹, C. Vassileiou², I. Dimakis³ and F.

*Battista*⁴

¹*Department of Agricultural Crop Production and Rural Environment School of Agricultural Sciences, University of Thessaly,* ²*Alinda-Velco SA,* ³*Agricultural Productive Cooperation of Nea Aghialos, Greece,* ⁴*Lallemand Inc, Italy*

Measures to address the adverse impacts of climate change on vine cultivation

S. Georgiou, M. Tsiviki, V. Stergiopoulou, I. Katsoula, K. Mpouloukostas and E. Soufleros

Postgraduate specialization of Oenology-Viticulture, Laboratory of Oenology and Spirits, Department of Agriculture, Aristotle University of Thessaloniki, Greece

Georgakis - New white restaurant table vive variety

P. Zamanidis¹, C. Pasxalidis², L. Papakostantinou³, G. Ouzounidou⁴, E. Vavoulidou⁵, I. Daskalakis³

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization “Demeter”, Department of Grapevine, ²Technological Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, ⁴Institute of Technology of Agricultural Products, Hellenic Agricultural Organization “Demeter”, ⁵Institute of Soil Sciences, Hellenic Agricultural Organization “Demeter”, Greece

Elpida - New vinegar quality erythrosarki aromatic variety of vine

P. Zamanidis¹, C. Pasxalidis², L. Papakonstantinou³, I. Daskalakis³

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization “Demeter”, Department of Grapevine, ²Technological Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, Greece

Xrysi Sofia - New white vinyl variety of vine variety for wine production of high quality

P. Zamanidis¹, C. Pasxalidis², K. Biniari³, D. Bouza³, M. Stavrakaki³

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization “Demeter”, Department of Grapevine, ²Technological Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, Greece

Marathon - New wine growth productive and respective vine variety

P. Zamanidis¹, C. Pasxalidis², K. Biniari³, D. Bouza³, M. Stavrakaki³

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization “Demeter”, Department of Grapevine, ²Technological

Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, Greece

Florina - New white horse table vineyard vine variety

P. Zamanidis¹, C. Pasxalidis², L. Papakonstantinou³, G. Ouzounidou⁴, E. Vavoulidou⁵

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization "Demeter", Department of Grapevine, ²Technological Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, ⁴Institute of Technology of Agricultural Products, Hellenic Agricultural Organization "Demeter", ⁵Institute of Soil Sciences, Hellenic Agricultural Organization "Demeter", Greece

Ahaia - New vinegar variety for the production of eronatic wine

P. Zamanidis¹, C. Pasxalidis², K. Biniari³, D. Bouza³, M. Stavrakaki³

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization "Demeter", Department of Grapevine, ²Technological Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, Greece

Amvrosia - New rose wine aromatic variety

P. Zamanidis¹, C. Pasxalidis², Aik. Biniari³, D. Mpouza³, M.. Stavrakaki³

¹Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization "Demeter", Department of Grapevine, ²Technological Educational Institute (T.E.I.) of Peloponnese, School of Agricultural Technology, ³Agricultural University of Athens, Greece

Differentiation of red wine-producing *Vitis vinifera* L. biotypes, autochthonous to Crete, Greece, employing ampelographic and SSR markers

I. Masaoutis¹, E.E. Trantas², E.V. Avramidou³, M. Pikraki³, T. Pitsoli⁴, M. Nikolantonakis¹ and A. G. Doulis³

¹ Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization "Demeter" (ex. NAGREF), Laboratory of Viticulture, ² Technological Educational Institute of Crete, School of Agricultural Technology, Department of Plant Sciences, Laboratory of Plant Biochemistry and Biotechnology, ³ Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization "Demeter" (ex. NAGREF), Laboratory of Plant Biotechnology & Genomic Resources, ⁴ Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization "Demeter" (ex. NAGREF), Department of Grapevine, Greece

18.15 - 19.30

Winetasting of the famous wines of Santorini

Saturday, 13 May 2017

09.30 - 10.00

Session 4

Coordinators: N. Ollat - P. Nastos

Climate and viticulture in Byzantium. An overview of sources and modern research

I. Anagnostakis

Research Director National Hellenic Research Foundation, Institute of Historical Research, Section of Byzantine Research, Greece

10.00 - 11.30

The vine; an emblematic plant organic-indicatrix of the climatic variations, presentation of project ADVICLIM

J. Rochard

National Sustainable Development Expert, French Institute of Vine and Wine (IFV), France

Effects of temperatures on vine phenological stages

N. Nikolaou

Professor of Viticulture, Aristotle University of Thessaloniki, Greece

Effects of shoot trimming severity on the accumulation of sugar and anthocyanins in cv. merlot berries

M. Bubola, K. Diklić, I. Palčić, Z. Užila, T. Plavša¹

¹Institute of Agriculture and Tourism, Croatia

Preliminary results of the introduction of the tolerant grapevine varieties in sub-Mediterranean Slovenia

D. Rusjan¹, T. Jug², A. Škvarč²

¹Group for viticulture, Agronomy Department, Biotechnical Faculty University of Ljubljana, ²Chamber of Agriculture and Forestry of Slovenia, Institute for Agriculture and Forestry, Slovenia

Extreme viticulture: values, beauties, alliances, vulnerabilities with the climate adaptation

R. Gaudio

CERVIM (Centre for Research, Environmental Sustainability and Advancement of Mountain Viticulture), Italy

11.30 - 12.00

Coffee break

12.00 - 14.30

Session 5

Coordinators: K. Biniari - D. Rusjan

Local cultivar adaptation to dry vineyard soil-climatic conditions of the Kozani prefecture area in combination with the traditional cultural practices – Solutions to the climatic change proposed by the wisdom of the past

E. Batianis¹, Z. Tzikalios² and A. Maxairidou³

¹Agronomist–Enologist M.Sc. (A.U.Th.), Department of Plant and Animal Production, Regional Administration of Western Macedonia, ²Agronomist – Plant Genetic Improvement, Agronomy and Weed Science M.Sc. (A.U.Th.), ³Agronomist engineer, Alexander Technological Educational Foundation of Thessaloniki, Greece

The effects of temperature on lifecycle of the European Grapevine Moth and on its control using Entomopathogenic fungi

E.I. Beris^{1 3} D.P. Papachristos², S. Gowen³, B. Pembroke³ and D.C. Kontodimas²

¹Dep. of Oenology and Beverage Technology, School of Food Technology and Nutrition, Technological educational Institute of Athens, ²Lab. of Agricultural Entomology, Dep. of Entomology and Agricultural Zoology, Benaki Phytopathological Institute, Greece, ³Dep. of Agriculture, School of Agriculture, Policy and Development, University of Reading, UK

Innovation and Sustainability in Viticulture: New Disease-resistant Grape Varieties

Vivai Cooperativi Rauscedo, Italy

N. Tsombikos and N. Dalpis¹

¹Vitro Hellas S.A., Greece

The exploitation of clones of Greek grapevine varieties in view of climate change. The case of grapevine cultivar Liatiko (Vitis vinifera L.) i. Study of the genetic variability of grapevine cultivar Liatiko (Vitis vinifera L.) using the ampelographic description and molecular method SSR

M. Stavrakaki and K. Biniari

Agricultural University of Athens, Faculty of Crop Science, Laboratory of Viticulture, Greece

Effect of culture media and indolebutyric acid (IBA) on rooting of cuttings of grapevine rootstocks in hydroponic culture system

I. Daskalakis, M. Stavrakaki, S. Theodorakopoulos, D. Bouza and K. Biniari

Agricultural University of Athens, Faculty of Crop Science, Laboratory of Viticulture, Greece

Multivariate analysis and genetic diversity of Greek grapevine (*Vitis vinifera* L.) cultivars using ampelographic and microsatellite markers

*A. Tsivelikas*¹, *E. Avramidou*², *P. Ralli*¹, *K. Kotrotsis*¹, *I. Ganopoulos*^{1, 3}, *T. Moysiadis*³, *A. Doulis*^{2, 4}

¹*Institute of Plant Breeding & Phytogenetic Resources, Hellenic Agricultural Organization-DEMETER (ex. N.AG.RE.F.),* ²*Institute of Olive Tree, Subtropical Plants & Viticulture, Hellenic Agricultural Organization-DEMETER (ex. N.AG.RE.F.),* *Laboratory of Plant Biotechnology & Genomic Resources,*

³*Institute of Applied Biosciences, Center for Research and Technology Hellas (CE.R.T.H.), Greece*

Computer-aided grapevine identification: An idea for the future or a practical tool now?

*M. Stavrakaki*¹, *P. Karampiperis*², *S. Konstantinidis*² and *T. Kontogiannis*²

¹*Agricultural University of Athens, Faculty of Crop Science, Laboratory of Viticulture,* ²*Agroknow, Greece*

Agronomical and analytical methods in response of climate change impacts on secondary wine grape metabolites

R. Flamini, D. Tomasi

Council for Agricultural Research and Economics - Viticulture, CREA-VIT, Italy

14.30 - 16.30 Visit of the Boutari Winery - Lunch

17.00 - 19.00 **Session 6**

Seminar: The necessity of improved vine propagation material of Greek grapevine varieties in the new conditions -The role of clonal selection

Coordinator: M. N. Stavrakakis

Vine clonal selection in Greece: perspectives and priorities

N. Nikolaou

Professor of Viticulture, Aristotle University of Thessaloniki, Greece

Clonal selection and certification: the only way for a modern, antagonistic and sustainable viticulture

N. Katis

Professor of Virology, School of Agriculture, Aristotle University of Thessaloniki, Greece

Clone selection of Greek grapevine varieties - Selection criteria and implementation problems

Y. Kanakis

Agriculturist Msc, Fassoulis Grapevine Nursery, Greece

Clonal selection in Greece. Problems and prospects

N. Tsombikos, N. Dalpis

Vitro Hellas, S.A., Greece

Grapevine propagation material: legislation and structure of the sector

E. Chrysikopoulou, Lawyer

Wine grapevine varieties: Strategies for their protection and exploitation

T. Dougos, Nursery owner, Agronomist, Representative of the

Hellenic Grapevine Nurseries Federation

20.30

Symposium Dinner (optional)

Sunday, 14 May 2017

09.30 - 16.00

Visit of selected wineries and the historic vineyard of Santorini and lunch.

Last update: 8 May 2017