

**KOSTAS S. CHARTZOULAKIS, MSc, PhD**

**Full name** :Kostas S. Chartzoulakis

**Date of birth** :Kisamos, Crete, Greece, 27 March 1952 Citizenship: Greek

**Marital Status**: Married with two children

**Present Address** :NAGREF, Olive Tree and Subtropical Plants Institute, Agrokipio, 73100 Chania, Crete, Hellas.

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**Studies:**

1975-1970MSc. in Agricultural Engineering and Hydraulics, Agricultural University of Athens, Greece

1975Postgraduate Training in Irrigation and Soil Physics, University of Wageningen, Netherlands

1987-1986MSc Programme in Protected Crops, MAICH, CIHEAM, France. Awarded for the thesis 'Effects of saline irrigation water on germination, growth and yield of greenhouse cucumber'

1991-1988PhD Programme, Dept of Horticulture, University of Thessaloniki, Greece. Awarded Doctor of Philosophy for the thesis 'Ecophysiological response of kiwifruit, cv Hayward, to water and salt stress in the stage of vegetative growth' Present work: 1980 up today in the Institute for Olive Tree Subtropical Plants of Chania, Crete

2005-2000Senior Researcher, Head of the Department of Irrigation and Water Resources.

-2006up today Director of the Institute for Olive Tree and Subtropical Plants

**Work subject** - Water requirements of the crops (olives, citrus, avocado, grapes, vegetables(

- Irrigation systems (design and application(
- Soil-Plant-Water relationships (photosynthesis, stress physiology(
- Use of marginal (saline and reclaimed) waters in agriculture
- Sustainable water resources management in agriculture, water footprint
- Treatment and valorisation of olive mill wastewaters (OMW(

Languages: Greek, English

**Scientific Societies Membership**

Active member of the following Scientific Societies:

- The International Society for Horticultural Science (ISHS,(
- The International Water Association (IWA(
- The Geotechnical Chamber of Greece

-The Greek Society for Horticultural Science **GSHS**

### **Research projects**

- " .1Study of the physiological basis of salt tolerance of the main Greek olive cultivars' (Contract GSRT-1296/99). Duration: 1999-2001.
- " .2Wastewater recycling of olive oil mills in Mediterranean countries – Demonstration and sustainable reuse of residuals" (WAWAROMED) in INCO-MED program of EU (contract ICA3-CT1999-00011). Duration: 2000-2003.
- " .3Study of the defense mechanisms to salinity of grapevines (*Vitis vinifera* L.)" (Contract GSRT-5363/00).Duration: 2001-2003.
- " .4Technology for treatment and reuse of the water used to wash olives" (UDOR), in EU CRAFT-2000 Program (EVK1-CT-2001-30011). Duration: 2002-2004.
- .5Towards sustainable water use on Mediterranean islands: Addressing conflicting demands and varying hydrological, social and economic conditions' (MEDIS) in the EESD ESD of EU (contract EVK1-CT-2001-00092). Duration: 2002-2005.
- ‘ .6The future of olive plantation systems on sloping and mountainous land: Scenarios for production and natural resource conservation’ (OLIVERO) in the QLRT of EU (contract QLRT-CT-2002-01841). Duration: 2003-2005.
- ‘ .7Best water use innovative practices towards a sustainable water resources management’ (BEWARE) in the CRINNO project of Region of Crete-EU. Duration: 2003-2005.
- ‘ .8A new approach of irrigation technology regarding the optimization of production system procedure’ (FP-21) in the EPAN 4.5 project of GSRT-EU. Duration: 2003-2006.
- “ .9Safe and High Quality Food Production using Low Quality Waters and Improved Irrigation Systems and Management’ (SAFIR) in the FP6-2004-FOOD-3-B of EU (contract FOOD-CT-2005-023168). Duration: 2005-2009.
- “ .10Mise en oeuvre d’une Plateforme de Services pour la lutte contre la sécheresse et la désertification dans les régions du bassin de la Méditerranée Européenne à travers un système d’actions pilote locales’ (DESERTNET 2) in the frame of INTEREG III-MEDOC II (Convention: 2005-05-4.4-I-156) Duration: 2006-2008.
- ‘ .11Physiological adaptation mechanisms of grapevine cultivars under combined drought stress and elevated UV radiation’ in the ‘PENED-2003’ (contract 03EΔ480) of GSRT. Duration: 2005-2008.
- ‘ .12Innovative irrigation techniques for improved water use efficiency and fruit quality in olive culture’ in Greek-Tunisian Cooperation for R&T of GSRT (contract 135-e). Duration: 2006-2008.
- ‘ .13Development and validation of an irrigation scheduling tool for olives to improve water use efficiency at farm level’ in Greek-Egypt Cooperation for R&T of GSRT (contract 269-e). Duration 2006-2008.
- .14Biotechnological Recycle of olive mills washing water by microalgae (ALGATEC) in the frame of FP7-SME-2008-1 of E.U (Grant agreement: ALGATEC 232331). Duration: 2009-2011.
- .15Innovation Center of Crete - Emphasizing the Management of Natural Resources in the frame of 830/EYΔ&ΠΤ/2008 του EEA Grants 2004-2009 (EYΔ&ΠΤΣ 1319/12-05 2008. Duration: 2009-2011.

- ‘.16Water and Life (H<sub>2</sub>O and Life) in the frame of Life Learning Grundtvig 2011 (contract 2011-1-CY1-GRU06-01523 3). Duration: 2012-2013.
- ‘.17Capacity Building of Personnel in Jordanian Olive Industry, (CBPOOI), in the frame of TEMPUS-1-2013 (contract 531820-2013 TEMPUS). Duration: 2014-2016.

### **Organization of Scientific Meetings**

- Convenor of the ‘2nd International Symposium on Irrigation of Horticultural Crops’ held in Chania, Crete, Greece from 8-13/9/96.
- Editor of ACTA HORTICULTURAE No 449 (Volume I and II), the official journal of International Society for Horticultural Science (ISHS).
- Local organiser of the High Level Scientific Conference on ‘Photosynthesis in a changing world’ funded (HPCF-2001-00003-01), held in Chania, Crete, Greece from 27/5 4/7/2003.
- Convener of the 23rd Congress of Greek Society of Horticultural Science (GSHS) ‘The agricultural production in the new European Environment’, held in Chania, Crete, Greece from 23-26/10/2007.
- Convener of the 4th International Conference on ‘Olive culture and Biotechnology of Olive Products’ OLIVEBIOTEQ 2011 held in Chania, Crete Greece from 31/10 4/11/2011.
- Chairman of the WG ‘Saline Water Management and Water Reuse’, της CMIR (Commission of Irrigation) of ISHS.
- Member of the editorial board of ‘Journal of BALKAN ECOLOGY’
- Reviewer in the international scientific journals ‘Agricultural Water Management’, ‘Agriculture, Ecosystem & Environment’, ‘Australian Journal of Agricultural Research’, ‘Canadian Journal of Plant Science’, ‘European Journal of Agronomy’, ‘Functional Plant Biology’, ‘Journal of Horticultural Science and Biotechnology’, ‘Scientia Horticulturae’, ‘Water International’, ‘Bioresource Technology’, ‘HortScience’, ‘J. Plant Physiology’, etc.

### **Participation in Scientific meetings**

Some of the international scientific meetings I have participated presenting my work:

- 2 .1nd International Conference on Irrigation, 15-17 Sept., 1981, Tel-Aviv, Israel.
- 1 .2st Intern. Symposium on Water Relations in Horticultural Crops, 3-5 Sept., 1984, Pisa, Italy
- .3Intern. Conference for the Crop Water Requirements, 9-14 Sept., 1984, ICID-UNESCO, Paris, France
- 4 .4th International Symposium on Water supply and Irrigation in open and under Protected Cultivation. August 26-28, 1985, Padova, Italy.
- .5First International Conference on Mediterranean Tree Crops, 13-15 November 1985, Chania, Crete, Greece
- .6General meeting of European Co-operative Network of Olive Production. FAO, 29/9-4/10-1986, Marseille, France
- .7AGRIMED meeting on New Alternative Crops for Mediterranean basin EEC countries. 21-23/9/1988, Chania, Crete, Greece
- 2 .8nd International Meeting on Mediterranean Tree Crops, 2-4 Nov. 1988, Chania, Crete, Greece.

- .9V International Symposium on Scheduling of Irrigation for Vegetable Crops under field conditions. 5-9 June 1989, Potenza, Italy.
- 2 .10nd Inter. Symposium on Protected Cultivation of Vegetables in mild winter climates, 30 Oct.-3 Nov. 1989, Iraklio, Crete.
- .11XXIII International Horticultural Congress, 27 Aug.-1 Sept. 1990, Firenze, Italy.
- 8 .12th Consultation of Research Network on Olives, 10-13 Sept.1991, Izmir, Turkey.
- .13VII International Citrus Congress, 8-13 March 1992, Acireale, Italy.
- .14International Symposium on Irrigation of Horticultural Crops, 23-27/11/92, Almeria, Spain.
- .15International Symposium on Quality of Fruits and Vegetables: The Influence of Pre- and Post Harvest Treatments and Technologies, 19-23 / 9/ 93, MAICH, Chania, Crete, Greece.
- .16XXV International Horticultural Congress, 21-27 Aug. 1994, Kyoto, Japan.
- .17International Conference on Land and Water Management in Mediterranean Region, 4-8 Sept. 1994, MAI Bari, Italy.
- .18Third International Symposium on Kiwifruit, 19-22 Sept. 1995, Thessaloniki, Greece.
- 2 .19nd Intern. Symposium on Wastewater Reclamation and Reuse, IAWQ, 17-20/10/1995, Iraklio, Greece.
- .20Second International Symposium on Irrigation of Horticultural Crops, 9-13 September 1996, Chania, Crete, Greece.
- .21Mediterranean Colloquium on Protected Cultivation, 6-9 Oct. 1996, Agadir, Morocco.
- .22Water conservation: Best management practices, Experts Workshop, 6-10/9/97, Capetown, S. Africa.
- .23Third International Symposium on Olive Growing, 22-26 September 1997, Chania, Crete, Greece.
- .24XXV International Horticultural Congress. 3-8 Aug. 1998, Brussels, Belgium
- .25International Workshop on Stress Synergism in Plants: Abiotic and Biotic Stress in Photosynthesis. 23-26 Aug. 1998, Tata, Hungary.
- 3 .26rd International Symposium on Irrigation of Horticultural Crops, 28/6-2/7/1999, Lisbon, Portugal.
- 6 .27th International Symposium on Grapevine Physiology and Biotechnology, 11-15/6/2000, Iraklio, Crete, Greece
- 1 .28st World Water Congress – 3rd International Symposium on Wastewater Reclamation and Reuse, 3-7/7/2000, Paris, France
- 4 .29th International Symposium on Olive Growing, 25-30/9/2000, Valenzano, Bari, Italy.
- .30International Workshop on ‘Land and Water Use for Sustainable Olive Growing’, COI, 24-28/9/2001, Naples, Italy
- .31International Symposium on Cherry Tomato, 25-29/6/2002, Santorini, Greece
- .32XXVI International Horticultural Congress, ISHS, 11-17 Aug. 2002, Toronto, Canada
- 13 .33th Congress of FESPP, 2-6 Sept. 2002, Iraklion, Crete, Greece.
- .34Regional Symposium on Water Recycling in Mediterranean Region, 26-29/9/2002, Iraklio, Crete, Greece
- .35Integrated Water Management – Policy Aspects, 19-21/6/2003, Nicosia, Cyprus

- .36 Sustainable Strategies for Irrigation in Salt-prone Mediterranean Regions: A System Approach, 8-10/12/2003, Cairo, Egypt
- .37 Water Resources Management in Water Stressed Environments and Islands: The Challenge of Eco-adaptation, 1-4/2/2004, Pa Palma, Canary Islands, Spain
- .38 International Seminar on Olive Biotechnology and Quality of Olive end Products” 22-24/11/2004, Errachidia Morocco.
- .39 International Course on ‘Irrigation and Quality of Olive Oil’, organized by International Olive Oil Council (COI) from 17-24/4/2005, Nimes, France.
- .40 International Conference on Water Management in Mediterranean Basin organized by Arid Cluster (EU) 12-14/5/2005, Limmasol, Cyprus.
- 2 .41nd International Conference on Cherry Tomato, 9-11/6/2005 Santorini, Greece
- 9 .42th International Conference on ‘Environmental Science and Technology, 1-3 September 2005, Rhodes, Greece
- 2 .43nd International Conference on ‘Integrated Approaches to Sustain and Improve Plant Production Under Drought Stress’ (INTERDROUGHT II), 24-28/9/2005, Rome Italy
- .44 International Workshop on ‘Agricultural Recycling of Olive Oil Mill Wastewaters’, 4-5 November 2005, Reggio Calabria, Italy
- 2 .45nd Mediterranean Conference on ‘Water Resources in Mediterranean Basin’ (WATEMED 2) 14-17/11/2005, Marrakech, Morocco.
- 2 .46nd International Symposium on Biotechnology and Quality of Olive Tree Products around Mediterranean basin’ 5-10 November 2006, Marsala, Italy.
- 5 .47th International Symposium on Irrigation of Horticultural Crops, 28/8-3/9/2006, Mildura, Australia presenting paper.
- .48 International Conference ‘New Technologies for the Treatment and Valorization of Agro By-Products’, ISRIM, 3-5/10/2007 Terni, Italy
- .49 First Symposium on Horticulture in Europe, ISHS, 17-20/2/2008 Vienna, Austria as invited speaker.
- .50 IX International Conference on Protection and Restoration of the Environment, PRE9’, 29/6-3/7/2008 Kefalonia, Greece
- .51 International Conference on ‘La Valorization des Margines et du Grignon en Agriculture, 23-24/7/2008 Tunis, Tunisia
- .52 VI International Symposium on Olive Growing, ISHS, 9-13/9/2008 Evora Portugal.
- ‘ .53 Olive Irrigation Symposium’, Nazareth (Israel), 6-10/12/2009, organized by ISHS as invited speaker.
- .54 International Conference ‘OliveBioteq’ 2009, Sfax (Tunisia), 15-19/12/2009 presenting paper.
- 3 .55rd International Conference on ‘Small and Decentralized Waste and Wastewater Treatment Plants (SWAT), 14-16 May 2010, Skiathos, presenting paper.
- .56 International Workshop on ‘Climate Change and Sustainability of Agro-Environment: Challenges and Interventions” 4-5 June, 2010, Islamabad, Pakistan as invited speaker
- 28 .57th International Horticultural Congress (IHC), Horticultural use of water in a changing climate’ CLIMWATER, 23-27/8/2010 Lisbon, Portugal.
- 2 .58nd International Conference of IAMAW ‘Recycling and utilization of Mediterranean agro-industrial wastes’, 17-18/6/2010 Izmir, Turkey.
- .59 International Conference ‘The Olive Sector: 2020 vision’ 14-15/4/2011, Athens, Greece co-sponsored by EU, as invited speaker.

- 4 .60th International Conference 'Olive growing and Biotechnology of olive products' OLIVEBIOTEQ 2011, 31/10-4/11/2011, Chania, Greece, convener.
- ‘ .61IWA Regional Conference on Wastewater Purification & Reuse’, 28-30/03/2012, Heraklion, Crete, Greece.
- ‘ .62Valorization of Mediterranean Bio-wastes and Effluents’, 5-8/06/2012, Santarem, Portugal organized by IAMAW and the Portuguese Society of Biotechnology (SPBT).(
- 7‘ .63th International Symposium on Irrigation of Horticultural Crops’, 16-20/07/2012 Geisenheim, Germany organized by the Geisenheim Research Centre and International Society for Horticultural Science (ISHS.(
- 2 .64nd International Workshop on the ‘Environment and Agriculture in Arid and Semiarid Regions’, 6-7/09/2012, Constanta, Romania as invited speaker, organized by Research Station of Fruit Growing and Ovidius University.
- 7 .65th International Symposium on Olive Growing, 25-29/09/2012, San Juan, Argentina as invited speaker, organized by the National Institute of Technology (INTA), the National University of San Juan (UNSL) and the International Society for Horticultural Science (ISHS.(
- .66International Workshop ‘SOIL-WASTE-WATER 2013’, 3-5/4/2013, Landau, Germany as invited speaker, organized by the University of Koblenz-Landau and the Deutsche Forschungsgemeinschaft (DFG).(
- .67Fourth International Conference on Environmental Management, Engineering, Plannings and Economics (CEMEPE 2013), 24-28/6/2013, Mykonos, Greece, organized by Society of Ecotoxicology and Environmental Safety (SECOTOX) and the Dept. of Planning and Regional Development, University of Thessaly, Greece.

## Scientific Publications

### I. Thesis

- .1Chartzoulakis K. S., 1988. Effects of saline irrigation water on germination, growth and yield of greenhouse cucumber. M.Sc Thesis, MAICH/ICAMAS, Paris, pp. 1-46.
- .2Chartzoulakis K.S., 1991. Ecophysiological response of kiwifruit, cv Hayward, to water and salt stress in the stage of vegetative growth. PhD Thesis. Annals of Faculty of Agriculture 22, University of Thessaloniki, pp 137.

### II. Research papers in Referred Journals

- .1Chartzoulakis K., Michelakis N. and E. Vougioukalou, 1991. Growth and production of kiwi under different irrigation systems. FRUITS Vol. 46:75-81.
- .2Chartzoulakis K., Michalakakis N. and I. Tzompanakis, 1992. Effects of water amount and application date on yield and water utilization efficiency of Koroneiki olives, under drip irrigation. Adv. Hort Sci., 6: 82-84.
- .3Chartzoulakis, K. S., 1992. Effects of NaCl salinity on germination, growth and yield of greenhouse cucumber. J. Hort. Sci., 67(1): 115-119.
- .4Chartzoulakis K., Noitsakis B. and I. Therios, 1993. Photosynthesis, plant growth and dry matter distribution in kiwifruit, as influenced by water deficits. Irrig. Sci.14: 1-5.
- .5Chartzoulakis K., Noitsakis B. and I. Therios, 1993. Effects of shading on gas exchange, specific leaf weight and chlorophyll content on four kiwi cultivars, under field conditions. J. Hort. Sci. 68: 605-611.

- .6Chartzoulakis K. 1994. Photosynthesis, water relations and leaf growth of cucumber exposed to salt stress. *Scientia Hort.* 59: 27-35.
- .7Chartzoulakis K. and Drosos N. 1995. Water use and yield of greenhouse grown eggplant under drip irrigation. *Agric. Water Manag.* 28: 113-120.
- .8Chartzoulakis K., Therios I., Misopolinos N. and Noitsakis B., 1995. Growth, ion content and photosynthetic performance of salt-stressed kiwifruit. *Irrig. Sci.* 16: 23-28.
- .9Chartzoulakis K. and Loupassaki M., 1997. Effects of NaCl salinity on germination, growth, gas exchange and yield of greenhouse eggplant. *Agric. Water Manag.* 32(3): 215-225.
- .10Chartzoulakis K. S., 1998. Environmentally sustainable irrigation management for greenhouse vegetables in Crete, Greece. *J. Balkan Ecol.* 1(2): 62-67.
- .11Chartzoulakis K., Michelakis N. and Stefanoudaki E., 1999. Growth, yield and fruit quality of 'Bonanza' oranges under different soil water regimes. *Adv. Hort. Sci.*13:6-11.
- .12Nastou A., Chartzoulakis K., Therios I. and Bosabalidis A., 1999. Leaf anatomical responses, ion content, CO<sub>2</sub> assimilation and leaf anatomy in three lemon cultivars under NaCl salinity. *Adv. Hort. Sci.* 13 (2): 61-67.
- .13Chartzoulakis K., Patakas A and Bosabalidis A., 1999. Changes in water relations, photosynthesis and leaf anatomy induced by intermittent drought in two olive cultivars. *Envir. Exp. Bot.* 42 (2): 113-120.
- .14Chartzoulakis K., Patakas A and Bosabalidis A., 1999. Comparative study on gas exchange, water relations and leaf anatomy of two olive cultivars grown under well irrigated and drought conditions. *Z. Naturforsch* 54: 688-692.
- .15Chartzoulakis K. and Drosos N., 1999. Growth, yield and water use of pepper grown in an unheated greenhouse. *Agric. Med.* 129: 155-160.
- .16Chartzoulakis K. and Clapaki G., 2000. Response of two pepper hybrids to NaCl salinity at various growth stages. *Scientia Hort.* 86: 247-260.
- .17Stefanoudaki E., Chartzoulakis K., Koutsaftakis A. and Kotsifaki F., 2001. Effects of drought on qualitative characteristics of olive oil, cv Koroneiki. *Grasas y Aceitas* 52(3 4): 202-206.
- .18Fysarakis I., Chartzoulakis K. and Stavrakas D. 2001. Response of Sultana vines (*V. vinifera* L) on six rootstocks to NaCl salinity exposure and recovery. *Agric. Wat. Manag.* 51(1): 13-27.
- .19Tsagarakis K.P., Tsoumanis P., Chartzoulakis K. and Angelakis A.N., 2001. Water resources status including wastewater treatment and reuse in Greece: Related problems and prospectives. *Water International* 26(2): 252-258.
- .20Chartzoulakis K., Paranychianakis N. and Angelakis A., 2001. Water resources management in the island of Crete, Greece with emphasis to agricultural use. *Water Policy* 3(3): 193-205.
- .21Chartzoulakis K., Patakas A., Kofidis G., Bosabalidis A. and Nastou A., 2002. Moderate water stress affects leaf anatomy, gas exchange, water relations and growth in two avocado cultivars. *Scientia Hort.*, 95: 39-50.
- .22Chartzoulakis K., Loupassaki M., Bertaki M. and Androulakis I., 2002. Effects of NaCl salinity on growth, ion content and CO<sub>2</sub> assimilation of six olive cultivars. *Scientia Hort.*, 96: 235-247.
- .23Loupassaki M.H., Chartzoulakis K.S., Digalaki N.B., Androulakis I.I., 2002. Effects of salt stress on concentration of nitrogen, phosphorus, potassium, calcium, magnesium

and sodium in leaves, shoots and roots of six olive cultivars. *J. Plant Nutr.* 25(11): 2457-2482.

.24Centritto M., Loreto F. and Chartzoulakis K., 2003. The use of low [CO<sub>2</sub>] to estimate diffusional and non-diffusional limitations of photosynthetic capacity of salt-stressed olive sapling. *Plant, Cell & Environment* 26: 585-594.

.25Loreto F., Centritto M. and Chartzoulakis K., 2003. Photosynthetic limitations in olive cultivars with different sensitivity to salt stress. *Plant, Cell & Environment* 26: 595-601.

.26Kofidis G., Bosabalidis A.M., Chartzoulakis K., 2004. Leaf anatomical alterations induced by drought stress in two avocado cultivars. *J. Biol. Res.* 1: 115-120.

.27Paranychianakis N.V, Chartzoulakis K.S., Angelakis A.N., 2004. Influence of rootstock, irrigation level and recycled water on water relations and leaf gas exchange of Soultanina grapevines. *J. Exp. Envir. Bot.* 52(2): 185-198.

.28Chartzoulakis K., Psarras G., 2005. Global change effect on crop photosynthesis and production in Mediterranean: the case of Crete, Greece. *Agric. Ecosys. Environ.* 106(2-3): 147-157.

.29Paranychianakis N.V, Chartzoulakis K.S., 2005. Irrigation of Mediterranean crops with saline water: from physiology to management practices. *Agric. Ecosys. Environ.* 106(2-3): 171-187.

.30Chartzoulakis, K., 2005 Salinity and olive: Growth, salt tolerance mechanisms, photosynthesis and management practices. *Agric. Wat. Manag.*, 78(1-2): 108-121.

.31Chartzoulakis K., Psarras G., Vemmos S., Loupassaki M., Bertaki M., 2006. Response of two olive cultivars to salt stress and potassium supplement. *J. Plant Nutr.* 29(11): 2063-2078.

.32Psarras G., Bertaki M, Chartzoulakis K., 2008. Response of greenhouse tomato to salt stress and K<sup>+</sup> supplement. *Plant Biosystems* 142 (1): 149-153.

.33Stefanouadaki E, Williams M, Chartzoulakis K, Harwood J., 2009. Olive oil qualitative parameters after orchard irrigation with saline water. *J. Agric & Food Chem.* 57 (4): 1421-1425.

.34Stefanouadaki E, Williams M, Chartzoulakis K, Harwood J., 2009. Effect of irrigation on quality attributes of olive oil. *J. Agric & Food Chem.* 57 (15): 7048-7055.

.35Chartzoulakis K, Psarras G., Moutsopoulou M., Stefanouadaki E., 2010. Application of olive mill wastewater to a Cretan olive orchard: Effects on soil properties, plant performance and the environment. *Agric. Ecosys. Environ.* 138 (3-4): 293-298.

.36Jensen R.C., Battilani A., Plauborg F., Psarras G., Chartzoulakis K., Janowiak F., Stikic R., Jovanovic Z., Guitong L., Xuebin Q., Fulai L., Jacobsen S.E., Andersen N. M., 2010. Deficit irrigation based on drought tolerance and root signalling in potatoes and tomatoes. *Agric. Water Manag.* 98: 403-413.

.37Maton L., Psarras G., Kasapakis G., Lorenzen R.J, Andersen M., Boesen M., Bak S.N., Chartzoulakis K., Pedersen M.S., Kloppmann W., 2010. Assessing the net benefits of using wastewater treated with a membrane bioreactor for irrigating vegetables in Crete. *Agric. Water Manag.* 98: 458-464.

.38Doupis G., Chartzoulakis K., Beis A., Patakas A., 2011. Allometric and biochemical responses of grapevines subjected to drought and enhanced ultraviolet-B radiation. *Austr. J. Grape & Wine Res.*(17 (1): 36-42.



.39Doupis G., Chartzoulakis K., A., Patakas A., 2012. Differences in antioxidant mechanisms in grapevines subjected to drought and enhanced UV-B radiation. *Emirates J. Food Agric.* 24(6): 607-613.

.40Doupis G., Bertaki M., Psarras G., Kasapakis I., Chartzoulakis K., 2013. Water relations, physiological behavior and antioxidant defence mechanism of olive plants subjected to different irrigation regimes. *Scientia Hort.* 153: 150–156.

.41Ghrab M., Gargouri K., Bentaher H., Chartzoulakis K., Ayadi M., Ben Mimoun M., Masmoudi M.M., Ben Mechlia N., Psarras G., 2013. Water relations and yield of olive tree (cv. Chemlali) in response to partial root-zone drying (PRD) irrigation technique and salinity under arid climate. *Agric. Water Manag.* 123: 1–11.

### **III Research papers in referred proceedings**

.1Chartzoulakis K. and N. Michelakis, 1988. Influence of different irrigation systems on greenhouse tomatoes. *Acta Horticulturae*, 228: 97-104.

.2Michelakis N. and K. Chartzoulakis, 1988. Water consumptive use of greenhouse tomatoes as related to various levels of soil water potential under drip irrigation. *Acta Horticulturae*, 228:127-136.

.3Chartzoulakis K. and N. Michelakis, 1988. Root development and plant growth of young orange trees irrigated with different systems. *Proc. 2nd Inter. Meeting on Mediterranean Tree Crops*, 254-261.

.4Chartzoulakis K., 1989. Effects of saline irrigation water on germination, growth and yield of greenhouse cucumber. *Acta Horticulturae*, 287: 327-334.

.5Chartzoulakis K. and N. Michelakis, 1990. Effects of different irrigation systems on root growth and yield of greenhouse cucumber. *Acta Horticulturae*, 278: 237-243.

.6Chartzoulakis K. and N. Michelakis, 1992. The effect of soil water potential on plant growth and gas exchange of young orange trees. *Proceedings International Society Citriculture*, 374-377.

.7Chartzoulakis K. 1995. Salinity effects on fruit quality of cucumber and eggplant. *Acta Horticulturae*, 379: 187-192.

.8Chartzoulakis K., Therios I. and Noitsakis B., 1996. The effects of soil water deficit on internal water relations of kiwifruit. *Acta Horticulturae*, 444: 305-309.

.9Chartzoulakis K. and N. Drosos, 1997. Water requirements of green- house grown pepper under drip irrigation. *Acta Horticulturae*, 449 (1): 175-180.

.10Patakas A., Noitsakis. and Chartzoulakis 1997. Changes in WUE in *Vitis vinifera* as affected by leaf age. *Acta Horticulturae*, 449(2): 457-460.

.11Tsadilas C. and Chartzoulakis K., 1998. Boron deficiency in olive trees in Greece in relation to soil boron concentration. *Acta Horticulturae*, 474(1): 341-344.

.12Chartzoulakis K. and Clapaki G., 2000. Effects of salinity on growth and yield of two pepper cultivars. *Acta Horticulturae*, 511: 143-149.

.13Chartzoulakis K., Bosabalidis A., Patakas A. and Vemmos S., 2000. Effects of water stress on water relations, gas exchange and leaf structure of olive tree. *Acta Horticulturae*, 537 (1): 241-247.

.14Paranychianakis N., Chartzoulakis K. and Angelakis A., 2000. Growth and mineral uptake of sultana grapevines irrigated with reclaimed wastewater and its potential for using such waters in Crete, Greece. *Acta Horticulturae*, 537 (2): 725-730.

- .15Paranychianakis N., Chartzoulakis K., Aggelidis S., Angelakis A., 2002. Grapevine growth and nutrition as affected by irrigation with recycled water. Proc. Reg. Symp. on Water Recycling in Mediterranean Region, Vol. I, p. 457-464.
- .16Moutsopoulou M.N, Chartzoulakis K., Stefanoudaki E., 2002. Effects of application of raw olive mill wastewater on soil properties and plant performance of olive orchards. Proc. Reg. Symp. on Water Recycling in Mediterranean Region, Vol. II, p. 155-159.
- .17Chartzoulakis K., Psarras G., Moutsopoulou M., Stefanoudaki E., 2006. Application of olive mill wastewater on olive orchards: Effects on soil properties, plant performance and the environment. Proceedings of OLIVEBIOTEQ 2006, Vol. II, 37-44.
- .18Chartzoulakis K., Loupassali M., Bertaki M., 2006. Response of 12 olive cultivars to NaCl salinity. Proceedings of OLIVEBIOTEQ 2006 Vol. I, 403-406.
- .19Patakas A., Noitsakis B., Chouzouri A., Chartzoulakis K., Beis A., Zotos A., 2008. Physiological and biochemical changes induced by different irrigation strategies in grapevines. Acta Hort. 792: 511-518.
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