

# **Dimitrios Savvas**

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## **CURRICULUM VITAE**

Last updated: 4 January 2020

04/24/1961: Born in Ioannina, Greece

1967-1973: Primary school in Megalo Peristeri, Ioannina

1973-1976: Gymnasium in Ioannina

1976-1979: Lyceum (High School) in Ioannina

1979-1985: Agricultural University of Athens

07/1984-08/1984: Practical work at the Institute for Subtropical Plants and Olive Trees in Chania, Greece.

07/1985-10/1985: Practical work at the Agricultural Research Station of Ioannina.

12/11/1985: Diploma in Agriculture

04/21/1987-08/03/1988: Working in the Agricultural Insurance Organization of Greece as an Agronomist.

10/01/1988-07/22/1992: Research Fellow at the Institute for Fruit and Vegetable Production of the University of Bonn, Germany.

06/12/1992 Ph.D. degree from the University of Bonn

01/01/93-12/30/95 Soilless culture expert in the company “Anthokipeftiki Argiraki”, Athens, Greece.

02/23/93-6/30/93 Assistant Professor at T.E.I. of Messolonghi.

09/20/93-02/08/96 Assistant Professor at T.E.I. of Kalamata

02/09/96 – 05/18/1999 Assistant Professor at T.E.I. of Epirus

05/19/1999-10/04/2004 Associate Professor at T.E.I. of Epirus

10/04/2004-06/05/2006 Professor at T.E.I. of Epirus

09/01/97-08/31/2003 Head of the Department of Floriculture and Landscape Architecture at T.E.I. of Epirus, Faculty of Agricultural Technology.

09/01/2003-06/05/2006 Director of the Faculty of Agricultural Technology at TEI of Epirus

06/05/2006-02/06/2011 Assistant Professor at the Agricultural University of Athens, Laboratory of Vegetable Crops

02/06/2011-09/30/2015 Associate Professor at the Agricultural University of Athens, Laboratory of Vegetable Crops

11/05/2012: Election as an internal member in the Council of the Agricultural University of Athens.

10/01/2015 onwards Professor at the Agricultural University of Athens, Laboratory of Vegetable Crops

Acad. Year 2015-2016: Director of the Sector “Vegetable Crops, Floriculture and Landscape Architecture”

### **PARTICIPATION IN EDITORIAL BOARDS OF SCIENTIFIC JOURNALS**

1. *Environmental and Experimental Botany* (I.F. for 2017-2018: **3.666**)
2. *Scientia Horticulturae* (I.F. for 2017-2018: **1.760**)
3. *Agricultural Water Management* (I.F. for 2017-2018: **3.182**)
4. *European Journal of Horticultural Science* (I.F. for 2017-2018: **0.590**)

### **PARTICIPATION IN SCIENTIFIC COMMITTEES AND EDITORIAL BOARDS OF INTERNATIONAL SCIENTIFIC SYMPOSIA**

1. “ISHS International Symposium on Managing Greenhouse Crops in Saline Environment», Pisa, Italy, 9-12 July 2003 (Acta Horticulturae, 609).
2. ISHS International Symposium on Growing Media. Nottingham, U.K., 2-8 September 2007 (Acta Horticulturae 819).
3. ISHS International Symposium on Strategies towards Sustainability of Protected Cultivation in Mild Winter Climate" (Antalya, Turkey, 6 – 11 April 2008).
4. ISHS International Symposium on Greenhouse systems: GREENSYS2011. Chalkidiki, Greece, 6-10 June 2011.
5. ISHS 5<sup>th</sup> Balkan Symposium on Vegetables and Potatoes. Tirana, Albania, 9-13 October 2011.
6. ISHS GroSci 2013: International Symposium on Growing Media and Soilless Cultivation, Leiden, The Netherlands, 17-21 June 2013.
7. ISHS-IHC-2014. World Congress on Horticultural Science 2014. International Symposium on Innovation and New Technologies in Protected Cropping. Brisbane, Australia, 18-22 August 2014.
8. ISHS 6<sup>th</sup> Balkan Symposium on Vegetables and Potatoes. Zagreb, Croatia, 29 Σεπτεμβρίου - 2 Οκτωβρίου 2014.

### **Recent research projects**

1. Project leader in a Research Project of the action ARCHIMEDES, which was co-funded by the EU and the Greek Ministry of Education and Religions titled: «Development of domestic know-how and technology for the cultivation of greenhouse crops in closed

- hydroponic systems aimed at preventing nitrate pollution and use of chemical soil fumigants”. Duration of the project: 01/01/2003 to 12/31/2006.
2. Member of the research team in an INTERREG IIIA GREECE-ITALY research project titled: “Development and promotion for organic farming producing systems - Pro.Bio.Sis.” (I2101029), which was implemented by the Faculty of Agricultural Technology of TEI of Epirus. Duration of the project: 01/01/2006 to 12/31/2008.
  3. Member of the research team in an INTERREG IIIA GREECE-ITALY research project titled: «*Posidonia oceanica*: Protection and regeneration of fields and use of residuals in Agriculture (POPRURA)” (I3101017, Category: D2) which was implemented by the Faculty of Agricultural Technology of TEI of Epirus. Duration of the project: 01/01/2006 to 12/31/2008.
  4. Project leader in a Project Based Personnel Exchange Programme with Germany (IKYDA 2007). Title of the project: «Improving salinity tolerance and fruit quality of vegetable products by grafting». Collaborating institution: «Institute for Vegetable and Ornamental Crops, Großbeeren, Germany». Source of funds: State Scholarships Foundation of Greece. Duration of the project: 01/01/2007 to 12/31/2008.
  5. Member of the research team in a Research and Dissemination of Technology Project sponsored by the General Secretariat of Research & Technology of Greece. Title of the project: «New Technologies for More Environment-friendly Greenhouses». Collaborating institutions: a) University of Thessaly, Laboratory of Agricultural Engineering and Environmental Control, b) Plastika Kritis s.a., c) AGREK Samantouros S.A. Duration of the project: 10/01/2007 to 31/10/2008.
  6. Member of the research team of GEOMATIONS, led by Prof. Sigrimis, in an FP.7 RTD project. Project acronym: FLOW-AID. Project full title: “Farm level optimal water management: Assistant for irrigation under deficit”. Grant agreement no. 036958 GOCE. Duration of the project: 10/01/2006 to 09/30/2009.
  7. Coordinator of the research team of the Agricultural University of Athens in an FP.7 RTD project. Project acronym: LEGUME FUTURES. Project full title: Legume-supported cropping systems for Europe. Grant agreement no. 245216 CP-FP. Duration of the project: 03/01/2010 to 02/28/2014.
  8. External researcher in the research team of the project “Improvement of stress tolerance using rootstocks” (“Erhöhung von Stresstoleranz durch den Einsatz von Unterlagen”) which is funded from the German Federal Ministry of Food, Agriculture, and Consumer Protection and implemented by «Leibniz-Institute for Vegetable and Ornamental Crops

- Großbeeren und Erfurt». Co-ordinator: Dr. Dietmar Schwarz. Duration of the project: 01/01/2010 – 12/31/2012.
9. Member of the research team in the European research project (FP.7) titled: ‘Sustainable use of irrigation water in the Mediterranean Region’. Project acronym: SIRRIMED. Grant agreement no: 245159. Duration of the project: 09/01/2010 to 08/31/2014. Co-ordinator of the Greek research team: Prof. C. Kittas, University of Thessaly.
  10. Coordinator of a research project titled: “Establishment of good agricultural practices for vegetable production in pumice and their dissemination in commercial practice”, which was sponsored by the private company LAVA S.A. Duration: 11/01/2010 – 12/31/2012.
  11. Coordinator of the team of the Agricultural University of Athens in a LEONARDO Project titled: “AGRICOM “ Transfer of the Water Competences Model to AGRICultural COMpetences” within the framework of the Programme «Lifelong Learning Programme Leonardo da Vinci - Transfer of Innovation – Call 2011». Duration: 10/01/2011 to 09/30/2013.
  12. Coordinator of the team of the Agricultural University of Athens in a LEONARDO Project titled: “GreeNET: Environmental Education through Enquiry and Technology” within the framework of the Programme «Lifelong Learning Programme Leonardo da Vinci - Transfer of Innovation – Call 2012». Duration: 11/01/2012 to 10/31/2015.
  13. Member of the research team in a research project of the action ARCHIMEDES titled: «Effects of mycorrhizal and other symbiotic microorganisms on plants cultivated in soil and soilless culture systems under biotic and abiotic stress conditions», which was co-funded by the EU and the Greek Ministry of Education and Religion and co-ordinated by the Department of Floriculture and Landscape Architecture (scientific responsible: Assoc. Professor G. Patakioutas). Duration: 04/01/2012 to 03/31/2015.
  14. Member of the research team in a research project of the action ARCHIMEDES titled: «Evaluation of the effects of planting on buildings and development of innovative relevant hydroponic structures (Hydroponic Structures on Buildings – HsoB”, which was co-funded by the EU and the Greek Ministry of Education and Religion and co-ordinated by the Department of Floriculture and Landscape Architecture (scientific responsible: Dr. G. Varras). Duration: 04/01/2012 to 03/31/2015.
  15. Member of the research team in an INTERREG IIIA GREECE-ITALY research project titled: «IRMA – Efficient Irrigation Management Tools for Agricultural Cultivations and Urban Landscapes» which is implemented by the Faculty of Agricultural Technology of

- TEI of Epirus under the supervision of Professor Dr. Ioannis Tsirogiannis. Duration of the contract: 04/11/2014 – 3/31/2015.
16. Coordinator of the research team of the Agricultural University of Athens in the FP7 RTD project EUROLEGUME, titled: «Enhancing of legumes growing in Europe through sustainable cropping for protein supply for food and feed» (Grant agreement no.: 613781). Duration of the project: 4 years starting from 01/01/2014.
  17. Country representative for Greece in the Management Committee of the COST FA1204, titled: «Vegetable Grafting to Improve Yield and Fruit Quality under Biotic and Abiotic Stress Conditions» and Coordinator of STSM (Short-Term Scientific Missions) in this Action (<http://www.vegetablegrafting.unitus.it>). Duration of the contract: 10/01/2012 to 09/30/2016.
  18. Member of the research team in a research project titled: «Transnational Network for SME Support in the Animal Breeding and Horticultural Sector – AGRO-START” which is implemented by the Institute for Research and Technology - Thessaly (IRETETH), of the Centre for Research and Technology – Hellas (CERTH). Duration of the contract: 05/05/2014 έως 11/28/2014.
  19. Coordinator of the research team of the Agricultural University of Athens in the HORIZON2020 RTD project “TRUE: Transition paths to sustainable legume based systems in Europe”. Duration of the project: 4 years starting on 04/01/2017.
  20. Coordinator of the research team of the Agricultural University of Athens in the HORIZON2020 RTD project “TOMRES: A novel and integrated approach to increase multiple and combined stress tolerance in plants using tomato as a model”. Duration of the project: 3.5 years starting on 06/01/2017.
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## **List of Publications**

### **I. Ph.D. Thesis**

1. Savvas, D., 1992. Vegetatives und generatives Wachstum bei Auberginen (*Solanum melongena* L.) in Hydrokultur in Abhängigkeit von der elektrischen Leitfähigkeit der Nährlösung. Thesis. University of Bonn, Germany.

### **II. Publications in international refereed journals with impact factor**

1. Savvas, D. und F. Lenz, 1994. Influence of salinity on the incidence of the physiological disorder "internal fruit rot" in hydroponically grown eggplants. *Angewandte Botanik (Journal of Applied Botany)*, 68: 32-35.
2. Savvas, D. und F. Lenz, 1994. Einfluss einer NaCl-Salzbelastung auf das vegetative und generative Wachstum von Aubergine (*Solanum melongena* L.) in Hydrokultur. *Gartenbauwissenschaft (European Journal of Horticultural Science)*, 59: 172-177.
3. Savvas, D. und F. Lenz, 1995. Nährstoffaufnahme von Aubergine (*Solanum melongena* L.) in Hydrokultur. *Gartenbauwissenschaft (European Journal of Horticultural Science)* 60: 29-33.
4. Savvas, D. and F. Lenz, 1996. Influence of NaCl salinity on the mineral composition of eggplants in sand culture. *Angewandte Botanik (Journal of Applied Botany)* 70: 124-127.
5. Savvas, D. and G. Manos, 1999. Automated composition control of nutrient solution in soilless culture systems. *Journal of Agricultural Engineering Research*, 73: 29-33.
6. Savvas, D. and K. Adamidis, 1999. Automated management of nutrient solutions based on target electrical conductivity, pH, and nutrient concentration ratios. *Journal of Plant Nutrition* 22, 1415-1432.
7. Savvas, D. and F. Lenz, 2000. Effects of NaCl or nutrient-induced salinity on growth, yield, and composition of eggplants grown in rockwool. *Scientia Horticulturae* 84: 37-47.
8. Savvas, D. and F. Lenz, 2000. Response of eggplants grown in recirculating nutrient solution to salinity exerted prior to the start of harvesting. *Journal of Horticultural Science and Biotechnology*, 75: 262-267.
9. Mavrogianopoulos, G., D. Savvas and V. Vogli, 2002. Influence of NaCl-salinity imposed to half of the root system of hydroponically grown tomato on growth, yield, and tissue mineral composition. *Journal of Horticultural Science & Biotechnology*, 77: 557-564.

10. Savvas, D., 2002. Automated replenishment of recycled greenhouse effluents with individual nutrients in hydroponics by means of two alternative models. *Biosystems Engineering*, 83: 225-236.
11. Savvas, D. and G. Gizas, 2002. Response of hydroponically grown gerbera to nutrient solution recycling and different nutrient cation ratios. *Scientia Horticulturae*, 96: 267-280.
12. Savvas, D., G. Manos, A. Kotsiras, and S. Souvaliotis, 2002. Effects of silicon and nutrient-induced salinity on yield, flower quality, and nutrient uptake of gerbera grown in a closed hydroponic system. *Journal of Applied Botany*, 76: 153-158.
13. Savvas, D., V. Karagianni, A. Kotsiras, V. Demopoulos, I. Karkamisi and P. Pakou, 2003. Interactions between ammonium and pH of the nutrient solution supplied to gerbera (*Gerbera jamesonii*) grown in soilless culture. *Plant and Soil*, 254: 393-402.
14. Akl, I.A., D. Savvas, N. Papadantonakis, N. Lydakis-Simantiris, P. Kefalas, 2003. Influence of ammonium to total nitrogen supply ratio on growth, yield and fruit quality of tomato grown in a closed hydroponic system. *European Journal of Horticultural Science*, 68: 204-211.
15. Karras, G., D. Savvas, G. Patakioutas, P. Pomonis, T. Albanis, 2005. Fate of metalaxyl applied in nutrient solution to gerbera (*Gerbera jamesonii*) grown in a closed hydroponic system. *Journal of Horticultural Science & Biotechnology*, 80: 111-115.
16. Lykoskoufis, I.H., D. Savvas, G. Mavrogianopoulos, 2005. Growth, gas exchange, and nutrient status in pepper (*Capsicum annum* L.) grown in recirculating nutrient solution as affected by salinity imposed to half of the root system. *Scientia Horticulturae*, 106: 147-161.
17. Savvas, D., A. Kotsiras, G. Meletiou, S. Margariti, I. Tsirogiannis, 2005. Modeling the relationship between water uptake by cucumber and NaCl accumulation in a closed hydroponic system. *HortScience*, 40: 802-807.
18. Savvas, D., V.A. Pappa, A. Kotsiras, G. Gizas, 2005. NaCl accumulation in a cucumber crop grown in a completely closed hydroponic system as influenced by NaCl concentration in irrigation water. *European J. Hort. Sci.* 70: 217-223.
19. Tas, G., Papadantonakis, N., and Savvas, D., 2005. Responses of lettuce (*Lactuca sativa* L. var. longifolia) grown in a closed hydroponic system to NaCl-, or CaCl<sub>2</sub>-salinity. *J. Applied Botany & Food Quality*, 79: 136-140.



20. Trajkova, F., N. Papadandonakis, and D. Savvas, 2006. Comparative effects of NaCl- and CaCl<sub>2</sub>-salinity on cucumber (*Cucumis sativus* L.) grown in a closed hydroponic system. *HortScience* 41: 437-441.
21. Savvas, D., Nasi, E., Moustaka, E., Mantzos, N., Barouchas, P., Passam, H.C., Olympios, C., 2006. Effects of ammonium nitrogen on lettuce grown on pumice in a closed hydroponic system. *HortScience* 41: 1667-1673.
22. Karipidis, C., Olympios, C., Passam, H.C., Savvas, D., 2007. Effect of moisture content of tomato pollen stored cryogenically on in vitro germination, fecundity and respiration during tuber growth. *Journal of Horticultural Science & Biotechnology* 82: 29-34.
23. Savvas, D., Mantzos, N., Barouchas, P., Tsirogiannis, I., Olympios, C., Passam, H.C., 2007. Modelling Salt Accumulation by a Bean Crop Grown in a Closed Hydroponic System in Relation to Water Uptake. *Scientia Horticulturae* 111, 311-318.
24. Karras, G., Savvas, D., Patakioutas, G., Pomonis, G., Albanis, T., and Pomonis, P., 2007. Modeling the Transport of Metalaxyl in Gerbera Plants Grown in a Closed-loop Hydroponic System. *Biosystems Engineering* 96, 279-292.
25. Karras, G., D. Savvas, G. Patakioutas, P. Pomonis, T. Albanis, 2007. Fate of cyromazine applied via the nutrient solution in a gerbera (*Gerbera jamesonii*) crop grown in a closed hydroponic system. *Crop Protection* 26, 721-728.
26. Savvas, D., Gizas, G., Karras, G., Lydakis-Simantiris, N., Salahas, G., Papadimitriou, M., Tsouka, N., 2007. Interactions between silicon and NaCl-salinity in a soilless culture of roses in greenhouse. *European Journal of Horticultural Science* 72, 73-79.
27. Savvas, D., Stamati, E., Tsirogiannis, I.L., Mantzos, N., Barouchas, P.E., Kittas, K., Katsoulas, N., 2007. Interactions between salinity and irrigation frequency in greenhouse pepper grown in a closed-loop hydroponic system. *Agricultural Water Management* 91, 102-111.
28. Gizas, G., Savvas, D., 2007. Particle size and hydraulic properties of pumice affect growth and yield of greenhouse crops in soilless culture. *HortScience* 42, 1274-1280.
29. Katsoulas, N, Kittas, C, Tsirogiannis, I.L., Kitta, E., Savvas, D., 2007. Greenhouse microclimate and soilless pepper crop production and quality as affected by a fog evaporative cooling system. *Transactions of the American Society of Agricultural and Biological Engineers* 50, 1831-1840.
30. Patakioutas, G., Savvas, D., Matakoulis, C., Sakellarides, T., Albanis, T., 2007. Fate of cyromazine and its metabolite melamine applied via nutrient solution to a closed-cycle

- cultivation of bean (*Phaseolus vulgaris* L.). *Journal of Agricultural & Food Chemistry*, 55, 9928-9935.
31. Savvas, D., Chatzieustratiou, E., Pervolaraki, G., Gizas, G., Sigrimis, N., 2008. Modelling Na and Cl concentrations in the recycling nutrient solution of a closed-cycle pepper cultivation. *Biosystems Engineering* 99, 282-291.
  32. Savvas, D., Giotis, D., Chatzieustratiou, E., Bakea, M., Patakioutas, G., 2008. Silicon supply in soilless cultivations of zucchini alleviates stress induced by salinity and powdery mildew infections. *Environmental and Experimental Botany* 65, 11-17.
  33. Savvas, D., Karapanos, I., Tagaris, A., Passam, H.C., 2009. Effects of NaCl and silicon on the quality and storage ability of zucchini squash fruit. *Journal of Horticultural Science & Biotechnology* 84, 381-386.
  34. Katsoulas, N., Savvas, D., Tsirogiannis, I., Merkouris, O., Kittas, C., 2009. Response of an eggplant crop grown under Mediterranean summer conditions to greenhouse cooling. *Scientia Horticulturae* 123, 90-98.
  35. Savvas, D., Papastavrou, D., Ntatsi, G., Ropokis, A., Olympios, C., Hartman, H., Schwarz, D., 2009. Interactive effects of grafting and Mn-supply on growth, yield and nutrient uptake by tomato. *HortScience* 44, 1978-1982.
  36. Varlagas, H., Savvas, D., Mouzakis, G., Liotsos, C., Karapanos, I., Sigrimis, N., 2010. Modelling uptake of Na<sup>+</sup> and Cl<sup>-</sup> by tomato in closed-cycle cultivation systems as influenced by irrigation water salinity. *Agricultural Water Management* 97, 1242-1250.
  37. Savvas, D., Leneti, E., Mantzos, N., Kakarantza, L., Barouchas, P., 2010. Effects of enhanced NH<sub>4</sub><sup>+</sup>-N supply and concomitant changes in the concentrations of other nutrients needed for ion balance on the growth, yield, and nutrient status of eggplants grown on rockwool. *Journal of Horticultural Science & Biotechnology* 85, 355-361.
  38. Liopa-Tsakalidi, A., Savvas, D., Beligiannis, G.N., 2010. Modelling the Richards function using Evolutionary Algorithms on the effect of electrical conductivity of nutrient solution on zucchini growth in hydroponic culture. *Simulation Modelling Practice and Theory* 18, 1266-1273.
  39. Savvas, D., Colla, G., Roupheal, Y., Schwarz, D., 2010. Amelioration of nutrient and heavy metal stress in fruit vegetables by grafting. *Scientia Horticulturae* 127, 156-161.
  40. Savvas, D., Savva, A., Ntatsi, G., Ropokis, A., Karapanos, I., Krumbein, A., Olympios, C., 2011. Effects of three commercial rootstocks on mineral nutrition, fruit yield and quality in salinised tomatoes. *Journal of Plant Nutrition and Soil Science* 174, 154-162.

41. AlNaddaf, O., Livieratos, I., Stamatakis, A., Tsirogiannis, I., Gizas, G., Savvas, D., 2011. Hydraulic characteristics of composted pig manure, perlite, and mixtures of them, and their impact on cucumber grown on bags. *Scientia Horticulturae* 129, 135–141.
42. Salahas, G., Papasavvas, A., Giannakopoulos, A., Tselios, T., Konstantopoulou, H., Savvas, D., 2011. Impact of nitrogen deficiency on biomass production, leaf gas exchange, and total phenol and betacyanin concentrations in red beet (*Beta vulgaris* L. ssp. *vulgaris*) plants. *European Journal of Horticultural Science* 76, 194–200.
43. Tzerakis, K., Savvas, D., Sigrimis, N., 2012. Responses of cucumber grown in recirculating nutrient solution to gradual Mn and Zn accumulation in the root zone owing to excessive supply via the irrigation water. *Journal of Plant Nutrition and Soil Science* 175, 125–134.
44. Kitta, E., Katsoulas, N., Savvas, D., 2012. Shading effects on greenhouse microclimate and gas exchange in a cucumber crop grown under Mediterranean conditions. *Applied Engineering in Agriculture* 28, 129-140.
45. Gizas, G., Tsirogiannis, I., Bakea, M., Mantzos, N., Savvas, D., 2012. Impact of hydraulic characteristics of raw or composted *Posidonia* residues, coir, and their mixtures with pumice on root aeration, water availability and yield in a lettuce crop. *HortScience* 47, 896–901.
46. Ntatsi, G., Savvas, D., Druege, U., Schwarz, D., 2013. Contribution of phytohormones in alleviating the impact of sub-optimal temperature stress on grafted tomato. *Scientia Horticulturae* 149, 28–38.
47. Savvas, D., Ntatsi, G., Barouchas, P., 2013. Impact of Cd and Ni on cation uptake by cucumber grafted onto four commercial rootstocks *Scientia Horticulturae* 149, 86–96.
48. Tzerakis, C., Savvas, D., Sigrimis, N., Mavrogiannopoulos, G., 2013. Uptake of Mn and Zn by cucumber grown in closed hydroponic systems as influenced by the Mn and Zn concentrations in the supplied nutrient solution. *HortScience* 48, 373–379.
49. Neocleous, D., Savvas, D., 2013. Responses of hydroponically-grown strawberry to different K:Ca:Mg ratios in the supplied nutrient solution. *Journal of Horticultural Science & Biotechnology* 88, 293–300.
50. Neocleous, D., Savvas, D., 2013. Assessment of different strategies to balance high Mg levels in the irrigation water when preparing nutrient solution for soilless strawberry crops. *European Journal of Horticultural Science* 78, 267-274.

51. Tsirogiannis, I., Katsoulas, N., Savvas, D., Kittas, C., 2013. Relationships between reflectance and water status in a greenhouse rocket (*Eruca Sativa* Mill.) cultivation. *European Journal of Horticultural Science* 78, 275-282.
52. Ntatsi, G., Savvas, D., Huntenburg, D., Druge, U., Hinch, D.K., Zuther, E., Schwarz, D., 2014. A study on ABA involvement in the response of tomato to suboptimal root temperature using reciprocal grafts with notabilis, a null mutant in the ABA-biosynthesis gene LeNCED1. *Environmental & Experimental Botany* 97, 11–21.
53. Ntatsi, G., Savvas, D., Kläring, H.P., Schwarz, D., 2014. Growth, yield, and metabolic responses of temperature-stressed tomato to grafting onto rootstocks differing in cold tolerance. *Journal of the American Society for Horticultural Science* 139, 230–243.
54. Kontopoulou, C.K., Bilalis, D., Pappa, V.A., Rees, R.M., Savvas, D., 2015. Impact of organic farming practices and salinity on yield and greenhouse gas emissions from a common bean crop grown in a Mediterranean environment. *Scientia Horticulturae* 183, 48-57.
55. Katsoulas, N., Savvas, D., Bartzanas, T., Kittas, C., 2015. Model-based control of water and nutrient discharge in a tomato crop grown in a semi-closed soilless system as influenced by the drainage fraction. *Computers & Electronics in Agriculture* 113, 61-71.
56. Neocleous, D., Savvas, D., 2015. Impact of different nutrient macrocation ratios on macronutrient uptake by melon (*Cucumis melo* L.) grown in recirculating nutrient solution. *Journal of Plant Nutrition and Soil Science* 178, 320–332.
57. Kontopoulou, C.K., Giagkou, S., Stathi, E., Iannetta, P.M., Savvas, D., 2015. Responses of hydroponically-grown common bean fed with N-free nutrient solution to root inoculation with N<sub>2</sub>-fixing bacteria. *HortScience* 50, 597–602.
58. Salachas, G., Savvas, D., Argyropoulou, K., Tarantillis, P.A., Kapotis, G., 2015. Yield and nutritional quality of aeroponically cultivated basil as affected by the available root-zone volume. *Emirates Journal of Food and Agriculture* 27, 911-918.
59. Savvas, D., Ntatsi, G., 2015. Biostimulant activity of silicon in horticulture. *Scientia Horticulturae* 196, 66–81.
60. Neocleous, D., Savvas, D., 2016. NaCl accumulation and macronutrient uptake by a melon crop in a closed hydroponic system in relation to water uptake. *Agricultural Water Management* 165, 22–32.

61. Karkanis, A., Ntatsi, G., Kontopoulou, C.K., Pristeri, A., Bilalis, D., Savvas, D., 2016. Field pea in European cropping systems: adaptability, biological nitrogen fixation and cultivation practices. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* 44, 325-336.
62. Lazaridi, E., Ntatsi, G., Savvas, D., Bebeli, P.J. 2017. Diversity in cowpea (*Vigna unguiculata* (L.) Walp.) local populations from Greece. *Genetic Resources and Crop Evolution* 64, 1529–1551.
63. Savvas, D., Öztekin, G.B., Tepecik, M., Ropokis A., Tüzel, Y., Ntatsi, G., Schwarz, D., 2017. Impact of grafting and rootstock on nutrient to water uptake ratios during the first month after planting of hydroponically grown tomato. *The Journal of Horticultural Science and Biotechnology* 92, 294–302.
64. Tampakaki, A., Fotiadis, C., Ntatsi, G., Savvas, D. 2017. Phylogenetic multilocus sequence analysis of indigenous slow-growing rhizobia nodulating cowpea (*Vigna unguiculata* L.) in Greece. *Systematic and Applied Microbiology* 40, 179-189.
65. Kontopoulou, C.K., Liasis, E., Iannetta, P.M., Savvas, D., 2017. Impact of rhizobial inoculation and reduced N supply on biomass production and biological N<sub>2</sub>-fixation in common bean (*Phaseolus vulgaris* L.) grown hydroponically. *Journal of the Science of Food and Agriculture* 97, 4353–4361.
66. Lazaridi, E., Ntatsi, G., Fernández J.A., Karapanos, I., Carnide, V.P., Savvas, D., Bebeli, P.J., 2017. Phenotypic diversity and evaluation of fresh pods of cowpea landraces from Southern Europe. *Journal of the Science of Food and Agriculture* 97, 4326–4333.
67. Tampakaki, A., Fotiadis, C., Ntatsi, G., Savvas, D. 2017. A novel symbiovar (aegeanense) of the genus *Ensifer* nodulates *Vigna unguiculata*. *Journal of the Science of Food and Agriculture* 97, 4314–4325.
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**IMPACT OF PUBLISHED RESEARCH (Status on 10 June 2020)**

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