

Vegetable Crops Section – List of Selected Publications

Dr. Marios C. Kyriacou – Section Head/ Postharvest Technology-Physiology

1. El-Nakhel, C., Pannico, A., Kyriacou, M. C., Giordano, M., De Pascale, S., & Rouphael, Y. (2019). Macronutrient deprivation eustress elicits differential secondary metabolites in red and green-pigmented butterhead lettuce grown in a closed soilless system. *Journal of the Science of Food and Agriculture*. In press.
2. Rouphael, Y., Kyriacou, M., Carillo, P., Pizzolongo, F., Romano, R., & Sifola, M. (2019). Chemical Eustress Elicits Tailored Responses and Enhances the Functional Quality of Novel Food *Perilla frutescens*. *Molecules*, 24(1), 185.
3. Kyriacou, M. C., El-Nakhel, C., Graziani, G., Pannico, A., Soteriou, G. A., Giordano, M., ... & Rouphael, Y. (2019). Functional quality in novel food sources: Genotypic variation in the nutritive and phytochemical composition of thirteen microgreens species. *Food chemistry*, 277, 107-118.
4. Carillo, P., Raimondi, G., Kyriacou, M. C., Pannico, A., El-Nakhel, C., Cirillo, V., ... & Rouphael, Y. (2019). Morpho-physiological and homeostatic adaptive responses triggered by omeprazole enhance lettuce tolerance to salt stress. *Scientia horticulturae*, 249, 22-30.
5. Carillo, P., Colla, G., El-Nakhel, C., Bonini, P., D'Amelia, L., Dell'Aversana, E., ... & De Pascale, S. (2019). Biostimulant Application with a Tropical Plant Extract Enhances *Corchorus olitorius* Adaptation to Sub-Optimal Nutrient Regimens by Improving Physiological Parameters. *Agronomy*, 9(5), 249.
6. Carillo, P., Colla, G., Fusco, G. M., Dell'Aversana, E., El-Nakhel, C., Giordano, M., ... & Kyriacou, M. C. (2019). Morphological and physiological responses induced by protein hydrolysate-based biostimulant and nitrogen rates in greenhouse spinach. *Agronomy*, 9(8), 450.
7. Carillo, P., Kyriacou, M. C., El-Nakhel, C., Pannico, A., Dell'Aversana, E., D'Amelia, L., ... & Rouphael, Y. (2019). Sensory and functional quality characterization of protected designation of origin 'Piennolo del Vesuvio' cherry tomato landraces from Campania-Italy. *Food chemistry*, 292, 166-175.
8. Christou A, Kyriacou MC, Georgiadou EC, Papamarkou R, Hapeshi E, Karaolia P, et al. Uptake and bioaccumulation of three widely prescribed pharmaceutically active compounds in tomato fruits and mediated effects on fruit quality attributes. *Sci Total Environ* 2019; 647:1169-1178.
9. Rouphael Y, Kyriacou MC. Quality and safety of fresh fruits and vegetables at harvest. *Sci Hortic* 2018; 239:78-79.

10. Roupghael Y, Giordano M, Cardarelli M, Cozzolino E, Mori M, Kyriacou MC, et al. Plant- and seaweed-based extracts increase yield but differentially modulate nutritional quality of greenhouse spinach through biostimulant action. *Agronomy* 2018;8(7).
11. Colla G, Kim H-, Kyriacou MC, Roupghael Y. Nitrate in fruits and vegetables. *Sci Hortic* 2018; 237:221-238.
12. Kyriacou MC, Roupghael Y. Towards a new definition of quality for fresh fruits and vegetables. *Sci Hortic* 2018; 234:463-469.
13. Kyriacou MC, Leskovar DI, Colla G, Roupghael Y. Watermelon and melon fruit quality: The genotypic and agro-environmental factors implicated. *Sci Hortic* 2018; 234:393-408.
14. Roupghael Y, Kyriacou MC, Petropoulos SA, De Pascale S, Colla G. Improving vegetable quality in controlled environments. *Sci Hortic* 2018; 234:275-289.
15. Roupghael Y, Raimondi G, Lucini L, Carillo P, Kyriacou MC, Colla G, et al. Physiological and metabolic responses triggered by omeprazole improve tomato plant tolerance to NaCl stress. *Front Plant Sci* 2018;9.
16. Roupghael Y, Kyriacou MC, Colla G. Vegetable grafting: A toolbox for securing yield stability under multiple stress conditions. *Front Plant Sci* 2018;8.
17. Roupghael Y, Colla G, Giordano M, El-Nakhel C, Kyriacou MC, De Pascale S. Foliar applications of a legume-derived protein hydrolysate elicit dose-dependent increases of growth, leaf mineral composition, yield and fruit quality in two greenhouse tomato cultivars. *Sci Hortic* 2017; 226:353-360.
18. Soteriou GA, Siomos AS, Gerasopoulos D, Roupghael Y, Georgiadou S, Kyriacou MC. Biochemical and histological contributions to textural changes in watermelon fruit modulated by grafting. *Food Chem* 2017; 237:133-140.
19. Emmanouilidou MG, Kyriacou MC. Rootstock-modulated yield performance, fruit maturation and phytochemical quality of 'Lane Late' and 'Delta' sweet orange. *Sci Hortic* 2017; 225:112-121.
20. Raimondi G, Roupghael Y, Kyriacou MC, Di Stasio E, Barbieri G, De Pascale S. Genotypic, storage and processing effects on compositional and bioactive components of fresh sprouts. *LWT - Food Sci Technol* 2017; 85:394-399.
21. Kyriacou MC, De Pascale S, Kyratzis A, Roupghael Y. Microgreens as a component of space life support systems: A cornucopia of functional food. *Front Plant Sci* 2017;8.
22. Kyriacou MC, Roupghael Y, Colla G, Zrenner R, Schwarz D. Vegetable grafting: The implications of a growing agronomic imperative for vegetable fruit quality and nutritive value. *Front Plant Sci* 2017;8.
23. Roupghael Y, Kyriacou MC, Vitaglione P, Giordano M, Pannico A, Colantuono A, et al. Genotypic variation in nutritional and antioxidant profile among iceberg lettuce cultivars. *Acta Sc Polon Horto Cult* 2017;16(3):37-45.

24. Leonardi C, Kyriacou MC, Gisbert C, Oztekin GB, Mourão I, Roupheal Y. Quality of grafted vegetables. *Vegetable Grafting: Principles and Practices*; 2017. p. 214-245.
25. Kyriacou MC, Emmanouilidou MG, Soteriou GA. Asynchronous ripening behavior of cactus pear (*Opuntia ficus-indica*) cultivars with respect to physicochemical and physiological attributes. *Food Chem* 2016; 211:598-607.
26. Kyriacou MC, Roupheal Y, Di Gioia F, Kyrtzis A, Serio F, Renna M, et al. Micro-scale vegetable production and the rise of microgreens. *Trends Food Sci Technol* 2016; 57:103-115.
27. Soteriou GA, Papayiannis LC, Kyriacou MC. Indexing melon physiological decline to fruit quality and vine morphometric parameters. *Sci Hort* 2016; 203:207-215.
28. Kyriacou MC, Soteriou GA, Roupheal Y, Siomos AS, Gerasopoulos D. Configuration of watermelon fruit quality in response to rootstock-mediated harvest maturity and postharvest storage. *J Sci Food Agric* 2016;96(7):2400-2409.
29. Soteriou GA, Kyriacou MC. Rootstock-Mediated Effects on Watermelon Field Performance and Fruit Quality Characteristics. *Int J Vegetable Sci* 2015;21(4):344-362.
30. Soteriou GA, Kyriacou MC, Siomos AS, Gerasopoulos D. Rootstock-mediated effects on watermelon ripening behavior and fruit physicochemical and phytochemical composition. *Acta Hort* 2015; 1079:707-714.
31. Kyriacou MC, Soteriou G. Quality and postharvest performance of watermelon fruit in response to grafting on interspecific cucurbit rootstocks. *J Food Qual* 2015;38(1):21-29.
32. Soteriou GA, Kyriacou MC, Siomos AS, Gerasopoulos D. Evolution of watermelon fruit physicochemical and phytochemical composition during ripening as affected by grafting. *Food Chem* 2014; 165:282-289.
33. Petrou P, Soteriou G, Schouten RE, Kyriacou MC. Effects of rind removal on physicochemical quality characteristics of fresh-cut watermelon [*Citrullus lanatus* (Thunb) Matsum & Nakai] during cold storage. *Int J Food Sci Technol* 2013;48(2):357-362.
34. Kyriacou MC, Soteriou GA. Postharvest change in compositional, visual and textural quality of grafted watermelon cultivars. *Acta Hort* 2012; 934:985-992.
35. Kyriacou MC. Influence of a post-harvest hot water treatment on the development of green mould [*Penicillium digitatum* (Pers.: Fr.) sacc.] and on the quality of 'Mandora' fruit [*Citrus reticulata* blanco × *Citrus sinensis* (L.) Osbeck]. *J Hort Sci Biotechnol* 2011;86(4):359-365.
36. Kyriacou MC, Siomos AS, Ioannides IM, Gerasopoulos D. Cold storage, reconditioning potential and chip processing quality of spring potato (*Solanum tuberosum* L. cv. Hermes) tubers in response to differential nitrogen fertilisation. *J Sci Food Agric* 2009;89(11):1955-1962.

37. Kyriacou MC, Siomos AS, Ioannides IM, Gerasopoulos D. The chip-processing potential of four potato (*Solanum tuberosum* L.) cultivars in response to long-term cold storage and reconditioning. *J Sci Food Agric* 2009;89(5):758-764.
38. Kyriacou MC, Ioannides IM, Gerasopoulos D, Siomos AS. Storage profiles and processing potential of four potato (*Solanum tuberosum* L.) cultivars under three storage temperature regimes. *J Food Agric Environ* 2009;7(1):31-37.
39. Kyriacou MC, Gerasopoulos D, Siomos AS, Ioannides IM. Impact of hot water treatment on sprouting, membrane permeability, sugar content and chip colour of reconditioned potato tubers following long-term cold storage. *J Sci Food Agric* 2008;88(15):2682-2687.

Dr. Angelos Kyratzis – Genebank/ Herbarium

1. Kyratzis, A.C., Nikoloudakis, N., Katsiotis, A. 2019. Genetic variability in landraces populations and the risk to lose genetic variation. The example of landrace “Kyperounda” and its implications for ex situ conservation. *PLoS ONE*. *In press*
2. Gianella M., Balestrazzi, A., Pagano, A., Muller, J.V., Kyratzis, A.C., Kikodze, D., Canella, M., Mondoni, A., Rossi, G., Guzzon, F. 2019. Germination niche differentiation in heteromorphic seeds of wheat wild relatives. *Plant Biology*. *In press*
3. Santo A., Dessi, L., Uccesu, M., Kharrat, M.B.D., Sakr, B.C., Accogli, R.A., Buhagiar, J., Kyratzis, A., Fournaraki, C., Bacchetta, G. 2019. Seed germination ecology and salt stress response in eight Mediterranean populations of *Sarcopoterium spinosum* (L.) Spach. *Plant Species Biology*. 34:110-121.
4. Fenu, G., Bacchetta, G., Christodoulou, C.S., Fournaraki, C., Giusso del Galdo, G.P., Gotsiou, P., Kyratzis, A., Piazza, C., Vicens, M., Pinna, M.S., de Montmollin, B. 2019. An early evaluation of translocation actions for endangered plant species on Mediterranean islands. *Plant Diversity*. 41:94-104.
5. Constantinou, S., Nikoloudakis, N., Kyratzis, A.C., Katsiotis, A. 2018. Genetic diversity of *Avena ventricosa* populations along an ecogeographical transect in Cyprus is correlated to environmental variables. *PLoS ONE* 13(3): e0193885.
6. Kyriacou, M., De Pascale, S., Kyratzis, A., Roupheal, Y. 2017. Microgreens as a component of space life support systems: A cornucopia of functional food. *Frontiers in Plant Science*. 8:1587.
7. Fenu, G., Giusso del Galdo, G., de Montmollin, B., Gotsiou, P., Cogoni, D., Piazza, C., Fournaraki, C., Kyratzis, A.C., Vicens, M., Christodoulou, C.S., Bacchetta, G. 2017.

Active management actions for the conservation of the endangered Mediterranean island flora: the CARE-MEDIFLORA project. *Plant Sociology*. 54(2):101-110.

8. Kyratzis, A., Skarlatos, D.P., Menexes, G.C., Vamvakousis, V.F., Katsiotis, A. 2017. Assessment of vegetation indices derived by UAV imagery for durum wheat phenotyping under a water limited and heat stressed Mediterranean environment. *Frontiers in Plant Science*. 8:1114.
9. Kyriacou, M.C., Roupael, Y., Di Gioia, F., Kyratzis, A., Seri, F., Renna, M., De Pascale, S., Santamaria, P. 2016. Micro-scale vegetable production and the rise of microgreens. *Trends in Food Science and Technology*. 57:103-115.
10. Philips, J., Kyratzis, A., Christodoulou, C., Kell, S., Maxted, N. 2014. Development of a national crop wild relative conservation strategy for Cyprus. *Genetic Resources and Crop Evolution*. 61:817-827.

Dr. Georgios A. Soteriou – Vegetable Crop Science

1. Kyriacou, M. C., El-Nakhel, C., Graziani, G., Pannico, A., Soteriou, G. A., Giordano, M., ... & Roupael, Y. (2019). Functional quality in novel food sources: Genotypic variation in the nutritive and phytochemical composition of thirteen microgreens species. *Food chemistry*, 277, 107-118.
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