



**Dept HORTICULTURAL GENETICS & BIOTECHNOLOGY
RECENT PUBLICATIONS**

Perrakis A., Denic D., Blazakis K.N., Giannoutsou E., Bitá C.E., Krokida A., Kouhen M., Kaloudas D., Rizou M., Lazaridou A., Mekkaoui K., El Zein Z., Khalil M., Abdelkader E.L., Kosma M., González A.G., Monzer A., Bellaidi S., Papantoniou D., Varnava – Tello A., Bouzayen M., Adamakis S.I.D., Driouich A., Billiaderis K., Kalogerakis N., Kalaitzis P. (2021) The expression levels of a tomato prolyl 4 hydroxylase shift the position of the pedicel abscission zone and induce either acceleration or delay in ethylene-induced flower and fruit abscission (submitted).

Konkina A., Klepadlo M., Lakehal A., El Zein Z., Krokida A., Botros M., Iakovidis M., Chernobavskiy P., Zerroumda M.E., Tsanakas G., Petrakis N., Dourou A.M., Kalaitzis P. (2021) An Arabidopsis Prolyl 4 Hydroxylase Is Involved in the Low Oxygen Response Front. Plant Sci. 12:316. doi: 10.3389/fpls.2021.63735

Leszczuk A., Kalaitzis P., Blazakis K.N., Zdunek A. (2020) The role of arabinogalactan proteins (AGPs) in fruit ripening—a review, Horticulture Research,7:1, Nature Publishing Group

Elsa Chedid, Myrto Rizou, Panagiotis Kalaitzis (2020) Application of High Resolution Melting combined with DNA-based markers for quantitative analysis of olive oil authenticity and adulteration, Food Chemistry: X, 100082

Dominique Van Der Straeten, Angelos K Kanellis, Panagiotis Kalaitzis, Mondher Bouzayen, Caren Chang, Autar Mattoo, Jin-Song Zhang (2020) Ethylene Biology and Beyond: Novel Insights in the Ethylene Pathway and its Interactions, Frontiers in Plant Science, 11: 248

Ignacio Ezquer, Ilige Salameh, Lucia Colombo, Panagiotis Kalaitzis (2020) Plant Cell Walls Tackling Climate Change: Biotechnological Strategies to Improve Crop Adaptations and Photosynthesis in Response to Global Warming, Plants,9 (2): 212

Perrakis A., Bitá C.E., Arhondakis S., Krokida A., Mekkaoui K., Denic D., Blazakis K.N., Kaloudas D., Kalaitzis P. (2019) Suppression of a Prolyl 4 Hydroxylase Results in Delayed Abscission of Overripe Tomato Fruits. Front. Plant Sci. 10:348. doi: 10.3389/fpls.2019.00348

Georgiadou E., Koubouris G., Goulas V., Sergendani C., Nikoloudakis N., Manganaris G., Kalaitzis P., Fotopoulos V. (2019) Genotype-dependent regulation of vitamin E biosynthesis in olive fruits as revealed through metabolic and transcriptional profiles (in press Plant Biology)

Roka L., Koudounas K., Daras G., Zoidakis J., Vlahou A., Kalaitzis P., Hatzopoulos, P. (2018) Proteome of olive non-glandular trichomes reveals protective protein network against (a) biotic challenge, Journal of plant physiology

Koubouris G., Bouranis D., Vogiatzis E., Nejadd R.A., Giday H., Tsaniklidis G., Ligoigakis K.E., Blazakis K., Kalaitzis P., Fanourakis D. (2018) Leaf area estimation by considering leaf dimensions in olive tree; *Scientia Horticulturae* 240:440-445

Fragkostefanakis S., Kaloudas D., Kalaitzis P. (2018). Pyridine 2,4-dicarboxylic acid suppresses tomato seedling growth. *Frontiers in Chemistry* 30-01-2018 <https://doi.org/10.3389/fchem.2018.00003>

Kalaitzis P., Zein E. (2016) Olive oil authentication, traceability and adulteration detection using DNA-based approaches. *Lipid Technology* 28(10-11):173-176, November 2016, DOI: 10.1002/lite.201600048

Georgiadou, C.E., Goulas, V., Ntouro, T., Manganaris, A.G., Kalaitzis, P., Fotopoulos, V. (2016) Regulation of on-tree vitamin E biosynthesis in olive fruit during successive growing years: the impact of fruit development and environmental cues, *Frontiers in Plant Sciences*, *Frontiers in Plant Science* 7:1656 · October 2016

Arhontakis, S., Bitas, E.C., Perrakis, A., Manioudaki, M., Kaloudas, D., Kalaitzis, P. (2016) *In silico* transcriptional regulatory networks involved in tomato fruit ripening, *Frontiers in Plant Sciences* doi: [10.3389/fpls.2016.01234](https://doi.org/10.3389/fpls.2016.01234)

Bazakos, C., Khanfir, E., Aoun, M., Spano T., El Zein, Z., Chalak, L., El Riachy, M., Abou-Sleymane, G., Ben Ali, S., Kammoun, N., Kalaitzis, P. (2016) The potential of SNP-based PCR-RFLP capillary electrophoresis analysis to authenticate and detect admixtures of Mediterranean olive oils. *Electrophoresis* DOI 10. 1002/elps. 201500537

BOOK CHAPTERS

Mellidou, I., Georgiadou, E., Kaloudas, D., Kalaitzis, P., Photopoulos, V., Kanellis, A. (2018) Vitamins in “Postharvest Physiology and Biochemistry of Fruits and Vegetables”, Editors: Yahia, E., Carrillo-Lopez, A., Woodhead Publishing, Pages: 359-384, DOI: 10.1016/B978-0-12-813278-4.00017-

Christos Bazakos, Stelios Spaniolas and Panagiotis Kalaitzis (2016) DNA-based approaches for traceability and authentication of olive oil in “Olive Tree Products” - Editor: D. Boskou, Intech press

Loredana Lopez, Gaetano Perrotta, Panagiotis Kalaitzis, Rosario Muleo (2016) Transcriptomics in olive (*Olea europaea* L.) in *Olea Europea* in “The Olive Tree Genome”, Editor E. Rugini, I. Baldoni, Springer International Publishing

SOFTWARE

OliveId is a semi-automatic computational tool, that has been developed for the morphological analysis of olive fruits, leaves and endocarps. In particular, quantitative and qualitative characters of fruits, leaves and endocarps, such as size, shape, symmetry, contour roughness and presence of additional structures (nipple, petiole, etc.) are determined. Moreover, this software can be easily used to describe the morphologies of other crop species, such as tomato, pear, potato, grapevine, etc. https://www.iamc.ciheam.org/education/master_of_science/hob/research/morphological_characterization