

Dissemination actions

- * **Broadcast from the French Scientific FESTIVAL LA NOVELA TOULOUSE 2013 on the TOMATO Sequencing and the COST FA1106 Action (in french)**
- * **Broadcast from the Greek TV NEA on COST FA1106 QualityFruit 2013 2nd Annual Meeting..... (in greek)**
- * Key result of the FRAIB (Research Federation Agrobioscience, Interaction and Diversity Toulouse) (in French and english) 2013
- * TERPNET 2013: <http://terpnet2013.pharm.auth.gr/joomla/>
- * SEB meeting 2013: http://www.sebiology.org/meetings/Past_Meetings/Valencia/plant.html
- * POST HARVEST unlimited 2014: <http://web.cut.ac.cy/postharvest/>
- * [Download the COST LOGO \(414.7 KB\)](#)
- * [«FLYER-COST.pdf» \(693.7 KB\)](#)
- * International Innovation, 2012, COST FA1106 presentation [\[icon\]](#)

Special issue of an international scientific journal

A Special Issue of the **Journal of Experimental Botany** will be published in 2014 entitled “**Fruit development and Ripening**” and featuring 17 reviews and original papers on the topic. This is the outcome of the session “**Fruit development and Ripening**” organized by **COST Action FA1106** and The Society of Experimental Biology meeting held July 2013 in Valencia (Spain).

Articles in peer review journals

1. Andronis E. A., P. N. Moschou & K. A. Roubelakis-Angelakis. 2014. Peroxisomal Polyamine Oxidase and NADPH-Oxidase cross-talk for ROS homeostasis which affects respiration rate in Arabidopsis thaliana. *Frontiers in Plant Science. Plant Metab. Chemodiv.* doi: 10.3389/fpls.2014.00132 (*in press*)
2. Balo B, Toth E, Szucs E, Olasz A, Katona Z, Simon Z, Burai P, Bisztray Gy.D. (2013): A terroir kutatás új Irányai hazánkban, szemelvények a világból. *Ostermelo gazdalkodók lapja.* 5. p. 62-66.
3. Bodor P, Szoke A, Toth-Lencses K, Veres A, Deak T, Kozma P, Bisztray Gy.D., Kiss E. (2014) Differentiation of grapevine (*Vitis vinifera* L.) conculta members based on molecular tools. *Biotechnology & Biotechnological Equipment.* (*in press*)
4. Cavallini E, Zenoni S, Finezzo L, Guzzo F, Zamboni A, Avesani L, Tornielli GB. (2014) Functional Diversification of Grapevine MYB5a and MYB5b in the Control of

- Flavonoid Biosynthesis in a *Petunia* Anthocyanin Regulatory Mutant. *Plant Cell Physiol.* 2014 Mar;55(3):517-34. doi: 10.1093/pcp/pct190.
5. Cocaliadis MF, Rafael Fernández-Muñoz, Clara Pons, Diego Orzaez, and Antonio Granell (2014) Increasing tomato fruit quality by enhancing fruit chloroplast function. A double-edged sword? *J.Exp. Bot.* (*in press*)
 6. Dai Z., Messaoud Meddar, Christel Renaud, Isabelle Merlin, Ghislaine Hilbert, Serge Delrot, and Eric Gomes (2014). Long-term in vitro culture of grape berries and its application to assess the effects of sugar supply on anthocyanin accumulation. *J.Exp. Bot.* (*in press*)
 7. Dal Santo S, Tornielli GB, Zenoni S, Fasoli M, Farina L, Anesi A, Guzzo F, Delledonne M, Pezzotti M. [The plasticity of the grapevine berry transcriptome](#). *Genome Biol.* 2013 Jun 7;14(6):r54.
 8. Da Silva C, Zamperin G, Ferrarini A, Minio A, Dal Molin A, Venturini L, Buson G, Tononi P, Avanzato C, Zago E, Boido E, Dellacassa E, Gaggero C, Pezzotti M, Carrau F, Delledonne M, [The high polyphenol content of grapevine cultivar tannat berries is conferred primarily by genes that are not shared with the reference genome](#). *M. Plant Cell.* 2013 Dec;25(12):4777-88.
 9. Fasoli M, Dal Santo S, Zenoni S, Tornielli GB, Farina L, Zamboni A, Porceddu A, Venturini L, Bicego M, Murino V, Ferrarini A, Delledonne M, Pezzotti M. [The grapevine expression atlas reveals a deep transcriptome shift driving the entire plant into a maturation program](#). *Plant Cell.* 2012 Sep;24(9):3489-505.
 10. Hao Y, Wang X, Li X, Bassa C, Mila I, Audran-Delalande C, Maza E, Bouzayen M, van der Rest B and Zouine M (2014) Genome-wide identification, phylogenetic analysis, expression profiling and protein-protein interaction properties of the *Topless* gene family members in tomato. *J. Exp. Bot.* doi:10.1093/jxb/ert440
 11. Hilioti Z, Ioannis Ganopoulos, Ioannis Bossis, Athanasios Tsaftaris*, 2014. LEC1-LIKE paralog transcription factor: how to survive extinction and fit in NF-Y protein complex, *Gene.* (*in press*)
 12. Kuhn N., Le Guan, Dai Z, Wu B, Lauvergeat V, Gomès E, Li S, Godoy F, Arce-Johnson P, and Delrot S (2014) Berry ripening: recently heard through the grapevine. *J.Exp. Bot.* (*in press*)
 13. Liu M, Diretto G, Pirrello J, Roustan JP, Li ZG, Giuliano G, Regad F, Bouzayen M (2014) The chimeric repressor version of an *ERF* family member, *Sl-ERF.B3*, shows contrasting effects on tomato fruit ripening. *New Phytologist* (*in press*)
 14. Liu M, Pirrello J, Mila I, Roustan JP, Li ZG, Bouzayen M, Regad R (2013). Ectopic Expression of The Transcriptional Repressor ERF4-SRDX confers ethylene hypersensitivity and Modulates Multiple Developmental Processes in tomato. *The Plant Journal* 76,406–419
 15. Maza E, Frasse P, Senin P, Bouzayen M, Zouine M (2013) Comparison of normalization methods for differential gene expression analysis in RNA-Seq experiments: A matter of relative size of studied transcriptomes. *Communicative & Integrative Biology* 6.
 16. Martins V, Bassil E, Hanana M, Blumwald E, Gerós H. 2014. Copper homeostasis in grapevine: Functional characterization of the *Vitis vinifera* copper transporter 1. *Planta.* (*in press*)
 17. 18. Monforte AJ, Aurora Diaz, Ana Caño-Delgado, and Esther van der Knaap (2014). The genetic basis of fruit morphology in horticultural crops: lessons from tomato and melon. *J.Exp. Bot.* (*in press*)

- 18 . Moschou P.N. and K.A. Roubelakis-Angelakis (2013). Polyamines and Programmed cell death. *J. Exp. Bot.* doi: 10.1093/jxb/ert373.
- 19 . Nour V., Trandafir I., Ionica M.E. (2013). Antioxidant compounds, mineral content and antioxidant activity of several tomato cultivars grown in Southwestern Romania. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* 41 (1), 136-142.
- 20 . Nour V., Trandafir I., Ionica M.E. (2014). Evolution of antioxidant activity and bioactive compounds in tomato (*Lycopersicon esculentum* Mill.) fruits during growth and ripening. *Journal of Applied Botany and Food Quality*. (*in press*)
- 21 . Pirrello J, Narasimha Prasad BC, Zhang W, Chen K, Mila I, Zouine M, Latché A, Pech JC, Ohme-Takagi M, Regad F and Bouzayen M. (2012) Functional analysis and binding affinity of tomato Ethylene Response Factors provide insight on the molecular bases of plant differential responses to ethylene. *BMC Plant Biology* 12,190
- 22 . Takayuki Tohge, Saleh Alseekh, and Alisdair R Fernie (2014) On the regulation and function of secondary metabolism during fruit development and ripening. *J.Exp. Bot.* (*in press*)
- 23 . Teixeira A, Eiras-Dias J, Castellarin SD, Gerós H (2013). Berry phenolics of grapevine under challenging environments. *Int. J. Mol. Sci.*14:18711-39.
- 24 . Noronha H, Agasse A, Martins AP, Berny MC, Gomes D, Zarrouk O, Thiebaud P, Delrot S, Soveral G, Chaumont F, Gerós H (2013). The grape aquaporin VvSIP1 transports water across the ER membrane. *J.Exp. Bot.* (*In press*, doi 10.1093/jxb/ert448).
- 25 . Teixeira A, Martins V, Noronha H, Eiras-Dias J, and Gerós H. (2014). The First Insight into the Metabolite Profiling of Grapes from Three *Vitis vinifera* L. Cultivars of Two Controlled Appellation (DOC) Regions. *Int. J. Mol. Sci.* 15(3), 4237-4254; doi:[10.3390/ijms15034237](https://doi.org/10.3390/ijms15034237)
- 26 . Rambla JL, Tukinov, Bovy A, Monforte A, Granell A (2014). The expanded tomato fruit volatile landscape. *J.Exp. Bot.* (accepted) (MS ID#: JEXBOT/2013/117051)
- 27 . Ruan Y-L, Patrick JW, Bouzayen M, Osorio S and Fernie AR. (2012) Molecular regulation of seed and fruit set. *Trends In Plant Science* 17(11), 656- 665
- 28 . Sagar M, Chervin C, Mila I, Roustan JP, Benichou M, Gibon Y, Biais B, Latche A, Pech JC, Bouzayen M and Zouine M (2013) SI-ARF4, an Auxin Response Factor involved in the control of sugar metabolism during tomato fruit development. *Plant Physiology* 161, 1362–1374
- 29 . Sagar M, Chervin C, Roustan JP, Bouzayen M and Zouine M. (2013). Under-expression of the Auxin Response Factor *SI-ARF4* improves postharvest behavior of tomato fruits. *Plant Signaling & Behavior* 12; 8(10)
- 30 . Tohge T., Saleh Alseekh, and Alisdair R Fernie (2014) On the regulation and function of secondary metabolism during fruit development and ripening. *J.Exp. Bot.* (*in press*)
- 31 . [Zhang Y](#), [Butelli E](#), [De Stefano R](#), [Schoonbeek H](#), [Magusin A](#), [Pagliarani C](#), [Wellner n](#), [Hill L](#), [Orzaez D](#), [Granell A](#), [Jones JDG](#), and [Martin C](#) (2013). Anthocyanins Double the Shelf Life of Tomatoes by Delaying Overripening and Reducing Susceptibility to Gray Mold. *Curr Biol.* 23(12): 1094–1100. doi: [10.1016/j.cub.2013.04.072](https://doi.org/10.1016/j.cub.2013.04.072)
- 32 . Zouine M, Fu Y, Chateigner-Boutin AL, Mila I, Wang H, Audran C, Roustan JP and Bouzayen M (2014). Characterization of the tomato *ARF* gene family uncovers a multi-levels post-transcriptional regulation including alternative splicing. *PLoS ONE* 9 (1), e84203

Books

- 1 . Kanellis, A. K. and Manganaris G. A. 2013. Antioxidants and bioactive compounds in fruits, In: Pravendra Nath, Mondher Bouzayen, Autar K. Mattoo and Jean Claude Pech (eds), Fruit ripening: Physiology, Signalling and Genomics, CABI, Nosworthyway, Willingford, Oxfordshire, UK, (*in press*)
 - 2 . Carbonell Bejerano, P., L.C. de Carvalho, J.E. Eiras Dias, J. M. Martínez-Zapater, S. Amâncio. Chapter 20. Exploiting *Vitis* genetic diversity to manage with stress.
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- 1 . Kanellis, A. Biodiversity, New Varieties and Genetic Improvement of Fruits and Vegetables for Health. International Symposium on Quality Management of Fruits and Vegetables for Human Health (FVHH2013), August 5-8, 2013, Bangkok, Thailand.
 - 2 . Bouzayen, M. Felshy fruit ripening: tomato and grape as examples. EPSO Workshop: Horticulture for the 21st century. Berlin (Germany), November 11-12, 2013.
 - 3 . Bouzayen M. The key switches of auxin regulation during fruit set in tomato. The 10th Solanaceae Conference. Beijing (China), October 13-17, 2013.
 - 4 . De Maagd, RA. APETALA2a and two FRUITFULL orthologs: Regulation of tomato fruit ripening by APETALA2a and two FRUITFULL orthologs. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 5 . Dal Santo, S. Grapevine berry transcriptome. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 6 . Seymour G. Tomato epigenetic variation. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 7 . Gallusci G. Epigenetic control of tomato fruit development. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 8 . Aharoni A. Transcriptome and Metabolome Analysis for Gene Discovery in the Steroidal Alkaloid Pathway. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 9 . Fernie AF. Secondary metabolism during fruit ripening. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 10 . Delrot S. Grape berry development and ripening. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 11 . Monforte AJ. The genetic control of fruit morphology in melon. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
 - 12 . Grando S. Identification of causal mutations of metabolic QTLs associated to grape and wine flavor. TERPNET meeting, Session V Terpenoids Roles in Fleshy Fruit Biology Kolymvari (Crete-Greece) June 1-5, 2013
 - 13 . Bouzayen M. Multi-hormonal control of the developmental transitions leading to fruit ripening. TERPNET meeting, Session V Terpenoids Roles in Fleshy Fruit Biology Kolymvari (Crete-Greece) June 1-5, 2013
 - 14 . Hirschberg J. Regulation of carotenoid biosynthesis: Interplay between carotenoids and phytohormones. Session V Terpenoids Roles in Fleshy Fruit Biology Kolymvari (Crete-Greece) June 1-5, 2013

- 15 . Aharoni A. Transcriptome and Metabolome Analysis for Gene Discovery in the Steroidal Alkaloid Pathway. TERPNET meeting, Session V Terpenoids Roles in Fleshy Fruit Biology Kolymvari (Crete-Greece) June 1-5, 2013
- 16 . Dirmeyer G. A beta-carotene/ABA regulatory loop controls tomato fruit ripening. TERPNET meeting, Session V Terpenoids Roles in Fleshy Fruit Biology Kolymvari (Crete-Greece) June 1-5, 2013
- 17 . Granell A. Genomic approaches to unravel and reconstitute volatile production in fruit. SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
- 18 . Bouzayen M. Multi-hormonal control of the transcriptional regulation associated with fruit development and ripening SEB meeting, Fruit Development and ripening session. Valencia (Spain), July 3-6, 2013.
- 19 . Bichescu C., Bahrim G., Stanciuc N., Răpeanu G., Assessment of polyphenolic compounds during maturation of Fetească neagră grapes from Murfatlar vineyard, international Conference EuroAliment 2013 –Around Food, October 3-5th, Galați, Romania ([http://www.euroaliment.ugal.ro/Programme %20EuroAliment%202013.pdf](http://www.euroaliment.ugal.ro/Programme%20EuroAliment%202013.pdf)) – poster presentation.
- 20 . Carbonell-Bejerano, P., V. Rodriguez, S. Hernáiz, C. Royo, G. Bravo, S. Dal Santo, M. Pezzotti, and J.M. Martínez-Zapater. Transcriptional differences among ripening berries of different density in Tempranillo and Albariño Spanish wine cultivars. the IX International Symposium on Grapevine Physiology and Biotechnology la Serena (Chile), April 2013.
- 21 . Andronis E.A. and K.A. Roubelakis-Angelakis. 2014. Transient expression of cyt-c in tomato ameliorates plant responses to salinity. FESPB Congress, Dublin, Ireland, 22-26 June 2014