

Refereed Journal Articles

Harfouche, A. L., Nakhle, F. (2023). Artificial intelligence, blockchain, and extended reality: emerging digital technologies to turn the tide on illegal logging and illegal wood trade. *Annals of Silvicultural Research* 48 (1): 12–21.

Harfouche, A. L., Nakhle, F., Harfouche, A. H., Sardella, O. G., Dart, E., Jacobson, D. (2023). A primer on artificial intelligence in plant digital phenomics: embarking on the data to insights journey. *Trends in Plant Science*, 28 (2): 154-184. **(Featured Invited Article)** and **(Article chosen for journal cover image, Number 2, February 2023)**

Nakhle, F., **Harfouche, A.L.** (2023). Extended reality gives digital agricultural biotechnology a new dimension. *Trends in Biotechnology*, 41 (1): 1-5. **(Invited Article)**.

Sallustio, L., **Harfouche, A.L.**, Salvati, L., Marchetti, M., Corona, P. (2022). Evaluating the potential of marginal lands available for sustainable cellulosic biofuel production in Italy. *Socio-Economic Planning Sciences*, 82, 101309.

Harfouche, A., Romagnoli, M., Corona, P. (2022). Under the “publish or perish” mantra and the race for grants, insights to catalyze research into wood science. *Annals of Silvicultural Research* 47 (2): 116-118.

Tauro, F., Maltese, A., Giannini, R., **Harfouche, A.** (2022). Latent heat flux variability and response to drought stress of black poplar: A multi-platform multi-sensor remote and proximal sensing approach to relieve the data scarcity. *Remote Sensing of Environment* 268, 112771.

Nakhle, F., **Harfouche, A.L.** (2021). Ready, Steady, Go AI: A practical tutorial on fundamentals of artificial intelligence and its applications in phenomics image analysis. *Patterns* 2 (9), 100323. **(Invited Article)** and **(Article chosen for journal cover image, Number 9, September 2021)**

Harfouche, A.L., Petousi, V., Meilan, R., Sweet, J., Twardowski, T., Altman, A. (2021) Promoting ethically responsible use of agricultural biotechnology. *Trends in Plant Science* 26: 546-559. **(Featured Invited Article)** and **(Article chosen for journal cover image, Number 6, June 2021)**

Francesconi, S., **Harfouche, A.,** Maesano, M., Balestra, G.M. (2021). UAV-based thermal, RGB imaging and gene expression analysis allowed detection of Fusarium Head blight and gave new insights into the physiological responses to the disease in durum wheat. *Frontiers in plant science* 12:551.

Harfouche, A.L, Nakhle, F. (2020). Creating bioethics distance learning through virtual reality. *Trends in Biotechnology* 38: 1187-1192. **(Invited Article)**

Maesano, M., Khoury, S., Nakhle, F., Firrincieli, A., Gay, A., Tauro, F., **Harfouche, A.** (2020). UAV-based LiDAR for high-throughput determination of plant height and above-

ground biomass of the bioenergy grass *Arundo donax*. **Remote Sensing** 12(20), 3464.

Streich, J Romero, J Gazolla JGFM, Kainer D, Cliff A, Prates ET, Brown JB, Khoury S, Tuskan GA, Garvin M, Jacobson D, **Harfouche AL**. (2020). Can exascale computing and explainable artificial intelligence applied to plant biology deliver on the United Nations sustainable development goals? **Current Opinion in Biotechnology** 61: 217-225. **(Invited Article)**

Taylor G., Donnison I.S., Murphy-Bokern D., Morgante M., Bogeat Triboulot M-B., Bhalerao R., Hertzberg M., Polle A., **Harfouche A.**, Alasia F., Petoussi V., Trebbi D., Schwarz K., Keurentjes J.J.B., Centritto M., Genty B., Flexas J., Grill E., Salvi S., Davis WJ. (2019). Sustainable bioenergy for climate mitigation: developing drought tolerant trees and grasses. **Annals of Botany** 124: 513–520. **(Article chosen for journal cover image, Number 4, September 2019)**

Harfouche, A.L, Jacobson, D., Kainer, D., Romero, J., Harfouche, A.H., Scarascia Mugnozza, G., Moshelion, M., Tuskan, G., Keurentjes, J., Altman, A. (2019). Accelerating climate resilient plant breeding by applying next-generation artificial intelligence. **Trends in Biotechnology** 37: 1217–1235. **(Invited Article)** and **(Article chosen for journal cover image, Number 11, November 2019)**

Firriencieli, A., Presentato, A., Favoino, G., Marabottini, R., Allevato, E., Stazi S.R., Scarascia-Mugnozza, G., **Harfouche, A.**, Petruccioli, M., Zannoni, D., Turner, R.J., Cappelletti, M. (2019). Identification of resistance genes and response to arsenic in *Rhodococcus aetherivorans* BCP1. **Frontiers in Microbiology** 10:888.

Brunetti, C., Gori, A., Marino, G., Latini, P., Sobolev, AP., Nardini, A., Haworth, M., Giovannelli, A., Capitani, D., Loreto, F., Taylor, G., Scarascia Mugnozza G., **Harfouche, A.**, Centritto, M. (2019). Dynamic changes in ABA content in water-stressed *Populus nigra*: effects on carbon fixation and soluble carbohydrates. **Annals of Botany** 124: 627–643.

Clifton-Brown, J., **Harfouche, A.**, Casler, M., Jones, H., Macalpine, W., Murphy-Bokern, D., ... Lewandowski, I. (2019). Breeding progress and preparedness for mass-scale deployment of perennial lignocellulosic biomass crops switchgrass, miscanthus, willow and poplar. **Global Change Biology Bioenergy** 11: 118–151.

Fabbrini, F., Ludovisi, R., Alasia, O., Flexas, J., Douthe, C., Ribas Carbó, M., Robson, P., Taylor, G., Scarascia-Mugnozza, G., Keurentjes, J.J.B., **Harfouche, A.** (2019). Characterization of phenology, physiology, morphology and biomass traits across a broad Euro-Mediterranean ecotypic panel of the lignocellulosic feedstock *Arundo donax*. **Global Change Biology Bioenergy** 11: 152–170.

Polle A, Chen SL, Eckert C and **Harfouche A.** (2019) Engineering drought resistance in forest trees. **Frontiers in Plant Science** 9: 1875.

- Tauro, F., Selker, J., van de Giesen, N., Abrate, T., Uijlenhort, R., Porfiri, M., Manfreda, S., Caylor, K., Moramarco, T., Benveniste, J., Ciraolo, G., Estes, L., Domeneghetti, A., Perks, M.T., Corbari, C., Rabiei, E., Ravazzani, G., Bogena, H., **Harfouche, A.**, Brocca, L., Maltese, A., Wickert, A., Tarpanelli, A., Good, S., Alcalá, J.M.L., Petroselli, A., Cudennec, C., Blume, T., Hut, R., and Salvatore Grimaldi, S. (2018) Measurements and observations in the XXI century (MOXXI): Innovation and multidisciplinary to sense the hydrological cycle. *Hydrological Sciences Journal* 63: 169–196.
- Ludovisi, R., F. Tauro, R. Salvati, S. Khoury, G. Mugnozza Scarascia, and **A. Harfouche**. (2017). UAV-based thermal imaging for high-throughput field phenotyping of black poplar response to drought. *Frontiers in Plant Science* 8:1681. **(Article has more citations than 98% of all Frontiers articles)**
- Evangelistella, C., Valentini, A., Ludovisi, R., Firrincieli, A., Fabbri, F., Scalabrin, S., Cattonaro, F., Morgante, M., Scarascia Mugnozza, G., Keurentjes, J.J.B., **Harfouche, A.** (2017). *De novo* assembly, functional annotation, and analysis of the giant reed (*Arundo donax* L.) leaf transcriptome provide tools for the development of a biofuel feedstock. *Biotechnology for Biofuels* 10:138-161.
- Kandel, S.L., Firrincieli, A., Joubert, P.M., Okubara, P., Leston, N.D., McGeorge, K.M., Scarascia Mugnozza, G., **Harfouche, A.**, Kim, S.H., Doty, S.L. (2017). An *in vitro* study of bio-control and plant growth promotion potential of salicaceae endophytes. *Frontiers in Microbiology* 8:386.
- Harfouche, A.**, Khoury, S., Fabbri, F., Scarascia Mugnozza, G. (2014). Forest biotechnology advances to support global bioeconomy. *Annals of Silvicultural Research* 38: 42-50.
- Sabatti, M., Fabbri, F., **Harfouche, A.**, Beritognolo, I., Mareschi, L., Carlini, M., Paris, P.L., Scarascia-Mugnozza G. (2014). Evaluation of biomass production potential and heating value of hybrid poplar genotypes in a short-rotation culture in Italy. *Industrial Crops and Products* 61: 62-73.
- Harfouche, A.**, Meilan, R., and Altman, A. (2014). Molecular and physiological responses to abiotic stress in forest trees and their relevance to tree improvement. *Tree Physiology* 34: 1181-98. **(Invited Article) and (Article chosen for journal cover image, Number 11, November 2014)**
- Fabbri, F., Gaudet, M., Bastien, C., Zaina, G., **Harfouche, A.**, Beritognolo, I., Marron, N., Morgante, M., Scarascia Mugnozza, G. and Sabatti, M. (2012). Phenotypic plasticity, QTL mapping and genomic characterization of bud set in black poplar. *BMC Plant Biology* 2012, 12:47. **(Article permanently listed as 'frequently consulted')**
- Harfouche, A.**, Meilan, R., Kirst, M., Morgante, M., Boerjan, W., Sabatti, M. and Scarascia Mugnozza, G. (2012). Accelerating the domestication of forest trees in a changing

world. ***Trends in Plant Science*** 17: 64-72. (Invited Article) and (Article chosen for journal cover image, Number 2, February 2012)

Tuskan, G.A., Chen, J., DiFazio, S., Faivre-Rampant, P., Gaudet, M., **Harfouche, A.**, Jorge, V., Labbe, J., Ranjan, P., Sabatti, M., Slavov, G., Street, N., Tschaplinski, T.J. and Yin, T. (2012). The obscure events contributing to the evolution of an incipient sex chromosome in *Populus* - A retrospective working hypothesis. ***Tree Genetics and Genomes*** 8: 559-571.

Meilan, R., **Harfouche, A.** and Nehra, N. (2012). Risk assessment of biotech trees: A path forward. ***Journal of Forestry*** 2: 171-172. (Invited Article)

Beritognolo, I., **Harfouche, A.**, Brilli, F., Prosperini, G., Gaudet, M., Brosché, M., Salani, F., Kuzminsky, E., Auvinen, P., Paulin, L., Kangasjärvi, J., Loreto, F., Valentini, R., Scarascia Mugnozza, G. and Sabatti, M. (2011). Comparative study of transcriptional and physiological responses to salinity stress in two contrasting *Populus alba* L. genotypes. ***Tree Physiology*** 31: 1335-1355. (Article chosen for journal cover image, Number 3, March 2012)

Manescu, C., Hamamouch, N., Maios, C., **Harfouche, A.**, Doulis, A.G. and Aravanopoulos, F.A. (2011). Linkage mapping of *Cupressus sempervirens* based on molecular and morphological markers. ***Genetics and Molecular Research*** 10: 1891-1909.

Harfouche, A., Meilan, R. and Altman, A. (2011). Tree genetic engineering and its application to sustainable forestry and biomass production. ***Trends in Biotechnology*** 29: 9-17. (Invited Article) and (Article chosen for journal cover image, Number 1, January 2011)

Harfouche, A., Grant, K., Selig, M., Tsai, D. and Meilan, R. (2010). Protecting innovation: Genomics-based Intellectual Property for the feedstock development of second generation biofuels. ***Recent Patents on DNA & Gene Sequences***. 4(2):94-105. (Invited Article)

Harfouche, A.L., Muleo, R., Rotondi, R., Mencarelli, F. and Rugini, E. (2008). Salicylic acid induces H₂O₂ production and endochitinase gene expression but not ethylene biosynthesis in *Castanea sativa* *in vitro* model system. ***Journal Plant Physiology*** 165(7):734-44.

Rosado, A., Schapire, A.L., Bressan, R.A., **Harfouche, A.L.**, Hasegawa, P.M., Valpuesta, V. and Botella, M.A. (2006). The Arabidopsis tetratricopeptide repeats containing protein TTL1 is required for osmotic stress responses and ABA sensitivity. ***Plant Physiology*** 142: 1113-1126

Harfouche, A.L., Shivaji, R., Williams, P.W. and Luthe, D.S. (2006). Ethylene signaling mediates a maize defense response to insect herbivory. ***Molecular Plant Microbe Interactions*** 19(2): 189-199.

Harfouche, A.L., Muleo, R., Rotondi, R., Mencarelli, F. and Rugini, E. (2002). L'acido salicilico regola l'espressione del gene endochitinasi e la produzione dell' H₂O₂, ma non quella dell'etilene, in tessuti di castagno (*Castanea sativa* Mill.). **Italus Hortus** 1:103-104.

Harfouche, A.L., Aravanopoulos, F.A., Doulis, A.G. and Xenopoulos, S. (2000). Identification of RAPD markers associated with crown form in *Cupressus sempervirens* by bulked segregant analysis. **Forest Genetics** 7 (3): 169-176.

Doulis, A.G., **Harfouche, A.L.** and Aravanopoulos, F.A. (1999). Rapid, high quality DNA isolation from cypress (*Cupressus sempervirens* L.) needles and optimization of the RAPD marker technique. **Plant Molecular Biology Reporter** 17: 1-14.

Accepted Refereed Journal Articles

Harfouche, A. L., Nakhle, F., Corona, P. (2023). Metaverse technology innovating plant science research and learning. **Trends in Plant Science. (Invited Technology of the Month; Manuscript Accepted for Publication, Manuscript Number: PLANTS-D-23-00231)**

Edited Book

2023. "The Impact of Artificial Intelligence on Business and Society — The Advent of the Smart Organization", **Springer Nature Switzerland AG**. Editors Antoine H. Harfouche and **Antoine L. Harfouche**, (in progress).

Edited Volumes

2019. Special issue on "Developing Sustainable Bioenergy Crops for Future Climates", **Annals of Botany** (Guest co-editor with Rishi Bhalerao, Bill Davies, Iain Donnison, Joost Keurentjes, Michele Morgante, Donal Murphy-Boekern, Steve Long, Andrea Polle, Andrew Smith and Gail Taylor).

Book Chapters

Kuzminsky, E., Rugini, E., **Harfouche, A.** (2015). Rigenerazione da tessuti maturi di due genotipi di pioppo bianco (*Populus alba* L.) adatti ad ambienti salini. In: Micheli M, Caboni E, Lambardi M, Monticelli S, Colture *in vitro*: note di laboratorio, Società di Ortoflorofrutticoltura Italiana, Sesto Fiorentino, Firenze, Italy. pp. 175-176.

Vettori, C., Pilate G, Häggman H, Gallardo F, Ionita L, Ruohonen-Lehto M, Glandorf B, **Harfouche, A.**, Biricolti, S., Paffetti, D., Kazana,V., Sijacic-Nikolic, M., Tsourgiannis, L., Migliacci, F., Donnarumma, F., Minol, K. and Faldung, M. (2014). COST Action FP0905: Biosafety of Forest Transgenic Trees. In: Ramawat K.G., Méryllon J-M., and Ahuja M. R. Tree Biotechnology, CRC Press, Boca Raton, USA. pp. 112-124.

Harfouche, A., Meilan, R., Grant, K. and Shier, V.K. (2011). Intellectual property rights of biotechnologically-improved plants. In: Altman A. and Hasegawa M. (Eds.). Plant biotechnology and agriculture: Prospects for the 21st century, Elsevier, San Diego, USA. pp. 525-539. **(Book translated into Chinese language; Chinese Edition, Ke'Ai Communication of China Publishers. 01-2012-2726).**

Speranza, S., Mazzaglia, A., **Harfouche, A.** and Heydari, A. Involvement of insect pests in plant and crop stress. In: Pessarakli M. (Ed.). (2010). Handbook of plant and crop stress, 3rd edition, revised and expanded, CRC Press, Taylor & Francis Publishing Company, Florida, USA. pp 747-771.

Linee Guida

Corona et al. 2022. Prospettive e potenzialità della digitalizzazione del settore forestale in Italia. Rete Rurale Nazionale 2014-2020, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, Roma, ISBN:9788833852157.

Publications in Proceedings of National and International Conferences

Firincieli, A., (presenter), Minuti, A., Cappelletti, M., Ferilli, M., Ajmone-Marsan, P., Bani, P., Petruccioli, M., **Harfouche, A.L.** (2023). Structural and functional analysis of the active cow rumen's microbial community provides a catalogue of genes and microbes participating in the deconstruction of cardoon biomass. XXXIV SIMGBM (Società Italiana di Microbiologia Generale e Biotecnologie Microbiche) CONGRESS - MICROBIOLOGY 2023, Cagliari, 21-24 September 2023 (Invited for Oral Presentation) (in progress).

Pignatti, S., Casa, R., **Harfouche, A.**, Pascucci, S., Palombo, A. (2019). Maize crop and weeds species detection by using UAV VNIR hyperpectral data. *IGARSS 2019 - 2019 IEEE International Geoscience and Remote Sensing Symposium*, Yokohama, Japan, 2019, pp. 7235-7238, doi: 10.1109/IGARSS.2019.8900241.

Casa, R., Pascucci, S., Pignatti, S., Palombo, A., Nanni, U., **Harfouche, A.**, Laura, L., Di Rocco M., Fantozzi P. (2019). UAV-based hyperspectral imaging for weed discrimination in maize. In: Precision agriculture'19, France. Wageningen Academic Publishers, The Netherlands, pp. 365–371.

Pantera A, Burriel C, Herdon M, Tamás J, Lamaison M, Musquar C, Seeman M, Atanassova S, **Harfouche A**, Escural JM, Fico F, Devernay S, Lavoyer S, Balaguer F, Papadopoulos A, Papanastasis V, Mantzanas K. (2018). Education in agroforestry: preliminary results from the Agrof-MM – Erasmus+ project. In: Proceedings of the 4th European Agroforestry Conference, Agroforestry as Sustainable Land Use, The Netherlands. pp. 549-552.

Firincieli, A., Valentini, A., Scalabrin, S., Cattonaro, F., Morgante, M., Kurentjes, J., Scarascia Mugnozza, G., **Harfouche, A.** (2017). Co-expression network analysis identifies

drought-specific gene signatures in the bioenergy crop *Arundo donax*. P10. Abstracts from the International Conference on 'Developing biomass crops for future climate' 24–27 September 2017, Oriel College, Oxford.

Salvati, R., **Harfouche, A.**, Scarascia Mugnozza, G. (2015). Piattaforme aeree ultraleggere per la gestione innovativa di ecosistemi agroforestali e ambientali. "Strumenti di gestione ecoefficiente nell'industria e in agricoltura" In: Il giornata di Cultura Ambientale. pp. 49-54.

Fabbrini, F., Alasia, O., Sabatti, M., Merlone, A., Taylor, G., **Harfouche, A.**, Alasia, F. (2015). Improving biomass for bioenergy and bioproducts in Italy: the case of Franco Alasia Vivai. In: ProCoGen final open conference Promoting Conifer Genomic Resources. P6.

Harfouche, A. (2015). Agricoltura Italiana tra Tradizione e Innovazione. In: Convegno Aspetti Transdisciplinari dello Sviluppo Sostenibile, Camera dei Deputati, Parlamento Italiano. **(Invited Speaker)**

Harfouche, A. (2015). BIOINNO: another Knowledge Alliance project. In: EIRMA Insight - HEKATE final conference - fostering entrepreneurship among young industry professionals and academic researchers. pp. 7-8. **(Invited Speaker)**

Salvati, R., **Harfouche, A.**, Scarascia Mugnozza, G. (2015). Piattaforme aeree ultraleggere per la gestione innovativa di ecosistemi agroforestali e ambientali. Il Giornata di Cultura Ambientale ISPRA - Strumenti di gestione ecoefficiente nell'industria ed in agricoltura. **(Oral communication)**

Salvati R., **Harfouche, A.**, Scarascia Mugnozza G. (2015). Droni multisensoriali per la gestione innovativa di ecosistemi agroforestali e ambientali. DronItaly 2015. Expo Fiera Milano. **(Oral communication)**

Salvati R., Matteucci G., **Harfouche, A.**, Scarascia Mugnozza, G. (2015). Sistemi Aeromobili a Pilotaggio Remoto (SAPR) per la gestione innovativa di ecosistemi agroforestali. DronItaly 2015. Expo Fiera Milano. **(Oral communication)**

Salvati, R., **Harfouche, A.**, Scarascia Mugnozza, G. (2015). Sistemi Aeromobili a Pilotaggio Remoto (SAPR) per applicazioni in agricoltura di precisione. EXPO (Padiglione Bielorussia). **(Oral communication)**

Salvati, R., **Harfouche, A.**, Scarascia Mugnozza, G. (2015). Sistemi Aeromobili a Pilotaggio Remoto (SAPR): interventi di agricoltura di precisione nella Valle Peligna. "Consorzio Aglio Rosso di Sulmona: un'esperienza in crescita e innovativa". **(Oral communication)**

Harfouche, A., Salvati, R., Fabbrini, F., Scarascia-Mugnozza, G. (2015). Field-based phenomics: toward more efficient forest tree breeding. International Plant and Algal Phenomics Meeting (IPAP). p. 20. **(Invited Keynote Speaker)**

- Salvati R., **Harfouche, A.**, Scarascia Mugnozza G. (2015). APR a supporto del monitoraggio ambientale. Workshop FlyTop. **(Oral communication)**
- Salvati R., **Harfouche, A.**, Scarascia Mugnozza G., Mencarelli F., Bellincontro A., Fabbrini F. (2015). Drone4Bioscience and agriculture research and innovation. Roma Drone Conference 2015 - Droni in agricoltura. Nuove soluzioni tecnologiche per monitoraggio e interventi di precisione nelle coltivazioni. **(Oral communication)**
- Harfouche, A.**, Khoury S., Romanelli M., Boccolini M., Sabatti M., Scarascia Mugnozza G., Barakat S., Ihasz O., Boddington M., Verhaegen I., Hoefnagels H., Broes L., Aznar M., Serazetdinova L., Krzyzaniak A., Lynch S., Valentini A., Bellemain E., Toptchiyski S. (2015). Bioinnovation and entrepreneurship: a knowledge alliance for biotech entrepreneurship education. EFMD Entrepreneurship Education Conference.
- Khoury S., Latini P., Fabbrini F., Proietti-De-Santis L., Meschini R., Scarascia Mugnozza G., **Harfouche, A.** (2015). Measuring telomere length in forest trees and its relevance to tree breeding. IUFRO Tree Biotechnology 2015 Conference: Forests: the importance to the planet and society. S3.P18.
- Khoury, S., Latini, P., Fabbrini, F., Proietti-De-Santis, L., Meschini, R., Sabatti, M., Scarascia Mugnozza, G., **Harfouche, A.** (2015). Measuring telomere length in plant and tree species: the intersection of research, innovation and entrepreneurship. IV Mediterranean Forest Week. P61.
- Fabbrini, F., Evangelistella, C., Scalabrin, S., Schnabel, S., Ludovisi, R., Rüger, S., Sabatti, M., Morgante M., Taylor G., Keurentjes J., Scarascia-Mugnozza G., **Harfouche A.** (2015). Genetical genomics and physiological responses to drought stress in poplar. IUFRO Tree Biotechnology 2015 Conference: Forests: the importance to the planet and society. S1.P3.
- Scarascia Mugnozza, G., **Harfouche, A.**, Salvati, R., Sabatti, M., Fabbrini, F., Corona, P. (2014). Poplar as a feedstock for biofuels: land availability and biomass production potential in Italy. In: Genetics, Breeding and Conservation of Poplar and Willow, International Poplar Symposium VI. S5.P5.
- Ludovisi, R., Gaudet, M., Fabbrini, F., Bastien, C., **Harfouche, A.**, Scarascia Mugnozza, G., Sabatti, M. (2014). Influence of temperature on bud flush phenology in *Populus nigra*: A comparison between two growing seasons. In: Genetics, Breeding and Conservation of Poplar and Willow, International Poplar Symposium VI. S1.P24.
- Harfouche, A.** (2014). Bioinnovation and Entrepreneurship: a Knowledge Alliance for biotech entrepreneurship education. In: Thematic Cluster meeting "Knowledge Alliances" Compendium, European Commission, Erasmus Higher Education, Brussels. pp. 16-17.
- Vettori, C., Pilate, G., Häggman, H., Gallardo, F., Ionita, L., Ruohonen-Lehto, M., Glandorf, B., **Harfouche, A.**, Biricolti, S., Paffetti, D., Kazana, V., Sijacic-Nikolic, M.,

- Tsourgiannis, L., Migliacci, F., Donnarumma, F., Minol, K., Fladung, M. (2012). COST Action FP0905: Biosafety of forest transgenic trees. In: 2nd Forest Genomics Meeting – Transgenic Forest Trees: Time to Harvest? pp. 23-24. (**Oral communication**)
- Sabatti, M., Fabbrini, F., Gaudet, M., Bastien, C., Guet, J., Zaina, G., **Harfouche A.**, Beritognolo I., Jorge, V, Marron N., Morgante M., Scarascia-Mugnozza G. (2012). QTL mapping and genomic characterization of phenology in black poplar. Final Conference Noveltree - Tree Breeding, Genomics and Evolutionary Biology: New synergies to tackle the impact of climate change in the 21st century. p. 27.
- Ludovisi, R., Fabbrini, F., Gaudet, M., **Harfouche, A.**, Bastien, C., Sabatti, M. (2012). Phenotypic plasticity of growth-related traits in black poplar. Final Conference Noveltree - Tree Breeding, Genomics and Evolutionary Biology: New synergies to tackle the impact of climate change in the 21st century. p. 23.
- Vettori, C., Kazana, V., Sijacic-Nikolic, M., Tsourgiannis, L., Migliacci, F., Donnarumma, F., Minol, K., Pilate, G., Häggman, H., Gallardo, F., Ionita, L., Ruohonen-Lehto, M., Glandorf, B., **Harfouche, A.**, Biricolti, S., Paffetti, D., Fladung, M., et al. (2012). Public attitude towards adoption of transgenic tree plantations: A European perspective. In: 12th International Symposium on Biosafety of Genetically Modified Organisms (ISBGMO12), P1.42.
- Fladung, M., Pilate G., Häggman H., Gallardo F., Ionita L., Ruohonen-Lehto M., Glandorf B., **Harfouche A.**, Biricolti S., Paffetti D., Kazana V., Sijacic-Nikolic M., Tsourgiannis L., Migliacci, F., Donnarumma, F., Minol, K., Vettori C. (2012). Biological characterization, assessment of possible environmental impacts and monitoring of genetically modified trees: a European perspective. In: 12th International Symposium on Biosafety of Genetically Modified Organisms (ISBGMO12), Symposium S9.6.
- Häggman, H., Find, J. M., Pilate, G., Gallardo, F., Ruohonen-Lehto, M., Kazana, V., Migliacci, F., Ionita, L., Sijacic-Nikolic, M., Donnarumma, F., **Harfouche, A.**, Biricolti, S., Glandorf, B., Tsourgiannis, L., Minol, K., Paffetti, D., Fladung M., and Vettori, C. (2012) Biosafety of genetically modified forest trees (GMTs)– COST action FP0905 – a common action of European scientists. 2nd International Conference of the IUFRO WORKING PARTY 2.09.02. Mendel Lectures and Plenary MLP-3, p.13.
- Gallardo, F., Ionita, L., Ruohonen-Lehto, M., **Harfouche, A.**, Biricolti, S., Boerjan, W., Glandorf, B., Jouanin, L., Fladung, M. and Vettori, C. (2011). Environmental impact assessment and monitoring of genetically modified trees. **BMC Proceedings**, 5 (Suppl 7):O59.
- Harfouche, A.**, Sabatti, M., Corona, P., Scarascia Mugnozza, G., Fabbrini, F., Paris, P. and Salvati, R. (2011). Feedstocks for lignocellulosic biofuels: productivity forecast and land suitability in Italy. VIII Congresso Nazionale SISEF Selvicoltura e

Conservazione del suolo: la sfida europea per una gestione territoriale integrata. p. 60.

Sabatti, M., **Harfouche, A.**, Gaudet, M. and Scarascia Mugnozza, G. (2011). The genus *Populus*: a model system for studying the evolution of gender determination in plants. VIII Congresso Nazionale SISEF Selvicoltura e Conservazione del suolo: la sfida europea per una gestione territoriale integrata. p. 69.

Ludovisi, R., Fabbrini, F., **Harfouche, A.**, Gaudet, M., Scarascia Mugnozza, G. and Sabatti, M. (2011). Estimation of aboveground biomass production in a full-sib family of black poplar (*Populus nigra* L.) using multiple regression linear model. VIII Congresso Nazionale SISEF Selvicoltura e Conservazione del suolo: la sfida europea per una gestione territoriale integrata. p. 56.

Fabbrini, F., Gaudet, M., **Harfouche, A.**, Bastien, C., Beritognolo, I., Scarascia Mugnozza, G. and Sabatti, M. (2011). Characterization of bud set process in a *P. nigra* European association population. VIII Congresso Nazionale SISEF Selvicoltura e Conservazione del suolo: la sfida europea per una gestione territoriale integrata. p. 65.

Fabbrini, F., Gaudet, M., **Harfouche, A.**, Bastien, C., Beritognolo, I., Scarascia Mugnozza, G. and Sabatti, M. (2011). Phenotypic plasticity of bud set process in a *P. nigra* full-sib family. VIII Congresso Nazionale SISEF Selvicoltura e Conservazione del suolo: la sfida europea per una gestione territoriale integrata. p. 66.

Ludovisi, R., Fabbrini, F., **Harfouche, A.**, Gaudet, M., Scarascia Mugnozza, G. and Sabatti, M. (2011). Study of bud burst in a full-sib family of black poplar (*Populus nigra* L.). VIII Congresso Nazionale SISEF Selvicoltura e Conservazione del suolo: la sfida europea per una gestione territoriale integrata. p. 68.

Fabbrini, F., Gaudet, M., **Harfouche, A.**, Bastien, C., Zaina, G., Morgante, M., Beritognolo, I., Scarascia Mugnozza, G. and Sabatti, M. (2011). Phenotypic plasticity and QTL mapping of bud set process in *Populus nigra*. Joint meeting AGI - SIBV - SIGA. 6A.39

Androulaki, K., Petoussi-Douli, V., Doulis, A.G. and **Harfouche, A.** (2011). Bioethics and genetic modification of trees: Questions and concerns addressed in the international scientific literature. 7th Annual Meeting, Bioethical Issues in the Life Sciences. p. 3.

Harfouche, A. (2010). Bioethics, intellectual property and research and development in agricultural biotechnology: are we as ethical as we think we are? 6th Annual Meeting, Bioethical Issues in the Life Sciences. p. 16.

Beritognolo, I., Brilli, F., Brosché, M., Gaudet, M., **Harfouche, A.**, Kuzminsky, E., Loreto, F., Prosperini, G., Sabatti, M., Salani, F., Scarascia Mugnozza, G. and Valentini, R. (2010). Comparative transcriptome profiling of salt stress response in *Populus alba* L. IUFRO Fifth International Poplar Symposium. p. 68.

- Sabatti, M., Beritognolo, I., Brunner, A.M., Gaudet, M., **Harfouche, A.**, Mecucci, F. and Scarascia Mugnozza, G. (2010). Variation in sex expression of *Populus*, and comparative mapping analysis of sex determination across poplar species and hybrids. IUFRO Fifth International Poplar Symposium. p. 88.
- Harfouche, A.** (2009). Agricultural biotechnology: capitalizing on research & development with intellectual property protection. 5th Annual Meeting, Bioethical Issues in the Life Sciences. p. 3.
- Shivaji, R., Engelberth, J.E., **Harfouche, A.L.**, Williams, P. and Luthe, D. (2005). Corn at heightened alert. Plant Biology 2005 annual meeting of the American Society of Plant Biologists. p. 863.
- Harfouche, A.L.**, Shivaji, R., Lopez, L., Camas A., Williams, P. and Luthe, D. (2005). Ethylene signaling contributes to the insect-induced defense response in maize. 47th Maize Genetics Conference. p. 50.
- Camas, A., Lopez, L., **Harfouche, A.**, Windham, G., Williams, P. and Luthe, D.S. (2004). Expression of different lipoxygenase genes in relation to resistance in corn developing and mature embryos to aflatoxin contamination by *Aspergillus flavus*. 4th Fungal Genomics, 5th Fumonisin Elimination and 17th Aflatoxin Elimination Workshops. p. 72.
- Aravanopoulos, F.A., Manescu, C., Maïos, C., Hammouch, N., **Harfouche, A.L.** and Doulis, A. (2004). Molecular genetic map of cypress (*Cupressus sempervirens* L.) Based on RAPD, SCAR and Morphological Markers. Hellenic Society of Plant Genetics and Breeding. p. 74. (in Greek)
- Harfouche, A.L.**, Shivaji, R., Lopez, L., Williams, P. and Luthe, D. (2004). Deciphering the roles of ethylene and jasmonic acid in maize insect defense signaling. Plant Biology 2004 annual meeting of the American Society of Plant Biologists. p. 119.
- Harfouche, A.L.**, Shivaji, R. and Luthe, D. (2004). Jasmonic acid and ethylene modulate the activation of insect defense signaling pathways in maize. 46th Maize Genetics Conference. p. 60.
- Manescu, C., Maïos, C., Hammouch, N., **Harfouche, A.**, Doulis, A. and Aravanopoulos, F.A. (2003). A molecular linkage map of *Cupressus sempervirens* L. based on RAPD, SCAR and morphological markers. Proceedings of 25th annual conference Hellenic Society of Biological Sciences. p. 196. (in Greek)
- Abdollahi, H., **Harfouche, A.L.**, Ruzzi, M., Rugini, E. and Muleo, R. (2002). Erwinia amylovora inhibits the expression of chloroplastic gene psbA, and modifies the qualitative content of chlorophylls in leaves of pear. Giornale di Società Italiana di Ortoflorofrutticoltura. p. 481-491.
- Harfouche, A.L.**, Rugini, E. and Muleo, R. (2001). Analisi con RT-PCR dell'espressione del gene endochitinase in castagno in risposta all'acido salicilico. *Italus Hortus* 8(5): p. 32.

Harfouche, A.L., Rugini, E., Mencarelli, F., Rey, N.A. and Muleo, R. (2001). Ruolo dell'acido salicilico in espianti di castagno coltivati *in vitro*. *Italus Hortus* 8(5): p. 37.

Dissertations

Harfouche, A. (2002). Physiological and molecular studies of defence responses of chestnut (*Castanea sativa* Mill.) to salicylic acid: Establishment of an *in vitro* model system and identification of defense-related genes to fungal pathogens. Ph.D. Dissertation. University of Tuscia. 115 pp.

Harfouche, A. (1999). Identification of Randomly Amplified Polymorphic DNA (RAPD) markers associated with crown form in common cypress (*Cupressus sempervirens* L.) by Bulk Segregant Analysis. Master's thesis. Mediterranean Agronomic Institute of Chania. 98 pp.