

Mehdi TRAD

Born on June 24, 1978 in France

Nationality: Tunisian

Marital status: married

Address: 216 El Manar, Jemmel 5020, Monastir - TUNISIA

Phone: +966 563097808

E-mail: mh.trad@yahoo.com



: +966 563097808



: [linkedin.com/in/mehdi-trad-b3996097](https://www.linkedin.com/in/mehdi-trad-b3996097)



OCCUPATION

- 2021** *Expert, Technical Consultant – Seeds and Seedlings Propagation and Development*, SSPD project. EMEA Department. Palladium Group Ltd. Ministry of Environment, Water and Agriculture, MEWA KSA
Project tasks: prepare, implement, and develop a comprehensive program for the conservation of agricultural biodiversity and the development of an integrated seed system. Prepare and implement model action plans with timeframes for the identification of plant breeds of different crops to be described, purified, evaluated, and propagated to identify economically viable value chains to be developed and promoted effectively. Field crops – Horticulture crops – Integrated seed and plant system. Riyadh, Kingdom of Saudi Arabia. November 2021 to now.
- 2021** *Researcher* – Regional Research Center in Horticulture and Organic Agriculture (CRRHAB)
Research field: Quality and postharvest physiology of fruit crops - Food safety and agro-food chain resilience – Biodiversity conservation and natural resources management for food security and sustainable agriculture. University of Sousse, Sousse, Tunisia. July to November 2021.
- 2020** *Researcher* – Lab. of Horticulture, National Institute for Agricultural Research (INRAT)
Research field: Quality and postharvest physiology of fruit crops - Food safety and agro-food chain resilience - Biodiversity conservation and natural resources management for food security and sustainable agriculture. University of Carthage, Tunis, Tunisia. November 2020 to June 2021.
- 2019** *Expert, Technical Consultant – Crop patterns* project. EMEA Department. Palladium Group Ltd. Ministry of Environment, Water and Agriculture, MEWA KSA
Key member of the Crop Patterns team responsible for project planning and strategy development, project technical operational implementation, technical data collection, stakeholder liaison and project implementation based in the Regional Offices of the project. Horticulture crops – Cultivation and Production Systems. Terrace Production Systems – Horticulture Crops. Riyadh, Kingdom of Saudi Arabia. November 2019 to November 2020.
- 2014** *Researcher* – Lab. of Horticulture, National Institute for Agricultural Research (INRAT)
Research field: Quality and postharvest physiology of fruit crops - Food safety and agro-food chain resilience - Biodiversity conservation and natural resources management for food security and sustainable agriculture. University of Carthage, Tunis, Tunisia. June 2014 to November 2019.
- 2013** *Extension Engineer* – The Regional Commissary for Agricultural Development (CRDA)
Farming engineering in crop system management: open field and greenhouse crops, irrigated and rainfed. crops, extension and advisory for plant protection, organization of workshops and demonstration plots. Mahdia, Tunisia. December 2013 to June 2014.

EDUCATION

- 2012** *PhD, Agricultural Sciences*
Agricultural High Institute of Chott-Mariem (ISACM). University of Sousse, Sousse, Tunisia
Search topic: characterization of several local fig cultivars *Ficus carica* for quality (morphology, taste and nutritional) and post-harvest assessment of the fruit (fresh consumption or drying). Influence of caprification (artificial pollination) on fruit quality.

- 2006** *MSc, Agronomy and Crop Science*
Agricultural National Institute of Tunis (INAT). University of Carthage, Tunis, Tunisia
Search topic: composition and development of aroma compounds in local flat peaches *Prunus persica*.
Volatile compounds evolution with fruit ripening (from pre-ripeness to over-ripeness).
Impact of close environment of the fruit in the tree on aroma production.
- 2003** *Engineer, Horticultural Sciences*
Agricultural National Institute of Tunis (INAT). University of Carthage, Tunis, Tunisia
Search topic: study of the biotic and abiotic stressors likely to induce the *russeting* in apple (cv. 'Golden Delicious') in the north-east of Tunisia.
- 1997** *Bachelor, Experimental Sciences*
Jemmel Secondary School, Monastir, Tunisia.

INTERNSHIP

- 2009** Research internship at the UMR SQPOV, INRA Avignon, France.
1 month Initiation to the different techniques of extraction and analysis of chemical and bioactive compounds in fruits and vegetables. February 2009.
- 2009** Research internship at the UMR SQPOV, INRA Avignon, France.
4 months Biochemical analysis of figs *Ficus carica* L. for fruit quality assessment.
September 01 to December 31, 2009.
- 2010** Research internship at the UMR SQPOV, INRA Avignon, France.
3 months Biochemical analysis of figs *Ficus carica* L. for fruit quality assessment.
September 15 to November 15, 2010.
- 2015** Research internship at the UMR SQPOV, INRA Avignon, France.
2 months Biochemical analysis of wild and autochthonous vines *Vitis vinifera* for plant selection and breeding.
October 01 to November 30, 2015.

TRAINING COURSE

- 2014** 'Agricultural use of brackish water and salinity management'
Institution of Agricultural Research and Higher Education (IRESA)
National Institute for Research in Rural Engineering, Water and Forestry (INRGREF)
The Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD)
Sidi Thabet, Tunis. 28 to 30 April 2014.
- 2016** English training course: *Level B2*
National Institute for Agricultural Research (INRAT)
Tunis, Tunisia. June 08 to July 22, 2016.
- 2016**: Elsevier – Scopus – Mendeley – Plagiarism training course
Agricultural National Institute of Tunis (INAT)
CNUDST – ELSEVIER. November 03, 2016.
- 2018** Statistics training course: R software
Experimental and bio-statistical designs applied to agricultural trials
Zarzis, Tunisia. 15 to 17 December 2018

LANGUAGE SKILLS

Language	Understanding	Speaking	Reading	Writing
Arabic	Mother tongue	Mother tongue	Mother tongue	Mother tongue
French	Excellent	Excellent	Excellent	Excellent
English	Good	Good	Good	Good

COMPUTER SKILLS

- Software engineering: MS Office; Adobe Photoshop; Adobe Illustrator; Turbo Pascal; Maple; SAS; SPSS; R; EndNote; Mendeley; KoBoToolbox
- Operating Systems: Windows (Win. 98 » Win. 10); Linux (Ubuntu; Xubuntu)
- Internet: All current uses of internet: search online, mailing, Professional Networking (ResearchGate, LinkedIn...).

LABORATORY SKILLS

† *Enzymatic analysis of sugars and acids*: Spectrophotometer analysis

† *Extraction and pre-concentration techniques*:

Soxhlet extraction – lipid, fatty acids and essential oils

Liquid-liquid extraction – volatile compounds, phenolic compounds and fatty acids

Head-Space extraction – volatile compounds

SPE extraction – dietary fibers and phenolic compounds

HS-SPME extraction – volatile compounds

† *Separation and analysis methods*:

Gas Chromatography coupled with Flame Ionisation Detector (GC/FID);

Gas Chromatography coupled with Mass Spectrometry (GC/MS);

High Phase Liquid Chromatography coupled with Diode Array Detector (HPLC/DAD);

High Phase Liquid Chromatography coupled with Mass Spectrometry (HPLC/MS).

PUBLICATIONS

Research articles :

- 2021** 'A critical review of pear genetic resources in Tunisia after the fire blight outbreak: risk assessment and geographic limits'. **Mehdi Trad**, Saloua Mselmi Taoueb. *Euro-Mediterranean Journal for Environmental Integration* 6, 50 (2021). <https://doi.org/10.1007/s41207-021-00259-2>
- 2021** 'Key descriptors for sugars and acids to evaluate *Vitis sylvestris* grapevines'. **Mehdi Trad**, Catherine M.G.C.Renard, Mounira Harbi. *Journal of Horticulture Science and Forestry* 3(2021): 103
- 2021** 'Pistachio performance in the southern Mediterranean: towards optimal use of genetic resources to increase productivity of rainfed agriculture'. Azza Chelli, **Mehdi Trad**, Moez Mkadmi, Imen Ouerghui, Olfa Mlayah, Hana Jemai. *Euro-Mediterranean Journal for Environmental Integration* 6, 24 (2021). <https://doi.org/10.1007/s41207-020-00230-7>
- 2019** 'Towards a bio-morphometric approach for the discrimination between wild and domesticated vines under Mediterranean environment'. **Mehdi Trad**, Mounira Harbi. *Flora Mediterranea* 29(2019): 247-262. <https://doi.org/10.7320/FlMedit29.247>
- 2017** 'Comportement variétal du cépage 'Asli' soumis à l'irrigation : Qualité morphométrique et chimique des Raisins'. **Mehdi Trad**, Rym Bouhlal, Hmida Ben Hamda, Mounira Harbi. *Revue des Régions Arides* 43(3)(2017), 181-187
- 2017** 'Flavan-3-ols and procyanidins in grape seeds: biodiversity and relationships among wild and cultivated

vines'. **Mehdi Trad**, Carine LeBourvellec, Hmida Ben Hamda, Catherine M.G.C.Renard, Mounira Harbi. *Euphytica* (2017)213:242. <https://doi.org/10.1007/s10681-017-2032-z>

- 2017** 'The unique fig caprification system and its effect on productivity and fruit characteristics'. Messaoud Mars, **Mehdi Trad**, Badii Gaaliche. *Acta Horticulturae*. 1173(2017), 127-136. <https://doi.org/10.17660/ActaHortic.2017.1173.22>
- 2017** 'The Glucose-Fructose ratio of wild Tunisian grapes'. **Mehdi Trad**, Marielle Boge, Hmida Ben Hamda, Catherine M.G.C.Renard, Mounira Harbi. *Cogent Food & Agriculture* (2017), 3: 1374156 <https://doi.org/10.1080/23311932.2017.1374156>
- 2017** 'Volatile compounds in ripe fig receptacle are influenced by environment in the vicinity of the fruit' **Mehdi Trad**, Christian Ginies, Badii Gaaliche, Catherine M.G.C.Renard, Messaoud Mars. *Fruits* 72(4)(2017), 230-237. <https://doi.org/10.17660/th2017/72.4.5>
- 2016** 'Shoot Architecture and Morphology of Different Branch Orders in Fig Tree (*Ficus carica* L.)' Badii Gaaliche, Mouna Aïachi-Mezghani, **Mehdi Trad**, Evelynes Costes, Pierre-Eric Lauri, Messaoud Mars. *International Journal of Fruit Science* 16(4)(2016), 378-394. <https://doi.org/10.1080/15538362.2015.1126699>
- 2015** 'Apple breeding in Tunisia and the actual climatic context: quality assessment and crop adaptation' **Mehdi Trad**, Badii Gaaliche, Rym Bouhlal, Mounira Harbi, Hmida Ben Hamda, Salem Laouini. *International Journal of Plant Science and Ecology*. Public Science Framework 4(2015), 131-137.
- 2014** 'Relationship between pollination and cell wall properties in common fig fruit' **Mehdi Trad**, Christian Ginies, Badii Gaaliche, Catherine M.G.C. Renard, Messaoud Mars. *Phytochemistry* 98(2014), 78-84. <https://doi.org/10.1016/j.phytochem.2013.12.011>
- 2014** 'Nutritional Compounds in Figs from Southern Mediterranean Region' **Mehdi Trad**, Carine LeBourvellec, Badii Gaaliche, Catherine M.G.C. Renard, Messaoud Mars *International Journal of Food Properties* 17(2014), 491-499. <https://doi.org/10.1080/10942912.2011.642447>
- 2013** 'Inter- and intra-tree variability in quality of figs. Influence of altitude, leaf area and fruit position in the canopy. **Mehdi Trad**, Badii Gaaliche, Catherine M.G.C. Renard, Messaoud Mars *Scientia Horticulturae* 162(2013), 49-54. <https://doi.org/10.1016/j.scienta.2013.07.032>
- 2013** 'Caprification modifies polyphenols but not cell wall concentrations in ripe figs' **Mehdi Trad**, Carine LeBourvellec, Badii Gaaliche, Christian Ginies, Catherine M.G.C. Renard, Messaoud Mars. *Scientia Horticulturae* 160(2013), 115-122. <https://doi.org/10.1016/j.scienta.2013.05.037>
- 2013** 'Aroma composition in relation with quality of 'Peento' flat peach during fruit development' **Mehdi Trad**, Wissal Dhifi, Brahim Marzouk, Messaoud Mars. *Food Global Science Books* 7(1)(2013), 8-12.
- 2013** 'Assessment of pollen viability, germination and tube growth in eight Tunisian caprifig (*Ficus carica* L.) cultivars'. Badii Gaaliche, Afifa Majdoub, **Mehdi Trad**, Messaoud Mars. *ISRN Agronomy* Vol. 2013, ID 207434, 4 pages. <https://doi.org/10.1155/2013/207434>
- 2013** 'Plant natural resources and fruit characteristics of fig (*Ficus carica* L.) change from coastal to continental areas of Tunisia'. **Mehdi Trad**, Badii Gaaliche, Catherine M.G.C. Renard, Messaoud Mars *Journal of Agricultural Research and Development* 3(2)(2013), 22-25.
- 2012** 'Does pollination affect aroma development in ripened fig [*Ficus carica* L.] fruit ?' **Mehdi Trad**, Christian Ginies, Badii Gaaliche, Catherine M.G.C. Renard, Messaoud Mars

- 2012** 'Quality Performance of 'Smyrna' Type Figs Grown Under Mediterranean Conditions of Tunisia'
Mehdi Trad, Badii Gaaliche, Catherine M.G.C. Renard, Messaoud Mars
Journal of Ornamental and Horticultural Plants 2(3)(2012), 139-147.
- 2012** 'Pomological and Biochemical Characteristics of Fig (*Ficus carica* L.) cv. Zidi in Different Agroecological Zones of Tunisia'. Badii Gaaliche, **Mehdi Trad**, Lamia Hfaiedh, Wassim Lakhal, Messaoud Mars
Pakistan Journal of Agricultural Science 49(4)(2012), 425-428.
- 2012** 'Biodiversité et efficacité comparée de caprifiugiers tunisiens'
Badii Gaaliche, **Mehdi Trad**, Messaoud Mars
Tunisian Journal of Medicinal Plants and Natural Products 7(2012), 12-19.
- 2011** 'Flavonoïds and Hydroxycinnamic Acids in Tunisian Fig [*Ficus carica* L.] Fruits'
Trad Mehdi, Gaaliche Badii, LeBourvellec Carine, M.G.C. Renard Catherine, Messaoud Mars
Tunisian Journal of Medicinal Plants and Natural Products 6(2011), 108-114.
- 2011** 'Effect of pollination intensity, frequency and pollen source on fig (*Ficus carica* L.) productivity and fruit quality'. Badii Gaaliche, **Mehdi Trad**, Messaoud Mars
Scientia Horticulturae 130(2011), 737-742. <https://doi.org/10.1016/j.scienta.2011.08.032>
- 2011** 'Caprification Efficiency of some Tunisian Local Fig (*Ficus carica* L.) Cultivars'
Badii Gaaliche, Lamia Hfaiedh, **Mehdi Trad**, Messaoud Mars
Pakistan Journal of Agricultural Science 48(2011), 295-298.
- 2011** 'Interactions between vegetative and generative growth and between crop generations in fig tree (*Ficus carica* L.)'. Badii Gaaliche, Pierre-Eric Lauri, **Mehdi Trad**, Evelyne Costes, Messaoud Mars
Scientiae Horticulturae 131(2011), 22-28. <https://doi.org/10.1016/j.scienta.2011.09.022>
- 2011** 'Caprification efficiency of three Tunisian fig (*Ficus carica* L.) cultivars'
Badii Gaaliche, Lamia Hfaiedh, **Mehdi Trad**, Messaoud Mars
Journal of Natural Product and Plant Resource 1(3)(2011), 20-25.

Conference proceedings:

- 2021** 'What's left of the pear tree after the fire blight outbreak ? An urgent need for germplasm preservation'. Mehdi Trad. In: Ksibi M. et al. (eds) Recent Advances in Environmental Science from the Euro-Mediterranean and Surrounding Regions (2nd Edition). EMCEI 2019. Environmental Science and Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-51210-1_226
- 2018** 'Assessment of seed propagation ability of almond genotypes (*Prunus dulcis* Mill. D.A.Webb.) for a Mediterranean environment'. Saloua Msalmi Taoueb, **Mehdi Trad**, Imène Ouerghi, Hana Jemai, Messaoud Mars. In: Kallel A., Ksibi M., Ben Dhia H., Khélifi N. (eds) *Recent Advances in Environmental Science from the Euro-Mediterranean and Surrounding Regions*. EMCEI 2017. Advances in Science, Technology & Innovation (IEREK Interdisciplinary Series for Sustainable Development). Springer, Cham pp 1179-80 https://doi.org/10.1007/978-3-319-70548-4_341
- 2016** 'Morphometric features of local and foreign female pistachio cultivars and ecotypes in north-east Tunisian conditions'. Azza Chelli Chaabouni, Samiha Ouni, **Mehdi Trad**, Imen Ouerghi, Hmida Ben Hamda. In : Kodad O. (ed.) López-Francos A. (ed.), Rovira M. (ed.), Socias i Company R. (ed.). XVI GREMPA Meeting on Almonds and Pistachios. Zaragoza : CIHEAM, 2016. p. 37-41. (*Options Méditerranéennes : Série A. Séminaires Méditerranéens; n° 119*). 16. Meeting of GREMPA (Mediterranean Research Group for Almond and Pistachio), 2015/05/12-14, Meknes (Morocco).
- 2006** 'Evolution des composés d'arôme avec la maturation des fruits de la pêche plate 'Plate de Chine'

[*Prunus persica* L.]'. **Trad Mehdi**, Mejri Slah, Marzouk Brahim, Jebbari Abderrahmen, Aounallah Karim. Proceedings of the 13th conference on the results of national research programs in agriculture. IRESA - Ministry of Agriculture. 14-15 December, 2006. Hammamet, Tunisia, pp. 408-418.

Books:

2024 'Patrimoine et Traditions Viticoles à Kerkennah'. Editions Universitaires Européennes. ISBN 978-620-6-70953-4. my.editions-ue.com. Ben Slimane et al. (2024), 132 pages.

2017 'Quality Standards of Fig Fruit - A Basic Component of Mediterranean Diet'. Trad M. 2017. LAP Lambert Academic Publishing. ISBN 978-3-659-71479-5 Saarbrücken, Germany, 97 pages.

Dissertation :

2012 'Paramètres de qualité organoleptique et nutritionnelle chez la figue (*Ficus carica* L.) : effets de la caprification et de l'environnement du fruit'. University of Sousse, Sousse, Tunisia. Trad M. (2012), 173 pages.

COMMUNICATIONS

I. Oral

2019 O.C.249

"What's left of the pear tree after the Fire Blight outbreak? An urgent need for germplasm preservation". Mehdi Trad. 2nd Euro-Mediterranean Conference for Environmental Integration (EMCEI 2019), 10-13 October 2019, Sousse, Tunisia.

2017 O.C.16

"La viticulture en Tunisie : approche biométrique pour la discrimination entre vigne sauvage et vigne cultivée". **Trad Mehdi**, Ben Hamda Hmida, Harbi Mounira. 2nd Mediterranean Conference on Biodiversity « BIODIV2017 ». 28-30 October 2017. Monastir, Tunisia.

2016 O.C.33

"Flavan-3-ols and procyanidins in grape seeds: analysis of several local vines growing in the terroir of Rafrat". **Trad Mehdi**, Carine LeBourvellec, Mounira Harbi, Hmida Ben Hamda, Catherine M.G.C. Renard. 27th International Forum on Biological Sciences ATSB. 28-31 March, 2016. Hammamet, Tunisia.

2015 O.C.03

"Morphometric features of local and foreign female pistachio varieties and ecotypes under Northeast Tunisian conditions". Chelli Chaabouni A., Ouni S., **Trad M.**, Ouerghi I., Ben Hamda H. 16th GREMPA Meeting-Meknes (Morocco), 12-14 May 2015 (Abstract N°S1-O-03, p.20).

2012 O.C.23

"Richesse en sucres et répartition du glucose, fructose et saccharose entre la peau et la pulpe de la figue". **Trad Mehdi**, Gaaliche Badii, Boge Marielle, M.G.C. Renard Catherine & Messaoud Mars. 23rd International Forum on Biological Sciences. ATSB. 21-24 March, 2012. Hammamet, Tunisia.

2011 O.C.05

"Flavonoïdes et acides hydroxycinnamiques chez les fruits de cinq variétés de figues (*Ficus carica* L.)". **Trad Mehdi**, Gaaliche Badii, Le Bourvellec Carine, M.G.C. Renard Catherine & Messaoud Mars. 2nd Scientific Conference on Bio-resources. ISBM, 30 April, 2011. Monastir, Tunisia.

2011 O.C.17

"Composés phénoliques chez certaines variétés locales de figuier (*Ficus carica* L.)". **Mehdi Trad**, Badii Gaaliche, Carine LeBourvellec, Catherine M.G.C. Renard & Messaoud MARS. 22nd International Forum on Biological Sciences. ATSB. 28-31 March, 2011. Mahdia, Tunisia.

2006 O.C.11

"Evolution des composés d'arôme avec la maturation des fruits de la pêche plate 'Plate de Chine' [*Prunus persica* L.]". **Trad Mehdi**, Mejri Slah, Marzouk Brahim, Jebbari Abderrahmen & Aounallah Karim 13th Scientific days of the IRESA (Institution of Agricultural Research and Higher Education), Ministry of Agriculture and Environment. 14, 15 December, 2006. Hammamet, Tunisia.

2. Poster

2017 P.C.360

"Assessment of seed propagation ability of almond genotypes (*Prunus dulcis* Mill. D.A.Webb.) for a Mediterranean environment". Saloua Msalmi Taoueb, **Mehdi Trad**, Imène Ouergui, Hana Jemai and Messaoud Mars. 1st Euro-Mediterranean Conference for Environmental Integration (EMCEI), 22-25 November 2017. Sousse, Tunisia.

2016 P.C.

"Comportement varietal du cépage 'Asli' soumis à l'irrigation: Qualité morphométrique et chimique des raisins". **Mehdi Trad**, Rym Bouhlal, Hmida Ben Hamda, Mounira Harbi. Vth International Meeting on Plant Biotechnology in Arid and Oases areas (ARIDOTECH 2016). 19-21 December, 2016. Zarzis, Tunisia.

2016 P.C.69

"The Glucose-Fructose ratio of wild Tunisian grapes"
Mehdi Trad, Marielle Boge, Hmida Ben Hamda, Catherine M.G.C. Renard & Mounira Harbi 15th International days of Biotechnology (JIB2016). Tunisian Association of Biotechnology. 18-22 December, 2016. Sousse, Tunisia.

2014 P.C.

"Assessment of quality performance of 13 new apple accessions growing in mild areas of Tunisia"
Mehdi Trad, Badii Gaaliche, Rym Bouhlal, Hmida Ben Hamda, Mounira Harbi & Salem Laouini 13th International days of Biotechnology (JIB2014). Tunisian Association of Biotechnology. 20-24 December, 2014. Hammamet, Tunisia.

2013 P.C.16

"Adaptation du figuier à son environnement. Ressources naturelles et caractéristiques morphologiques et physico-chimiques du fruit". **Mehdi Trad**, Badii Gaaliche, Catherine M.G.C. Renard & Messaoud Mars 1st Doctorial « Agronomy and Environment » of the High Agronomic Institute of Chott-Mariem. 23-25 April, 2013. Sousse, Tunisia.

2012 P.C.128

"Biodiversity and genetic resources of fig (*Ficus carica* L.) change from coastal to continental areas of Tunisia". **Mehdi Trad**, Badii Gaaliche, Catherine M.G.C. Renard & Messaoud Mars. 1st International Conference of the ATP-BE (Tunisian Association of Physiology and Environmental Biomonitoring). 19-22 December, 2012. Douz, Tunisia.

2011 P.C.27

"Sugars and organic acids in local figs: differences between dark and white fruits".
Trad Mehdi, Gaaliche Badii, Boge Marielle, M.G.C. Renard Catherine & Messaoud Mars. Tunisian, Japanese Symposium on Science, Society and Technology. 11-13 November, 2011. Hammamet, Tunisia.

ADDITIONAL MOTIVATIONS

Reading: books, reviews, and scientific reports.

Sport: swimming and running.

Travel: visit ecological and archaeological sites.

