Papers 2020-2022

Research articles SCI 2022 (5)

NEW!! Ceballos-Laita L, Takahashi D, Uemura M, **Abadía J**, **López Millán AF**, **Rodríguez-Celma J** (2022) Effects of Fe and Mn deficiencies on the root protein profiles of tomato (*Solanum lycopersicum*) using two-dimensional electrophoresis and label-free shotgun analyses. **Int J Mol Sci**, 23, 3719 (doi: 10.3390/ijms23073719)

NEW!! Izadi Z, Rezaei Nejad A, **Abadía J** (2022) Iron chelate improves rooting in indole-3-butyric acid-treated rosemary (*Rosmarinus officinalis*) stem cuttings. **Agriculture** 12, 210 (doi: 10.3390/agriculture12020210)

NEW!! Hosseini MS, Ebrahimi M, **Abadía J**, Kadkhodaei S, Amirian R (2022) Growth, phytochemical parameters and glycyrrhizin production in licorice (*Glycyrrhiza glabra* L.) grown in the field with saline water irrigation. **Ind Crops Prod** 177, 114444 (doi: 10.1016/j.indcrop.2021.114444)

NEW!! Zahedi SM, Hosseini MS, Meybodi NDH, **Abadía J**, Germ M, Gholami R, Abdelrahman M (2022) Evaluation of drought tolerance in three commercial pomegranate cultivars using photosynthetic pigments, yield parameters and biochemical traits as biomarkers. **Agric Water Manag**, 261:107357 (doi: 10.1016/j.agwat.2021.107357)

De la Peña M, Marín-Peña AJ, Urmeneta L, Coleto I, **Castillo-González J**, van Liempd SM, Falcón-Pérez JM, Á**lvarez-Fernández A**, González-Moro MB, Marino D (2021) Ammonium nutrition interacts with iron homeostasis in Brachypodium distachyon. **J Exp Bot**, accepted (doi: 10.1093/jxb/erab427)

Dissemination papers 2022 (1)

NEW!! Castillo-González JL, Abadía A, **Abadía J**, **Álvarez-Fernández A** (2021) Physiological changes and root responses to zinc deficiency in Prunus rootstock GF 677. **Acta Horticulturae** 1333, 379-386 (doi: 10.17660/ActaHortic.2022.1333.51)

Research articles SCI 2021 (4)

Izadi Z, Nejad AR, **Abadía J** (2021) Foliar applications of thidiazuron and putrescine increase leaf iron concentrations and antioxidant activity in iron-deficient pot marigold (*Calendula officinalis* L.). **Acta Physiol Plant** 43, 122 (doi: 10.1007/s11738-021-03295-1)

Hosseini MS, Ebrahimi M, Samsampour D, **Abadía J,** Khanahmadi M, Amirian R, Ghafoori IN, Ghaderi-Zefrehei M, Gogorcena Y (2021) Association analysis and molecular tagging of phytochemicals in the endangered medicinal plant licorice (*Glycyrrhiza glabra* L.). **Phytochemistry**, accepted (doi: 10.1016/j.phytochem.2020.112629)

Plant Stress Physiology

Gheshlaghi Z, Luis-Villarroya A, **Álvarez-Fernández A**, Khorassani R, **Abadía J** (2021) Iron deficient *Medicago scutellata* grown in nutrient solution at high pH accumulates and secretes large amounts of flavins. **Plant Sci**, accepted (doi: 10.1016/j.plantsci.2020.110664)

Sobrino-Plata J, Barón-Sola A, Ortega-Villasante C, Ortega-Campayo V, González-Berrocal C, Conesa-Quintana C, Carrasco-Gil S, **Muñoz-Pinilla M**, **Abadía J**, **Álvarez-Fernández A**, Hernández LE (2021) Sulphur and biothiol metabolism determines toxicity responses and fate of mercury in Arabidopsis. **Environ Exp Bot** 182, (doi: 10.1016/j.envexpbot.2020.104302)

Book chapters 2021 (1)

Bonilla I, **Abadía J**, Bolaños L, Pestana M (2021) Introdução a nutrição vegetal: elementos minerais. In: Relaçoes solo-planta: bases para a nutrição e produção vegetal, Prieto HE, Lucena JJ, Bonilla I, Ed. Editora UFV da Universidade Federal de Vicosa, Brasil. ISBN: 978-65-5925-019-6 (link)

Research articles SCI 2020 (11)

NEW!! Castro-Rodríguez R, Abreu I, Reguera M, Novoa-Aponte L, Mijovilovich A, Escudero V, **Jiménez-Pastor FJ**, **Abadía J**, Wen J, Mysore KS, **Álvarez-Fernández A**, Küpper H, Imperial J, González-Guerrero M (2021) *Medicago truncatula* Yellow Stripe1-Like3 gene is involved in vascular transition metal delivery to root nodules. **J Exp Bot**, accepted (doi: 10.1093/jxb/eraa390)

NEW!! Ceballos-Laita L, **Gutierrez-Carbonell E**, Takahashi D, Lonsdale A, **Abadía A**, Doblin MS, Bacic A, Uemura M, **Abadía J**, **López-Millán AF** (2020) Effects of excess manganese on the xylem sap protein profile of tomato (*Solanum lycopersicum*) as revealed by shotgun proteomic analysis. **Int J Mol Sci** 21, 8863 (doi: 10.3390/ijms21228863)

NEW!! Arrizabalaga-Arriazu M, Gomès E, **Morales F**, Irigoyen JJ, Pascual I, Hilbert G (2020) High temperature and elevated carbon dioxide modify berry composition of different clones of grapevine (Vitis vinifera L.) cv. Tempranillo. **Front Plant Sci** 11, 1888 (doi: 10.3389/fpls.2020.603687)

Davarpanah S, Tehranifar A, Zarei M, Aran M, Davarynejad G, **Abadía J** (2020) Early season foliar iron fertilization increases fruit yield and quality in pomegranate. **Agronomy** 10, 832 (doi: 10.3390/agronomy10060832)

Hosseini MS, Samsampour D, Ebrahimi M, **Abadía J,** Najafabadi AS, Igartua E, Khanahmadi M (2020) Evaluation of glycyrrhizin contents in licorice (Glycyrrhiza glabra L.) under drought and soil salinity conditions using nutrient concentrations and biochemical traits as biomarkers. **Acta Physiol Plant** 42, 103 (doi: 10.1007/s11738-020-03090-4)

Zahedi SM, Hosseini MS, **Abadía J**, Marjani M (2020) Melatonin foliar sprays elicit salinity stress tolerance and enhance fruit yield and quality in strawberry (*Fragaria* × *ananassa* Duch.). **Plant Physiol Biochem** 149, 313-323 (doi: 10.1016/j.plaphy.2020.02.021)

Izadi Z, Nejad AR, **Abadía J** (2020) Effects of Fe concentrations at different growth stages on flower production in pot marigold (*Calendula officinalis*). **Acta Physiol Plant**, 42, 6 (doi: 10.1007/s11738-020-3011-x)

Escudero Welsch VP, Abreu I, del Sastre E, Tejada-Jiménez M, Larue C, Novoa-Aponte L, Wen J, Mysore K, A**badía J**, Argüello JM, Castillo-Michel H, **Álvarez-Fernández A**, Imperial J, González-Guerrero M (2020) Nicotianamine synthase 2 is required for symbiotic nitrogen fixation in *Medicago truncatula* nodules. **Front Plant Sci**, accepted (doi: 10.3389/fpls.2019.01780)

Morales F, Ancín M, Fakhet D, Gonzalez-Torralba J, Gamez AL, Seminario A, Soba D, Ben Mariem S, Garriga M, Aranjuelo I (2020) Photosynthetic metabolism under stressful growth conditions as bases for crop breeding and yield improvement. **Plants** 9, 88 (doi: 10.3390/plants9010088)

A Larbi, H Kchaou, B Gaaliche, K Gragouri, H Boulal, **F Morales** (2020) Supplementary potassium and calcium improves salt tolerance in olive plants. **Sci Hortic** 260, in press (doi: 10.1016/j.scienta.2019.108912)

Gheshlaghi Z, Khorassani R, **Abadía J**, **Álvarez-Fernández A**, **Luis-Villarroya A**, Fotovat A, Kafi M (2019) Glutathione supplementation prevents iron deficiency in *Medicago scutellata* grown in rock sand under different levels of bicarbonate. **Plant Soil**, in press (doi: 10.1007/s11104-019-04314-4)