

## Curriculum Vitae



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**Born:** 1 September 1973; Iran

**Education:** PhD Crop physiology, University of Chamran Ahwaz, Iran, in 2005.

### Publication

**Book: Mostafa Heidari. 2017.** Physiology and Mechanisms of Resistance to Environmental Stress in Crops. Shahroodut University of Technology Press, Iran.

### Articles:

Safiye Arab, Mehdi Baradaran firouzabadi, Ahmad Gholami and **Mostafa Haydari**. 2022. Physiological responses of soybean plants to pretreatment and foliar spraying with Ellagic acid and Seaweed extract under accelerated aging", *SOUTH AFRICAN JOURNAL OF BOTANY*, 3, 3, 510-518

Maryam Bromand Sivieri, **Mostafa Heidari**, Ahmad Gholami and Hadi Ghorbani, 2021. Effects of foliar application of nano iron oxide and biofertilizers on the activity of antioxidant enzymes and some physiological characteristics of the root and aerial parts in black cumini (*Nigella sativa* L.). *Iranian Journal of Horticultural Science*. Vol 51, No 4, Winter 2021 (939-953)

M. Bromand Sivieri, **M. Heidari**, A. Gholami, H. Ghorbani. 2021. Effects of biofertilizers and foliar application of iron oxide nanoparticle on grain yield and some physiological characteristics of black cumini (*Nigella sativa* L.). *Iranian Journal of Field Crop Science*. Vol 51, No 4, Winter 2021 (73-83)

Narjes Moshfeghi, **Mostafa Heidari**, Hamid Reza Asghari, Mehdi Baradaran Firoz Abadi, Lynette K. Abbott and Yinglong Chen. 2020. Foliar application of nano-Zn and mycorrhizal inoculation enhanced Zn in grain and yield of two barley (*Hordeum vulgare*) cultivars under field conditions. *Australian Journal of Crop Science*. 14(03):475-484.

**Mostafa Heidari**, Ahmad Paydar, Mehdi Baradarn Firozabad and Mohammad Abedinin Esfalati. 2020. The Effect of drought stress and application of humic on quantitative yield, photosynthetic pigments, and mineral nutrients content in sunflower seeds. *Iranian Journal of Field Crop Science* Vol 50, No 4, Winter 2020 (51-62).

E. Neyestani, H. Makarian, A.A. Ameri, **M. Haydari**. 2020. Evaluation of yield relationship with yield components in different dry land wheat genotypes. *Journal of Plant Ecophysiology*.12(40): 83-90.

**Heidari, M.**, Amirfazli, N., Ghorbani, H., Zafarian, F. 2019. Calcium chloride and drought stress changed grain yield and physiological traits in Sesame (*Sesamum Indicum L.*). *Scientia Agriculturae Bohemica*, 50, 211-218.

Bahareh Talebi, **Mostafa Heidari** and Hadi Ghorbani. 2019. Arsenic application changed growth, Photosynthetic pigments and antioxidant enzymes activity in sorghum (*Sorghum bicolor L.*) under salinity stress. *Scientia agriculturae bohemia*, 50, 2019 (3): 155–163

Narjes moshfeghi, **Mostafa Heidari**, Hamid reaza Asghari, Mehdi Baradaran firouzabadi, K. Abbott Lynette, Chen Yinglong. 2019. Effect of zinc foliar application and mycorrhizal inoculation on morpho-physiological traits and yield parameters of two barley cultivars. *Italian Journal of Agronomy* 14: 67-77.

Ashori, A., Gholipoor, M. Heidari. 2019. Effect of foliar spray of Spermine and Spermidine on growth and some physiological characteristics of chickpea (*Cicer arietinum L.*) under salt stress. **Iranian Journal of Pulses Research Vol. 10, No. 2, 2019, p. 163-177**

**Mostafa Heidari**, Ismaeil Salmanpour, Hadi Ghorbani, Hamid reaza asghari. 2018. Iron Chelate and Rhizobacteria Changed Growth, Grain Yield, and Physiological Characteristics in Maize. *Scientia agriculturae bohemic*. 49: 2018 (4): 245–254

Mahsa Bahrami, **Mostafa Heidari** and Hadi Ghorbani.2016. Variation in antioxidant enzyme activities, growth and some physiological parameters of bitter melon (*Momordica charantia*) under salinity and chromium stress. *Journal of Environmental Biology*. 37(4): 529-535.

Mostafa Heidari, Maryam Goleg, Hadi Ghorbani and Mehdi Baradarn Firozabad. 2016. Effect of drought stress and foliar application of iron oxide nanoparticles on grain yield, ion content and photosynthetic pigments in sesame (*Sesamum indicum L.*). *Iranian Journal of Filed Crop Science*, Vol. 46, No. 4, Winter 2016

Babaeian, M., Moussavi Nik, M., Amiri, E., **M. Heidari**, Kheirkhah. M. 2015. Water productivity of rice production in northern Iran under water deficit condition: field and modeling approach. *Trend in life sciences*.4 (1):308-388.

**Heidari, M** and Minaei, A. 2014. Effects of drought stress and humic acid application on flower yield and content of macro-elements in medical plant borage (*Borago officinalis L.*). *Journal of Plant Production*. 21 (1): 167-182.

**Heidari, M.** and Jahantighi, H. 2014. Evaluate Effect of Water Stress and Different Amounts of Nitrogen Fertilizer on Seed Quality of Black Cumin (*Nigella Sativa L.*) *Iranian Journal of Field Crops Research*. 42 (4): 640-647.

**Heidari. M.**, Miri, H.R. and Minaei, A. 2014. Antioxidant enzymes activity and biochemical components of borage (*Borago officinalis*) in response to water stress and humic acid treatment. *Environmental Stresses in Crop Sciences*. 11: 159-169.

**Heidari, M** and Karami, V. 2014. Effects of different mycorrhiza species on grain yield, nutrient uptake and oil content of sunflower under water stress. *Journal of the Saudi Society of Agricultural*

Sciences.13: 9-13.

Y Esmailian, Y., Galavi, M., Amiri, E. and **Heidari, M.** 2014. Effect of Organic and Chemical Fertilizers on Yield, Yield Components and Seed Quality of Sunflower under Drought Stress Conditions. *Water and Soil Science*. 24(3): 175-189.

**Heidari, M.** and Mobasri Moghadam, M. 2014. Effects of amount and timing of nitrogen application on yield production and quantitative characteristics of karela (*Momordica charantia* L.). *Iranian Journal of Medical and Aromatic Plants*. 66 (4):591-599.

**Heidari, M.** and Kahlil, S. 2014. Effect of humic acid and phosphorus fertilizer on seed and flower yield, photosynthetic pigments and mineral elements concentration in sour tea (*Hisbiscus sabdariffa* L.). *Iranian Journal of Field Crop Science*. 45 (2): 191-199.

**Heidari, M.** and Karami, V. 2013. Effects of water stress and different mycorrhiza species on grain yield, yield components, chlorophyll content and biochemical components of sunflower. *Environmental Stresses in Crop Sciences*. 10: 17-26.

Ashtari, R., **Heidari, M.**, Omidi, M. and Zare, A. R.. 2013. Seed germination and dormancy breaking techniques for *Ducrosa anethifolia* (DC.). *Trakia Journal of Sciences*. 1: 82-87.

**Heidari, M.** and Jahantighi, H. 2012. Effect of water stress and amount of nitrogen fertilizer on grain yield, yield components, essential oils and thymoquinone content in Black Cumin (*Nigella sativa* L.). *Environmental Stresses in Crop Sciences*. 8: 33-42.

Jowkar, M., Ghanbari, A., Moradi, F. and **Heidari, M.** 2012. Alterations in seed vigor and antioxidant enzymes activities in *Silybum marianum* under seed priming with KNO<sub>3</sub>. *Journal of Medicinal Plants Research* Vol. 6(7), pp. 1176-1180.

**Heidari, M.** and Mobasri Moghadam, M. 2012. Effect of rate and time of nitrogen application on fruit yield and accumulation of nutrient elements in *Momordica charantia*. *Journal of the Saudi Society of Agricultural Sciences*. 11, 129-133

**Mostafa Heidari.** 2012. Effects of salinity stress on growth, chlorophyll content and osmotic components of two basil (*Ocimum basilicum* L.) genotypes. *Africa journal of biotechnology*. 11(2): 379-384.

**Mostafa Heidari** and Amir Golpayegani. 2012. Effects of water stress and inoculation with plant growth promoting rhizobacteria (PGPR) on antioxidant status and photosynthetic pigments in basil (*Ocimum basilicum* L.). *Journal of the Saudi Society of Agricultural Sciences*. 11, 57-61.

**Mostafa Heidari** and Simin Sarani . 2012. Growth, biochemical components and ion content of Chamomile (*Matricaria chamomilla* L.) under salinity stress and iron deficiency. *Journal of the Saudi Society of Agricultural Sciences*. 11, 37-42

Rezapor, A. R., **Heidari, M.**, Galavi, M. and Ramrodi, M. 2012. Effect of water stress and different amounts of sulfur fertilizer on grain yield, grain yield components and osmotic adjustment in *Nigella sativa* L. *Iranian Journal of Medical and Aromatic Plants*. 53: 384-391.

Seyed Mohsen Mousavi Nik, Mohammad Hosein Bijeh keshavarzi, **Mostafa Heidari** and Gholam Reza Yarahmadi. 2011. Studies of changes in chlorophyll content in *Artemisia annua* L. under the effects of biological and chemical fertilizers. *Annals of Biological Research*, 2 (5):196-202.

**Mostafa Heidari**, Mohammad Galavi and Maryam Hassani. 2011. Effect of sulfur and iron

fertilizers on yield, yield components and nutrient uptake in Sesame (*Sesamum indicum L.*) under water stress. Africa Journal of Biotechnology. 10(44):8816-8822.

**Mostafa Heidari** and Semin Sarani. 2011. Effects of lead and cadmium on seed germination, seedling growth and antioxidant enzymes activities of mustard (*Sinapis arvensis L.*). ARPN Journal of Agricultural and Biological Science. 6 (1): 39-46.

**Mostafa Heidari** and Parisa Jamshidi. 2011. Effects of Salinity and Potassium Application on Antioxidant Enzyme Activities and Physiological Parameters in Pearl Millet. Agricultural Sciences in China, 10(2): 228-237

Ahmad Ahmadian, Ahmad Ghanbari, Bart Ali Siahsar, **Mostafa Haydari**, Mahmood Ramroodi and Sayed Mohsen Mousavinik. 2011. Study of Chamomile's yield and its components under drought stress and organic and inorganic fertilizers using and their residue. Journal of Microbiology and Antimicrobials Vol. 3(2), pp. 23-28.

**Mostafa Heidari**, Sayed Mohsen Mousavinik and Amir Golpayegani. 2011. Plant growth promoting rhizobacteria (PGPR) effect on physiological parameters and mineral uptake in basil (*Ocimum basilicum L.*) under water stress. ARPN Journal of Agricultural and Biological Science. 6(5): 6-11.

**M. Heidari**, H. Steppuhn and F. Farzaneh. 2011. Effects of Nitrogen Sources on Nitrate Reductase Activity and Some Physiological Parameters in Psyllium (*Plantago ovata F.*) under Salinity Stress. Journal of Agricultural Science and Technology. 5: 412-419.

Hamid Marvi, **Mostafa Heidari** and Mohammad Armin. 2011. Physiological and biochemical responses of wheat cultivar under salinity stress. ARPN Journal of Agricultural and Biological Science. 6(5): 35-40.

**Mostafa Heidari**, Ahmad Abdolzadeh and Fatemeh Farzaneh. 2011. Effect of Different Levels of Salinity and Nitrogen Sources on Growth and Chemical Contents in Psyllium (*Plantago ovata F.*). Iranian Journal of Field Crop Science. 42 (1) 199-207.

Elaheh Kamali, Zaman Shahmohamadi, **Mostafa Heidari** and Mohammad Faizi. 2011. Effects of Irrigation Water Salinity and Leaching Fraction on Soil Chemical Characteristic, Grain Yield, Yield Components and Cation Accumulation in Safflower in Esfahan. Iranian Journal of Field Crop Science. 42 (1) 63-70.

Babaeian , M.1 , **M. Heidari** , A. Ghanbari. 2011. Effect of water stress and foliar micronutrient application on physiological characteristics and nutrient uptake in sunflower (*Helianthus annuus L.*). Iranian Journal Crop Science. 21(4): 377-391.

28- Arazmjo , E , **M. Heidari** , A. Ghanbari. 2010. Effect of water stress and type of fertilizer on yield and quality of chamomile (*Matricaria chamomilla L.*). 12 (2): 100-111.

**Mostafa Heidari, 2010.** Nucleic acid metabolism, proline concentration and antioxidants enzyme activity in canola (*Brassica nupus L.*) under salinity stress. Agricultural sciences in china. 9(4): 504-511.

**Heidari M** and Jamshid P. 2010. Interaction between salinity and potassium on grain yield, carbohydrate content and nutrient uptake in pearl millet. ARPN Journal of Agricultural and

Biological Science. 5 (6): 39-46.

**Mostafa Heidari**. 2009. Antioxidant Activity and Osmolyte Concentration of Sorghum (*Sorghum bicolor*) and Wheat (*Triticum aestivum*) Genotypes under Salinity Stress. Asian Journal of Plant Sciences. 8 (3):240-244.

A. Arazmjo , **M. Heidari** , A. Ghanbari . 2009. The effect of water stress and three sources of fertilizers on flower yield, physiological parameters and nutrient uptake in chamomile (*Matricaria chamomilla* L.). Iranian Journal of Medical and Aromatic Plants.25 (4):482-494

**Mostafa Heidari**, Ahmad Ghanbari and Yaser Esmailyan, 2009. Effect of Municipal wastewater with manure and chemical fertilizers on the trace element contents in soil and corn yield .International Journal of Applied Agricultural Research. 4(1): 37-46.

**Mostafa Heidari**. 2009. Variation in seed germination, seedling growth, nucleic acid and biochemical component in canola (*Brassica nupus* L.) under salinity stress. Asian Journal of Plant Sciences. 8(8): 557-561.

**Mostafa Heidari** and Fatmeh Mesri, 2008. Salinity effects on compatible solutes, antioxidants enzymes and ion content in three wheat cultivars. Pakistan journal of biological sciences, 11(10)1385-1389.

Yaser Esmailyan, **Mostafa Heidari** and Ahmad Ghanbari. 2008. Effect of Municipal wastewater with manure and chemical fertilizer on grain yield and yield components in corn KoSc704. Journal of Agronomy. 7(3): 277-280.

Safora Bazi, **Mostafa Heidari** , Nafyseh Mahdinejat and Frogh Abbasi. 2008. Effects of different salinity stress on osmotic adjustment and antioxidant-enzymatic active in two sorghum genotypes. Journal of Science and Technology of Agriculture and Natural Resource, Water and Soil. 46(4): 9-16.

A. Lotfi , A.A. Vahabi Sedehi\* , A. Ganbari , **M. Heidari**. 2008. The effect of deficit irrigation and manure on quantity and quality traits of plantago ovata Forssk in Sistan region. Iranian Journal of Medical and Aromatic Plants. 42: 506-518.

### Conferences

**Mostafa Heidari** and Abdol Mehdi Bakhshandeh. 2007. Effects of increasing soil salinity and nitrogen levels on grain yield, osmotic adjustment and nutrient uptake in wheat. International conference Rhizospher 2, France.

**Mostafa Heidari**. 2008. Salinity stress effects on the antioxidant enzymes and biochemical components in two sorghum cultivars. 9<sup>th</sup> international conference on systems biology, Sweden.

**Mostafa Heidari**. 2010. Physiological responses of eight wheat cultivars under salinity stress. 3<sup>rd</sup> Annual International Symposium on Agricultural Research. 15-18 July 2010, Athens, Greece.

**Mostafa Heidari** and Semin Sarani.2011. Effects of salinity stress and iron deficiency on biochemical and physiological parameters in Chamomile. Asian Congress on Biotechnology. Shanghai, China.

**Mostafa Heidari** and Toktam Akbari. 2012. Effect of salinity stress on photosynthesis pigments

and osmotic components of two Marigold (*Tagetes patula* L.) genotypes. University Malaysia Terengganu Annual Seminar (UMTAS 2012).

### **Expertise**

Crop environmental stress physiology; Crop nutritional physiology; environmental stress change impacts on crop yield and quality; Root characteristics and acquisition of water and mineral nutrients.

### **Awards**

Selected as the top researcher on Agriculture college, University of shahrood, in 2014.

### **Reviewer for scientific journals**

Environmental Stresses in Crop Sciences

Journal of Field Crops Research