

Parviz Heidari



Personal information:

Ph.D of plant biotechnology

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2016-present: Associate professor of plant biotechnology, Shahrood University of Technology

Research Experience

Mar 2014 – Oct 2014 **Researcher**

University of Groningen, Ecophysiology, Groningen, Netherlands
signal transduction in tomato root under low temperature

Oct 2011 – Feb 2015 **PhD Student**

Sari Agricultural Sciences and Natural Resources University, Department of
Agronomy, Plant Breeding and Biotechnology
Sari, Iran

Skills & Activities

Skills Signal Transduction, Transcriptomics, Hormone profiling, Polyploidy,
Genomics, Bioinformatics and Computational Biology, NGS Data Analysis,
Pathway Analysis, Molecular Biology, Cytogenetics, Genetic diversity,
Bioremediation

Interests: Cell Signal Transduction, Plant Genome & Bioinformatics and Computational
Biology

Editorial boards Guest Editor (International Journal of Molecular Sciences, IF=5.92)

Topic Editor (Frontiers in Plant Science, IF=5.75)

Reviewer of BMC genomics

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Reviewer of Scientia Horticulturae

Reviewer of PLOS One

Reviewer of Frontiers in plant science

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Journal Publications

- HS Hosseini Pouya, Abdullah, **P Heidari**. *Magnesium Transport Systems in Plants: Function, Physiological Roles, and Impact on Related Molecular Pathways: a Review*. *Plant Molecular Biology Reporter*. 2026. 44 (2), 43
- Abdullah, C Chen, R Yan, A Sammad, **P Heidari**, T Hussain, et al. *Comparative chloroplast genomics of Hibiscus (Malvaceae) and its phylogenetic implications*. *BMC Plant Biology*. 2026.
- S Panahi-Moghaddam, **P Heidari**, HR Asghari, Abdullah. *The role of arbuscular mycorrhizal symbiosis in maintaining potassium uptake in bean under drought and ABA stress*. *Scientific Reports*. 2026.
- Z Alizadeh, **P Heidari**, HR Asghari. *The impact of symbiosis between arbuscular mycorrhizal fungi and beans on potassium absorption and transporters in response to salt stress*. *BMC Plant Biology*. 2026.
- R Yan, Abdullah, Y Zeng, A Sammad, **P Heidari**, J Liu, X Tian. *Chloroplast Genomes of Croton alabamensis and Croton bonplandianus (Euphorbiaceae): Comparative Analysis With Related Croton Species*. *Ecology and Evolution*. 2026: 16 (4), e73288.
- M Rezaei, **P Heidari**, S Reim. *Integrated Metabolomics and Targeted Gene Expression Profiling Reveal the Arginine–Anthocyanin Axis in Pomegranate Aril Paleness Disorder*. *Current Issues in Molecular Biology*. 2026: 48 (2), 225.
- S Tahmasebi, P Jonoubi, M Majdi, A Majd, **P Heidari**. *Ovule and pollen development in Camelina sativa provides systematic insights*. *Scientific Reports*. 2026.
- P Heidari**, Abdullah. *Sulfate Transporters in Plants: Functions, Regulation, and Interactions*. *Physiologia Plantarum*. 2026 178 (1), e70798.
- S Panahi-Moghaddam, **P Heidari**, HR Asghari. *Arbuscular Mycorrhizal Increases the Concentration of Potassium and KUPs Activity in Phaseolus vulgaris Under Drought Stress and ABA Application*. *Journal of Sustainable Agriculture and Environment*. 2025: 4 (4), e70125
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- Abdullah, A Rahmatulla, C Chen, R Yan, I Naz, **P Heidari**, I Ahmed, et al. *Comparative chloroplast genomics of Erigeron (Asteroideae, Asteraceae)*. *BMC Plant Biology*. 2025: 25 (1), 1356
- H Li, R Yan, C Chen, M Islam, A Majid, I Ahmed, **P Heidari**, X Tian. *Evolutionary dynamics of the chloroplast genome in Daphne (Thymelaeaceae): comparative analysis with related genera and insights into phylogenetics*. *FEBS open bio*. 2025.

- H Li, J Jia, Abdullah, A Sammad, SA Shah, Y Huang, Y Cui, **P Heidari**, et al. *Chloroplast Genomes Characterization of Aconitum violaceum, Caltha palustris, and Delphinium denudatum (Ranunculaceae)*. Ecology and Evolution. 2025: 15 (10), e72276.
- HS Hosseini Pouya, M Cheniany, **P Heidari**. *Decoding the CBL gene family in durum wheat: Insights into dual ABA signaling pathways and calcium-mediated drought tolerance*. The Plant Genome. 2025: 18 (3), e70062.
- HS Hosseini Pouya, F Zare, **P Heidari**. *Regulation of heavy metal balance in plants: roles of transporters, chelators, and signaling mechanisms*. Journal of Crop Health. 2025: 77 (4), 117.
- Abdullah, D Haram, R Yan, M Ma, I Naz, R Ullah, SA Shah, I Ahmed, **P Heidari**, et al. *Inverted repeats dynamics shape Asclepiadoideae (Apocynaceae) Chloroplast genomes: effects on genome size, gene content, structural arrangement, and mutation rate*. BMC genomics. 2025: 26 (1), 697.
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- HS Pouya, M Cheniany, **P Heidari**. *Insights into TtCIPK gene family and its roles in durum wheat in response to PEG and ABA treatments*. Scientific Reports. 2025: 15 (1), 25419.
- P Heidari**, M Ahmadizadeh, S Rezaee. *Genome-wide analysis of the ammonium transporters gene family in Phaseolus vulgaris and its roles in response to drought and salinity stress*. Scientific Reports. 2025 15 (1), 22069.
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- Abdullah, Sahar Faraji, Furrukh Mehmood, Hafiz Muhammad Talha Malik, Ibrar Ahmed, **Parviz Heidari** and Peter Poczai. *The GASA Gene Family in Cacao (Theobroma cacao, Malvaceae): Genome Wide Identification and Expression Analysis*. *Agronomy*, 7, 7, 1-20, 2021-07-24
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Sahar Faraji, Ertugrul Filiz, Seyed Kamal Kazemitabar, Alessandro Vannozzi, Fabio Palumbo, Gianni Barcaccia and **Parviz Heidari**: *The AP2/ERF Gene Family in Triticum durum: Genome-Wide Identification and Expression Analysis under Drought and Salinity Stresses*. *Genes*. 12/2020.

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Mostafa Ahmadizadeh, Sadra Rezaee, **Parviz Heidari**: *Genome-wide characterization and expression analysis of fatty acid desaturase gene family in Camelina sativa*. Gene reports. 11/2020.

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Thomas Nussbaumer, Olivia Debnath, Christian Wagner, **Parviz Heidari**: *TraitCorr as a workbench for correlating gene expression measurements with phenotypic data*. Gene Reports. 2020. <https://doi.org/10.1016/j.genrep.2020.100649>.

Kobra Abiri, Mehdi Rezaei, Hamidreza Tahanian, **Parviz Heidari**, Ali Khadivi: *Morphological and pomological variability of a grape (Vitis vinifera L.) germplasm collection*. Scientia Horticulturae 04/2020; 266.

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Mehdi Rezaei, **Parviz Heidari**, Ali Khadivi: *Identification of superior apricot (Prunus armeniaca L.) genotypes among seedling origin trees*. Scientia Horticulturae 02/2020; 262.

Ali Khadivi, **Parviz Heidari**, Mehdi Rezaei, Amir Safari-Khuzani, Mohammad Sahebi: *Morphological variabilities of Crataegus monogyna and C. pentagyna in northeastern areas of Iran*. Industrial Crops and Products 11/2019; 139., DOI:10.1016/j.indcrop.2019.111531.

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K. Seifpanahi-Shabani, A. Eyvazkhani¹, **Parviz Heidari**: *Bioremediation of Textile Dyes Wastewater: Potential of Bacterial Isolates from a Mining Soils and Wetlands*, Progress in Color, Colorants and Coatings, 2019, 12(3): 155-161. [Scopus]

Mehdi Rezaei, Hossein Hokmabadi, Ali Khadivi, Amir Safari-Khuzani, **Parviz Heidari**. *The selection of superior pistachio (Pistacia vera L.) genotypes among seedling trees originated from open-pollination*. Scientia Horticulturae 03/2019; 251:88-100.

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Mostafa Ahmadizadeh, **Parviz Heidari**: *Bioinformatics study of transcription factors involved in cold stress*. Biharean Biologist 09/2014; 8(2):83-86.

Hamid Najafi-Zarrini, **Parviz Heidari**: *Identification of Transport Proteins in Arabidopsis leaf plasma membrane by 2DLC-MALDI-TOF*. Biharean Biologist 06/2014; 8(1):16-20.

Parviz Heidari, Ali Ashraf Mehrabi, Ali Asghar, Nasrolah Nezhad Ghomi: *Cytogenetic diversity of Iranian balm (Melissa officinalis) landraces and genetic relationship within and between them using ITS markers*. Biharean Biologist 12/2013; 7(2).

Mohammad Zaeifizadeh, Sattar Tahmasebi Enferadi, Amir Mousavi, **Parviz Heidari**, Mostafa Ahmadizadeh: *Quick method for screening of tolerant sunflower (Helianthus annuus L.) genotypes to Sclerotinia sclerotiorum at seedling stage*. *Biharean Biologist* 06/2013; 7(1):29-32.