

**Name:** Hamid-Reza Fallahi

**Affiliation:**

- Associate Professor of Crop Ecology, Department of Plant Production & Genetics, Faculty of Agriculture, University of Birjand, Iran.

-Head of Plant & Environmental Stresses Research Group (PESRG), University of Birjand. Iran.

**E-Mail:** Hamidreza.fallahi@birjand.ac.ir

**Homepage:** <http://cv.birjand.ac.ir/teachers.php>

**Google scholar page:**

<https://scholar.google.com/citations?user=0nFDpHYAAAAJ&hl=en>



**Research Interests:** Agroecology, Sustainable Agriculture, Organic Agriculture, Environmental stresses, Seed Science, Medicinal Plants, Saffron Cultivation

**M. Sc. Thesis:**

Effects of biofertilizers and chemical fertilizers on quantity and quality characterizes of Chamomile (*Matricaria chamomilla*) as a medicinal plant.

**Ph. D Thesis:**

Application of RothC model to predict carbon sequestration and study the effect of climate change on carbon budget of the natural vegetation of Hossein Abad- Sarbisheh in Southern Khorasan province.

**Research works:**

**A. Books**

1. Ahmadian, A., Arazmjoo, E., **Fallahi, H.R.** 2014. Chamomile: Industrial Profile. Torbat-e Heydarieh University Press. Translation. [In Persian].
2. Behdani, M.A., **Fallahi, H.R.**, Aghhavani-Shajari, M. 2015. Future Crops. University of Birjand Press. Translation. [In Persian].
3. **Fallahi, H.R.**, Rezvani-Moghaddam, P., Behdani, M.A., Aghhavani-Shajari, M., Jahedi-pour, S., Yari, A. 2015. Principals of Carbon Sequestration. Jihad-e Daneshgahi Publication. [In Persian].
4. Behdani, M.A., **Fallahi, H.R.** 2016. Saffron: Technical Knowledge Based on Research Approaches. University of Birjand Press. [In Persian].
5. Behdani, M.A., **Fallahi, H.R.** 2018. Technical Knowledge of Saffron Production. Haft Rang Press. [In Persian].
6. Koocheki, A., **Fallahi, H.R.**, Jami-Al-Ahmadi, M. 2020. Saffron water requirements (pp: 67-92). In: Saffron: Science, Technology and Health (Edited by: Koocheki, A., Khajeh-Hosseini, M). Elsevier.
7. **Fallahi, H.R.**, Behdani, M.A., Aghhavani-Shajari, M. 2023. Food and Nutrition Ecology. In: Dryland Agroecology, First Part: Food Ecology (Eds: Koocheki, A., Nassiri Mahallati, M., Khorramdel, S., Khajeh-Hossini, M.). Chapter 9. Pp: 185-208. Ferdowsi University of Mashhad Press. (In Persian).
8. Aghhavani-Shajari, M., **Fallahi, H.R.** 2023. Carbon Sequestration in Agroecosystems. In: Dryland Agroecology, Third Part: Eco-friendly Strategies (Eds: Koocheki, A., Nassiri Mahallati, M., Khorramdel, S., Khajeh-Hossini, M.). Chapter 49. Pp: 1336-1385. Ferdowsi University of Mashhad Press. (In Persian).

**B. Articles**

**B-1. Journal articles**

1. **Fallahi, H.R.**, Koocheki, A. and P. Rezvani Moghaddam. 2008. Investigation the effect of organic fertilizers on quantity index and the amount of essential oil and chamazulene in chamomile (*Matricaria recutita*). Journal of Agriculture Research. 8(1): 157-168. [In Persian with English Summary].
2. **Fallahi, H.R.**, Ebadi, M.T. and R. Ghorbani. 2008. The effects of salinity and drought stresses on germination and seedling growth of clary (*Salvia sclarea*). Environmental Stresses in Agricultural Sciences. 1(1): 57-67. [In Persian with English Summary].

3. **Fallahi, H.R.**, Koocheki, A. and P. Rezvani Moghaddam. 2009. Effects of biofertilizers on quantitative and qualitative yield of chamomile (*Matricaria recutita*) as a medicinal plant. Iranian Journal of Field Crop Research. 7(1): 127-135. [In Persian with English Summary].
4. Hashemi, M., Jamshidi, A., Hedayati, M., **Fallahi, H.R.** 2009. Antibacterial effects of some medicinal plants on isolated salmonella from eggs consumed in Mashhad. Attachment of Journal of Veterinary, Islamic Azad University of Tabriz. 3(2): 177-179. [In Persian with English Summary].
5. **Fallahi, H.R.**, Ebadi, M.T., Rezvani Moghaddam, P., Hedayati, M. and S. Tarighi. 2010. Evaluation of essential oil of six medicinal plants on Controlling Salmonella Bacteria in Comparison with Streptomycin. Iranian Veterinary Journal. 6(1): 25-33. [In Persian with English Summary].
6. Yazdani-Biuki, R., Rezvani-Moghaddam, P., Koocheki, A., Amiri, M.B., **Fallahi, H.R.** and R. Deyhim-Fard. 2010. Effects of seed nourished by different levels of nitrogen, biofertilizers and drought stress on germination indices and seedling growth of wheat (*Triticum aestivum*) cv. Sayonz. Journal of Agroecology. 2(2): 266-276. [In Persian with English Summary].
7. **Fallahi, H.R.**, Rezvani Moghaddam, P. and M. Nasiri Mohallati. 2010. Effect of harvesting date on quantitative and qualitative characteristics of seedless Barberry (*Berberis vulgaris*) fruit. Iranian Journal of Field Crop Research. 8(2): 225-234. [In Persian with English Summary].
8. **Fallahi, H.R.**, Khajeh-Hosseini, M. 2011 Effects of applying various levels of nitrogen on parent plants on the resistance to salinity stress in achieved seeds in *Triticum aestivum* L. cv. Gaskojen at germination period. Journal of Agricultural Technology 7(6):1743-1754.
9. Mohamad Abadi, A.A., Rezvani Moghaddam, P., **Fallahi, H.R.** and, Z. Bromand Rezazadeh. 2011. Effect of chemical and organic fertilizers on quantitative and qualitative characteristics of fenugreek (*Trigonella foenum-graecum*) forage. Journal of Agroecology. 3(4): 491-499. [In Persian with English Summary].
10. Koocheki, A., Rezvani Moghaddam P. **Fallahi, H.R.** 2011. Effects of spring, summer and autumn planting dates, irrigation management and companion crops on saffron yield. Journal of Agroecology. In press. [In Persian with English Summary].
11. Amiri, M.B., Rezvani moghaddam, P., Ghorbani, R., **Fallahi, H.R.**, Fallah Poor, F. and R. Dayhim Far. 2011. Effects of seed priming by biofertilizers on the growth characteristics of three wheat cultivars at the emergence period under greenhouse conditions. Iranian Journal of Field Crop Research. 11(1): 64-73. [In Persian with English Summary].
12. Amiri, M.B., Rezvani Moghaddam, P., Ehyai, H.R., **Fallahi, H.R.**, Aghhavani shajari, M. 2011. Effect of osmotic and salinity stresses on germination and seedling growth indices of artichoke (*Cynara scolymus*) and purple coneflower (*Echinacea purpurea*). Environmental Stress in Crop Science. 3(2): 165-174. [In Persian with English Summary].
13. Mohammad-Abadi, A.A., Rezvani-Moghaddam, P., **Fallahi, H.R.** 2011. Effects of planting pattern and the first irrigation date on growth and yield of saffron. Journal of Agroecology. 3(1): 84-93. [In Persian with English Summary].
14. Amiri, M.B., Rezvani Moghaddam, P., Ehyai, H.R., **Fallahi, H.R.**, Aghhavani shajari, M. 2011. Response of germination and seedling growth of Hyssop (*Hyssopus officinalis*) and Marguerite (*Chrysanthemum superbum*) medicinal plants to water stress. Journal of Plant Ecophysiology. 8(3): 65-77. [In Persian with English Summary].
15. Aghhavani Shajari, M., Nemati, S.H., Mehrbakhsh, M.M., **Fallahi, H.R.**, Haghighi Tajvar, F. 2012. Effects of different substrates and irrigation on seedling growth indices of different cultivars of tomato (*Lycopersicon esculentum*) in greenhouse. Journal of Horticultural Science. 26(1): 87-95. [In Persian with English Summary].
16. **Fallahi, H.R.**, Rezvani Moghaddam, P., Nassiri Mahallati, M., Behdani, M.A. 2013. Validation of RothC model for evaluation of carbon sequestration in a restored ecosystem under two different climatic scenarios. Journal of Water and Soil. 27(3): 656-668. [In Persian with English Summary].
17. **Fallahi, H.R.**, Rezvani Moghaddam, P., Nassiri Mahallati, M., Behdani, M.A., Aghhavani Shajari, M., Amiri, M.B. 2013. Influence of seed nitrogen content and biofertilizer priming on wheat germination in salinity stress conditions. Archives of Agronomy and Soil Science. 59(6): 791-801.

18. Rezvani Moghaddam, P., **Fallahi, H.R.**, Aghhavani-Shajari, M., Nassiri Mahallati, M. 2013. Effects of harvest date, harvest time, and post-harvest management on quantitative and qualitative traits in seedless barberry (*Berberis vulgaris* L.). *Industrial Crops and Products*. 42: 30-36.
19. **Fallahi, H.R.**, Rezvani Moghaddam, P., Nassiri Mahallati, M., Behdani, M.A. 2013. The use of diversity indices to assess the effect of restoration and conservation on plant diversity of a rangeland in South Khorasan Province, Iran. *Journal of Agricultural Technology* 9(2):395-412.
20. **Fallahi, H.R.**, Rezvani-Moghaddam, P., Nassiri-Mahallati, M., Behdani, M.A. 2014. Floristic analysis and study of plant diversity in protected rangeland of HusseinAbad - South Khorasan Province, Iran. *Iranian Journal of Range and Desert Research*. 21(1): 62-74. [In Persian with English Summary].
21. Rezvani-Moghaddam, P., Mohammad Abadi, A.A., **Fallahi, H.R.**, Aghhavani shajari, M. 2014. Effects of nutrient management on flower yield and corm characteristics of saffron (*Crocus sativus* L.). *Journal of Horticultural Science*. 28(3): 427-434. [In Persian with English Summary].
22. **Fallahi, H.R.**, Paravar, A., Behdani, M.A., Aghhavani-Shajari, M., Fallahi, M.J. 2014. Effects of saffron corm and leaf extracts on early growth of some plants to investigate the possibility of using them as associated crop. *Notulae Scientia Biologicae*. 6(3):282-287.
23. **Fallahi, H.R.**, Mohammadi, M., Aghhavani-Shajari, M., Ranjbr. F. 2015. Determination of germination cardinal temperatures in two basil (*Ocimum basilicum* L.) cultivars using non-linear regression models. *Journal of Applied Research on Medicinal and Aromatic Plants* 2: 140-145.
24. **Fallahi, H.R.**, Taherpour Kalantari, R., Aghhavani-Shajari, M., Soltanzadeh, M.G. 2015. Effect of super absorbent polymer and irrigation deficit on water use efficiency, growth and yield of cotton. *Notulae Scientia Biologicae*. 7(3):338-344.
25. **Fallahi, H.R.**, Fadaeian, G., Gholami, M., Daneshkhah, O., Hosseini, F.S., Aghhavani-Shajari, M., Samadzadeh, A. 2015. Germination response of grasspea (*Lathyrus sativus* L.) and arugula (*Eruca sativa* L.) to osmotic and salinity stresses. *Plant Breeding and Seed Science*. 71: 97-108.
26. **Fallahi, H.R.**, Alami, S., Behdani, M.A., Aghhavani Shajari, M. 2015. Evaluation of local and scientific knowledge in saffron agronomy (Case study: Sarayan). *Journal of Saffron Research*. 3(1): 31-50. [In Persian with English Summary].
27. Aghhavani Shajari, M., Rezvani Moghaddam, P., Koocheki, A., **Fallahi, H.R.**, Taherpour Kalantari, R. 2015. Evaluation of the effects of soil texture on yield and growth of saffron (*Crocus sativus* L.). *Saffron Agronomy & Technology*. 2(4): 311-322. [In Persian with English Summary].
28. **Fallahi, H.R.**, Rezvani-moghaddam, P., Amiri, M.B., Aghhavani-Shajari, M., Yazdani Biuki, R. 2015. The study of nutritional management of mother plant and seed priming by biofertilizers on improve salinity tolerance of wheat (*Triticum aestivum* L.) cv. Sayonz at germination period. *Journal of Agroecology*. 6(4): 689-700. [In Persian with English Summary].
29. Behdani, M.A., Jami Al-Ahmadi, M., **Fallahi, H.R.** 2016. Biomass partitioning during the life cycle of saffron (*Crocus sativus* L.) using regression models. *Journal of Crop Science and Biotechnology*. 19(1): 71-76.
30. **Fallahi, H.R.**, Zamani, G., Mehrabani, M., Aghhavani-Shajari, M., Samadzadeh, A. 2016. Influence of superabsorbent polymer rates on growth of saffron replacement corms. *Journal of Crop Science and Biotechnology*. 19(1): 77-84.
31. Samadzadeh, A.R., **Fallahi, H.R.**, Nakhaei, S., Aghhavani-Shajari, M., Amirzadeh, A. 2016. Impact of super absorbent polymer and irrigation management on seed and essential oil yields of cumin. *Journal of Medicinal Plants and by Products*. 2: 145-152.
32. Koocheki, A., Rezvani Moghaddam, P., **Fallahi, H.R.**, Aghhavani-Shajari, M. 2016. The study of saffron (*Crocus Sativus* L.) replacement corms growth in response to planting date, irrigation management and companion crops. *Saffron Agronomy & Technology*. 4(1): 3-18. [In Persian with English Summary].
33. **Fallahi, H.R.**, Aghhavani Shajari, M., Taherpour Kalantari, R., Soltanzadeh, M.G. 2016. Evaluation of superabsorbent efficiency in response to dehydration frequencies, salinity and temperature and its effect on yield and quality of cotton under deficit irrigation. *Journal of Agroecology*. 7(4):513-527. [In Persian with an Extended English Summary].

34. Rezvani-Moghaddam, P., **Fallahi, H.R.**, Balandari, A. 2016. Ecological aspects and phytochemical characteristics of some medicinal plants of Labiateae in Khorasan province. Plant Ecophysiology. 24: 209-222. [In Persian with English Summary].
35. Koocheki, A., **Fallahi, H.R.**, Amiri, M.B., Ehyaei, H.R. 2016. Effects of humic acid application and mother corm weight on yield and growth of Saffron (*Crocus sativus* L.). Journal of Agroecology 7(4): 425-442. [In Persian with an Extended English Summary].
36. Koocheki, A., Rezvani Moghaddam, P., **Fallahi, H.R.** 2016. Effects of planting dates, irrigation management and cover crops on growth and yield of saffron (*Crocus sativa* L.). Journal of Agroecology. 8(1): 435-451. [In Persian with an Extended English Summary].
37. Behdani, M.A., Zamani, G., **Fallahi, H.R.**, Sayyari Zohan, M.H., Samadzadeh, A. 2016. Evaluation of cormel growth criteria of saffron in response to different organic and conventional production systems. Saffron Agronomy and Technology. 5(2):133-147. [In Persian with English Summary].
38. Jabbari, M., Khayyat, M., **Fallahi, H.R.**, Samadzadeh, A. 2017. Influence of Saffron corm soaking in salicylic acid and potassium nitrate on vegetative and reproductive growth and its chlorophyll fluorescence indices. Saffron Agronomy and Technology. 5(1): 21-35. [In Persian with an Extended English Summary].
39. **Fallahi, H.R.**, Ghorbani, M., Aghhavani-Shajari, M., Samadzadeh, A., Asadian, A.H. 2017. Qualitative response of roselle to planting methods, humic acid application, mycorrhizal inoculation and irrigation management. Journal of Crop Improvement. 31(2): 192-208.
40. **Fallahi, H.R.**, Aghhavani-Shajari, M., Mohammadi, M., Kadkhodaei Barkook, R., Zareei, E. 2017. Predicting of flixweed (*Descurainia sophia* (L.) Webb ex Prantl) germination response to temperature using regression models. Journal of Applied Research on Medicinal and Aromatic Plants 6: 131-134.
41. **Fallahi, H.R.**, Ramazani, H.R., Ghorbani, M., Aghhavani-Shajari, M. 2017. Path and factor analysis of roselle (*Hibiscus sabdariffa* L.) performance. Journal of Applied Research on Medicinal and Aromatic Plants 6: 119-125.
42. **Fallahi, H.R.**, Ghorbani, M., Aghhavani-Shajari, M., Samadzadeh, A., Asadian, A.H. 2017. Influence of arbuscular mycorrhizal inoculation and humic acid application on growth and yield of roselle (*Hibiscus sabdariffa* L.) and its mycorrhizal colonization index under deficit irrigation. International Journal of Horticultural Science and Technology. 3(2): 113-128.
43. **Fallahi, H.R.**, Zamani, Gh., Aghhavani-Shajari, M., Samadzadeh, A.R., Branca, F., Mehrabani, M. 2017. Saffron flower and stigma yield changes in response to application of different levels of super absorbent polymer. Journal of Medicinal Plants and By-products. 6(2): 145-151
44. **Fallahi, H.R.**, Aghhavani-Shajari, M., Feizi, H., Sahabi, H. 2017. Mother corm weight and soil amendment improves the vegetative and reproductive growth of saffron (*Crocus sativus* L.). Journal of Medicinal & Spice Plants (Zeitschrift für Arznei- & Gewürzpflanzen). 22(3): 110-114.
45. **Fallahi, H.R.**, Ghorbany, M., Aghhavani-Shajari, M., Samadzadeh, A., Khayyat, M., Maraki, Z., Asadian, A.H. 2017. Effects of irrigation management, mycorrhizal inoculation and humic acid application on color characteristics of roselle (*Hibiscus sabdariffa* L.) dried sepals. Environmental Stresses in Crop Science. 10(4): 571-582. [In Persian with Extended English Summary].
46. **Fallahi, H.R.**, Aminifard, M.H., Jorkesh, A. 2018. Effects of thiamine spraying on biochemical and morphological traits of basil plants under greenhouse conditions. Journal of Horticulture and Post-Harvest Research. 1(1): 27-36.
47. **Fallahi, H.R.**, Aghhavani-Shajari, M., Branca, F., Davarzani, J. 2018. Effect of different concentrations of saffron corm and leaf residue on the early growth of arugula, chickpea and fenugreek under greenhouse conditions. Acta agriculturae Slovenica. 111(1): 51-61.
48. Khayyat, M., Jabbari, M., **Fallahi, H.R.**, Samadzadeh, A. 2018. Effects of corm dipping in salicylic acid or potassium nitrate on growth, flowering, and quality of saffron. Journal of Horticultural Research. 26(1): 13-21.
49. Aminifard, M.H., Jorkesh, A., **Fallahi, H.R.**, Alipoor. K. 2018. Foliar application of thiamin stimulates the growth, yield and biochemical compounds production in coriander and fenugreek. Journal of Horticultural Research. 26(1): 77-85.

50. Jabbari, M., Khayyat, M., **Fallahi, H.R.**, Samadzadeh, A. 2018. Effects of foliar application of salicylic acid and potassium nitrate on chlorophyll content, electrolyte leakage and daughter corm growth of saffron. *Journal of Saffron Research*. 6(1): 27-49. [In Persian with English Summary].
51. Aghhavani-Shajari, M., **Fallahi, H.R.**, Ramezani-Zonouk, M. 2018. Response of roselle (*Hibiscus sabdariffa*) to drought and salinity stresses during germination and seedling growth stages. *Journal of Seed Research*. 8(1): 28-38. [In Persian with English Summary].
52. **Fallahi, H.R.**, Taherpour Kalantari, R., Asadian, A.H., Aghhavani-shajari, M. Ramazani, S.H.R., 2018. Effect of different soil fertilizing agents on growth and yield of isabgol and black seed as two medicinal plants. *Iranian Journal of Field Crop Sciences*. 49(3): 1-11. [In Persian with English Summary].
53. **Fallahi, H.R.**, Mahmoodi, S. 2018. Influence of organic and chemical fertilization on growth and flowering of saffron under two irrigation regimes. *Saffron Agronomy & Technology* 6(2): 147-166. [In Persian with English Summary].
54. **Fallahi, H.R.**, Mahmoodi, S. 2018. Impact of water availability and fertilization management on saffron (*Crocus sativus* L.) biomass allocation. *Journal of Horticulture and Postharvest Research*. 1(2): 131-146.
55. Ramazani, H.R. **Fallahi, H.R.**, Asadian, A.H. 2018. Effect of deficit irrigation and different levels of nitrogen chemical fertilizer on forage properties in Kochia. *Journal of Applied Research of Plant Ecophysiology*. 5(1): 1-15. [In Persian with English Summary].
56. Aminifard, M.H., Jorkesh, A., **Fallahi, H.R.** 2019. Biochemical, morphological and reproductive growth response of fenugreek to foliar application of glycine betaine and salicylic acid. *Journal of Medicinal & Spice Plants (Zeitschrift für Arznei- & Gewürzpflanzen)*. 23(1): 43-48.
57. Koocheki, A., Rezvani Moghaddam, P., Aghhavani-Shajari, M., **Fallahi, H.R.** 2019. Corm weight or number per unit of land: which one is more effective when planting corm, based on the age of the field from which corms were selected? *Industrial Crops and Products*. 131: 78-84.
58. Aminifard, M.H., Khandan Deh-Arbab, S., **Fallahi, H.R.**, Kaveh, H. 2019. Effects of different levels of algae extract and mother corm weight on photosynthetic pigment content, growth and yield of saffron. *Journal of Saffron Research*. Accepted. [In Persian with English Summary].
59. Ghorbani, M., Ramazani, S.H.R., **Fallahi, H.R.**, Mousavi Koochi, S.M. 2019. Effect of drought stress and bio-fertilizer on yield and yield components of Guar *Cyamopsis tetragonoloba* (L.) Taub. *Journal of Medicinal Plants and by Products*. 8(1): 13-19.
60. Khavari, M., Behdani, M.A., **Fallahi, H.R.** 2019. Influence of plant density, single and combined application of cow manure and chemical fertilizer on seed and mucilage yields in isabgol (*Plantago ovata* Forssk.). *Journal of Agroecology*. 11(3): 1139-1150.
61. Khandan Deh Arbab, S., Aminifard, M.H., **Fallahi, H.R.**, Kaveh, H. 2020. Effect of different levels of novafol bio-fertilizer and mother corm weight on vegetative growth, flowering and chlorophyll content of saffron. *Saffron Agronomy & Technology*, 7(4): 441-455. [In Persian with English Summary].
62. Samadzadeh, A.R., Zamani, G., **Fallahi, H.R.** 2020. Possibility of quinoa production under South-Khorasan climatic condition as affected by planting densities and sowing dates. *Applied Research in Field Crops*. 33(1): 82-104 (In Persian with English Summary).
63. Aminifard, M.H., Jorkesh, A., **Fallahi, H.R.**, Setamdideh Moslemi, F. 2020. Influence of benzyl adenine and salicylic acid on growth, yield and biochemical characteristics of coriander (*Coriandrum sativum* L.). *South African Journal of Botany*. 132: 299.303.
64. Khandan Deh-Arbab, S., Aminifard, M.H., **Fallahi, H.R.**, Kaveh, H. 2020. Evaluating the effects of growth promoting fertilizer containing seaweed extract and mother corm weight on antioxidant activity and stigma quality of saffron. *Plant Productions*. 43(2): 213-226. [In Persian with English Summary].
65. Khashei Siuki, A., Shahidi, A., Dastourani, M., **Fallahi, H.R.**, Shirzadi, F. 2020. Investigating the effect of amendments of zeolite, superabsorbent polymer, and different amounts of irrigation on sesame yield. *Journal of Water Research in Agriculture*. 34(2): 243-255. (In Persian with English Summary).
66. **Fallahi, H.R.**, Abbasi Aval Bohlooli, S., Noferesti, E., Hosseini, S.M., Seddigh Makoo, S., Moodi, M., Khezri, M. 2020. Evaluation the possibility of saffron transplanting and corm

- production in soilless planting system. *Journal of Saffron Research*. 8(2): 79-84 (In Persian with English Summary).
67. **Fallahi, H.R.**, Behdani, M.A., Rezvani Moghaddam, P., Jami Al-Ahmadi, M. 2021. Principles of standardization for organic saffron production in Iran. *Saffron Agronomy & Technology*, 9(1): 43-79. [In Persian with English Summary].
  68. **Fallahi, H.R.**, Aghhavani-Shajari, M., Sahabi, H., Behdani, M.A., Sayyari-Zohan, M.H., Vatandooste, S. 2021. Influence of some pre and post-harvest practices on quality of saffron stigmata. *Scientia Horticulturae*. 278: 109846.
  69. Aghhavani-Shajari, M., **Fallahi, H.R.**, Sahabi, H., Kaveh, H., Branca, F. 2021. Production systems and methods affect the quality and the quantity of saffron (*Crocus sativus* L.). *Spanish Journal of Agricultural Research*. 19(1): e0901.
  70. **Fallahi, H.R.**, Abbasi Aval Bohlooli, S., Pahlavan, Z., Hosseini, S.M., Hosseini, S.A.H., Ghohestani-Bojd, P. 2021. Saffron vegetative growth as affected by transplanting and direct corm planting under field conditions. *Journal of Horticulture and Postharvest Research*. 4 (Special Issue: Recent advances in saffron): 1-10.
  71. Vahidi, H., Mahmoodi, S., Parsa, S., **Fallahi, H.R.** 2021. Evaluation the yield and intercropping indices of millet (*Panicum miliaceum* L.) and quinoa (*Chenopodium quinoa* Willd.) under effect of plant density and cultivation ratios in Birjand region. *Journal of Agroecology*. 13(3): 471-488. [In Persian with English Summary].
  72. Khavari, M., Behdani, M.A., **Fallahi, H.R.** 2022. Effect of different fertilizers and planting density on morphological traits and photosynthetic pigments content in isabgol (*Plantago ovata* Forsk). *Iranian Journal of Field Crop Research*. 19(4): 327-341. [In Persian with English Summary].
  73. Ebrahimi, M., Pouyan, M., Shahi, T., **Fallahi, H.R.**, Hoseini, S., Ragh Ara, H., Branca, F., 2022. Effects of organic fertilisers and mother corm weight on yield, apocarotenoid concentration and accumulation of metal contaminants in saffron (*Crocus sativus* L.). *Biological Agriculture and Horticulture*. 38(2):73-93.
  74. Hasemi, M., Behdani, M.A., Jami Al-Ahmadi, M., **Fallahi, H.R.** 2022. Growth and yield of millet (*Panicum miliaceum* L) as affected by different levels of organic fertilizer and zinc sulfate. *Journal of Agroecology*, 14(1): 95-113. [In Persian with English Summary].
  75. Aminifard, M.H., Khandan Deh Arbab, S., **Fallahi, H.R.**, Kaveh, H. 2022. Effects of different levels of algae extract and mother corm weight on photosynthetic pigment content, growth and yield of saffron. *Journal of Saffron Research*. 9(2): 296-309. [In Persian with English Summary].
  76. Treccarichi, S., Infurna, G.M., Ciulla, A., Rossitto, A., Argento, S., **Fallahi, H.R.**, Branca, F. 2022. Evaluation of innovative growing techniques for organic saffron production in the Mediterranean countries. *Acta Horticulturae*. 1354: 57-62.
  77. Argento, S., Melilli, M.G., Infurna, M.G., Rossitto, A., **Fallahi, H.R.**, Timpanaro, G., Branca, F. 2022. Evaluation of a core collection of *Crocus sativus* L. and *Crocus* spp. for tolerance to salinity stress. *Acta Horticulturae*. 1354: 153-159.
  78. Nazarian, R., **Fallahi, H.R.**, Jami, M.Y., Sahabi, H. 2022. Comparing the effect of organic and chemical nutritional management and intercropping with clover on the quantity and quality of different wheat (*Triticum aestivum* L.) cultivars. *Notulae Scientia Biologicae*. 14(4): 11354.
  79. Askary, M., Behdani, M.A., Mollaei, H., **Fallahi, H.R.** 2023. Evaluation of the effects of organic and conventional cultivation practices on phytochemical and anti-cancer activities of saffron (*Crocus sativus* L.). *Journal of Agricultural Science and Technology*. 25(1): 139-154.
  80. Aminifard, M.H., Khandan Deh Arbab, S., **Fallahi, H.R.**, Kaveh, H. 2023. Evaluation of the effects of amino acid and mother corm weight on antioxidant activity and stigma quality of saffron. *Journal of Saffron Research*. 10(2): 183-194. [In Persian with English Summary].
  81. **Fallahi, H.R.** 2023. Evaluation of flowering potential of saffron corms in different weight groups under hydroponic conditions. *Journal of Saffron Research*. 10(2): 331-344. [In Persian with English Summary].
  82. **Fallahi, H.R.**, Salariyan, A. 2023. Evaluation of saffron irrigation and nutritional management among different farmers groups compared to experts recommendations. *Saffron Agronomy and Technology*. 10(4): 371-390 [In Persian with English Summary].

83. **Fallahi, H.R.**, Salariyan, A. 2023. Analysis and description of the most important agronomic factors affecting yield gap of saffron fields. *Saffron Agronomy and Technology*. 11(1): 23-51. [In Persian with English Summary].
84. Ghorbany, M., **Fallahi, H.R.**, Aghhavani-Shajari, M., Mahmoodi, S., Ramazani, S.H.R. 2023. Feasibility of quinoa production under deficit irrigation and glycine betaine foliar application. *Environmental Stresses in Crop Sciences*. 16(2): 333-347. [In Persian with English Summary].
85. Salehinia, S., Behdani, M.A., Sayyari Zohan, M.H., **Fallahi, H.R.** 2023. The effect of camel manure and manganese sulfate on yield and yield components of Foxtail millet (*Setaria italic*). *Plant Productions*. 46(1): 91-103. [In Persian with English Summary].
86. **Fallahi, H.R.**, Aghhavani-Shajari, M., Sabahi-Bajestani, M., Meysamizadeh, M., Ziba, N., Abgarmi, M., Moradi-Moghaddam, S., Abbasi- Avval Bohlooli, S., Hosseini, S.A.H. 2023. Comparison of flowering and color parameters of saffron stigma obtained from hydroponic and open-field production systems. *Journal of Saffron Research*. 11(1): 94-107. [In Persian with English Summary].
87. Khashei Siuki, A., Shahidi, A., Dastourani, M., **Fallahi, H.R.**, Shirzadi, F. 2023. Yield and quality of sesame (*Sesamum indicum* L.) improve by water preservative materials under normal and deficit irrigation in Birjand. *Agrotechnique in Industrials Crops*. 3(3): 121-132.
88. Golestanifar, F., Mahmoodi, S., **Fallahi, H.R.**, Shahidi, A. 2023. Evaluation of physiological growth analysis of some quinoa (*Chenopodium quinoa* Willd.) varieties under different moisture levels in spring and summer planting dates at South Khorasan region. *Iranian Journal of Field Crops Research*. 22(1): 45-70. [In Persian with English Summary].
89. Danaei-Rad, E., Zamani, G.R., **Fallahi, H.R.** 2023. The effect of foliar application of cycocel on quantitative traits related to the yield of mung bean (*Vigna radiata*) genotypes under water deficit conditions. *Iranian Journal of Pulses Research*. 14(2): 223-235. [In Persian with English Summary].
90. Moradi Moghaddam, S., **Fallahi, H.R.**, Behdani, M.A., Mahmoodi, S. 2024. Growth response of saffron replacement corms to storage conditions of mother corms during summer dormancy. *Saffron Agronomy and Technology*. 11(4), 345-370.
91. Feizi, H., Moosavipoor, S. M., Sahabi, H., **Fallahi, H.R.** 2024. The effect of foliar application of seaweed extract and some nutrients on flowering and apocartenoid content in saffron stigma. *Saffron Agronomy & Technology*. 11(4): 371-391. [In Persian with English Summary].
92. Aminifard, M.H., Khaksari Moghaddam, A., Bayat, H., **Fallahi, H.R.** 2024. The effect of potassium sulfate and seaweed on vegetative growth and yield of saffron (*Crocus sativus* L.) in the Sarayan region. *Journal of Saffron Research*. 11(2): 268-275. [In Persian with English Summary].
93. Aminifard, M.H., Khaksari Moghaddam, A., Bayat, H., **Fallahi, H.R.** 2024. The effect of potassium sulfate and seaweed extract on the photosynthetic pigments of leaves and some stigma active substances of saffron (*Crocus sativus* L.). *Journal of Saffron Research*. 11(2): 297-313. [In Persian with English Summary].
94. Golestanifar, F., Mahmoodi, S., **Fallahi, H.R.**, Shahidi, A. 2024. Effect of planting date and moisture levels on some physiological and biochemical traits of quinoa cultivars (*Chenopodium quinoa* Willd.) in Birjand and Sarbisheh regions. *Iranian Journal of Field Crops Research*. 22(2): 169-195. [In Persian with English Summary].
95. Askary, M., Behdani, M.A., Mollaei, H., **Fallahi, H.R.**, Azarmi Atajan, F., Mokhtari Macinaei, H. 2024. Bioactive compounds and apoptotic effects of saffron (*Crocus sativus* L.) in different fertilizer conditions. *Biochemical Systematics and Ecology*. 114: 104806.
96. Aslam, M., Hussain, A., Dutt, V., **Fallahi, H.R.**, Husaini, A.M. 2024. *Ulmus wallichiana* Planchon: A vulnerable Himalayan native with immense medicinal value. *Vegetos*.
97. Moradi Moghaddam, S., **Fallahi, H.R.**, Behdani, M.A., Mahmoodi, S. 2024. The effect of corm storage conditions during the summer dormancy stage on reproductive growth and yield of saffron. *Journal of Saffron Research*. **In Press**.
98. Golestanifar, F., Mahmoodi, S., **Fallahi, H.R.**, Shahidi, A. 2024. Evaluation of drought stress resistance indices of three quinoa cultivars in spring and summer planting dates in Birjand and Sarbisheh regions. *Environmental Stresses in Crop Sciences*. **In Press**. [In Persian with English Summary].

99. Golestanifar, F., Mahmoodi, S., **Fallahi, H.R.**, Shahidi, A. 2024. Evaluation of some growth traits of quinoa cultivars (*Chenopodium quinoa* Willd.) affected by moisture levels and planting date in two regions of South Khorasan. Journal of Plant Production Research. In **Press**. [In Persian with English Summary].
100. Danaei-Rad, E., Zamani, G.R., **Fallahi, H.R.** 2024. The effect of foliar application of cycocel on morphophysiological and biochemical characteristics of mung bean (*Vigna radiata*) genotypes under water deficit conditions. Iranian Journal of Pulses Research. In **Press**. [In Persian with English Summary].
101. Aminifard, M.H., Nooki, A., Fallahi, H.R., Azari-Nasrabad, A. 2024. Impact of some organic fertilizers on quantitative and qualitative yields of Isabgol (*Plantago ovata* Forsk) medicinal plant, under different levels of water availability. Crop Science Research in Arid Regions. In **Press**. [In Persian with English Summary].

## **B-2. Conferences articles**

1. Ebadi, M.T, Azizi, M., Rezvani-Moghaddam, P., **Fallahi, H.R.** 2008. Effect of organic fertilizers on growth and yield indices of two varieties of German chamomile. The first national conference on management and development of sustainable agricultural in Iran. Ahvaz, Iran. p129-135. [In Persian].
2. Ebadi, M.T., **Fallahi, H.R.**, Bani Hassan, M., Hedayati, M. 2008. Evaluation of antibacterial effects of ethanol extract of fruit barberry on two pathogenic bacteria (*Salmonella typhimurium* and *Escherichia coli*). 1<sup>st</sup> National Conference on Saffron and Barberry, October, Qaen, Iran. p 258-259. [In Persian].
3. Hedayati, M., **Fallahi, H.R.**, Ebadi, M.T. 2008. Application of essential oils of ajowan, cumin and oregano medicinal plants for controlling of two standard species of salmonella. 1<sup>st</sup> National Conference of Modern Technologies in Agriculture and Natural Resources. March, Rasht, Iran. P 1639-1645. [In Persian].
4. **Fallahi, H.**, Koocheki, A., Rezvani Moghaddam, P. 2008. Effects of biofertilizers on yield and quality indices of chamomile. The first national conference on management and development of sustainable agricultural in Iran. Ahvaz, Iran.149-156. [ In Persian].
5. Ebadi, M.T., Azizi, M., Nemati, H., **Fallahi, H.R.** 2008. Role of nuclear techniques on increasing the amount of active ingredients in medicinal and aromatic plants. National Conference of Modern Technologies in Agriculture and Natural Resources, March, Rasht, Iran. p 1304-1308. [In Persian].
6. **Fallahi, H.R.**, Hedayati, M., Rezvani Moghaddam, P., Tarighi, S. 2008. Effect of six medicinal plant essential oils and streptomycin on controlling of two standard samples of salmonella bacteria. National Conference of Modern Technologies in Agriculture and Natural Resources, Rasht, Iran. p 1705-1711. [In Persian].
7. Amiri, M.B., Rezvani Moghaddam, P., Ghaorbani, R., **Fallahi, H.R.** 2009. Effect of biofertilizers on the seedling growth of different cultivars of wheat (Chamran, Sayonz and Gaskogen). The First National Symposium on Agriculture and Sustainable Development. 10-11 March, Shiraz, Iran, p1302- 1314. [In Persian with English Summary].
8. Sadeghi Lotfabadi, S., **Fallahi, H.R.**, Arazmjoo, E. 2009. Study of Urea and potassium effects and type of application on *Zea mays* morphological traits in the presence of salinity. The First Regional Conference on Agriculture and Environmental Resources. 23 November, Ramhormoz, Iran. P 615-621. [In Persian with English Summary].
9. **Fallahi, H.R.**, Koocheki, A., Rezvni Moghaddam, P. 2010. Effect of biofertilizers on quantitative and qualitative yield of chamomile. 6<sup>th</sup> conference on Medicinal and Aromatic Plants of Southeast European Countries (Supplement of Pharmacognosy Magazine). 6(22): 109.
10. **Fallahi, H.R.**, Rezvani-Moghaddam, P., Nassiri-Mahallati, M. 2010. Effect of harvesting date on quantitative and qualitative characteristics of seedless barberry (*Berberis vulgaris*) fruit. 6<sup>th</sup> conference on Medicinal and Aromatic Plants of Southeast European Countries (Supplement of Pharmacognosy Magazine). 6(22): 109.
11. **Fallahi, H.R.**, Rezvani-Moghaddam, P., Hedayati, M., Ebadi, M.T. 2010. Evaluation of six medicinal plants essential oils on controlling salmonella pathogenic bacteria in comparion with



- streptomycin. 6<sup>th</sup> conference on Medicinal and Aromatic Plants of Southeast European Countries (Supplement of Pharmacognosy Magazine). 6(22): 130.
12. **Fallahi, H.R.**, Ebadi, M.T., Ghorbani, R. 2010. The effects of salinity and drought stresses on germination and seedling growth of clary (*Salvia sclarea*). 6<sup>th</sup> conference on Medicinal and Aromatic Plants of Southeast European Countries (Supplement of Pharmacognosy Magazine). 6(22).
  13. Hedayati, M., **Fallahi, H.R.** 2010. Antibacterial effects of seven medicinal plants (oregano, chamomile, celery, ajowan, cumin, pomegranate skin and juice) on controlling of salmonella isolated from eggs in Mashhad. 7<sup>th</sup> Iranian Veterinary Students Congress. 1-2 December, Shiraz, Iran. P 109. [In Persian].
  14. Hedayati, M., **Fallahi, H.R.** 2010. Comparison of cefixime antibiotic with six medicinal plants (*Mentha piperita*, *Thymus vulgaris*, *Rosmarinus officinalis*, *Bunium persicum*, *Eucalyptus globulus* and *Achillea millefolium*) essential oils on controlling of salmonella bacteria. 7<sup>th</sup> Iranian Veterinary Students Congress. 1-2 December, Shiraz, Iran. P 110. [In Persian].
  15. Nemati, H., Mehrbakhsh, M.M., Aghhavani-shajari, M., **Fallahi, H.R.**, Haghghi-Tajvar, F. 2011. Effects of substrate and irrigation on seedling growth of tomato (*Lycopersicon esculentum*). 2<sup>nd</sup> National Symposium on Agriculture and Sustainable Development. 2-3 March, Shiraz, Iran. Pp228. [In Persian].
  16. Rezvani-Moghaddam, P., Aghhavani-Shajari, M., **Fallahi, H.R.**, Nassiri Mahallati, M. 2011. Relationships between harvesting time and fruit quality in seedless barberry as a medicinal shrub. International conference of medicinal and Aromatic plants in Generating of New Values in 21<sup>th</sup> Century. November 9-12<sup>th</sup>, Sarajevo, Bosnia and Herzegovina. P 135-136.
  17. Rezvani-Moghaddam, P., Mohammad-Abadi, A.A. **Fallahi, H.R.**, Aghhavani-Shajari, M. 2011. Response of saffron to planting distances and irrigation times. International conference of medicinal and Aromatic plants in Generating of New Values in 21<sup>th</sup> Century. November 9-12<sup>th</sup>, Sarajevo, Bosnia and Herzegovina. P 137.
  18. **Fallahi, H.R.**, Rezvani-Moghaddam, P., Aghhavani-Shajari, M., Nassiri Mahallati, M. 2011. Dose harvesting seedless barberry at different hours per day make any differences in fruit quality indices? International conference of medicinal and Aromatic plants in Generating of New Values. November 9-12<sup>th</sup>, Sarajevo, Bosnia and Herzegovina. P 150-151.
  19. Aghhavani-shajari, M., Rezvani Moghaddam, P., Hedayati, M., Bani Hassan, M., **Fallahi, H.R.** 2011. The Effect of some antibiotics and essential oils on controlling *E. Coli* Bacteria. International conference of medicinal and Aromatic plants in Generating of New Values. November 9-12<sup>th</sup>, Sarajevo, Bosnia and Herzegovina. P 218-219.
  20. Rezvani-Moghaddam, P., Amiri, M.B., Ehyaei, H.R., **Fallahi, H.R.**, Aghhavani-Shajari, M. 2011. Effect of water and salinity stresses on germination indices and seedling growth in artichoke (*Synara scopolymus*) and purple coneflower (*Echinacea purpurea*). International conference of medicinal and Aromatic plants in Generating of New Values. November 9-12<sup>th</sup>, Sarajevo, Bosnia and Herzegovina. P 138.
  21. **Fallahi, H.R.**, Rezvani Moghaddam, P., Aghhavani-Shajari, M., Nasiri Mohallati, M. 2011. Evaluation The effects of harvesting management and drying methods on chemical indices of Barberry. 59<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research. 4-9<sup>th</sup> September, Antalya, Turkey. P 1292.
  22. Rezvani-Moghaddam, P., Mohammad-abadi, A.A., **Fallahi, H.R.**, Aghhavani-Shajari, M. 2011. Effects of chemical and organic fertilizers on number of corm and stigma yield of Saffron (*Crocus sativus*). 59<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research. 4-9<sup>th</sup> September, Antalya, Turkey. P.1381-1382.
  23. Rezvani Moghaddam, P., Ehyayi ,H.R., Amiri, M.B., **Fallahi, H.R.**, Aghhavani-shajari, M. 2011. Response of germination and seedling growth of, hyssop (*Hyssopus officinalis*) and Marguerite (*Chrysanthemum Superbum*) as medicinal plants to water stress. 59<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research. 4-9<sup>th</sup> September, Antalya, Turkey. P.
  24. **Fallahi, H.R.**, Khajeh-Hosieni, M., Rezvani Moghaddam, P. 2011. Effects of applying various levels of nitrogen on mother plants on the resistance to salinity stress in achieved seeds in

- Triticum aestivum* L. cv. Gaskogen. 10<sup>th</sup> Conference of the International Society for Seed Science. 10-15 April, Costa do Sauipe, Brazil. Pp206.
25. **Fallahi, H.R.**, Rezvani-Moghaddam, P., Khajeh-Hosieni, M., Amiri, M.B., Yazdani-Biuki, R. 2011. Effects of seed nourished by different levels of nitrogen, different biofertilizers and drought stress on germination indices and seedling growth of wheat (*Triticum aestivum*) cv. Sayonz. 10<sup>th</sup> Conference of the International Society for Seed Science. 10-15 April, Costa do Sauipe, Brazil. Pp205.
  26. **Fallahi, H.R.**, Rezvani-moghaddam, P., Ghorbani, R., Amiri, M.B., Fallah Poor, F. 2011. Effect of seed priming by biofertilizers on the growth characteristics of three wheat cultivars at the germination periods under greenhouse condition. 10<sup>th</sup> Conference of the International Society for Seed Science. 10-15 April, Costa do Sauipe, Brazil. Pp286.
  27. **Fallahi, H.R.**, Rezvani Moghaddam, P., Khajeh-Hosieni, M., Amiri, M.B., Aghhavani Shajari, M. and R. Yazdani-Biuki. 2011. The study nutritional management of parent plant in combination with seed priming by biofertilizers in towards to increase of salinity tolerance in wheat cv, Sayons at germination period. 10<sup>th</sup> Conference of the International Society for Seed Science. 10-15 April, Costa do Sauipe, Brazil. pp 205.
  28. Rezvani-Moghaddam, P., Behdani, M.A., Aghhavani-Shajari, M., Fallahi, H.R., Nassiri Mahallati, M. 2011. Effects of harvesting and drying methods on the anthocyanin content of seedless barberry (*Berberis vulgaris*). The First National Conference of Barberry and Jujube. 9-10 November, Birjand, Iran. P 124.
  29. Rezvani-Moghaddam, P., Behdani, M.A., Aghhavani-Shajari, M., Fallahi, H.R., Nassiri Mahallati, M. 2011. Evaluation of anthocyanin content of seedless barberry (*Berberis vulgaris*) in response to harvesting date and daily harvesting times. The First National Conference of Barberry and Jujube. 9-10 November, Birjand, Iran. P 119.
  30. Nemati, H., Mehrbakhsh, M.M., Aghhavani-shajari, M., **Fallahi, J.** and F. haghghi-Tajvar. 2011. Comparison of seedling growth indices in some hybrid and standard cultivars of tomato (*Lycopersicum esculentum*) in soilless culture system. 2<sup>nd</sup> National Symposium on Agriculture and Sustainable Development. 2-3 March, Shiraz, Iran. Pp 227. [In Persian].
  31. **Fallahi, H.R.**, Ghorbani, R., Aghhavani-Shajari, M. 2011. Overview of the role of mycorrhizal fungi in biological control of plant pathogens. National Conference of New Findings in Agronomy, 17-18 October, Shahre-e Qods, Iran. 9p. [In Persian with an English Abstract].
  32. Rezvani-Moghaddam, P., Mohammad-Abadi, A.A., **Fallahi, H.R.**, Aghhavani-Shajari, M. 2011. Influence of mother corm planting density on yield and replacement corms growth indices of saffron medicinal plant. National Conference of New Findings in Agronomy, 17-18 October, Shahre-e Qods, Iran. P 399. [In Persian].
  33. Rezvani-Moghaddam, P., **Fallahi, H.R.** 2011. Eco-phytochemical properties of medicinal plants of labiate family in Khorasan Province. National Conference of Medicinal Plants. 2-3 March, Mazandaran, Iran, Pp 940. [In Persian].
  34. Balandari, A., **Fallahi, H.R.** 2011. Effects of nutritional management and use of organic mulch on yield and quality of seedless barberry. National Conference of Medicinal Plants. 2-3 March, Mazandaran, Iran, Pp191. [In Persian].
  35. Rezvani-Moghaddam, P., Mohammad-abadi, A.A., **Fallahi, H.R.**, M. Aghhavani-Shajari, M. 2011. Effects of different organic and inorganic fertilizers on growth indices of daughter corms and yield of saffron. National Conference of medicinal plants. 2-3 March, Mazandaran, Iran, Pp 424. [In Persian].
  36. Aghhavani-Shajari, M., **Fallahi, H.R.** 2011. Iran's position in the global market and its potential in the production of Jujube medicinal plant. National Conference of medicinal plants. 2-3 March, Mazandaran, Iran, Pp 144. [In Persian].
  37. Aghhavani-Shajari, M., **Fallahi, H.R.** 2011. An overview of the compounds and uses of jujube in traditional and modern medicine. National Conference of medicinal plants. 2-3 March, Mazandaran, Iran, Pp 1230. [In Persian].
  38. Rezvani-Moghaddam, P., Mohamad abadi, A.A. **Fallahi, H.R.** 2011. Effects of plant density and irrigation on growth of saffron corms. National Conference of medicinal plants. 2-3 March, Mazandaran, Iran, Pp 421. [In Persian].

39. Kamayestani, N., Rezvani-Moghaddam, P., **Fallahi, H.R.**, Aghhavani-Shajari, M., Ranjbar, F. 2011. Effects of different nutritional sources on weed diversity in anise (*Pimpinella anisum*) field. First National on Strategies for Achieving Sustainable Agriculture. June, Ahvaz, Iran.8 p. [In Persian].
40. Koocheki, A., Rezvani-Moghaddam, P., **Fallahi, H.R.**, Aghhavani-Shajari, M. 2011. Effects of sowing date, spring-summer and fall irrigations and cover crops on forage yield of saffron. First National on Strategies for Achieving Sustainable Agriculture. June, Ahvaz, Iran.5 p. [In Persian].
41. Koocheki, A., **Fallahi, H.R.**, Amiri, M.B., Ehyaei, H.R. 2012. Effects of mother corm weight on flower and stigma yield of saffron (*Crocus sativus* L.) in humic acid application treatment. 12<sup>th</sup> Iranian Crop Sciences Congress. 4-6 September, Karaj, Iran. [In Persian].
42. Koocheki, A., **Fallahi, H.R.**, Amiri, M.B., Ehyaei, H.R. 2012. Effect of humic acid application and mother corm weight on some quantitative characteristics of saffron (*Crocus sativus* L.) with emphasized on ecological operations. 12<sup>th</sup> Iranian Crop Sciences Congress. 4-6 September, Karaj, Iran. [In Persian].
43. **Fallahi, H.R.**, Alami, S., Aghhavani-Shajari, M. 2013. Allelopathic effects of saffron corm and leaf residues on early growth of arugula in greenhouse condition. 1<sup>st</sup> conference of medicinal plants application in life cycle and traditional medical. 27 November. Torbat Heydariyeh, Iran. P 198. [In Persian].
44. Aghhavani-Shajari, M., Rezvani-Moghaddam, P., Ghorbani, R., Nassiri Mahallati, M., **Fallahi, H.R.** 2013. Qualitative evaluation of coriander (*Coriandrum sativum*) oil as a new oil crop. National Conference of Medicinal Plants. 20-21 November, Amol, Iran. P 701. [In Persian].
45. Aghhavani-Shajari, M., Rezvani-Moghaddam, P., Ghorbani, R., Nassiri Mahallati, M., **Fallahi, H.R.** 2013. Evaluation of ecological nutrition management on qualitative and qualitative indices of coriander (*Coriandrum sativum*). National Conference of Medicinal Plants. 20-21 November, Amol, Iran. P 700. [In Persian].
46. **Fallahi, H.R.**, Razmi, M., Shahr-Abadi, F., Mohammadi, M., Aghhavani-shajari, M. 2013. Effects of seed preparation on improvement of salinity tolerance of savory at germination and early seedling growth stage. National Conference of Medicinal Plants. 20-21 November, Amol, Iran. P 439. [In Persian].
47. **Fallahi, H.R.**, Davarzani, R., Aghhavani-Shajari, M. 2013. The study of traditional knowledge of saffron production in Sarayan. 2<sup>nd</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 30 October. P 22. [In Persian].
48. **Fallahi, H.R.**, Davarzani, R., Aghhavani-Shajari, M. 2013. A preliminary study on possible combined planting of fenugreek with saffron. 2<sup>nd</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 30 October. P 23. [In Persian].
49. Aghhavani-Shajari, M., Najafi, M., **Fallahi, H.R.**, Amini, M.A. 2014. Study of traditional opinions of saffron farmers in Torbat Heydariyeh. 3<sup>th</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 26-27 November. P 86. [In Persian].
50. Aghhavani-Shajari, M., Feizi, H., Abedi, Sh., Afsari Ghale-Zoo, N., **Fallahi, H.R.** 2014. Evaluation of traditional methods of saffron cultivation in Torbat Heydariyeh. 3<sup>th</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 26-27 November. P 31. [In Persian].
51. **Fallahi, H.R.**, Behdani, M.A., Aghhavani-Shajari, M. 2014. Evaluation of saffron potential for development of agricultural tourism in Khorasan province. 3<sup>th</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 26-27 November. P 84. [In Persian].
52. Paravar, A., **Fallahi, H.R.** 2014. Evaluation of allelopathic effects of saffron corms extract on early growth of arugula under laboratory conditions. 1<sup>st</sup> International and 15<sup>th</sup> Iranian Crop Science Crop Science. August 24-26. Karaj, Iran.
53. **Fallahi, H.R.**, Feli, A., Salari-Nasab, S., 2014. Effect of different levels of superabsorbent on saffron replacement corms growth at the first growing cycle. 3<sup>th</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 26-27 November. P 17. [In Persian].
54. Aghhavani-Shajari, M., Rezvani-Moghaddam, P., Koocheki, A., **Fallahi, H.R.** 2014. Influence of different soil textures on saffron daughter corms agronomic criteria. 3<sup>th</sup> National Conference on

- Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 26-27 November. P 20. [In Persian].
55. Aghhavani-Shajari, M., Rezvani-Moghaddam, P., Koocheki, A., **Fallahi, H.R.** 2014. Effect of different substrate on saffron (*Crocus sativus* L.) flower yield. 3<sup>th</sup> National Conference on Latest Scientific Research Achievements of Saffron. Torbat Heydariyeh, Iran. 26-27 November. P 18. [In Persian].
  56. Aghhavani-Shajari, M., **Fallahi, H.R.**, Samadzadeh, A., Ebrahimi, F., TaherPour Kalantari, R. 2015. Growth response of saffron replacement corms to application of different levels of humic acid. 4<sup>th</sup> National conference on Saffron. 4-5 November, Qaen, Iran. P 24. [In Persian].
  57. **Fallahi, H.R.**, Aghhavani-Shajari, M., Ramezani Zonouk, M. 2015. Effect of scooping, scaling and on saffron replacement corms growth. 4<sup>th</sup> National conference on Saffron. 4-5 November, Qaen, Iran. P 19. [In Persian].
  58. **Fallahi, H.R.**, Ghorbany, M., Aghhavani-Shajari, M., Asadian, A.H., Arab-Salehi, K., Fani-Kheshti, N. 2016. Comparison of growth and yield of roselle in transplanting and direct-sowing methods. Proceedings of 5<sup>th</sup> National Congress of Medicinal Plants. P 455. 18-19 May. Isfahan. Iran.
  59. **Fallahi, H.R.**, Ghorbany, M., Aghhavani-Shajari, M., Asadian, A.H., Fani-Kheshti, N., Arab-Salehi, K. 2016. Improvement of yield and water use efficiency of roselle medicinal plant by mycorrhizal inoculation. Proceedings of 5<sup>th</sup> National Congress of Medicinal Plants. P 299. 18-19 May. Isfahan. Iran.
  60. **Fallahi, H.R.**, Aghhavani-Shajari, M., Zamani, G., Samadzadeh, A., Ramezani-Zonouk. M. 2016. Influence of humic acid on flower and stigma yield of saffron (*Crocus sativus* L.). Proceedings of 5<sup>th</sup> National Congress of Medicinal Plants. P 311. 18-19 May. Isfahan. Iran.
  61. **Fallahi, H.R.**, Zamani, G., Aghhavani-Shajari, M., Samadzadeh, A. 2017. Comparison of flowering and growth of saffron in natural and controlled culture systems. 6<sup>th</sup> National Congress of Medicinal Plants. 9-10 May, Tehran. p--.
  62. **Fallahi, H.R.**, Aghhavani-Shajari, M., Khayyati, M.R., Akbari, M., Fazel, F., Asadi, F., Asad-Nezhad, A. 2017. Saffron growth, yield and chlorophyll fluorescence parameters are affected by mother corm weight. 6<sup>th</sup> National Congress of Medicinal Plants. 9-10 May, Tehran. 111.
  63. **Fallahi, H.R.**, Aghhavani-Shajari, M., Khayyati, M.R., Ghoreyshi, S.O., Zareei, E. 2017. Sensitivity of chlorophyll fluorescence parameters to water and nutrients availability in saffron. 6<sup>th</sup> National Congress of Medicinal Plants. 9-10 May, Tehran. p 103.
  64. Behdani, M.A., Zamani, G., **Fallahi, H.R.**, Sayyari Zohan, M.H., Samadzadeh, A.R. 2018. Influence of low, medium and high input organic and conventional production system on flowering and yield of saffron. 7<sup>th</sup> National Congress of Medicinal Plants. 12-14 May, Shiraz. p 212.
  65. **Fallahi, H.R.**, Aghhavani-Shajari, M., Hamami, H., Hashemi, S.S., Zarei, E., Kadkhodaei Barkook, R., Mohammadi, B. 2018. Allocation of photoassimilates in different parts of saffron during growing season. 7<sup>th</sup> National Congress of Medicinal Plants. 12-14 May, Shiraz. p 98
  66. **Fallahi, H.R.**, Aghhavani-Shajari, M., Sahabi, H., Maraki, Z., Yazdani, K., Kalateh Rahmani, M. 2018. Effect of drying temperature on colour parameters and secondary metabolites content in saffron. 7<sup>th</sup> National Congress of Medicinal Plants. 12-14 May, Shiraz. p 142
  67. Amini Fard, H., Khandan DehArbab, S., **Fallahi, H.R.**, Kaveh, H. 2018. Effect of different algae extract levels on antioxidant activities, anthocyanin and phenol content of saffron (*Crocus sativus* L.). 7<sup>th</sup> National Congress of Medicinal Plants. 12-14 May, Shiraz. p 410.
  68. Khandan DehArbab, S., Amini Fard, H., **Fallahi, H.R.**, Kaveh, H. 2018. Study of growth characteristics and yield of saffron (*Crocus sativus* L.) by different levels of amino acids. 7<sup>th</sup> National Congress of Medicinal Plants. 12-14 May, Shiraz. p 396
  69. Alami, S., Behdani, M.A. **Fallahi, H.R.** 2018. Effect of concentration and duration of corm dipping in salicylic acid on flowering and chlorophyll fluorescence indices of saffron. NOPEA. 14 Febuary. Birjand. Iran. (In Persian with English Summary).
  70. Alami, S., Behdani, M.A. **Fallahi, H.R.** 2018. Impact of concentration and duration of corm dipping in potassium nitrate on flowering and chlorophyll fluorescence parameters in saffron. NOPEA. 14 Febuary. Birjand. Iran. (In Persian with English Summary).

71. **Fallahi, H.R.**, Aghhavani-Shajari, M., Sahabi, H., Abolhasani, S., Zareie, E., Hashemi, S.S., Kadkhodaei Barkook, R. 2018. Evaluation of saffron yield changes in response to temperature and rainfall variations in Birjand. 5<sup>th</sup> National Conference on Saffron. 14-15 November, Torbat-Heydariyeh, Iran. pp 146-151.
72. **Fallahi, H.R.**, Branca, F., Aghhavani-Shajari, M., Vali-Pour, S., Sahabi, H., Khalili, F. 2019. Evaluation of *Chenopodium botrys* resistance to salinity stress during early growth stage. 8<sup>th</sup> National Congress on Medicinal Plants. 24-25 April, Tehran. p: 54.
73. **Fallahi, H.R.**, Mahmoodi, S., Branca, F., Aghhavani-Shajari, M., Zareei, E., Sahabi, H., Akbari Olyaei, M. 2019. Foliar application of nutrients improves saffron (*Crocus sativus* L.) flowering. 8<sup>th</sup> National Congress on Medicinal Plants. 24-25 April, Tehran. p: 55.
74. Behdani, M.A., Zamani, G., **Fallahi, H.R.**, Sayyari-Zohan, M.H., Samadzadeh, A. 2019. Effect of different organic production systems on saffron flowering. 8<sup>th</sup> National Congress on Medicinal Plants. 24-25 April, Tehran. p: 56.
75. **Fallahi, H.R.**, Hosseini, S.A.H., Sahabi, H., Aghhavani-Shajari, M., Zareei, E., Ghaemi-Poor, F., Maraki, Z. 2019. Effects of nutrients spraying on saffron stigma quality in a one-year-old field. 8<sup>th</sup> National Congress on Medicinal Plants. 24-25 April, Tehran. p: 378.
76. **Fallahi, H.R.**, Salariyan, A., Rezghi, M. 2021. Analytical review on saffron irrigation management. The 5<sup>th</sup> National Congress of Irrigation and Drainage. 23-24 June, University of Birjand (In Persian with English Summary).
77. **Fallahi, H.R.** 2021. Saffron adaptability approaches to climate change. International Conference on Saffron and Seed Spices-Innovative Technologies for Sustainable Development. Sher-e-Kashmir University of Agricultural Sciences & Technology. 7-8 November.
78. **Fallahi, H.R.**, Moradi-Moghadam, S., Behdani, M.A., Mahmoodi, S. 2021. Reduction of soil temperature during saffron flower initiation stage by organic mulches application as a strategy for climate change adaptability. International Conference on Saffron and Seed Spices-Innovative Technologies for Sustainable Development. Sher-e-Kashmir University of Agricultural Sciences & Technology. 7-8 November.
79. Mosht-Afkan, M., **Fallahi, H.**, Behdani, M.A., Hedayatizadeh, M. 2021. Determining the energy equivalent of different organs of saffron. 6<sup>th</sup> National Conference on Saffron. 17-18 November, University of Gonabad, Gonabad, Iran. (In Persian with English Summary).
80. **Fallahi, H.** 2021. Analysis of the effect of some management factors on improving the yield of saffron. 6<sup>th</sup> National Conference on Saffron. 17-18 November, University of Gonabad, Gonabad, Iran. (In Persian with English Summary).
81. **Fallahi, H.**, Salariyan, A., Aghhavani-Shajari, M. 2021. Analytical review on nutritional management of saffron. 6<sup>th</sup> National Conference on Saffron. 17-18 November, University of Gonabad, Gonabad, Iran. (In Persian with English Summary).
82. **Fallahi, H.R.**, Behdani, M.A., Hammami, H., Hosseini, S.A.H., Rezghi, M., Aghhavani-Shajari, M. 2023. Impact of ACCase inhibitor herbicides on saffron (*Crocus sativus* L.) yield. 10<sup>th</sup> National Congress on Medicinal Plants. 12 & 13 July, Urmia, Iran. p6.
83. **Fallahi, H.R.**, Behdani, M.A., Hammami, H., Hosseini, S.A.H., Hosseini, S.M. 2023. Effect of weed management practices on weed population and saffron flowering. 10<sup>th</sup> National Congress on Medicinal Plants. 12 & 13 July, Urmia, Iran. p7.
84. **Fallahi, H.R.** 2023. Allelopathic effects of saffron corm and leaf on early growth of rocket under laboratory and greenhouse condition. The 5<sup>th</sup> National Conference of Medicinal Plants and Traditional Medicin, October 12, 2023- University of Torbat Heydarieh, Torbat Heydarieh, Iran. P 126.
85. **Fallahi, H.R.**, Mahmoodi, S., Aghhavani-Shajari, M., Karimpour, H., Maraki, Z., Hosseini, S.A.H., Rezghi, M., Branca, F. 2023. Corm enrichment by foliar application of nutrients improves

saffron quality. The 5<sup>th</sup> National Conference of Medicinal Plants and Traditional Medicineth, October 12, 2023- University of Torbat Heydarieh, Torbat Heydarieh, Iran. Pp 127-130.

**C- Research projects**

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