

Curriculum Vitae (C.V)



Mehdi Ghaffari Sunflower Breeder

Oilseed crops Research Department,
Seed and Plant Improvement Institute, Agricultural Research Education and Extension
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Education

PhD: Plant Breeding, Biometric Genetic. Faculty of Agriculture. University of Tabriz, Iran, (2008-2012)

Thesis title: Proteome analysis of sunflower leaf under well-watered and limited irrigation

M.Sc: Plant Breeding, Faculty of Agriculture. University of Tabriz, Iran, (1996-1998)

Thesis title: Study of relationship between isozymes and seed storage proteins with quantitative traits in sunflower.

B.Sc: Plant production and Plant breeding, Faculty of Agriculture. University of Tabriz, Iran. (1988-1992)

Interests

- Sunflower Breeding
- Plant Genetics
- Biometry and Experimental Design
- Proteomics

Employment/Work Experience

Sunflower Breeder, Member of Scientific Board. Agricultural Research, Education and Natural Resources Research Center. Agricultural Research Education and Extension Organization (AREEO), Khoy, Iran. 1998 -2015.

Sunflower Breeder, Member of Scientific Board. Seed and Plant Improvement Institute, Agricultural Research Education and Extension Organization (AREEO), Karaj, Iran, 2015- to date.

Awards

Superior Researcher of West Azarbaijan, Iran in 2004

Superior Researcher of West Azarbaijan. Iran in 2006

Publications

1. Ghaffari, M., Davaji, A.M.N.R. and Ghadimi, F.N., 2019. Oil yield determinant of sunflower in climatically different regions of Iran. *Bulgarian Journal of Agricultural Science*, 25(1): 67-71.
2. Aghdam, M.Z., Kojouri, F.D., Ghaffari, M. and Ebrahimi, A., 2019. Genetic Analysis of Morpho-Physiological Characteristics of sunflower under stress and non-stress drought conditions. *AGRIVITA, Journal of Agricultural Science*, 41(3). 461-473.
3. Ghaffari, M., 2019. Relationship between agronomic characteristics and plant density in dual purpose oil-confectionery type sunflower. *Crops Improvement*, 21. (1): 1-12. (In Persian).
4. Ghaffari, M. and Shariati, F., 2018. Combining Ability of Sunflower Inbred Lines under Drought Stress. *Helia*, 41: 201-212.
5. Zeinalzadeh-Tabrizi, H., Haliloglu, K., Ghaffari, M. and Hosseinpour, A., 2018. Assessment of genetic diversity among sunflower genotypes using microsatellite markers. *Molecular biology research communications*, 7(3): 143.
6. Farshad, N., J. Soodabeh, Ghaffari M. and Ebadi A., 2018. Studying the physiological and yield responses of sunflower inbred lines to full and limited irrigation. *Journal of Integrative Agriculture*, 17(7):1605-1611.
7. Effects of integrated application of phosphorus fertilizer and sewage sludge on leaf chlorophyll index and some growth characteristics of sunflower under water deficit conditions. *J. of Soil Management and Sustainable Production*, Vol. 7(4): 1-18. (In Persian).
8. Ghaffari, M., Toorchi, M., Valizadeh, M. and Shakiba, M., 2017. Proteomic prospects for tolerance of sunflower (*Helianthus annuus*) to drought stress during the flowering stage. *Crop and Pasture Science*, 68(5): 457-465.

9. Farajzadeh, E., Valizadeh, M., Shakiba, M., Ghaffari, M. and Moharramnejad, S., 2017. Relationship between antioxidant enzyme activities and agro-physiological traits in sunflower lines under field water deficit stress. *Fresenius environmental bulletin*, 26(4): 2973-2981.
10. Ghaffari M. 2014. Effectiveness of different methods for screening of sunflower (*Helianthus annuus* L.) drought tolerant cultivars. *Turkish Journal of Agricultural and Natural Sciences*, Special Issue: 2: 1584-1589.
11. Ebrahimia, R, Rahmanpour R, Ghoosta Y and Ghaffari M. 2014. Reaction and survival of four types of sunflowers against *Sclerotinia sclerotiorum* under controlled conditions. *Archives of Phytopathology and Plant Protection*.47(16): 2033–2042.
12. Hassanzadeh, F., Toorchi, M., Moghadam, M., Aharizad, S. and Ghaffari, M., 2014. Relations of agronomic traits in some hybrids of sunflower (*Helianthus annuus* L.). *International Journal of Plant, Animal and Environmental Sciences*, 4(3): 266-270.
13. Ghaffari, M., Toorchi, M., Valizadeh, M., & Komatsu, S. (2013). Differential response of root proteome to drought stress in drought sensitive and tolerant sunflower inbred lines. *Functional Plant Biology*, 40(6), 609-617.
14. Tabrizi M, Hassanzadeh F, Moghaddam M, Alavikia S, Aharizad S and Ghaffari M. 2012. Combining ability and gene action in sunflower using line \times tester method. *Journal of Plant Physiology and Breeding*, 2(2): 23-32.
15. Ghaffari, M., Toorchi, M., Valizadeh, M., & Shakiba, M. R. 2012. Morpho-physiological screening of sunflower inbred lines under drought stress condition. *Turkish Journal of Field Crops*, 17(2): 185-190.
16. Ghaffari M. E. Farrokhi and M. Mirzapour. 2011. Combining ability and gene action for agronomic traits and oil content in sunflower (*Helianthus annuus* L.) using F1 hybrids. *Crop Breeding Journal*, 2011, 1 (1): 73-84.
17. Ghaffari M. 2004. Principle Component Analysis for selection of superior sunflower genotypes. *Seed and Plants*, 19 (4): 513-527. (In Persian)
18. Ghaffari M. 2007. Evaluation and selection of Sunflower inbred lines under normal drought stress conditions. (In Persian).
19. Hassanzadeh F, Toorchi M, Moghadam Vahed M, Aharizad S, Ghaffari M. 2016. Evaluation of the Combining Abilities and Gene Effects of Agronomic Traits in Sunflower Inbred Lines. *JCPP*. 6 (20): 97-109. (In Persian).

Conference

20. Rahmanpour, S. Ghaffari M., Safavi Fard, Nadia. 2017. Reaction of sunflower genotypes to *sclerotinia sclerotiorum* under greenhouse condition. Science protecting plants health conference. Brisbane, Australia.
21. Sahar Pooratefi, Mostafa Valizadeh, S. Abolghasem Mohammadi and Mehdi Ghaffari. 2017. Line \times Tester Analysis of Agro-Physiological Traits in Sunflower under Water Deficit Condition. Proceedings of the 6th International Conference on Healthcare, Environment, Food and Biological Sciences. Universal Researchers in Environmental & Biological Engineering (UREBE). Istanbul, Turkey.
22. Ghaffari, M. 2016. Genetic analysis of seed yield related traits under optimum and limited irrigation in sunflower. Proceedings of the 19th International Sunflower Conference, Edirne, Turkey.
23. Ghaffari, M. Toorchi M., Valizadeh, M. Alizadeh, B. 2016. Proteomic response of sunflower to drought stress. Proceedings of the 19th International Sunflower Conference, Edirne, Turkey.
24. Ghaffari, M. 2016. Proteomic response of sunflower to drought stress. Proceedings of the 19th International Sunflower Conference, Edirne, Turkey.
25. Ghaffari M., Rahmanpour, S., Shariati F. 2016. Confectionary sunflower in Iran. Proceedings of the 19th International Sunflower Conference, Edirne, Turkey.
26. Rahmanpour, S. Ghaffari M. 2016. Evaluation of sunflower genotypes to stem rot caused by *Sclerotinia sclerotiorum* under field conditions. Proceedings of the 19th International Sunflower

Conference, Edirne, Turkey.

27. Rahmanpour, S. Ghaffari M. 2016. Physiological variability of sunflower downy mildew causal agent, *Plasmopara halstedii*, in Iran. Proceedings of the 19th International Sunflower Conference, Edirne, Turkey.
28. Ghaffari Mehdi. 2014. Effectiveness of different methods for screening of sunflower (*Helianthus annuus* L.). Balkan Agricultural Congress, Sept. 8. 2014. Edirne, Turkey.
29. Ghaffari Mehdi and Ebrahim Farrokhi. 2008. Principle component analysis as a reflector of combining abilities. Proceedings of the 17th International Sunflower Conference, Cordoba, SPAIN.
30. Rehana K., M. Arshad, A. Shahzad, M. Ghaffari and S. Komatsu. 2011. Proteomics analysis of sensitive and tolerant barley lines under drought stress. Proteomics approach for identifying osmotic-stress-related proteins in soybean roots. Proc. Frontiers in Agriculture Proteome Research, Contribution of proteomics technology in agricultural sciences. Tsukuba, Japan.
31. Toorchi M., M. Ghaffari, M. Z. Nouri and S. Komatsu. 2011. Proteomics approach for identifying osmotic-stress-related proteins in soybean roots. Proc. Frontiers in Agriculture Proteome Research, Contribution of proteomics technology in agricultural sciences. Tsukuba, Japan.
32. Ebrahim Farrokhi, Bahram Alizadeh, Ghaffari Mehdi. 2008. General combining ability analysis in sunflower maintainer lines (*H. annuus* L.) using line×tester crosses. Proceedings of the 17th International Sunflower Conference, Cordoba, SPAIN.
33. Farrokhi Ebrahim, Abolghasem Khodabandeh and Mehdi Ghaffari .2008. Studies on general and specific combining abilities in sunflower (*Helianthus annuus* L.). Proceedings of the 17th International Sunflower Conference, Cordoba, SPAIN.