

Dr. Hamid Dehghani

Department of Plant Genetics and Breeding



I. PERSONAL INFORMATION:

Name:	Hamid Dehghani
Date of Birth:	1967
Place of Birth:	Kerman, Iran
Address:	Department of Plant Breeding and Biotechnology, Faculty of Agriculture
P.O. Box.	14115-136 Tehran, Islamic Republic of Iran
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II. JOB HISTORY

- Visiting Scholar at University of California, Davis, From August 2017.
- Professor, Plant Breeding, Department of Plant Breeding, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran, From May 2017:
- 2006-2017: Associate Professor, Plant Breeding, Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran.
- 2002-2006: Asistant Professor, Plant Breeding, Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran.

III. ADMINISTRATIVE POSITIONS HELD

- Head of Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran. 2004-2006.
- Deputy Dean for Financial Support, Faculty of Agriculture, Tarbiat Modares University, Iran. 2006-2010.
- Head, Statistics Committee, Faculty of Agriculture, Tarbiat Modares University, Iran. 2002-2007.
- Membership of supervision and assessment committee of Faculty of Agriculture. 2007 until 2017.
- Head of Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran. 2016 until August 2017.

IV. SCIENTIFIC AND ACADEMIC INFORMATION

A. EDUCATIONAL RECORDS

Degree	High School or University	Field	Date
Diploma	Motaheri High School, Kerman, Iran	Experimental Sciences	1981-1985
B. Sc	Shahid Bahonar University, Kerman, Iran	Agronomy and Plant Breeding	1986-1991
M. Sc	Tabiat Modares University, Tehran, Iran	Plant Breeding	1992-1994
Ph. D.	University of Tabriz, Tabriz, Iran	Plant Breeding (Genetics - Biometry)	1996-2002

B. MEMBERSHIP OF SCIENTIFIC SOCIETIES

- Agronomy and Crop Science Society of USA 2006-2010.
- EUCARPIA (Plant Breeding of Europe) 2007-2010
- Agronomy and Crop Science Society of Iran (1998 until now).
- Iranian Genetics Society (2002 until now).
- Member of Board of Directors of Genetic Resources Branch of Iranian Genetics Society (2014 until now).

C. JOURNALS EDITORIAL BOARD MEMBERSHIP

- Editorial Board of Cereal Research Journal, University of Guilan, Iran (in Persian with English abstracts)
- Editorial Board of Crop Breeding Journal, Seed and Plant Improvement Institute, Karaj, Iran (in English)

D. TEACHING EXPERIENCES

- **Teaching courses in Tarbiat Modares University (since 1998)**
 - o **M. Sc. courses**
 - Advanced Plant Breeding
 - Experimental Designs in Agriculture 2
 - Multivariate Statistical Analysis
 - Advanced Statistical Methods
 - o **Ph. D. courses**
 - Complementary Experimental Designs
 - Biometrical Genetics

E. Acknowledgment, Appointment letter, Awards and Honors

- Acknowledgment for achievements as Administrative and Financial Deputy in 2007
- Acknowledgment for managing of center of scientific excellence
- Acknowledgment for managing of Department of Plant Breeding in 2006
- Acknowledgment of agriculture faculty's staff
- Appointment letter as the Head of Plant Breeding Department
- Appointment letter for Administrative and Financial Deputy
- Appointment letter for membership of supervision and assessment committee of Faculty in 2007
- Appointment letter for membership of supervision and assessment committee of Faculty in 2011
- Acknowledgment for performance and services in faculty of Agriculture
- Chosen as the distinguished professor in 2007
- Selected as the one of %20 of first promoted Associate Professors
- Top researcher of the university in 2006
- Top researcher of the university in 2007
- Vote of promotion and approval committee for scientific efforts and enthusiasm in 2007
- Vote of university's promotion council for scientific efforts and enthusiasm in 2008
- Vote of promotion and approval committee for scientific efforts and enthusiasm in 2009
- Vote of promotion and approval committee for scientific efforts and enthusiasm in 2016

E. TECHNICAL REPORT OF PROJECT

- Evaluation of Resistance to Yellow Rust in Seedling and Adult Plant Stages of Wheat Cultivars, 2005

F. PUBLICATIONS

Book:

- **Dehghani H.,** M. Khodadadi. (2018). *Plant Breeding for Abiotic Stress Tolerance: Drought and Salinity*. Tehran, Iran, Academic Publishing Publications.

Papers:

- 149 papers were published in international and national research journals.
- 54 abstracts and complete articles were presented to international and national congresses of plant breeding.

ISI Publications

1. **Dehghani, H.,** M. Moghaddam, M. Ghannadha, M. Valizadeh, M. Torabi. 2002. Inheritance of the latent period of stripe rust in wheat. *Journal of Genetics and Breeding*, 56: 155-163.

2. Abdoli, M., A. Moieni, **H. Dehghani**. 2003. Effects of genotype and cotyledon section on organogenesis in sunflower. *Iranian Journal of Biotechnology*, 4: 234-238.
3. **Dehghani, H.**, M. Moghaddam. 2004. Genetic analysis of the latent period of stripe rust in wheat seedlings. *Journal of Phytopathology*, 152: 325-330.
4. Karimzadeh, G., R. Darvishzadeh, M. Jalali-Javaran, **H. Dehghani**. 2005. Cold induced accumulation of protein in the leaves of spring and winter barley cultivars. *Acta Biologica Hungarica*, 56(1-2): 83-96.
5. Mohebodini, M., **H. Dehghani**, S. H. Sabaghpour. 2006. Stability of performance in lentil (*Lens culinaris* Medik.) genotypes in Iran. *Euphytica*, 149(3): 343-352.
6. **Dehghani, H.**, A. Ebadi, A. Yousefi. 2006. Biplot analysis of genotype by environment interaction for barley yield in Iran. *Agronomy Journal*, 98: 388-393.
7. Sabaghnia, N., **H. Dehghani**, S. H. Sabaghpour. 2006. Nonparametric methods for interpreting genotype by environment interaction of lentil genotypes. *Crop Science*, 46: 1100-1106.
8. Karimzadeh, G., G. Sharifi-Shirchi, M. Jalali-Javaran, **H. Dehghani**, D. Francis. 2006. Soluble proteins induced by low temperature treatment in the leaves of spring and winter wheat cultivars. *Pakistan Journal of Botany*, 38: 1015-1026.
9. Abdoli, M., A. Moieni, **H. Dehghani**. 2007. Effects of cultivar and agar concentration on *in vitro* shoot organogenesis and hyperhydricity in sunflower (*Helianthus annuus* L.). *Pakistan Journal of Botany*, 39: 31-35.
10. Sabaghnia, N., **H. Dehghani**, S. H. Sabaghpour. 2008. Graphic analysis of genotype by environment interaction for lentil yield in Iran. *Agronomy Journal*, 100: 760-764.
11. Sabaghnia, N., S. H. Sabaghpour, **H. Dehghani**. 2008. The use of an AMMI model and its parameters to analyse yield stability in multi-environment trials. *Journal of Agricultural Science*, 146: 571-581.
12. **Dehghani, H.**, N. Sabaghnia, S. H. Sabaghpour. 2008. Genotype \times environment interaction for grain yield of some lentil genotypes and relationship among univariate stability statistics. *Spanish Journal of Agricultural Research*, 6(3): 385-394.
13. **Dehghani, H.**, H. Omid, N. Sabaghnia. 2008. Graphic analysis of trait relations of rapeseed using the biplot method. *Agronomy Journal*, 100: 1443-1449.
14. Ebadi-Segherloo, A., S. H. Sabaghpour, **H. Dehghani**, M. Kamrani. 2008. Non-parametric measures of phenotypic stability in chickpea genotypes (*Cicer arietinum* L.). *Euphytica*, 162: 221-229.
15. **Dehghani, H.** 2008. Estimating yield stability by nonparametric stability analysis in maize (*Zea mays* L.). *Plant Breeding and Seed Science*, 58: 61-77.
16. Feyzian, E., **H. Dehghani**, A. M. Rezai, M. Jalali-Javaran. 2009. Correlation and sequential path model for some yield-related traits in melon (*Cucumis melo* L.). *Journal of Agricultural Science and Technology*, 11: 341-355.
17. Feyzian, E., **H. Dehghani**, A. M. Rezai, M. Jalali-Javaran. 2009. Diallel cross analysis for maturity and yield-related traits in melon (*Cucumis melo* L.). *Euphytica*, 168: 215-223.

18. [Dehghani, H.](#), N. Sabaghnia, M. Moghaddam. 2009. Interpretation of genotype-by-environment interaction for late maize hybrids' grain yield using a biplot method. *Turkish Journal of Agriculture and Forestry*, 33: 139-148.
19. Sharifi, P., [H. Dehghani](#), A. Moumeni, M. Moghaddam. 2009. Genetic and genotype \times environment interaction effect for appearance quality of rice. *Agricultural Sciences in China*, 8(8): 891-901.
20. [Dehghani, H.](#), S. H. Sabaghpour, A. Ebadi-Segherloo. 2010. Study of genotype \times environment interaction for chickpea yield in Iran. *Agronomy Journal*, 102: 1-8.
21. Sabaghnia, N., [H. Dehghani](#), B. Alizadeh, M. Moghaddam. 2010. Interrelationships between seed yield and 20 related traits of 49 canola (*Brassica napus* L.) genotypes in non-stressed and water-stressed environments. *Spanish Journal of Agricultural Research*, 8(2): 356-370.
22. Sharifi, P., [H. Dehghani](#), A. Moumeni, M. Moghaddam. 2010. Genetic main effect and genotype \times environment interaction for cooking quality traits in a diallel set of Indica rice (*Oryza sativa* L.) varieties. *Crop & Pasture Science (Continuing Australian Journal Agriculture Research)*, 61(6): 475-482.
23. Safari, S., R. Choghan, E. Majidi Hervan, [H. Dehghani](#). 2010. Multienvironment analysis of traits relation and hybrid comparison of maize based on genotype by trait biplot. *American Journal of Agricultural and Biological Science*, 5(1): 107-113.
24. Sabaghnia, N., [H. Dehghani](#), B. Alizadeh, M. Moghaddam. 2010. Genetic analysis of oil yield, seed yield, and yield components in rapeseed (*Brassica napus* L.) using additive main effects and multiplicative interaction biplots. *Agronomy Journal*, 102(5): 1361-1368.
25. Sabaghnia, N., [H. Dehghani](#), B. Alizadeh, M. Moghaddam. 2010. Analysis on genetic contribution of some traits to seed yield in rapeseed by additive-dominance genetic method of mixed model. *Plant Breeding and Seed Science*, 62: 57-71.
26. Sabaghnia, N., [H. Dehghani](#), B. Alizadeh, M. Moghaddam. 2010. Heterosis and combining ability analysis for oil yield and its components in rapeseed. *Australian Journal of Crop Science*, 4(6): 390-397.
27. Sabaghnia, N., [H. Dehghani](#), B. Alizadeh, M. Moghaddam. 2010. Diallel analysis of oil content and some agronomic traits in rapeseed (*Brassica napus* L.) based on the additive-dominance genetic model. *Australian Journal of Crop Science*, 4(8): 609-616.
28. Safari, S., R. Choghan, E. Majidi Hervan, [H. Dehghani](#). 2010. Biplot analysis for multi-environment trials of maize (*Zea mays* L.) hybrids in Iran. *Crop & Pasture Science*, 61: 700-707.
29. Ebadi-Segherloo, A., S. Y. Sabaghpour, [H. Dehghani](#), M. Kamrani. 2010. Screening of superior chickpea genotypes for various environments of Iran using genotype plus genotype \times environment (GGE) biplot analysis. *Journal of Plant Breeding and Crop Science*, 2 (9): 286-292.
30. Sabaghnia, N., [H. Dehghani](#), B. Alizadeh, M. Moghaddam. 2011. Yield analysis of rapeseed (*Brassica napus* L.) under water-stress conditions using GGEbiplot methodology. *Journal of Crop Improvement*, 25(1): 26-45.

31. [Dehghani, H.](#), E. Feyzian, A. M. Rezai, M. Jalali-Javaran. 2012. Use of GGE biplot methodology for genetic analysis of yield and related traits in melon (*Cucumis melo* L.). Canadian Journal of Plant Science, 92: 77-85.
32. Dvorak, J., K. R. Deal, M. Luo, F. M. You, K. V. Borstel, [H. Dehghani](#). 2012. The origin of spelt and free-threshing hexaploid wheat. Journal of Heredity, 103(2): 1-16.
33. Mohammadi, R., [H. Dehghani](#), H. Zeinali. 2012. Interrelationships among flower yield and related characters in chamomile populations (*Matricaria chamomilla* L.). Journal of Medicinal Plants Research, 6(19): 3549-3554.
34. Sadeghi, F., [H. Dehghani](#), G. Najafian, M. Aghaee. 2012. Genetic analysis of bread-making quality attributes in hexaploid wheat (*Triticum aestivum* L.). Annals of Biological Research, 3(7): 3740-3749.
35. [Dehghani, H.](#), J. Dvorak, N. Sabaghnia. 2012. Biplot analysis of salinity related traits in beard wheat (*Triticum aestivum* L.). Annals of Biological Research, 3(7): 3723-3731.
36. [Dehghani, H.](#), J. Dvorak, N. Sabaghnia. 2012. Graphic analysis of biomass and seed yield of beard wheat in salt stress condition. Annals of Biological Research, 3(9): 4246-4253.
37. Danyali, S. F., F. Razavi, A. Ebadi Segherloo, [H. Dehghani](#), S. H. Sabaghpour. 2012. Yield stability in chickpea (*Cicer arietinum* L.) and study relationship among the univariate and multivariate stability parameters. Research in Plant Biology, 2(3): 46-61.
38. [Dehghani, H.](#), M. Moghaddam, M. R. Bihamta, N. Sabaghnia, R. Mohammadi. 2013. Biplot analysis of diallel data in strip rust of wheat. Australian Plant Pathology, 42: 601-608.
39. Khodadadi, M., [H. Dehghani](#), M. H. Fotokian. 2014. Genetic diversity and heritability of chlorophyll content and photosynthetic indexes among some Iranian wheat genotypes. Journal of Biodiversity and Environmental Sciences, 4(1): 12-23.
40. Khodadadi, M., [H. Dehghani](#), M. H. Fotokian. 2014. Heritability and genetic diversity of iron, zinc and some morphological and physiological traits in some spring wheat genotypes (*Triticum aestivum* L.). International Journal of Biosciences, 4(2): 1-9.
41. Akbarpour O., [H. Dehghani](#), B. Sorkhi, H. G. Gauch Jr. 2014. Evaluation of genotype × environment interaction in barley genotypes (*Hordeum vulgare* L.) based on AMMI model using developed SAS program. Journal of Agricultural Science and Technology, 16: 919-930.
42. Mohammadi R., [H. Dehghani](#), G. Karimzadeh. 2014. Genetic analysis of yield components, early maturity and total soluble solids in cantaloupe (*Cucumis melo* L. subsp. *melo* var *cantalupensis* Naudin). Yuzuncu Yil University Journal of Agricultural Sciences, 24(1): 79-86.
43. Khodadadi M., [H. Dehghani](#), M. H. Fotokian 2014: Genetic diversity of wheat grain quality and determination the best clustering technique and data type for diversity assessment. Genetika, 46(3): 763-774.
44. Akbarpour O., [H. Dehghani](#), M. J.Rousta. 2015. The evaluation of salt stress of iranian wheat germplasm in field condition. Crop & Pasture Science, 66: 770-781.

45. Sheikh, F., [H. Dehghani](#), M. A. Aghajani. 2015. Screening faba bean (*Vicia faba* L.) genotypes for resistance to Stemphylium blight in Iran. *European Journal of Plant Pathology*, 143: 677-689.
46. Ravari, S. Z. [H. Dehghani](#), H. Naghavi. 2015. Assessment of salinity indices to identify Iranian wheat varieties using an artificial neural network. *Annals of Applied Biology*, 168:185-194.
47. Akbarpour O., [H. Dehghani](#), B. Sorkhi, M. S. Kang. 2015. A SAS macro for computing statistical tests for two-way table and rank-based stability indices from genotype-by-environment interaction. *Acta Scientiarum*, 38(1) 35-50.
48. Khodadadi, M., [H. Dehghani](#), M. Jalali-Javaran, S. Rashidi Monfared. 2016. Numerical and graphical assessment of relationships between traits of the Iranian *Coriandrum sativum* L. core collection by considering genotype \times irrigation interaction. *Scientia Horticulturae*, 200: 73-82.
49. Gholizadeh, A., [H. Dehghani](#). 2016. Graphic analysis of trait relations of iranian bread wheat germplasm under non-saline and saline conditions using the biplot method. *Genetika*, 48(2): 473-486.
50. Khodadadi, M., [H. Dehghani](#), M. Jalali-Javaran, J. T, Christopher. 2016. Fruit yield, fatty and essential oils content genetics in coriander. *Industrial Crops and Products*, 94: 72-81.
51. Khodadadi, M., [H. Dehghani](#), M. Jalali-Javaran. 2017. Quantitative genetic analysis reveals potential to genetically improve fruit yield and drought resistance simultaneously in coriander. *Frontiers in Plant Science*, 8: 1-16.
52. Gholizadeh, A., [H. Dehghani](#). 2017. Correlation and sequential path analysis between yield and related characters of wheat (*Triticum aestivum* L.) genotypes in non-stressed and salinity-stressed conditions. *Romanian Agricultural Research*, 34: 37-49.
53. Ravari, S. Z. [H. Dehghani](#), H. Naghavi. 2015. Study of genetic control of salinity tolerance in bread wheat cv. Kavir-using generation mean analysis. *Crop Breeding Journal* 7 (1 & 2): 57-66.
54. Gholizadeh, A., [H. Dehghani](#), M. Khodadadi, P. J. Gulick. 2018. Genetic combining ability of coriander genotypes for agronomic and phytochemical traits in response to contrasting irrigation regimes. *PLoS One*, 6: 1-15.
55. Dvorak, J., L. Wang, T. Zhu, C. M. Jorgensen, K. R. Deal, X. Dai, M. W. Dawson, H. G. Muller, M.C. Luo, R. K. Ramasamy, [H. Dehghani](#), Y. Q. Gu, B. S. Gill, A. Distelfeld, K. M. Devos, P. Qi, F. M. You, P. J. Gulick, P. E. McGuire. 2018. Structural variation and rates of genome evolution in the grass family seen through comparison of sequences of genomes greatly differing in size. *The Plant Journal*; 95(3):1-17.
56. Xu, J., X. Dai, R. K. Ramasamy, L. Wang, T. Zhu, P. E. McGuire, C. M. Jorgensen, [H. Dehghani](#), P. J. Gulick, M. C. Luo, H. G. Müller, J. Dvorak. 2019. *Aegilops tauschii* Genome Sequence: A Framework for Meta-analysis of Wheat QTLs. *G3-Genes Genomes Genetics*, 9(3):841-853.
57. Gholizadeh, A., [H. Dehghani](#), M. Khodadadi. 2019. Quantitative genetic analysis of water deficit tolerance in coriander through physiological traits. *Plant Genetic Resources*, 17(3):255-264.

58. Hosseini, B., [H. Dehghani](#), M. Khodadadi. 2019. Root traits and transpiration efficiency in fenugreek ecotypes grown under different water treatment. *Journal of Agricultural Science and Technology*, 21(3): 715-727.

Scientific-research publications in English

1. Hanifei, M., **H. Dehghani**, R. Choukan. 2013. The role of antioxidant enzymes and phenolic compounds in disease resistance to *Fusarium oxysporum* f. sp. *Melonis* race 1.2. *International Journal of Agronomy and Plant Production*, 4(8): 1985-1996.
2. Rahimi, M., [H. Dehghani](#), B. Rabiei, A. R. Tarang. 2013. Evaluation of rice segregating population based on drought tolerance criteria and biplot analysis. *International Journal of Agriculture and Crop Sciences*, 5(3): 194-199.
3. Gholizadeh, A., [H. Dehghani](#), J. Dvorak. 2014. Determination of the most effective traits on wheat yield under saline stress. *Agricultural Advances*, 3: 103-110.
4. Gholizadeh, A., [H. Dehghani](#), J. Dvorak. 2014. Interrelationships between seed yield and related traits in bread wheat genotypes in non-saline and saline environments. *Scientific Journal of Crop Science*, 3: 24-31.
5. Gholizadeh, A., [H. Dehghani](#), J. Dvorak. 2014. Yield analysis of bread wheat under saline conditions using some statistical procedures. *Scientific Journal of Biological Sciences*, 3(45): 37-46.

Scientific-research publications in Persian

1. **Dehghani, H.**, M. Moghaddam, M. Ghanadha. 2004. Diallel analysis of infection type in wheat stripe rust. *Agricultural Science*, 13(4): 111-122.
2. Shahmohammadi, M., [H. Dehghani](#), A. Yousefi. 2004. Additive main effects and multiplicative interaction analysis (AMMI) in barley (*Hordeum vulgare* L.) genotypes. *Plant and Seed*, 20: 405-416.
3. Maherani, B., M. Barzgar, M. A. Sahari, [H. Dehghani](#). 2005. Optimization of extraction conditions of Iranian flaxseed gum using the response surface method. *Journal of Science and Technology of Agriculture and Natural Resources*, 8(4): 145-156.
4. Abdoli, M., A. Moini, **H. Dehghani**. 2005. Effects of genotype, explant age and cotyledon pieces on *in vitro* plant regeneration in sunflower. *Journal of Agricultural Science*, 1(4): 153-160.
5. Souri, J., [H. Dehghani](#), S. H. Sabaghpour. 2005. A Study of chickpea genotypes in water stress conditions. *Iranian Journal of Agricultural Science*, 36(6): 1517-1527.
6. [Dehghani, H.](#), M. Torabi, M. Moghaddam, M. R. Ghanadha. 2005. Biplot analysis of diallel cross data for infection type of wheat stripe rust. *Plant and Seed Journal*, 21: 123-138.
7. Shahmohammadi, M., [H. Dehghani](#), A. Yousefi. 2005. Stability analysis of barley (*Hordeum vulgare* L.) genotypes in regional trials in cold zone. *Journal of Science and Technology of Agriculture and Natural Resources*, 9(1): 143-155.
8. Ismaili, A., [H. Dehghani](#), S. Khavari Khorasani, H. Mirzai Nadoshan. 2005. Estimation of combining ability and gene effects of early maturity maize lines at different plant densities by line-tester method. *Iranian Journal of Agricultural Science*, 36(4): 917-929.

9. Shahmohammadi, M., [H. Dehghani](#), A. Yousefi, A. Moeini, H. Omid. 2005. Study of yield stability in barley (*Horeum vulgare* L.) cultivars through non-parametric measures. *Agricultural Science and Technology*, 19(2): 1-9.
10. Karimizadeh, R., [H. Dehghani](#), Z. Dehghanpour. 2006. Determination of genotypic ranks and stability of corn hybrids (*Zea mays* L.) by nonparametric statistics. *Iranian Journal of Agricultural Science*, 37-1(3): 381-388.
11. Karimizadeh, R., [H. Dehghani](#), Z. Dehghanpour. 2006. Using cluster analysis for stability of maize hybrids. *Journal of Science and Technology of Agriculture*, 10(3): 337-347.
12. Abdoli, M., A. Moini, **H. Dehghani**. 2006. Effect of pretreatments of temperature, hormone and cotyledon surface on *in vitro* plant regeneration of sunflower (*Helianthus annuus* L.). *Journal of Agronomy and Crop Science*, 2(1): 65-74.
13. Feyzian, E., M. Jalali-Javaran, [H. Dehghani](#), H. Zamyad. 2006. Analysis of the genetic diversity among some of Iranian melon (*Cucumis melo* L.) landraces using morphological and RAPD molecular markers. *Journal of Science and Technology of Agriculture and Natural Resources*, 41: 151-163.
14. Mohammadi, M., A. Moieni, M. Torabi, A. Saeedi, [H. Dehghani](#). 2006. Study on resistance to yellow rust (*Puccinia striiformis* West.) in hexaploid wheat doubled haploid lines and their parents. *Plant and Seed*, 22(1): 87-102.
15. Dehghanpour, Z., R. Karimizadeh, **H. Dehghani**, N. Sabaghnia. 2006. Estimation of adaptability and stability of grain yield in foreign early corn hybrids. *Iranian Journal of Agricultural Science*, 38-1(2): 249-257.
16. Safari, S., **H. Dehghani**, R. Choghan. 2007. Evaluation of maize inbred lines for drought tolerance based on resistance indices and biplot method. *Iranian Journal of Agricultural Sciences*, 38-1(2): 215-228.
17. Karimizadeh, R., [H. Dehghani](#), Z. Dehghanpour. 2008. Use of AMMI method for estimating genotype-environment interaction in early maturing corn hybrids. *Plant and Seed*, 23(4): 531-546.
18. Mofidian, M., Z. Movahedi, **H. Dehghani**. 2009. Yield stability analysis for superior alfalfa ecotypes from cold regions in Iran-using univariate methods. *Iranian Journal of Crop Sciences*, 11(2): 162-173.
19. Malekshahi, F., [H. Dehghani](#), B. Alizadeh. 2009. A study of drought tolerance indices in canola (*Brassica napus* L.) genotypes. *Journal of Science and Technology of Agriculture and Natural Resources*, 13(48): 77-90.
20. Nikoseresh, R., G. Nejafian, R. G. Mirfakhraei, [H. Dehghani](#). 2009. Evaluation of bread making quality of bread wheat cultivars and lines using SDS-sedimentation volume and high molecular weight glutenin subunits. *Plant and Seed journal*, 25-1(3): 373-383.
21. Feyzian, E., **H. Dehghani**, A. M. Rezai, M. Jalali Javaran. 2009. Genetic analysis for yield and related traits in melon (*Cucumis melo* L.) through diallel method. *Iranian Journal of Horticultural Science*, 40(1): 95-106.
22. Sharifi, P., [H. Dehghani](#), A. Moumeni. 2010. An estimation of genetic and genotype × environmental effects on some quantitative traits in rice. *Iranian Journal of Field Crop Science*, 40(4): 183-195.

23. Sharifi, P., **H. Dehghani**, A. Moumeni, M. Moghaddam. 2010. Estimation of genetic parameters for some cooking quality related traits in rice using diallel analysis. *Iranian Journal of Crop Science*, 12(2): 152-169.
24. Movahedi, Z., **H. Dehghani**, M. Mofidian. 2010. A study of yield stability in cold regions ecotypes of alfalfa (*Medicago sativa* L.) through non-parametric measures. *Iranian Journal of Field Crop Science*, 40(4): 103-111.
25. Safari, S., **H. Dehghani**, R. Choghan. 2010. Study of drought tolerance indices in maize inbred lines under limited irrigation and normal conditions. *Journal of Plant Protection*, 23(2): 20-25.
26. Sharifi, P., **H. Dehghani**, A. Moumeni, M. Moghaddam. 2010. Diallel analysis for heterosis study and estimation of genetic parameters for some morphological traits in rice. *Plant and Seed*, 26-1(1): 77-104.
27. Salehi-Najafabadi S., M. Jalali-Javaran, **H. Dehghani**. 2010. Using morphological and molecular markeres aims to assessment of the genetic diversity and division partiol of germplasm of Iranian melon. *Iranian Journal of Biology*, 23(3): 343-352.
28. Sharifi, P., **H. Dehghani**, A. Moumeni, M. Moghaddam. 2011. Genetic assessments of some morphological traits in rice by generation mean analysis. *Iranian Journal of Field Crop Science*, 42(1): 1-13.
29. Amiri-Oghan, H., **H. Dehghani**, M. Heidari. 2011. Inheritance of yield and its related traits in winter rapeseed cultivars (*Brassica napus* L.) under non-stress and drought stress conditions. *Agriculture Science*, 20(1): 33-48.
30. Khodadadi, M., **H. Dehghani**, M. H. Fotokian. 2011. Study of heritability, path and factor analysis in winter wheat (*Triticum aestivum* L.) genotypes. *Journal of Agronomy Science*, 4: 67-78.
31. Akbarpour, O., **H. Dehghani**, B. Sorkhialahlo. 2011. Investigating univariate and multivariate stability parameters of barley (*Hordeum vulgare* L.) promising genotypes in cold climate of Iran. *Iranian Journal of Field Crop Science*, 42(1): 23-32.
32. Akbarpour, O., **H. Dehghani**, B. Sorkhialahlo. 2012. Study of grain yield stability of barley (*Hordeum vulgare* L.) promising lines in cold regions of Iran using regression methods. *Iranian Journal of Crop Sciences*, 14(2): 155-170.
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1. Karimzadeh, G., M. Jalali-Javaran, **H. Dehghani**. 2001. The effect of low temperature on quantitative amount of leaf soluble protein in spring and winter cultivars of wheat. The 1th Iranian Conference on Applied Biology. Mashhad, Iran.
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24. Malekshahi., F., **H. Dehghani**, B, Alizadeh. 2009. Proceeding of the first national congress of oil seed crops. 23-24 Sep. 2009. Isfahan University of Technology. Iran.
25. Sabaghnia., N., **H. Dehghani**, B, Alizadeh, M. Moghadam. 2009. Proceeding of the first national congress of oil seed crops. 23-24 Sep. 2009. Isfahan University of Technology. Iran.
26. Sabaghnia., N., **H. Dehghani**, B, Alizadeh, M. Moghadam. 2009. Study of drought resistance indexes in canola (*Brassica napus* L.). National Conference on Oil Seed Crops. Isfahan University of Technology, Isfahan, Iran.
27. Sabaghnia., N., **H. Dehghani**, B, Alizadeh, M. Moghadam. 2009. Traits correlation and yield component analysis in canola genotypes by GGEbiplot. National Conference on Oil Seed Crops. Isfahan University of Technology, Isfahan, Iran.
28. Roostabaghi., B., **H. Dehghani**, B, Alizadeh. 2009. Factor analysis for grain yield and some canola traits. National Conference on Oil Seed Crops. Isfahan University of Technology, Isfahan, Iran.
29. Roostabaghi, B., **H. Dehghani**, B, Alizadeh. 2009. Study of yield and some canola traits by path analysis. National Conference on Oil Seed Crops. Isfahan University of Technology, Isfahan, Iran.

G. SUPERVISED AND ADVISED THESIS

Supervised Ph. D. thesis list

1. Feyzian, S. E. (2006-2009). Investigation of inheritance of yield and its attributing traits in local melon landrace (*Cucumis melo* L.).
2. Sharifi, P. (2006-2009). Estimating gene effects and genetic analysis for some of morphological and quality traits of rice.
3. Sabaghnia, N. (2007-2010). Genetic study of yield and drought tolerance in rapeseed (*Brassica napus* L.).

4. Rahimi, M. (2009-2013). Identification of QTLs controlling important yield related traits of rice in different irrigation conditions.
5. Sadeghi, F. (2009-2013). Study of genetic characteristics of bread-making quality attributes in hexaploid wheat using diallel and generation mean analysis methods.
6. Mohammadi, R. (2010- 2014). Study on inheritance, combining ability and estimation of gene effects for quantitative traits in Iranian endemic cantaloup populations.
7. Akbarpour, O. A. (2011-2015). Inheritance of salinity tolerance in some Iranian bread wheat (*Triticum aestivum* L.) cultivars.
8. Ravari, S. Z. (2011-2015). Estimation of genetic variance components for salinity tolerance by two methods of triple test cross analysis and generation mean analysis in bread wheat.
9. Sheikh, F. (2011-2015). Genetic study of Stemphylium blight resistance in faba bean (*Vicia faba* L.).
10. Darvishi, D. (2011-2016). Expression of some effective genes of terpenes production in Iranian endemic black zira (*Bunium Persicum* L.).
11. Ghotbi, V. (2011-2016). Genetic and heterosis study in several alfalfa populations (*Medicago Sativa* L.) by diallel cross design.
12. Khodadadi, M. (2012-2017). Genetic Study of Fruit Yield and Essential Oil in Iranian Coriander (*Coriandrum sativum* L.) Accessions Under Normal and Drought Stress Condition.
13. Hanifei, M. (2013-2017). Investigation of inheritance of fruit yield and essential oil in coriander (*Coriandrium Sativum* L.) under drought stress condition using triple test cross
14. Hossini, B. (2014-2017). Genetic Study of Grain Yield in Iranian Fenugreek (*Trigonella foenum-graceum* L.) Population Under Normal and Drought Stress Conditions.
15. Gholizadeh, A. (2014-2018). Genes Action and Heterosis of Fruit Yield, Essential Oil and their Related Traits in Coriander (*Coriandrum sativum* L.) under Different Irrigation Regimes

Supervised M. Sc. thesis list

1. Ilat, B. (2000- 2002). Correlation and path analysis of yield and its component in oilseed rape canola (*Brassica napus* L.).
2. Shahmohammadi, M. (2000-2002). Analysis of genotype×environment interaction in barley cultivars and comprising it with other methods.
3. Esmaili, A. (2000-2002). Estimation of combining ability and gene effects of maize early maturity lines by line × tester method.
4. Souri, J. (2001-2003). Evaluation of cicer germplasm for drought resistance.
5. Karimizadeh, R. (2002-2004). Study of grain yield and stability in corn early maturity hybrids at final stage.
6. Hydari, M. (2002-2004). Determining heterosis and drought tolerance heritability ability in winter canola cultivars by line×tester method.
7. Safari, S. (2003-2005). Evaluation of maize lines for drought tolerance.

8. Sabaghnia, N. (2004-2006). Study genotype \times environment interaction in yield of some autumn lentil cultivars.
9. Ebadi, A. (2004-2006). Study of genotype \times environment interaction for chickpea (*Cicer arietinum* L.).
10. Mohebodini, M. (2004-2006). Study on yield and stability analysis of different lentil (*Lens culinaris* L.) spring cultivars.
11. Movahedi, Z. (2005-2007). Final evaluation of alfalfa ecotypes of cold region.
12. Sarvari, M. (2005-2007). Evaluation of adaptability for drought stress and yield stability in sorghom.
13. Malekshahi, F. (2005-2007). Evaluatoin of some canola (*Brassica napus* L.) cultivars for drought resistance.
14. Sheikhmamo, M. (2006-2008). Study of genotype \times environment intraction and yield stability of barley (*Hordeum vulgare* L.) promising genotypes in the cold region of Iran.
15. Akbarpour, O. A. (2008-2009). Study of genety \times environment intraction and yield stability of barley (*Hordeum vulgare* L.) promising genotypes in the cold climate of Iran.
16. Mohamadi, R. (2008-2009). Study on agronomic traits, phytochemical and nutrition elements variation in *Matricaria chamomilla*.
17. Roostabaghi, B. (2009-2010). Combining ability analysis for yield and its components in rapseed (*Brassica napus* L.).
18. Moradi, M. (2009-2010). Study on stability parameters of barley (*Hordeum vulgare* L. elit genotypes under cold climate condition of Iran.
19. Seyfati, E. (1010-2011). Mapping QTLs for some physiological and morphological traits in an advanced back cross (BC₂F₅).
20. Khodadadi, M. (2010-2011). Genetic diversity in several spring wheat (*Triticum aestivum* L.) cultivars for iron, zinc and several morphological traits.
21. Rashidifar, J. (2010-2011). Evaluation of drought tolerance in some winter canola (*Brassica napus* L.) cultivars.
22. Mahdavi-Meyghan, A. (2010-2011). Study of correlation among morphological and morphophysiological traits in some Iranian endemic of cantaloupe (*Cucumis melo* L.).
23. Akrami, M. (2011-2012). Quantitative triats inheritance in Iranian endemic cantaloupe landraces (*Cucumis melo* L.).
24. Mohammadinejad, Z. (2011-2012). Drought tolernce in some Iranian endemic muskmelon (*Cucumis melo* var. Indorus).
25. Hanifei, M., (2011-2013). Evaluation of the tolerance of Iranian endemic melon populations against vascular wilt caused by *Fusarium oxysporum* F. sp. *Melonis*.
26. Sohrabi, S. (2011-2013). Stability analysis of promissing winter rapeseed (*Brassica napus* L.) lines.
27. Kanafi, M. (2011-2013). Salt tolerance in some Iranian bread wheat (*Triticum aestivum* L.) cultivars.
28. Gholizadeh, A. (2012-2013). Evaluation of some Iranian commerical bread wheat cultivars regarding to salinity stress.

29. Talaei, S. (2012-2013). Stability analysis of advanced grasspea (*Lathyrus sativus* L.) lines in subtropical dryland regions.
30. Eynizadeh, P. (2013-2015). Study of drought tolerance in some Iranian endemic coriander (*Coriandrum sativum* L.).
31. Sharifi-Zagheh, A. (2014-2016). Estimation of general combining ability of fruit yield and essential oil in endemic coriander (*Coriandrium Sativum* L.) populations using half-sib families under different irrigation treatments
32. Talebi, P. (2015-2017). Evaluation and Selection of Faba Bean (*Vicia faba* L.) Lines with High Yield, Suitable Plant Form for Mechanization and Resistant to Fungal Diseases

Advised thesis list:

1. Amarloo, A. (1998-2000). Study of potato cultivars polymorphism using storage protein electrophoresis.
2. Sharifi-Shirchi, G. (1999-2001). evaluation of temperature effects on electrophoretic patterns of proteins in the spring and winter wheat cultivars.
3. Darvishzadeh, R. (1999-2001). Study of quantitative variations of leaf soluble proteins in spring and winter barley cultivars in response to cold stress.
4. Niko-Seresht, G. (2000-2002). Study on the relationship between high molecular weight glutenin subunits and SDS sedimentation volume of advanced wheat lines in the moderate regions of Iran.
5. Abdoli, M. (2001-2003). Study on some factors affecting plant regeneration of mature sunflower (*Heliantus annuus* L.) cotyledons.
6. Feysian, E. (2003-2005). Germplasm collection of some cucumis melo landraces in the north and center of Iran, and study on their genetic diversity by morphological and molecular (RAPD) markers.
7. Khodai, R. (2004-2006). Genetic variation of watermelon (*Citrullus lanatus*) landrace using molecular and morphological markers.
8. Shahpasandzadeh, H. (2004-2006). Yield and essence of cumin grain (*Cuminum cyminum*) as influenced by seeding rate and integrated chemical and manure fertilizer in Kerman region.
9. Zarafshan, M. (2006-2008). Preparing climate and soil requirement tables for land suitability evaluation of cumin seed cultivation in Iran based on FAO framework method.
10. Salehi Najafabadi, S. (2007-2009). Study of genetic diversity some Iranian melon landraces, using morphological and molecular markers (RAPD, SSR).
11. Maleki-Choreh, J. (2007-2009). Study on anther culture in some cultivars of strawberry (*Fragaria ananassa*).
12. Dalkani, M. (2009-2010). Genetic diversity of some date palm (*Phoenix dactylifera*) cultivars from Kerman, Iran using morphological and molecular markers.
13. Boosh, A. (2010-2011). Propagation of rose damascena by temporary immersion system.
14. Abookazemi, K. (2010-2011). Transfer of human proinsulin gene into cucumber (*Cucumis sativus* L.) via agrobacterium method.

15. Rezaei, M. (2011-2012) Effects of Jasmonic acid and Paclobutrazol on potato minituber production in aeroponic system.

H. RESEARCH INTERESTS

- Genotype \times Environment Interaction
- Breeding for Abiotic Stress
- Breeding for Biotic Stress

My main research interests are plant breeding mediating responses to biotic and abiotic stresses, and I work to characterize both a plant's physiologic responses as well as its changes in phenotypic expression in response to plant stress, diseases and adaptation to environmental stresses.

Genotype \times environment interactions ($G \times E$) describe genetic variation for phenotypic plasticity, such that the relative performance of genotypes varies across environments. I have studied these interactions in the context of artificial selection for two decades by using different methods, univariate, multivariate, parametric, non-parametric and distinguish the stability and adaptation of plant material. Then it is an essential step in each breeding program until a new variety will be release.

Recently I started using of relatively low numbers of markers, which has facilitated the mapping of chromosome regions associated with phenotypic variability (e.g., QTL mapping) and, to a lesser extent, revealed the differential response of these chromosome regions across environments or drought stress (i.e., QTL \times environment interaction).