PERSONAL INFORMATION:

Full Name: Benjamin Torabi

Nationality: Iranian

Academic Level: Associate Professor

E-mail: ben_torabi@yahoo.com

EDUCATION:

- B.S., 1997-2001; Agronomy and Plant Breeding, 3.5 years,
  Dept. of Agronomy and Plant Breeding, University of Mazandaran, Sari, Iran

- M.S., 2001-2004; Agronomy, 3 years with thesis,
  Dept. of Agronomy and Plant Breeding, Gorgan University of Agricultural Sciences, Gorgan, Iran
  Thesis: Predicting phenological development in chickpea (*Cicer arietinum* L.)

- Ph.D., 2006-2011; Agronomy, 5 years with thesis,
  Dept. of Agronomy and Plant Breeding, Gorgan University of Agricultural Sciences, Gorgan, Iran
  Thesis: Analyzing the wheat yield constraints in Gorgan with a simulation model and analytical hierarchy process (AHP) approach

RESEARCH INTEREST:

Simulation of crops and cropping systems
Plant-environment relationships and agro-climatology
Climate change and crop production

PUBLICATION:

1. Soltani, A., **Torabi, B.,** Zeinali, E., Sarparast, R. 2004. Response of chickpea to photoperiod as a qualitative long-day plant. Asian J. Plant Sci. 6: 705-708.
2. Soltani, A., **Torabi, B.,** Zarei, H. 2005. Modeling crop yield using a modified harvest index-based approach: application in chickpea. Field Crops Res. 91: 273-285.
3. Soltani, A., Hammer, G.L., **Torabi, B.,** Robertson, M.J., Zeinali, E. 2006. Modeling chickpea growth and development: phenological development. Field Crops Res. 99: 1-13.

4. Soltani, A., Robertson, M.J. **Torabi, B.,** Yousefi-Daz, M., Sarparast, R. 2006. Modeling seedling emergence in chickpea as influenced by temperature and sowing depth. Agric. For. Meteorol. 138: 156-167.
5. **Torabi, B.,** Soltani, A., Galeshi, S., Zeinali, E. 2011. Assessment of yield gap due to nitrogen management in wheat. Aust. J. Crop Sci. 5(7): 879-884.
6. **Torabi, B.,** Attarzadeh, M., Soltani, A. 2013. Germination Response to Temperature in Different Saffower (*Carthamus tinctorius*) Cultivars. Seed Technol. 35(1): 47-59.
7. **Torabi, B.,** Adibniya, M., Rahimi, A. 2015. Seedling emergence response to temperature in safflower: measurements and modeling. Int. J. Plant Prod. 9(3): 393-314.
8. **Torabi, B.,** Soltani, E., Archontoulis, S.V., Rabii, A. 2016. Temperature and water potential effects on *Carthamus tinctorius* L. seed germination: measurements and modeling using hydrothermal and multiplicative approaches. Braz. J. Bot. Online publication date. 39(2): 427-436. DOI 10.1007/s40415-015-0243-x.
9. Kheyri, N., Ajam Norouzi, H., Mobasser, H.R., **Torabi, B**. 2018. Effect of different resources and methods of silicon and zinc application on agronomic traits, nutrient uptake and grain yield of rice (*Oryza sativa* L.). Applied Ecology and Environmental Research. 16 (5): 5781-5798.
10. Malek, M., Ghaderi-Far, F., **Torabi, B.,** Sadeghipour, H.R., Hay, F.R. 2019. The influence of seed priming on storability of rapeseed (*Brassica napus*) seeds. Seed Science and Technology, 47, 1, 87-92.
11. Kheyri, N., Ajam Norouzi, H., Mobasser, H.R., **Torabi, B.** 2019. Effects of silicon and zinc nanoparticles on growth, yield, and biochemical characteristics of rice. Agron. J. 111:1-7.
12. **Torabi, B.,** Archontoulis, S.V., Hoogenboom, G. 2019. A New function for prediction of biological processes response to temperature. Int. J. Plant Prod. https://doi.org/10.1007/s42106-019-00063-7.
13. Zaferanieh, M., Mahdavi, B., **Torabi, B.** 2020. Effect of temperature and water potential on Alyssum homolocarpum seed germination: Quantification of the cardinal temperatures and using hydro thermal time. South African Journal of Botany. 131: 259-266.
14. Dadrasi, A., **Torabi, B.,** Rahimi, A., Soltani, A., Zeinali, E. 2020. Parameterization and evaluation of a simple simulation model (SSM-iCrop2) for potato (*Solanum tuberosum* L.) growth and yield in Iran. Potato Res. DOI: 10.1007/s11540-020-09456-y
15. Soltani, A., Alimagham, S.M., Nehbandani, A., **Torabi, B.,** Zeinali, E., Zand, E., Vadez, V., van Loon, M.P., van Ittersum, M.K. 2020. Future food self-sufficiency in Iran: A model-based analysis. Global Food Security. 24: 100351. https://doi.org/10.1016/j.gfs.2020.100351
16. **Torabi, B.,** Adibniya, M. Rahimi, A, Azari, A. 2020. Modeling flowering response to temperature and photoperiod in safflower. Industrial Crops and Products. 151: 112474.
17. Soltani, A., Alimagham, S.M., Nehbandani, A., **Torabi, B.,** Zeinali, E., Dadrasi, A., Zand, E., Ghassemi, S., Pourshirazi, S., Alasti, O., Hosseini, R.S., Zahed, M., Arabameri, R., Mohammadzadeh, Z., Rahban, S., Kamari, H., Fayazi, H., Mohammadi, S., Keramat, S.,

Vadez, V., van Ittersum, M.K., Sinclair, T.R. 2020. SSM-iCrop2: A simple model for diverse crop species over large areas. Agricultural Systems. 182. 102855.
18. Soltani, A., Alimagham, S.M., Nehbandani, A., **Torabi, B.,** Zeinali, E., Zand, E., Ghassemi, S., Vadez, V., van Ittersum, M.K., Sinclair, T.R. 2020. Modeling plant production at country level as affected by availability and productivity of land and water. Agricultural Systems. 83: 102859
19. **Torabi, B.,** Soltani, A., Galeshi, S., Zeinali, E. 2012. Analysing wheat yield constraints in Gorgan. Journal of Crop Production. 4 (4): 1-17. *[in Persian]*.
20. **Torabi, B.,** Soltani, A., 2013. A simple model for predicting grain yield of maize single cross hybrid. Journal of Crop Production and Processing. 7, 47-57. *[in Persian]*.
21. **Torabi, B.,** Soltani, A., Galeshi, S., Zeinali, E. 2013. Assessment of effect of irrigation regime on wheat yield gap in Gorgan region. Journal of Plant Production. 20 (2), 73-93. *[in Persian]*.
22. **Torabi, B.,** Soltani, A., Galeshi, S., Zeinali, E., Kazemi-Korgehei, M. 2013. Ranking factors causing the wheat yield gap in Gorgan. Journal of Crop Production. 6 (1): 171-189. *[in Persian]*.
23. **Torabi, B.,** Soltani, A., 2013. Assessment of nitrogen fertilizing of wheat farms in Gorgan region. Journal of Crop Production. 6 (4): 19-32. *[in Persian]*.
24. **Torabi, B.,** Soltani, A., Galeshi, S., Zeinali, E. 2015. Balance of N, P and K Nutrients in Different Wheat Farms in Gorgan. Plant Production Technology. 15 (1), 47-57. *[in Persian]*.
25. **Torabi, B.,** Dastfali-Nejad, N., Rahimi, A., Soltani, A. 2015. Assessing the relationship between leaf area and some vegetative characteristics in safflower. Journal of Plant Ecophysiology, 23, 165-175. *[in Persian]*.
26. Soltani, E., Soltani, A., Mohamadi, N., **Torabi, B.,** Zeinali, E. 2015. Estimation of plant parameters of QUEFTS model for optimization of NPK nutrition in wheat. Journal of Crop Production. 8 (3), 41-62. [in Persian].
27. Bagheri, V., **Torabi. B**. 2015. A simple model to simulate the growth, development and yield of faba bean in Golestan province. Journal of Crop Production. 8 (2): 133-152. *[in Persian]*.
28. Hajarpoor, A., Soltani, A., **Torabi, B.** 2016. Using boundary line analysis in yield gap studies: A case study of wheat in Gorgan. Journal of Crop Production. 4 (8), 183-201. *[in Persian]*.
29. Masoumipour, A., **Torabi, B.,** Rahimi, A. 2016. Evaluation of extinction coefficient and radiation use efficiency in different safflower under different levels of nitrogen fertilizer. Journal of Crop Production. 9 (3), 67-86. *[in Persian]*.
30. **Torabi, B.,** Khatib, F., Rahimi, A. 2017. Assessing some of growth indices in safflower using regression analysis. Iranian Journal of Field Crops Research. 14 (4), 651-655. *[in Persian]*.
31. Dadrasi, V., **Torabi, B.** 2017. Predicting corn growth and yield in Hamadan. Iranian Journal of Field Crop Science. 47 (4), 595-610. *[in Persian]*.
32. Mansouri-Rad, A., Nakhzari-Moghadam, A., Soltani, A., Rahemi-karizaki, A., **Torabi, B.** 2017. Identifying soybean yield-limiting factors by using Comparative Performance Analysis (Case study: Golestan province – Kalaleh). Crops Improvement. 19 (4), 1033-1046. *[in Persian]*.

33. Dadrasi, V., **Torabi, B.,** Ghasemi-Maham, S. 2018. Modeling growth and yield of safflower in Isfahan. Journal of Plant Ecophysiology. 32, 161-176. *[in Persian]*.
34. Siahmarguee, A., **Torabi, B.,** Sohrabi-Rad, E.M. Alimagham, M. 2018. Effect of weeds and management factors on soybean yield gap in Kalaleh region. Crops Improvement. 20 (2), 563-576. *[in Persian]*.
35. **Torabi, B.,** Saadatkhah, H., Soltani, A., Mahdavi, B. 2018. Quantifying the dry matter production and distribution in different organs of safflower cultivars. Journal of Crop Production. 10 (4), 1-14. *[in Persian]*.
36. Dadrasi, A., **Torabi, B.,** Rahimi, A., Soltani, A., Zeinali, E. 2020. Determination of potato yield gap in Golestan province. Journal of Agroecology. DOI:10.22067/jag.v12i2.76734 *[in Persian]*.
37. Ebrahimi, N., **Torabi, B.,** Soltani, A., Zeinali, E. 2021. Parameterization and evaluation of SSM_iCrop model for prediction of growth and development of faba bean in Gorgan climatic conditions. Crops Improvement. 22(4): 531-542. *[in Persian]*.
38. **Torabi, B.,** Soltani, A., Galeshi, S., Zeinali, E. 2021. Quantifying wheat yield gap in Gorgan conditions. Journal of Crop Production. 13: 1-24. [*in Persian*].
39. Mohammad Nezhad, Y., Basirat, M., HajiAbaee, H., **Torabi, B.** 2021. Determining the fertilizer requirement for irrigated wheat in Golestan dam fields, using the QUEFTS model. Crops Improvement. 22(3): 433-443. [*in Persian*].
40. Rahban, S., **Torabi, B.,** Soltani, A., Zeinali, E. 2021. Using SSM-iCrop model to predict phenology, yield, and water productivity of canola (*Brassica napus* L.) in Iran condition. 31(1): 157-177.
41. Sousaraei, N., **Torabi, B.,** Soltani, E., Mashayekhi, K., Medina, J. 2022. Differential seed germination responses of tomato landraces to temperature under climate change scenarios. Seeds, 1, 36–48. https://doi.org/10.3390/seeds1010005.
42. Alasti, O., Zeinali, E., Soltani, A., **Torabi, B.** 2021. Estimating the Potential Increase of Irrigated Barley Production over Iran via Closure of Yield Gap Based on GYGA protocol. Journal of Crop Production. 13: 325-344. [in Persian].
43. Puorshirazi, S. Zeinali, E., Soltani, A., **Torabi, B.** 2021. Parameterization and Evaluation of a Simple Simulation Model (SSM-iCrop2) for Alfalfa Growth and Yield in Iran. Agroecology. DOI:10.22067/AGRY.2021.70433.1044 [in Persian].
44. Arabameri, R., Zeinali, E., Soltani, A., **Torabi, B.** 2021. The amount and how to distribute of chickpea and lentil yield gap in Iran. Crops Improvement. DOI:10.22059/JCI.2021.294686.2323 [*in Persian*].
45. Monemizadeh, Z., Ghaderi-Far, F., Sadeghipour, H.R., Siahmarguee, A., Soltani, A., **Torabi, B.,** Baskin, C.C. 2021. Variation in seed dormancy and germination among populations of Silybum marianum (Asteraceae). Plant Species Biology. DOI: 10.1111/1442-1984.12326.
46. Sousaraei, N., **Torabi, B.,** Soltani, E., Mashayekhi, K., Medina, J. 2022. Differential seed germination responses of tomato landraces to temperature under climate change scenarios. Seeds, 1, 36–48. https://doi.org/10.3390/seeds1010005
47. Alasti, O., Zeinali, E., Soltani, A., **Torabi, B.** 2022. Exploring the current status of barley yield and production gap of Iran. European Journal of Agronomy. 139, 126547.
48. Pourshirazi, S., Soltani, A., Zeinali, E., **Torabi, B.,** Arshad, A., 2022. Assessing the sensitivity of alfalfa yield potential to climate impact under future scenarios in Iran.

Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-022-20287-x

49. Dadrasi, A., **Torabi, B.,** Rahimi, A., Soltani, A., Zeinali, E. 2022. Modeling Potential production and yield gap of potato using modelling and GIS approaches. Ecological Modelling, 471 (2022) 110050.
50. Pourshirazi, S., Soltani, A., Zeinali, E., **Torabi, B.,** Arshad, A., 2022. Assessing the sensitivity of alfalfa yield potential to climate impact under future scenarios in Iran. Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-022-20287-x
51. Malek, M., Ghaderi-Far, F., **Torabi, B.,** Sadeghipour, H.R., 2022. Dynamics of seed dormancy and germination at high temperature stress is affected by priming and phytohormones in rapeseed (Brassica napus L.). Journal of Plant Physiology. 269: 153614
52. Dadrasi, A., **Torabi, B.,** Rahimi, A., Soltani, A., Salmani, F., Nehbandani, A., Nourbakhsh, F., Ullah, A., 2022. Evaluation of water Productivity in the Main Areas of Potato Cultivation in Iran, Potato Research. https://doi.org/10.1007/s11540-022-09603-7

ACADEMIC TEACHING EXPERIENCE:

- Advanced Statistical Methods
- Experimental Designs in Agriculture
- Using the SAS Software in Statistical Analyses
- Agronomy
- Crop Modeling
- Plant Production Ecology
- Principles of Agronomy
- Stress and Stress Coping in Cultivated Plants
- Climate Change and Plant Production

LANGUAGES: Persian and English