

RESEARCH PUBLICATIONS OF DR. JAMSHAD HUSSAIN

PAPERS IN IMPACT FACTORS JOURNALS:

1. Hussain, S., Y. Jianjun, J. Hussain, P. Zandi, Subhanullah, X. Xing, Z. Liandong, T. Yu, A. Ali, Z. Kebin. 2022. **The rhizospheric transformation and bioavailability of mercury in pepper plants are influenced by selected Chinese soil types.** Environmental Geochemistry and Health. 35124755.
<https://doi.org/10.1007/s10653-022-01209-9>
2. Hussain J, T. Khaliq, H.M., Rahman, A. Ullah, I. Ahmed, A.K. Srivastava, T. Gaiser, A. Ahmad. 2021. **Effect of temperature on sowing dates of wheat under arid and semi-arid climatic regions and impact quantification of climate change through mechanistic modeling with evidence from field.** Atmosphere. 12(7):927. <https://doi.org/10.3390/atmos12070927>.
3. Hussain, S., J. Yang, J. Hussain, I. Hussain, M. Kumar, S. Ullah, L. Zhang, X. Xia, Y. Jia, Y. Ma, Y. Gao,. 2021. **Phytoavailability and transfer of mercury in soil-pepper system: Influencing factors, fate, and predictive approach for effective management of metal-impacted spiked soils.** Environmental Research. 207: 112190.
<https://doi.org/10.1016/j.envres.2021.112190>.
4. Hussain, J. T. Khaliq, S. Asseng, U. Saeed, A. Ahmad, B. Ahmad, I. Ahmad, M. Fahad, M. Awais, A. Ullah and G. Hoogenboom. 2020. **Climate Change Scenarios, Impacts and Adaptations on Wheat through Multiple Climate and Crop models.** Climatic Change, 163(1), 253-266.
5. Hussain, J. T. Khaliq, A. Ahmad, S. Asseng and J. Akhtar. **Yield and phenological responses of wheat to different temperature regimes in semiarid climate.** Pakistan Journal of Agriculture Sciences. Accepted
6. Hussain, J., T. Khaliq, A. Ahmad, J. Akhtar. 2018. **Performance of four crop model simulations of wheat phenology, leaf growth, biomass and yield across planting dates.** PLOS ONE, 13(6): e0197546.

7. Hussain, J., T. Khaliq, A. Ahmad, A. Senthold, and G. Hoogenboom. 2018. **Wheat responses to climate change and its adaptations: A focus on arid and semi-arid environment**. International Journal of Environmental Research. 12: 117–126.
8. Ullah, A., I. Ahmad, A. Ahmad, T. Khaliq, U. Saeed, M. Habib-ur-Rahman, J. Hussain, S. Ullah, G. Hoogenboom. 2019. **Assessing climate change impacts on pearl millet under arid and semi-arid environments using CSM-CERES-Millet model**. Environmental Science and Pollution Research. 26 (7), 6745-6757. <https://doi.org/10.1007/s11356-018-3925-7>.
9. Ahmed, I., M.H. Rahman, S. Ahmed, J. Hussain, A. Ullah, J. Judge. 2018. **Assessing the impact of climate variability on maize using simulation modeling under semi-arid environment of Punjab, Pakistan**. Environmental Science and Pollution Research. 25(28): 28413-28430. <https://doi.org/10.1007/s11356-018-2884-3>.
10. Awais, M., A. Wajid, M. F. Saleem, W. Nasim, A. Ahmad, M.A.S. Raza, M.U. Bashir, M. Mubeen, H.M. Hammad, M.H. ur Rahman, U. Saeed, M.N. Arshad and J. Hussain. 2018. **Potential impacts of climate change and adaptation strategies for sunflower in Pakistan**. Environmental science and pollution research. 25: 13719–13730.
11. Awais, M., A. Wajid, W. Nasim, A. Ahmad, M.F. Saleem, M.A.S. Raza, M.U. Bashir, M. Habib-ur-Rahmanh, U. Saeed, J. Hussain, N. Arshad, and G. Hoogenboom. 2017. **Modeling the water and nitrogen productivity of sunflower using OILCROP-SUN model in Pakistan**. Field Crop Research, 205: 67–77.
12. Awais., M., A. Wajid, A. Ahmad, F. Saleem, U. Bashir, U. Saeed, J. Hussain, and H. Rehman. 2015. **Nitrogen fertilization and narrow plant spacing stimulates sunflower productivity**. Turkish journal of field crops. 20 (1), 99-108.
13. Wajid, A., M.H. Rahman, A. Ahmad, T. Khaliq, N. Mahmood, F. Rasul, M.U. Bashir, M. Awais, J. Hussain and G. Hoogenboom. 2013. **Simulating the interactive impact of nitrogen and promising cultivars on yield of lentil (*Lens***

culinaris) using CROPGRO-legume model. International Journal of Agriculture and Biology, 15: 1331–1336.

PUBLICATIONS WITHOUT IMPACT FACTOR:

14. Abbas, Z., G. Abbas, J. Hussain, T. Mehmood, M. Amer, S. Hussain, M.N. Ahmad. 2021. **Basal and foliar application of macro and micronutrients enhances cotton production.** 2022. Journal of Environmental & Agricultural Sciences. 23(3 & 4): XX-xx.
15. Rehman, M., T. Khaliq, A. Ahmad, S.A. Wajid, F. Rasul, J. Hussain & S. Hussain. 2014. **Effect of Planting Time and Cultivar on Soybean Performance in Semi-Arid Punjab, Pakistan.** Global Journal of Science Frontier Research. 14:41-45.
16. Malghani A.L., A.U. Malik, A. Sattarb, F. Hussain, G. Abbas and J. Hussain. 2012. **Response of growth and yield of wheat to NPK fertilizer.** Science International, 24(2):185-189.
17. Mubeen. M., T. Khaliq, A. Ahmad, A. Ali, F. Rasul and J. Hussain. 2012. **Quantification of Seed cotton yield and water use efficiency of cotton under variable irrigation schedules.** Crop and Environment, 3: 54-57.
18. Ashfaq A., T. Khaliq, J. Hussain and M. Shaukat, 2014. **Country Paper from Pakistan: Crop Management Technologies and Practices to Adapt Changing Climate.** 14- AG-16-GE-CON-AForum on Mitigating Negative Effects of Climate Change on AgricultureBali, Indonesia, 30 September–3 October 2014, Tokyo Japan.

Book Chapters:

19. Hussain, J., S. Hussain, N. Tahir, I. Rasool, A. Ullah, S. Ahmad. 2022. **Climate Change and Rice Production: Impacts and Adaptations.** In book: Modern Techniques of Rice Crop Production Publisher: Springer Nature Singapore
20. Ghaffar, A., M.H., Rahman, S. Ahmed, G. Haider, I. Ahmad, M.A., Khan, J. Hussain, M. Afzaal, S. Ahmed, S. Fahad, A. Ahmed. 2022. **Adaptations in Cropping**

System and Pattern for Sustainable Crops Production under Climate Change Scenarios. In Improvement of Plant Production in the Era of Climate Change. CRC Press.

21. Ahmad, A., M. Ashfaq, G. Rasul, S. A. Wajid, T. Khaliq, F. Rasul, U. Saeed, J. Hussain, I.A. Baig, A.A. Naqvi, S.A.A. Bokhari, S. Ahmad, W. Naseem, and G. Hoogenboom. 2015. Impact of Climate Change on the Rice-Wheat Cropping System of Pakistan. Handbook of Climate Change and Agro-ecosystems, Vol. 3 (editors Daniel Hillel and Cynthia Rosenzweig) Published by Imperial College Press and the American Society of Agronomy.
22. McDermid, S.P., A.C. Ruane, C. Rosenzweig, N.I. Hudson, M.D. Morales, P. Agalawatte, S. Ahmad, L.R. Ahuja, I. Amien, S.S. Anapalli, J. Anothai, S. Asseng, J. Biggs, F. Bert, P. Bertuzzi, V. Bhatia, M. Bindi, I. Broad, D. Cammarano, R. Carretero, A.A. Chattha, U. Chung, S. Debats, P. Deligios, G. De Sanctis, T. Dhliwayo, B. Dumont, L. Estes, F. Ewert, R. Ferrise, T. Gaiser, G. Garcia, S. Gbegbelegbe, V. Geethalakshmi, E. Gerardeaux, R. Goldberg, B. Grant, E. Guevara, J. Hickman, H. Hoffmann, H. Huang, **J. Hussain, et al., 2015: The AgMIP Coordinated Climate-Crop Modeling Project (C3MP): Methods and protocols.** In Handbook of Climate Change and Agroecosystems: The Agricultural Model Intercomparison and Improvement Project (AgMIP). C. Rosenzweig, and D. Hillel, Eds., ICP Series on Climate Change Impacts, Adaptation, and Mitigation Vol. 3. Imperial College Press, 191-220, doi:10.1142/9781783265640_0008.

Papers presented in International Conferences

1. Khaliq, T., S.A. Wajid, A. Ahamd, M.H. Rahman, **J. Hussain**, U. Saeed, F. Rasul and G. Hoogenboom, 2014. **Multi-model evaluation and climate change impact assessment on farmers' surveyed data in wheat. Grand Challenges Great Solutions;** ASA, CSSA, & SSSA International Meetings November 2-5, 2014, Long Beach, California, Abstract No. 88430.
2. Ahmad, A., A. Wajid, K. Tasneem, M. Habib-ur-Rehman, F. Rasul, S. Umer, J. Hussain, G. Hoogenboom, 2015. **Farmer rice field adaptation technology for**

rice-wheat cropping system in Punjab, Pakistan under future changing climate. Global Science Conference, March 16-18, 2015. Montpellier France. Page No. 97.

3. Ahmad, A., G. Hoogenboom, A. Wajid, T. Khaliq, S. Ahmad, W. Nasim, **J. Hussain**, M. Habib-ur-Rahman and U. Saeed 2013. **Climate change vulnerability of fine rice productivity in Pakistan.** Water, Food, Energy and Innovation for a Sustainable World, ASA, CSSA, SSSA International Annual Meetings, Nov., 3-6, 2013, Tampa Florida.
4. Wajid, S.A., A. Ahmad, G. Hoogenboom, T. Khaliq, F. Rasul, M.H. Rahman, **J. Hussain** and U. Saeed, 2013. **Assessing Climate Vulnerability in Wheat Using CERES-Model under DSSAT.** AgMIP-Pakistan Kickoff Workshop & International Seminar on Climate Change “Crop Modeling – An Artistic Tool for Risk Management in Agriculture” (June 4-6, 2013), Department of Agronomy, University of Agriculture, Faisalabad - Pakistan. Page No. 1.
5. Ahmad, A., S.A. Wajid, T. Khaliq, **J. Hussain**, M.H. Rahman, U. Saeed, S. Tahir and I. Ahmad, 2013. **Climate Change: A Serious Threat to Fine Rice Productivity.** AgMIP-Pakistan Kickoff Workshop & International Seminar on Climate Change “Crop Modeling – An Artistic Tool for Risk Management in Agriculture” (June 4-6, 2013), Department of Agronomy, University of Agriculture, Faisalabad - Pakistan. Page No. 2.
6. Ahmad, A., G. Hoogenboom, S.A. Wajid, T. Khaliq, F. Rasul, U. Saeed*, M.H. Rahman, **J. Hussain** and G. Shabbir, 2013. **Impact Assessment of Changing Climate on Rice Yield Using Farmers’ Field Data.** AgMIP-Pakistan Kickoff Workshop & International Seminar on Climate Change “Crop Modeling – An Artistic Tool for Risk Management in Agriculture” (June 4-6, 2013), Department of Agronomy, University of Agriculture, Faisalabad - Pakistan. Page No. 3.