

Curriculum vitae



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Personal Information

AKBAR HOSSAIN

B.Sc.Ag & MS in Agronomy (BAU, BD), Ph.D (ASU, Russia)

Principal Scientific Officer, Soil Science Division
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https://www.researchgate.net/profile/Akbar_Hossain2/publications
<https://www.mendeley.com/profiles/akbar-hossain3/>
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<http://scholar.google.com/citations?user=b4COOxIAAAAJ&hl=en>

Languages: Russian, English (medium of education), Bengali (native)

Research Expertise & Interest:

Plant stress physiology (especially abiotic stresses: heat, salinity and drought), Crop management, weed biology and ecology, weed management, Conservation Agriculture, Conservation Agriculture based weed management and Crop management; Climate Change Impact Assessment on Agriculture; Modeling on climate change impact assessment of crops (DSSAT, APSIM, Farming System Model), Nanotechnology in Agriculture etc.

Nature of duties in my present Institute:

Research planning, execution, evaluation, report writing, presentation, publication, official administrative work. Also involve in specifying teaching, research supervisor and thesis examiner for in Master of Science in Agronomy and Ph.D student.

Academic qualifications	
2013	Ph.D degree from Department of Ecology and Biological Sciences (Especially stress physiology of spring wheat), Astrakhan State University, Russia; under the dissertational council, D 212.243.13 in Federal State Budgetary Educational Institution of Higher Professional Education "Saratov State University named after N.G. Chernyshevsky", Saratov, Russia. Title of research was “ Ecological conditions of northern Bangladesh effect on stress resistance and productivity of spring wheat ”.
2002	Master of Science in Agronomy, Bangladesh Agricultural University, Mymensingh, Bangladesh. (with first class) Thesis topic: “ Effect of Nitrogen on the allelopathic influence of rice (Cv. Woo co) on growth and development of Barnyard grass (<i>Echinochloa crus-galli</i> L. Beauv). ”
1997	Bachelor of Science in Agriculture, Bangladesh Agricultural University, Mymensingh, Bangladesh. (with first class)
Teaching experience	Served as a teaching assistant from 15 January, 2010 to April 25, 2013 in Caspian Arid Agricultural Research Institute, Russian Academy of Science, Russia.
Research supervisor of MS students, Dept. of Agronomy, HSTU, Dinajpur-5200.	<ol style="list-style-type: none">1. I supervised more than 5 (five) Master of Science in Agronomy students’ research. Thesis title of these students are as follows:2. Performance of different pre- and post-emergence herbicides in zero-dry till direct seeded Aman rice3. Effect of sowing dates on phenology, growth and yield of recently released three wheat (<i>Triticum aestivum</i> L.) Varieties4. Performance of different pre- and post-emergence herbicides for weed control in zero-till maize5. Evaluation of phenology, growth, yield and stress tolerance indices of six wheat (<i>triticum aestivum</i> l.) varieties grown under late sown heat stress condition6. Effect of day-night temperature on phenology, growth and yield of wheat7. Assessing the impact of thermal units on phenology, growth and development of wheat varieties grown under different sowing conditions8. Effect of Zn and B on growth and yield of aman rice9. Effect of Zn and B on growth and yield of strip-tillage wheat
MS thesis examiner, Dept. of Agronomy, HSTU, Dinajpur-5200.	Examined the following research thesis of Master of Science in Agronomy students
Invited as an expert in Ph.D students seminar at Department of Agronomy, HSTU, Dinajpur-5200.	I was invited as an expert of three Ph.D students’ research seminar at Department of Agronomy, HSTU, Dinajpur-5200. <ol style="list-style-type: none">1. Weed management options for zero-till wheat, maize and direct seeded aman rice under wheat-mungbean-rice and maize-mungbean-rice cropping system2. Study on Morpho-physiological and genotypic characterization of wild rice against abiotic stresses

	3. Study on Morpho-physiological, productivity and quality local existing aeromantic rice cultivars against salinity stress.
Professional Employment History	
Nov. 2017 to till date	Senior agronomist, Bangladesh Wheat and Maize Research Institute, Dinajpur-5200, Bangladesh
14 Jun., 2011 to Nov. 2017	Senior agronomist, Wheat Research Center, Bangladesh Agricultural Research Institute, Bangladesh
2006-2011	Wheat agronomist, Wheat Research Centre, Bangladesh Agricultural Research Institute, Dinajpur, Bangladesh
2004-2005	Agronomist, Regional Agricultural Research Station, Bangladesh Agricultural Research Institute, Hathazari, Chittagong, Bangladesh
Honors and Awards	
2016	Awarded: India Science and Research Fellowship, 2016-17 by combined selection of Bangladesh Academy of Science and Department of Science and Technology, Ministry of Science and Technology, Government of India, to foster closer scientific and technological collaboration through human capacity building in advanced areas of research and development for scientists and researchers from neighboring countries.
2009	Awarded: Russian government Ph.D scholarship through the combined selection of Ministry of Education Russian Federation and Ministry of Education Bangladesh on the basis of academic results and scientific skill.
2006	Awarded: NARS scientists award' in Foundation Training Course's (Bath)" as a best scientist, awarded by Bangladesh Academy for Rural Development
Project activity	
Collaborative project: BARI/CIMMYT/ACIAR/CSIRO-Australia	I am engaged with three international collaborative projects as a research scientist. The activity of these projects are as follows: 1. Since 2013, I have been working with ACIAR-CIMMYT funded ' Sustainable Resilient Farming System Intensification (SRFSI) ' project. This project is working with conservation agricultural in Eastern Gangetic region of India, Bangladesh and Nepal. In, Bangladesh, it is working in North-Western part (Rangpur, Dinajpur and Rajshahi region) of Bangladesh.
Collaborative project BAU/IWM/BARI/CSIRO-Australia	2. Title: Sustaining groundwater irrigation for food security in the northwest region of Bangladesh. BARI Component (Agro-environmental Remote Sensing and Modeling) of SDIP Phase II – Sustaining groundwater irrigation for food security in the Northwest Region of Bangladesh' funded by CSIRO, Australia, (in collaboration with Bangladesh Agricultural University, Institute of Water Modeling and Bangladesh Agricultural Research Institute). I am working in the project as a co-investigator. Objectives of the project- Assess and validate the long-term (1980s to date) water use of dry season irrigation for northwest Bangladesh using remote sensing and statistical techniques: 1. Assess spatiotemporal dynamics of land cover and land use, 2. Assess spatiotemporal dynamics of cropping systems (type, extent).

Collaborative research Project with USAID/ CIMMYT/WRC-BARI	3. This is CIMMYT/USDA funded small project entitled: Response of newly evolved wheat varieties to sowing dates . The aim of the project is to examine the impact of inter- and intra- seasonal temperature variation on wheat performance stability and also to identify suitable wheat genotypes for appropriate sowing dates considering agronomic performance, yield response, disease incidence, etc. Updated data on yield decline rates with different varieties as a function of sowing date. This trial will also permit advanced $G \times E \times M$ analysis. This information will help to plan new research program for developing wheat varieties, which are able to produce adequate and stable yield under varying climatic conditions with minimum or no disease infection.
Collaborative research Project with University of Queensland/ CSIRO-Australia	4. I am also working with another collaborative research on “Evaluation of Conservation Agriculture Practices on Irrigation and Nitrogen Use Efficiency of Rice-Wheat-Mungbean Crop Rotation” in collaboration with WRC-BARI, CSIRO-Australia, University of Queensland-Australia, ACIAR-Australia and CIMMYT-Bangladesh. The objectives of the study is to evaluate the effects of conservation agriculture practices on irrigation and fertilizer specially nitrogen requirements of the system, whether cropping system intensification from a rice-wheat system to a rice-wheat-mungbean system has any impact on systems yield and economic return; and need to assess both short and long-term impacts on crop and soil productivity of these cropping systems for sustainability issues.
Collaborative research Project with University of Queensland/ CSIRO-Australia	5. Identifying Eastern Gangetic Plains Soils Constraints (Project no. crop/2018/2010)
Scientific/Professional Appointments	
	<p>As an editorial board member as well as reviewer in following listed journals:</p> <ol style="list-style-type: none"> 1. Editorial board member: International Journal of Agriculture, Environment and Food Sciences: http://dergipark.gov.tr/jaefs/board 2. Editorial board member: Journal of Research in Weed Science: http://www.jrweedsci.com/journal/editorial.board 3. Editorial board member: International Journal of Food and Bioscience: http://innovationinfo.org/index.php/journal/editorial_board_member/Akbar-Hossain 4. Editorial board member: International Journal of Recent Advances in science and technology: http://ijrast.com/index.php/IJRAST/editorial-board 5. Editorial board member: American Journal of Agriculture and Forestry: http://www.agricultureforestry.org/editorialboard 6. Editorial board member: International Journal of Applied Science and Research: http://www.ijasr.org/editorial.html

	<p>7. Editorial board member: International Journal of Agriculture, Environment and Bioscience: http://www.ijaeps.org/editor.php</p> <p>8. Editorial board member: Sumerianz Journal of Agriculture and Veterinary: https://www.sumerianz.com/?ic=journal-home&journal=30&info=edit#s</p> <p>9. Editorial board member in “International Journal of Applied Research”.</p> <p>10. Editorial board member in “International Journal of Applied Science-Research and Review”. link: http://www.ijas.org.uk/Default.aspx?pageid=17</p> <p>11. Editorial board member in “British Journal of Applied Science and Technology”. link: http://www.sciencedomain.org</p> <p>12. Editorial board member in “International Journal of Experimental Agriculture. Link: http://ggfjournals.com/content/editorialBoard/ijea</p> <p>13. Editorial Board member in the journal of ‘Plant Science Today’: http://horizonpublishing.com/journals/index.php/PST/about/editorialTeam</p> <p>14. Editorial Board member ‘Journal of Applied Biology & Biotechnology’ http://jabonline.in/editorial-board.php</p> <p>15. Editorial Board member in the journal of “Open Agriculture”</p> <p>16. Reviewer in ‘Archive of Agronomy and Soil Science’</p> <p>17. Reviewer in ‘African Journal of Agricultural Research’</p> <p>18. Reviewer in ‘Nutrient Cycling in Agroecosystems’</p> <p>19. Reviewer in the Journal of ‘Climate Change’</p> <p>20. Reviewer in the journal of ‘Agriculture, Ecosystem & Environment’</p> <p>21. Reviewer in the journal of ‘Ecological Indicators’</p> <p>22. Reviewer in the journal of ‘British Food Journal’</p> <p>23. Reviewers in the journal of ‘International Journal of Plant Production’</p> <p>24. Reviewer in the journal of ‘International Journal of Agricultural Research Innovation and Technology’</p> <p>25. Reviewer in the journal of ‘Pakistan Journal of Botany’.</p> <p>26. Reviewer in in the journal of “Saudi Journal of Biological Sciences”</p> <p>27. Reviewer in the journal of ‘Journal of Integrative Agriculture’</p>
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Publishing History

I am authored more than 175 journal articles, which were published in different national and international journals.

A complete list of publications are available at:

1. https://www.researchgate.net/profile/Akbar_Hossain2?ev=hdr_xprf

2. <http://scholar.google.com/citations?user=b4COOxIAAAAJ&hl=en>
3. <https://www.mendeley.com/profiles/akbar-hossain3/>

International recognized ID as a researcher:

1. <https://orcid.org/0000-0003-0264-2712>
2. Researcher ID: K-1070-2012 (<http://www.researcherid.com/rid/K-1070-2012>)
3. Scopus Author ID: 55351853600
(<http://www.scopus.com/inward/authorDetails.url?authorID=55351853600&partnerID=MN8TOARS>)

List of Publications

A. In-country papers/chapters/Abstracts

Full papers as a principal author:

1. **Hossain A**, Sarker M.A.Z., Hakim M.A., Lozovskaya M.V. and Zvolinsky. 2011. Effect of temperature on yield and some agronomist characters of spring wheat. International Journal of Agricultural Research Innovation and Technology. 1(1&2): 9-15.
2. **Hossain A**, Sarker M. A. Z., Hakim M.A., Islam Mst. T., and Ali M.E. 2011. Effect of Lime, magnesium and Boron on wheat (*Triticum aestivum* L.) and their residual effect on mungbean (*Vigna radiata* L.). International Journal of Agricultural Research Innovation and Technology. 1(1&2): 44-54.
3. **Hossain A**, M.A.S. Chowdhury, T. Jahan, M.A.I. Sarker and M.M. Akhter. 2010. Competitive ability of wheat cultivars against weeds. Bangladesh Journal of Weed Science. 1(1): 65-72.
4. **Hossain A**, M.A.S. Chowdhury, P.K. Malaker, M.S.N. Mandal and M.A.Z.Sarker. 2010. Efficacy and economics of herbicides against narrow and broad-leaved weeds of wheat. Bangladesh Journal of Weed Science. 1 (1): 73-81.
5. **Hossain A**, S.M.R. Karim, M.A.Z. Sarker, M.A.I. Sarker and M.A.S. Chowdhury. 2010. Survey and documentation of weed flora in the farm of wheat research center, Dinajpur, Bangladesh. Bangladesh Journal of Weed Science. 1(1): 97-102.
6. **Hossain A**, M A Z Sarker, M Saifuzzaman, M M Akhter and M S N Mandal. 2009. Effect of sowing dates on yield of wheat varieties and lines developed since 1998. Journal of Progressive Science and Technology. 7(1): 5-8. Website: <http://www.bjpst.net/>
7. **Hossain A**, M.A.Z. Sarker, S. Mowlick, M.R. Kabir and M.M. Bazzaz. 2009. Effect of herbicides on weed control in wheat. International Journal of Bio-Research. 6(1): 1-6. Website: <http://inrinet.org/>
8. **Hossain A**, M.A.S Chowdhury, Mst. T. Islam, P.K Malaker and S.M Iqbal. 2009. Plant diversity of the horticultural farm of Bangladesh agricultural university. Bangladesh Journal of Agricultural Research. 34(2): 189-204. doi:10.3329/bjar.v34i2.5790.
9. **Hossain A**, M. Boduzzaman, M.R. Kabir, M.A.I. Sarker and M.Z. Islam. 2009. Long term fertilizer residual effects on weed flora of wheat in Rice-wheat crop rotation. Bangladesh Research Publication Journal. 3 (1): 861-872.
10. **Hossain A**, K.K. Sarker, M.M. Islam, M.M. Bazzaz and M.M. Akhter.2008. Rice allelopathy effects on barnyard grass as influenced by different levels of nitrogen under field condition. Bangladesh Journal of Progressive Science and Technology. 6(2): 453-456. Website: <http://www.bjpst.net/> (Peer reviewed)
11. **Hossain A**, Mst. T. Islam, M A S Chowdhury, M A Z Sarker and P K Malaker. 2008. Effect of variety and weeding regime on weed vegetation in maize. Journal of Patuakhali Science and Techonology University. 1(1): 25-30. (Peer reviewed)
12. **Hossain A**, Mst. T. Islam, M.M. Islam and K.K. Sarker. 2008. Growth of Maize under different Weeding Regimes. International Journal of Bio-Research. 4(6): 82-85. Website: <http://inrinet.org/> (Peer reviewed)
13. **Hossain A**, Mst. T. Islam, A.A. Mamun and S.M.R. karim. 2006. Effect of nitrogen on the allelopathic influence of rice (Woo co) in controlling Barnyardgrass (*Echinochloa crus-galli* L.) under pot culture. Bangladesh Journal of Seed Science and Technology.10 (1&2), 57-62. (Peer reviewed).

Full papers as a co-author:

1. Hakim MA, **A. Hossain**, Teixeira da Silva JA, Zvolinsky VP, Khan MM. 2012. Yield, protein and starch content of 20 wheat (*Triticum aestivum* L.) genotypes exposed to high temperature under late sowing conditions. *Journal of Scientific Research*. 4 (2): 477-489.
2. Hiralal Roy; **A. Hossain**; S.M.R. Karim; M.A.I. Sarker and M.A. Alam. 2009. Effect of grass-legume weed mixture on the plant growth, dry matter accumulation and competitive ability of grass species. *Bangladesh Journal of Progressive Science and Technology*. 7(1): 93-96.
3. Mandal, M.S.N, M.G. Rabbani, M.M. Islam and **A. Hossain**. 2009. Study on propagules production in gladiolus as influenced by corm sizes and growth regulators (GA3 and Ethrel). *Bangladesh Journal of Progressive Science and Technology*. 7(1): 9-12.
4. Kabir M R, R Begum, M S N Mandal, **A. Hossain** and M.A. Alam. 2009. Effect of biotic and abiotic factors on the quality of triticale seed. *Bangladesh Journal of Progressive Science and Technology*. 7(1):13-16.
5. Kabir, M.J, M E Baksh, M M Islam, **A. Hossain** and M A Alam. 2009. Ex-ante impact of research on newly developed wheat varieties Bijoy and Prodip. *Bangladesh Journal of Progressive Science and Technology*. 7(1): 97-100.
6. Baksh, M.E., Kabir, M.J., M M Islam, M S N Mandal and **A. Hossain**. 2009. Social-Economic Study on Sustainability of Wheat Production in Northern Region of Bangladesh. *Bangladesh Journal of Progressive Science and Technology*. 7(1): 105-108.
7. Mandal, M.S.N, M.G. Rabbani, T Jahan, M R Kabir and **A. Hossain**. 2009. Role of corn size and growth regulators (GA3 and Ethrel) on growth and flowering of gladiolus cv. friendship. *Bangladesh Journal of Progressive Science and Technology*. 7(1): 101-104.
8. Rahman, M.M., **A. Hossain**, M.A. Hakim, M.R. Kabir and M.M.R. Shah. 2009. Performance of wheat genotypes under optimum and late sowing condition. *International Journal of Sustainable Crop Production*. 4(6): 34-39.
9. Jahan, T., M.A. Siddique, M.S.N. Mandal, M.M. Rahman and **A. Hossain**. 2009. Effect of irrigation on growth and yield of three tomato varieties at late sown condition. *International Journal of Bio-Research*. 7 (3): 60-64.
10. Akhter, M.M., M A Z Sarker, **A. Hossain**, M.A.I Sarker and M B Banu. 2009. Effect of rate and application time of nitrogen on growth and yield of wheat. *Bangladesh Research Publication Journal*. 3 (2): 886-896.
11. Kabir, M.R., **A. Hossain**, M.M. Rahman, M.A. Hakim and M.A.Z. Sarker. 2009. Stability analysis of wheat for grain yield affected by different environment. *Bangladesh Research Publication Journal*. 3 (1): 833-840.
12. Islam, Mst. T., **A. Hossain** and MR Azim. 2008. Effect of weeding regime on yield and yield components of Maize. *International Journal of Bio-Research*. 4(3):67-74.
13. Bazzaz, M.M., Z.I. Sarker, M.A. Hakim, **A. Hossain** and K. Mustarin. 2008. Study the effect of cutting on forage and grain production of dual-purpose triticale. *Bangladesh Journal of Progressive Science and Technology*. 6(2): 449-452.
14. Bazzaz, M.M., Qazi A. Khaliq, M. Moynul Haque, A.J.M. Sirajul Karim and **A. Hossain**. 2008. Effect of nitrogen and boron on growth dynamics, dry matter production and yield of wheat. *Bangladesh Journal of Progressive Science and Technology*. 6(2):377-380.
15. Islam, M.M., D.B. Pandit, M. Hassanuzzaman, **A. Hossain** and M. Farhad. 2008. Participatory Variety Selection for Selecting and Disseminating Farmers-Preferred Wheat variety. *International Journal of Bio-Research*. 4(5) 13-19.
16. Kabir, M.R., A.M. Farooque, M.A. Hakim, **A. Hossain** and R. Begum. 2008. Effect of irrigation and duration of mother bulb vernalization of the growth, yield and quality of onion seed. *Journal of Science and Technology*. 6: 136-141.
17. Sarker, K.K., S.K. Biswas, P.K. Malaker and **A. Hossain**. 2008. Performance of Some Water distribution systems for wheat production. *Bangladesh Journal Agricultural Engineering*. 19 (1& 2): 39-46.
18. Azim, M.R., **A. Hossain**, HR Pramanik, MH Waliullah and M Afroz. 2007. Effect of different organic manures on growth and development of sesame. *International Journal of Bio-Research*. 3(4): 52-57.
19. Iqbal, S.M., M.H. Reja, M.M. Islam, M.M. Islam and **A. Hossain**. 2006. Effect of GA3 and NNA on sex expression and fruiting behaviour of Litchi (*Litchi chinensis*) cv. BOMBAL. *Bangladesh Journal of Seed Science and Technology*. 10(1&2): 19-23.

B. Foreign papers/chapters/Abstracts

Full papers as a principal author:

1. **Hossain, A.**; Skalicky, M.; Brestic, M.; Maitra, S.; Ashraful Alam, M.; Syed, M.A.; Hossain, J.; Sarkar, S.; Saha, S.; Bhadra, P.; et al. 2021. Consequences and Mitigation Strategies of Abiotic Stresses in Wheat (*Triticum aestivum* L.) under the Changing Climate. *Agronomy* 11, 241. <https://doi.org/10.3390/agronomy11020241>
2. **Hossain, A.**; Skalicky, M.; Brestic, M.; Maitra, S.; Sarkar, S.; Ahmad, Z.; Vemuri, H.; Garai, S.; Mondal, M.; Bhatt, R.; et al. 2021. Selenium Biofortification: Roles, Mechanisms, Responses and Prospects. *Molecules*. 26, 881. <https://doi.org/10.3390/molecules26040881>
3. **Hossain, A.**, Sabagh, A.E., Barutcular, C., Bhatt, R., Cig, F., Seydoşoğlu, S., Turan, N., Konuskan, O., Iqbal, M.A., Abdelhamid, M. and Soler, C.M.T., 2020. Sustainable crop production to ensuring food security under climate change: A Mediterranean perspective. *Australian J Crop Sci*, 14(03), pp.439-446.
4. **Hossain A.**, Jahan, M.A.H.S., Timsina J., Teixeira da Silva, J.A., Mahboob, M.G., Farhad, M., 2018. Assessment of heat-tolerant irrigated spring wheat genotypes (*Triticum aestivum* L.) grown under multiple environments using grain yield and GGE biplot analysis. *Open Agriculture*, 3, 404–413. <https://doi.org/10.1515/opag-2018-0045>.
5. **Hossain A**, Islam MR, Rahman KAMM, Rashid MH and Anwari A. 2017. Comparative performance of three wheat (*Triticum aestivum* L.) varieties under heat stress. *International Journal of Natural and Social Sciences*, 4(3): 26-42.
6. **Hossain A.**, Teixeira da Silva J.A., Bodruzzaman, M., 2015. Rate and application methods of potassium in light soil for irrigated spring wheat. *Songklanakarin J. Sci. Technol.* 37 (6), 635-642.
7. **Hossain A.**, Sarker M.A.Z., Saifuzzaman M., Teixeira da Silva J.A., Lozovskaya M.V., Akhter M. M. 2013. Evaluation of growth, yield, relative performance and heat susceptibility of eight wheat (*Triticum aestivum* L.) genotypes grown under heat stress. *International Journal of Plant Production*. 7(3): 615-636.
8. **Hossain A.**, Jaime A. Teixeira da Silva. 2013. Wheat and Rice, the Epicenter of Food Security in Bangladesh. 2013. *Songklanakarin Journal of Science and Technology*. 35 (3), 261-274.
9. **Hossain A**, Teixeira da Silva JA. 2013. Wheat production in Bangladesh: its future in the light of global warming. *AoB Plants* published online January 8, 2013, 5: pls042 (*Annals of Botany Company*). DOI: 10.1093/aobpla/pls042
10. **Hossain A**, Teixeira da Silva JA, Lozovskaya MV, Zvolinsky VP, Mukhortov VI. 2012. High temperature combined with drought affect rainfed spring wheat and barley in south-eastern Russia: yield, relative performance and heat susceptibility index. *Journal of Plant Breeding and Crop Science*. 4(11): 184-196.
11. **Hossain A**, Teixeira da Silva JA, Lozovskaya MV, Zvolinsky VP. 2012. High temperature combined with drought affect rainfed spring wheat and barley in South-Eastern Russia: I. Phenology and growth. *Saudi Journal of Biological Sciences*. 19(4): 473-487.
12. **Hossain A**, Teixeira da Silva JA. 2012. Phenology, growth and yield of three wheat (*Triticum aestivum* L.) varieties as affected by high temperature stress. *Notulae Scientia Biologicae*. 4(3): 97-106.
13. **Hossain A**, Teixeira da Silva JA., Lozovskaya MV, Zvolinsky VP. 2012. The Effect of High Temperature Stress on the Phenology, Growth and Yield of Five Wheat (*Triticum aestivum* L.) Genotypes. *The Asian and Australasian Journal of Plant Science and Biotechnology*. 6(1): 14-23.
14. **Hossain A**, Lozovskaya MV, Zvolinsky VP, Teixeira da Silva JA. 2012. Effect of soil and climatic conditions on yield-related components performance of spring wheat (*Triticum aestivum* l.) varieties in the northern Bangladesh. *Natural Sciences: Journal of Fundamental & Applied Researches*. 2(39): 77-86.
15. **Hossain A**, Lozovskaya MV, Zvolinsky VP, Teixeira da Silva JA. 2012. Effect of soil and climatic conditions on phenology of spring wheat varieties in the northern Bangladesh. *Natural Sciences: Journal of Fundamental & Applied Researches*. 2(39): 86-93.
16. **Hossain A**, Lozovskaya MV, Zvolinsky VP. 2012. Effect of agro-climatic factors on grain yield of spring wheat varieties in the northern Bangladesh. *Natural Sciences: Journal of Fundamental & Applied Researches*. 3(40): 121-127.
17. **Hossain A**, Lozovskaya MV, Zvolinsky VP. 2012. Effect of phosphate fertilizers on the yield of spring wheat under acid soil of northern Bangladesh. *Natural Sciences: Journal of Fundamental & Applied Researches*. 3(40): 128-135.
18. **Hossain A**, Teixeira da Silva JA. 2012. Control of woodsorrel (*Oxalis europaea* Jord.) in wheat (*Triticum aestivum* L.) field by herbicides. Published April 12, 2012 in eWIS-2012-0010.

Full papers as a co-author:

1. Uddin, M.S.; Billah, M.; Afroz, R.; Rahman, S.; Jahan, N.; Hossain, M.G.; Bagum, S.A.; Uddin, M.S.; Khaldun, A.B.M.; Azam, M.G.; Hossain, N.; Akanda, M.A.L.; Alhomrani, M.; Gaber, A.; Hossain, A. Evaluation of 130 Eggplant (*Solanum melongena* L.) Genotypes for Future Breeding Program Based on Qualitative and Quantitative Traits, and Various Genetic Parameters. *Horticulturae* **2021**, *7*, 376. <https://doi.org/10.3390/horticulturae7100376>
2. Ibrahimova, U., Suleymanova, Z., Brestic, M., Mammadov, A., Ali, O.M., Abdel Latef, A.A.H. and Hossain, A., 2021. Assessing the Adaptive Mechanisms of Two Bread Wheat (*Triticum aestivum* L.) Genotypes to Salinity Stress. *Agronomy*, *11*(10), p.1979.
3. Naresh, R.K., Bhatt, R., Chandra, M.S., Laing, A.M., Gaber, A., Sayed, S. and Hossain, A., 2021. Soil Organic Carbon and System Environmental Footprint in Sugarcane-Based Cropping Systems Are Improved by Precision Land Leveling. *Agronomy*, *11*(10), p.1964.
4. Singh, R.K., Kumar, V., Pramanick, B., Alsanie, W.F., Gaber, A. and Hossain, A., 2021. The Use of Municipal Solid Waste Compost in Combination with Proper Irrigation Scheduling Influences the Productivity, Microbial Activity and Water Use Efficiency of Direct Seeded Rice. *Agriculture*, *11*(10), p.941.
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12. EL Sabagh, A., **Hossain, A.**, Islam, M.S., Iqbal, M.A., Fahad, S., Ratnasekera, D., Azeem, F., Wasaya, A., Sytar, O., Kumar, N. and Llanes, A., 2020. Consequences and Mitigation Strategies of Heat Stress for Sustainability of Soybean (*Glycine max* L. Merr.) Production under the Changing Climate. In *Plant Stress Physiology*. IntechOpen. [doi.10.5772/intechopen.92098](https://doi.org/10.5772/intechopen.92098)
13. EL Sabagh, A., **Hossain, A.**, Islam, M.S., Barutçular, C., Ratnasekera, D., Gormus, O., Amanet, K., Mubeen, M., Nasim, W., Fahad, S. and Tariq, M., 2020. Drought and Heat Stress in Cotton (*Gossypium hirsutum* L.): Consequences and Their Possible Mitigation Strategies. In *Agronomic Crops* (pp. 613-634). Springer, Singapore.
14. EL Sabagh, A., **Hossain, A.**, Barutçular, C., Islam, M.S., Ahmad, Z., Wasaya, A., Meena, R.S., Fahad, S., Oksana, S., Hafez, Y.M. and Najeeb, U., 2020. Adverse Effect of Drought on Quality of Major Cereal Crops: Implications and Their Possible Mitigation Strategies. In *Agronomic Crops* (pp. 635-658). Springer, Singapore.
15. EL Sabagh, A., **Hossain, A.**, Barutçular, C., Islam, M.S., Çiğ, F., Erman, M. and Saneoka, H., 2019. Physiological Approaches to Improve Terminal Drought Tolerance in Corn (*Zea mays* L.). *ICOFAAS 2019*, p.205.
16. Bhatt, R., **Hossain, A.**, 2019. Concept and Consequence of Evapotranspiration for Sustainable Crop Production in the Era of Climate Change [Online First], IntechOpen, DOI: 10.5772/intechopen.83707.

Abstracts/Conference/seminar/Posters

1. **Hossain, A.**, Sarker, S., Majumder, D., Bhatt, R., Meena, R.S. 2020. Frontier Technological Management of Intensive Rice-Wheat Systems of South-Asia for Food and Environmental Security. Conference: International Web-Conference on 'Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals' on 11th and 12th September, 2020 organized by Academy of Natural Resource Conservation and Management (ANRCM), Lucknow, India, at: Lucknow (UP), India; Volume: Souvenir cum abstract e-book.
2. **Hossain, A.**, Khaddakar, M.F.I., Timsina, J. 2019. Alternate use of freshwater at early growth stage and saline canal water at reproductive stage can minimize the yield loss of maize under coastal saline region of Bangladesh. Conference: International Conference on 'Soil And Water Resource Management For Climate Smart Agriculture, Global Food And Livelihood Security' held on 05th-09th November, 2019 (A Joint Conference 4th WASWAC World Conference; 20th ISCO International Conference 4th SCSI International Conference) at: NASC, New Delhi, India.
3. Farhad M, Govindan Velu, Mohammad Abdul Hakim, Mohammad Rezau Kabir, Mohammad Ashraful Alam, Mohammad Siddikunnabi Mandal, **Hossain, A.**, Mostofa Ali Reza, Kishwar-e-Mustarin, Abu Hena Sarwar Jahan

- and Naresh Chandra Deb Barma. 2018. Development and Deployment of Biofortified and Blast Resistant Wheat Variety in Bangladesh. Harvest Plus Workshop in CIMMYT-Mexico.
4. Sinha Abhas, Ghosh Arunava; DharTapamay; Bhattacharya Prateek; Mishra Kulanand; PaneruPrakash; ChoudharyBedanand; Shrestha Shukra Raj; ManandharSarita; Shrestha Hari Krishna; BeuraKasturikasen; Dutta Swaraj; Pradhan Amit; Rao K.K.; Bharati Ramesh; **Hossain A.**, Siddique Nur-Alam; Molla Samim; Chaki Apurbo; Gathala Mahesh; Islam Saiful, Dalal Ram; Gaydon Don; Laing Alison; Menzies Neal. 2018. Soil quality under no-till: challenges and opportunities for food security in the tropics. Published in RIO18, 21st World congress on Soil Science.
 5. Timsina, J., **Hossain, A.**, Islam, S., Wolf, J., Ittersum, M.V., 2015a. Bridging the yield gap for food security: a case of Bangladesh. In: International Fertilizer Association Conference, 20-22 October 2015. Crossroads, Asia-Pacific, Kualalumpur, Malaysia.
 6. Timsina, J., Wolf, J., Bussel, L.V., **Hossain, A.**, Rashid, H., Islam, S., Guilpart, N., Wart, J.V., Ittersum, M.V., 2015b. Can Bangladesh produce enough food in (2030 and) 2050? In: Second International Conference on Global Food Security. 11-14 October 2015, Cornell University, Ithaca, NY, USA.
 7. Sarker, M.A.Z., M.M. Akhter, **Hossain, A.** 2014. Wheat Requires Less Amount of Applied Fertilizers in Long Term Zero Tillage. In: Proceeding of the Conference on Conservation Agriculture for Smallholders in Asia and Africa. 7-11 December, 2014, Mymensingh, Bangladesh. (Eds. W.H. Vance, R.W. Bell, M.E. Haque). Published as an E-Book. Pp-165-166 paper in Proceeding.
 8. **Hossain A**, Lozovskaya MV, Zvolinsky VP, Tutuma, N.V. 2012. Effect of Soil Resources and Climatic Factors (Temperature) on spring wheat and barley in the northern Bangladesh and southern Russia. Paper presented in “International scientific and practical conference”, held in “Caspian Scientific Research Institute of Arid Agriculture”, Astrakhan, Russia, from 16-18 May 2012. (Russia)

Training received

No	Name of Training	Duration	Institute/universities/Centre
1.	Write-Shop: Journal paper writing workshop	10 -12 June 2018	Peter Brown (CSIRO) and Fay Rola-Rubzen (Curtin University). Funded by SRFSI-ACIAR/CIMMYT. Venue: Hotel Himalaya, Kathmandu, Nepal
2.	Conservation Agriculture: Gateway for Productive & Sustainable Cropping Systems in Asia	24 Oct.-07 Nov., 2015	Organized jointly CIMMYT, PAU, BISA, Punjab, India
3.	Approaches for integrated analysis of agricultural systems in South Asia: field, to farm, to landscape scale	18-23 May, 2015	Organized jointly NRM division of ICAR and CIMMYT; Venue: ICAR-CSSRI, Karnal (Haryana), India
4.	“R” Tutorial for Data Analysis and Management.	19-21 December, 2014	Organized and Funded by CIMMYT-CSISA-MI and CIMMYT-SRFSI Project; Venue: CIMMYT-Dhaka office, Bangladesh
5.	Training on “Conservation Agriculture, Farm Machinery, and On-Farm Research & Data Management”	28 Sept.-02 October 2014	Organized and Funded by CIMMYT-CSISA-MI and CIMMYT-SRFSI Project; Venue: FMP Engineering Division, BARI, Gazipur, Bangladesh
6.	Training Workshop on DSSAT Model for “ Modeling Climate Change Impact on Agriculture”	07-19 June 2014	Organized and Funded by Krishi Gobeshona Foundation (KGF), BARC Complex, Farmgate, Dhaka; Venue: BRAC-CDM, Savar, Bangladesh
7.	Training on Agricultural Innovation Systems for the project entitled “Sustainable Resilient Farming Systems Intensification (SRFSI)”	29-31 October, 2013	Organized and Funded by ACIAR in collaboration with CIMMYT & Centre for Research on Innovation and Science Policy (CRISP-India); Venue: Hotel Barsana, Bagdogra, Siliguri, India
8.	Special Training Course on “ Open Source Biometrical Computing with R”	15-17 June 2013	Organized and Funded by Bangladesh Agricultural Research Institute, Gazipur-1701; Venue: ICT-Biometrical Lab, Agricultural Statistics and ICT Division, BARI, Joydebpur, Dhaka.

9.	Training on “ Research Methodology” sponsored by BARC	01-13 Nov. 2008	Graduate Training Institute, Bangladesh Agricultural University, Mymensingh, Bangladesh
10.	“English Proficiency” Test (Speaking, Listening, Reading and Writing)	02 Nov. 2008	Department of Languages, Bangladesh Agricultural University, Mymensingh, Bangladesh
11.	Wheat Improvement	11-15 Feb. 2007	Wheat Research Centre, BARI Nashipur, Dinajpur
12.	Computer Skill for Data Management, Analysis, Reporting and Use of Internet	08-18 April 2007	Bangladesh Agricultural Research Institute, Joydebpur, Gazipur, Dhaka
13.	“Foundation Training Course” (N.B. I was placed in the third position and awarded crest of honor)	12 Feb.-11 June 2006	Bangladesh Academy for Rural Development, Camilla
14.	Special Light Driving Training course	02-23 April 2006	Bangladesh Road Transport Corporation Central Training Institute, Gazipur
15.	Attachment program in RDA, Bogra related to data collection and scientific report writing	07-11 May 2006	Rural Development Academy, Bogra
16.	Basic Knowledge of Computer Hardware & Software	17-21 Sept. 2006	Wheat Research Centre, BARI Nashipur, Dinajpur
17.	Orientation Training Course on newly recruited scientist	18 –30 June 2005	Bangladesh Agricultural Research Institute, Gazipur, Dhaka
18.	English language course ” Communicative English”	01 Sept.- Oct. 2002	Department of Languages, Bangladesh Agricultural University, Mymensingh, Bangladesh
19.	Fundamentals of Computer and MS words	06-19 Feb. 2002	Graduate Training Institute, Bangladesh Agricultural University, Mymensingh,
20.	Participatory Rural Appraisal (PRA) study on farming systems at Rajgonj village of kotwali thana, Mymensingh.	27 June 2002	Faculty of Agricultural, Department of Agronomy, Bangladesh Agricultural University, Mymensingh
21.	Practical courses in Agricultural Extension (Under took a week long extension field trip and submitted a field trip report as a major assignment	26-31 August 2000	Faculty of Agricultural, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh
22.	English Proficiency Course ”Written Business Communications”	Sept. – Dec. 1992	Dhaka Young Men’s Christian Association, Yeskaton, Dhaka

Members:

- a) Bangladesh Society of Agronomy
- b) Weed Science Society of Bangladesh (WSSB)
- c) Bangladesh Agricultural Research Institute Scientist Association (BARISA)
- d) Krisibid Association of Bangladesh (KSB)

Referees

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I am hereby confirmed that above mention information is correct in my updated CV.



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