Curriculum Vitae Of MD. HASIBUR RAHAMAN HERA Mobile: +8801729409043 E-mail: hasibhera22@gmail.com, hasibur.path@brri.gov.bd



Md. Hasibur Rahaman Hera has been serving as Scientific Officer in the Plant Pathology Division at Bangladesh Rice Research Institute (BRRI), Gazipur, Bangladesh since 26 July, 2015. He obtained Bachelor of Science in Agriculture (Honours) in 2011 from Patuakhali Science and Technology University (PSTU), Patuakhali, Bangladesh securing CGPA (Cumulative Grade Point Average) 3.773 (out of 4.00) and Master of Science in Soil Science in 2013 from Sher-e-Bangla Agricultural University (SAU), Dhaka, Bangladesh securing CGPA (Cumulative Grade Point Average) 3.64 (out of 4.00). Md. Hasibur Rahaman Hera has been continuing his research work since of his early career life. He published his fundamental research papaers in several International and National Journals.

Mailing Address

Md. Hasibur Rahaman Hera Scientific Officer Bangladesh Rice Research Institute (BRRI), Plant Pathology Division, Gazipur. E-mail: hasibhera22@gmail.com, hasibur.path@brri.gov.bd Phone/Mobile: +8801729409043

Academic Qualifications

Title	Institute Name	Group/Subject	Passing Year	Board/University	GPA/CGPA
Msc.	Sher-e-Bangla	Soil science	2013	Sher-e-Bangla	3.64 out of
Ag	Agricultural University			Agricultural University	4.00
BSc.Ag.	Patuakhali Science and	Agriculture	2011	Patuakhali Science and	3.773 out of
(Hons.)	Technology University			Technology University	4.00

Job Experience

Position	Dur	ation	Institution				
	From	То					
Scientific Officer	26-7-2015	22-08-2017	Bangladesh Rice Research Institute (BRRI), R/S Sonagazi,				
			Feni				
Scientific Officer	27-08-	23-12-2021	Bangladesh Rice Research Institute (BRRI), R/S, Barishal				
	2017						
Scientific Officer	2-1-2022	To date	Bangladesh Rice Research Institute, Plant Pathology				
			Division, Gazipur				

Organization	Year	Duration		Training on
		Мо	Day	
		nth		
	A A A A A	S		
Bangladesh Rice Research Institute	2015 (30	2	-	Two-month Rice Production and
(BRRI)	August to 28			Communication Training Course
	October)		-	
Bangladesh Rice Research Institute	2017 (01 to 05	-	5	Programming R for Experimental
(BRRI)	January)			Design and Data Analysis
Bangladesh Rice Research Institute	2017 (04 March	-	3	Modern Rice Production Training
(BRRI)	to 06 March)		-	Course
Bangladesh Rice Research Institute	2017 (08 to 10	-	3	Experimental Design and Data
(BRRI)	April)			Analysis Training Course
Bangladesh Rice Research Institute	2017 (05 to 09	-	5	Hybrid Rice Development and
(BRRI)	November)			Seed Production Training Course
National Agriculture Training Academy	2018 (07 April	-	5	Eco-friendly Plant Protection
(NATA)	to 12 April)			Technology
Yuan Longping High-tech Agriculture	2018 (31 July to	1	28	Training Course on Hybrid
Co. Ltd, China	28 September)			Rice Technology for
				Bangladesh,2108
Bangladesh Rice Research Institute	2019 (16 to 21	-	5	Basic Molecular Biology and
(BRRI)	March)			Disease Resistance
National Agriculture Training Academy	2020 (2 to 6	-	5	Rules and Regulations for
(NATA)	February)			Organizational Management
Bangladesh Rice Research Institute	2020 (18 to 22	-	5	Scientific Report Writing Training
(BRRI)	October)			Course
National Agriculture Training Academy	2021 (19-28	_	10	Eco-friendly Plant Protection
(NATA)	September)			Techniques
PIU-BARC National Agricultural	2022 (5 to 9	_	5	Scientific Report Writing Training
Technology Program Phase 2 Project	February)			Course
Bangladesh Rice Research Institute	2022 (26 to 30	_	5	Hybrid Rice Cultivation and Seed
(BRRI)	June)			Production Technologies
Bangladesh Rice Research Institute	2022 (27 to 29	_	7	Integrated Pest Management
(BRRI)	June and 25 to			Using Seamless Climate
	28 July)			Information Training
ICRISAT, Hyderabad, India	2022(12 to 17	-	6	Gender-Responsive Plant
, , ,	September)			Breeding and Seed Systems in
	÷ ′			South Asia
National Agriculture Training	2023(15 to 19	_	5	Crop Improvement through
Academy (NATA)	January)			Plant Biotechnology
Academy (NATA)	January)		5	Plant Biotechnology

Thesis Title: EFFECT OF FOLIAR APPLICATION OF ZINC ON YIELD OFWHEATGROWN UNDER WATER STRESS CONDITION.GROWN UNDER WATER STRESS CONDITION.

Submitted to Soil Science Division, Sher-e-Bangla Agricultural University, Dhaka-1207.

Research Publications

- 1. Md Hasibur Rahaman Hera, Mohammod Hossain, Alok Kumar Paul. Effect of Foliar Zinc Spray on Growth and Yield of Heat Tolerant Wheat Under Water Stress. International Journal of Biological and Environmental Engineering. Vol. 1, No. 1, 2018, pp. 10-16.
- Naher UA, Biswas JC, Maniruzzaman M, Khan FH, Sarkar MIU, Jahan A, Hera MHR, Hossain MB, Islam A, Islam MR and Kabir MS (2021) Bio-Organic Fertilizer: A Green Technology to Reduce Synthetic N and P Fertilizer for Rice Production. Front. Plant Sci. 12:602052. doi: 10.3389/fpls.2021.602052
- 3. A.K. Paul, T. K. Bala, S. Shahriar and H. R. Hira. Effect of Foliar Application of Zinc on Yield of Wheat Grown under Water Stress Condition. International Journal of Bio-resource and Stress Management 2016, 7(5):1025-1031. <u>HTTPS://DOI.ORG/10.23910/IJBSM/2016.7.5.1645b</u>
- 4. MN Morshed, MTH Howlader, MR Islam, N Sultana and MHR Hera. Effect of abiotic factors on the seasonal incidence of Rice yellow stem borer, Scirpophaga incertulas (Walker) and rice leaf folder, Cnaphalocrocis medinalis (Guenee) population at the south-east coastal region of Bangladesh. Journal of Entomology and Zoology Studies 2020; 8(3): 1321-1326
- M.A.I. Khan, M.H.R. Hera, S. Rahaman, Z.R. Moni, M.A.M. Hussen, T. Someya and K. Ueno WAY OF COMPOST APPLICATION FOR ORGANIC FARMING. SAARC J. Agric., 17(1): 211-217 (2019). DOI:<u>10.3329/sja.v17i1.42774</u>
- 6. Md. Niaz Morshed, Md. Eftekhar Uddin, Md Hasibur Rahaman Hera, Naznin Sultana. Effect of temperature, rainfall and relative humidity on seasonal incidence of major rice insect pests. International Journal of Biosciences, 2020 | IJB | ISSN: 2220-6655 (Print), 2222-5234 (Online) http://www.innspub.net Vol. 17, No. 6, p. 92-102, 202. DOI: 10.12692/ijb/17.6.92-102
- 7. Galib MAA, Chakrobarty T, Hera MHR, Farzana S and Rahman MM (2022). Effect of potassium fertilizer and alternate wetting and drying (AWD) irrigation system for Boro rice cultivation in Faridpur region. International Journal of Natural and Social Sciences, 9(1): 01-13. DOI: 10.5281/zenodo.6665068
- 8. Md. Moniruzzaman, Md. Niaz Morshed, Md Mahfuzur Rahman, Md. Eftekhar Uddin, **Md Hasibur Rahaman** Hera, Naznin Sultana, Md. Abul Hashem (2022), Can nitrogen fertilizer rates affect the yield response of Boro rice (Oryza sativa L.) variety on the Old Brahmaputra floodplain soil of Bangladesh? IJB, V21, N2, August, P27-33
- Maniruzzaman, S., Debsharma, S. K., Ahmed, M. E., Ali, M. H., & Hera, M. H. R. GGE Biplot Analysis for Genotype× Environment Interaction on Yield Trait of rice in Bangladesh Irrigated Environments. The Agriculturists 19(1&2):63-72(2021)
- 10. Hossain, M. Z., Rahman, M. M., Morshed, M. N., Uddin, M. E., Hera, M. H. R., Sultana, N. & Hashem, M. A. (2023). Yield response of rice (Oryza sativa L.) to elevated potassium applied under the irrigated ecosystem of Bangladesh. Eurasian Journal of Soil Science, 12 (2), 104-110. DOI: 10.18393/ejss.1198190

- 11.Sheikh Maniruzzaman, Tahmina Akter, Md. Azizur Rahman, Md. Hasibur Rahaman Hera and , Md. Maksudul Haque Effect of Level of Phosphorus and Mulching on Growth and Yield of Tomato Lycopersicon lycopersicum L Glo. Adv. Res. J. Agric. Sci. November 2018 Vol: 7(11): 348-365
- 12. Aktarujjaman, M., Majumder, S., Haq, M. E., Tamima, T., Parvin, A., Saha, S., Ahmed, M., Hera, M. H.R, & Hassan, S. (2019). Evaluation of Some Tomato Genotypes against Tomato Fruit Borer Infestation, Growth Parameters and Some Chemical Constituents. Asian Research Journal of Agriculture, 11(2), 1-6. <u>https://doi.org/10.9734/arja/2019/v11i230054</u>
- 13.H. Rahman, F.A. Happy, A.H. Efan and M.H.R. Hera THE SMALL-SCALE DAIRY VALUE CHAIN ANALYSIS: CHALLENGES AND OPPORTUNITIES FOR DAIRY DEVELOPMENT IN MYMENSINGH DISTRICT OF BANGLADESH. SAARC J. AGRIC., 17(2):213-226(2019) DOI: 10.3329/sja. v17i2.45307
- 14.Md. Zafrul Hasan, Md. Amirul Islam, Md. Hasibur Rahaman Hera, Md. Niaz Morshed and Md. Kamrul Hassan. Effects of Different Coating Materials on ShelfLife and Quality of Mango. May 2020 Trends in Horticultural Research 10(1):1-1 DOI: 10.3923/thr.2020.1.10
- 15.Md. Zafrul Hasan, Md. Niaz Morshed, Md. Amirul Islam, Md. Hasibur Rahaman Hera, Md. Kamrul Hassan (2020). Effects of Different Concentrations of Chitosan on Shelf Life and Quality of Mango. Sustainability in Food and Agriculture, 1(1): 21-26.
- 16.MA Islam, MY Kabir, NT Shuvra and **MHR Hera. Effect of different organic manures and fertilizers on growth and yield of knol-khol (Brassica oleracea var. gongylodes L.)** June 2020 Malaysian Journal of Halal Research 3(2):56-62. DOI: 10.2478/mjhr-2020-0010 License CC BY 4.0
- 17.Mahbuba Akther Mishu, Fardous Ara Happy, Farzana Yeasmin, G.M. Amzad Hossain and Md. Hasibur Rahaman Hera. Impact of ASA NGO's Microcredit Program on Livelihood of Rural People in Mymensingh District, Bangladesh American Journal of Agricultural and Biological Sciences 2020, Volume 15: 51.59. DOI: 10.3844/ajabssp.2020.51.59
- 18.Palash Kumar Kundu, Md. Ferdous Parvez, Dr. Tapos Kumar Acharjee, Sheikh Maniruzzaman, Sanjoy Kumar Debsharma, Golam Sarwar Jahan, Md. Hasibur Rahaman Hera, Aishik Debnath, Md. Rezoan Bin Hafiz Pranto. Rainfall Induced Saline Soil Management through Leaching. North American Academic Research, Volume 3, Issue 07; July,2020; 3(07) 208-222 ©TWASP, USA208
- 19. Aziza L, Fardous A H, Farjana Y, Hasibur R H. Production and Marketing of Cucumber in Some Selected Areas of Mymensingh District. Agri Res & Tech: Open Access J. 2018; 15(5): 555969. DOI: 10.19080/ARTOAJ.2018.15.555969.

FOLDER:

- 20.Md. Alamgir Hossain, Mohammod Hossain, Sheikh Maniruzzaman, Md. Hasibur Rahaman Hera and Palash Kundu **Boro rice cultivation in greater Barisal region (in Bengali), October 2017.**
- 21.Md. Alamgir Hossain, Mohammod Hossain, Moniruzzaman Kabir, Abu Syed, Md. Hasibur Rahaman Hera and Palash Kundu Aus rice cultivation in greater Barishal region (In Bengali), April 2018.

- 22.Md. Alamgir Hossain, Mohammod Hossain, <u>Moniruzzaman Kabir</u>, <u>Abu Syed</u>, Md. Hasibur Rahaman Hera and Palash Kundu Cultivation technology of BRRI dhan76 and BRRI dhan77 for non-saline tidal region (In Bengali), June 2019.
- 23.Md. Alamgir Hossain, Mohammod Hossain<u>Moniruzzaman Kabir</u>, <u>Abu Syed</u>, Md. Hasibur Rahaman Hera and Palash Kundu **Boro rice cultivation in greater Barisal region (in Bengali), November 2019.**

Conference Paper:

- Md. Abdul Kader1*, Partha Sarathi Biswas1, Helal Uddin Ahmed1, Md. Alamgir Hossain1, Md. Rafiqul Islam1, Md. Nazmul Bari1, Muhammad Ali Siddiquee1, Tapas Kumer Hore1, Md. Maksudul Haque1, Al Amin1, Md. Khairul Alam Bhuiyan1, Md. Panna Ali1, Md. Abul Monsor1, Masud Iqbal1,Habibul Bari Shozib1, Nilufa Ferdous1, Mohammod Hossain1, Aminul Islam1, Md. Salim Mian1, Mamunur Rashid1, Md. Adil1, Shamima Akter1, Fahmida Akter1, Md. Harun-Or-Rashid1, Md. Abu Syed1, A.T.M. Sakhawat Hossain1, Sheikh Maniruzzaman1, Hasibur Rahman Hera1, Golam Sarwar Jahan1, Md. Abdul Latif1, Tamal Lata Aditya1, Md. Ansar Ali1, Md. Shahjahan Kabir1, Md. Russell Reinke2, Mallikarjuna Swamy2, Raul Boncodin2, and Donald J. MacKenzie. Updates of Golden Rice Research in Bangladesh, 2018.
- 2. Green Synthesis, Characterization of Nano-Particles and Their Efficacy Against Sheath Blight and Bacterial Blight Diseases of Rice, An Ecofriendly Approach. MA Latif, SI Babor, MAI Khan, S Akter, R Akter MHRH and MRB. International Symposium for the 50 Years of BRRI. 24 February 2023 |Bangladesh Rice Research Institute (BRRI), *1101*.

Skill:

- Blast and bacterial leaf blight Resistant Breeding
- Molecular detection and virulence analysis of rice diseases
- Disease survey and reporting of rice growing area.
- Genome sequencing and germplasm characterization. Screening of new chemicals for controlling neck blast disease in rice plants.
- Isolation and inoculation of pathogen in rice plants.
- Working with microbiological interaction in rice field.
- Member of NSB board as a pathologist.
- Planning and execution of different experiments.
- Computer skills on Microsoft Office (Word, Excel, Power Point), Data analysis through MSTAT-C, Web browsing, SPSS, R Analysis

Research Interest:

As a scientist of plant pathology my interest is (1) Genome sequencing of diferent germplasm and pathogen. (2) to find out the source of infection and the predisposing factors of major bacterial rice diseases (3) Sustainable management of blast, sheath blight and bacterial blight diseases of rice through nano-particles (NPs) (4) Synthesis and characterization of Nanoparticles (5) to test the efficacy of nano particles against blast, sheath blight and bacterial leaf blight (6) to develop bacterial blight and blast resistance rice varieties (7) to develop long duration bacteria blight resistance advanced lines (8) to develop pyramid lines with multiple bacterial blight resistance genes (9) Multiplication and formulation of bacterial bioagents and shelf life study

My running experiment is:

1. Evaluation of BB and blast resistant advance lines in multilocation trial.

2. Development of multiple disease resistant (blast and bacteria blight) pre-breeding materials using gene pyramiding approach (Long duration).

3. Development of multiple disease resistant (blast and bacteria blight) medium growth duration pre-breeding materials for Boro 2021-22

4. Development of bacteria blight resistant pre-breeding materials using gene pyramiding approach (Long duration).

5. Development of Bacterial blight resistant medium duration pre-breeding materials for Boro 2021-22

6. Pyramiding of blast and Bacterial blight resistant Genes into the Genetic Background of BRRI dhan63 and BRRI dhan81

7. Development of pre-breeding materials of BB and False smut resistance in the background of BRRI dhan49

8. Improvement of high yielding varieties for resistance to blast and bacterial blight diseases using marker assisted backcross breeding.

9. Studies on host range of the blast pathogen.

10. Characterization of antagonistic bacteria effective against sheath blight pathogen

11. Improvement of differential system for rice blast disease in Bangladesh

12. Identification of the source of infection of major rice diseases

13.Crop Loss Assessment of rice due to major diseases in Bangladesh

14. Management of Sheath blight disease utilizing Trichoderma harzianum

15. Biological Control of Sheath Blight Disease

16. Screening of advanced breeding lines against sheath blight disease during T. Aman 2021

17. Efficacy of nano particles of Cu, CuO, Zn, ZnO and Ag against R. solani in vitro

Language proficiency

English: Reading, Writing, Listening and Speaking.

Bengali (Native): Excellent in reading, writing and speaking

Honorable Reference

1. Dr. Md. Abdul Latif, Director (Administration & Common service), Bangladesh Rice Research Institute (BRRI), Gazipur-1701, Bangladesh. Email: <u>alatif1965@yahoo.com</u>

2. Dr. Mohammad Ashik Iqbal Khan, PSO, Plant Pathology Division, Bangladesh Rice Research Institute (BRRI), Gazipur-1701, Bangladesh. Email: <u>ashikjp@gmail.com</u>