CURRICULUM VITAE OF

MD. ASHRAFUL ALAM

Personal information

First name(s) / Surname(s)	**Md. Ashraful Alam**
Father's Name	Daraj Uddin Ahammad
Mother's Name	Mst. Aesha Khatoon
Present Address	Chief Scientific Officer (P&E) and Agency Program Director, PARTNER, BARC, Farmgate, Dhaka
Parmanent Address	Village: Radhanagar, P. S.: Atwari, P.O.: Radhanagar, District: Panchagarh, Bangladesh
Telephone(s)	+8801716837719
E-mail	ashrafulw@yahoo.com
Nationality	Bangladeshi
Gender	Male
Marital Status	Married
Field of Specialization	Plant Breeding and Planning & Evaluation. Research and Development activities on Wheat breeding and biotechnology about 15 years at Bangladesh Wheat and Maize Research Institute. Worked on Agricultural Research Planning and Management at Bangladesh Agricultural Research Council (BARC) from December 2021 to till now.

Work experiences

Dates	**November, 2025– Present**
Occupation or position held	**Chief Scientific Officer (P&E)**
Work Place	Bangladesh Agricultural Research Council (BARC), Farmgate, Dhaka
Main activities and responsibilities	• Research project planning, development, execution on agricultural sector and technology transfer activities. • Associated with the development of national research priorities and research coordination of the NARS institutes. • Annual programme development of Planning and Evaluation Division on various activities like project development, monitoring, and evaluation. • Regular reporting to the Ministry of Agriculture on the progress of the activities under ADP and work plan of BARC. • Organize seminars/workshops on national issues, annual work plan preparation, recommendations and implementation. • Providing comments on the reports of Ministry of Agriculture (MoA) in different aspects of Agriculture. • Actively participated in field monitoring and evaluation of research projects, action plan (rice and pulses), NATP Sub-projects
Dates	**December, 2021-November, 2025**
Occupation or position held	**Principal Scientific Officer (P&E)**
Work Place	Bangladesh Agricultural Research Council (BARC), Farmgate, Dhaka
Main activities and responsibilities	• Research project planning, development, execution on agricultural sector and technology transfer activities. • Associated with the development of national research priorities and research coordination of the NARS institutes. • Annual programme development of Planning and Evaluation Division on various activities like project development, monitoring, and evaluation.
Dates	**June, 2021-November, 2021**
Occupation or position held	Senior Scientific Officer (Biotechnology)
Work Place	Bangladesh Wheat and Maize Research Institute, Nashipur, Dinajpur
Main activities and responsibilities	• Marinating Preliminary Yield Trial (PYT), Advanced Yield Trial (AYT), Candidate Variety Demonstration (CVD), Heat Tolerant Wheat Screening Nursery (HTWSN), Bangladesh Wheat

Screening Nursery (BWSN) and other trials and collecting data, analysis and report writing from those trials.

Dates **April, 2006 – May 2021**

Occupation or position held **Scientific Officer (Wheat Breeding)**

Work Place Wheat Research Centre (WRC), Bangladesh Agricultural Research Institute (BARI), Dinajpur, Bangladesh

Main activities and responsibilities

- Scoring of leaf rust, stripe rust and stem rust of wheat
- Design and execution of wheat variety development program to address national food security
- Hybridization and handling of segregating population
- Marinating Preliminary Yield Trial (PYT), Advanced Yield Trial (AYT), Candidate Variety Demonstration (CVD), Heat Tolerant Wheat Screening Nursery (HTWSN), Bangladesh Wheat Screening Nursery (BWSN) and other trials and collecting data, analysis and report writing from those trials.
- Statistical and biometrical data analysis

Dates **October, 2003 – March, 2006**

Occupation or position held Lecturer

Work Place Agricultural Training and Management Development Institute, Kaliakoir, Gazipur, Bangladesh

Main activities and responsibilities

- Prepared and delivered lectures to diploma in agriculture students on topics such as molecular biology, agronomy, horticulture and botany.
- Evaluated and grade students' class work, laboratory work, assignments, and papers.
- Supervised students' laboratory work.

Academic credentials

Name of the Degree **Ph.D.**

Name of the Institution and Place Northwest A&F University, Shaanxi, China

Thesis Title Molecular mapping and differential expression of powdery mildew resistance genes in wheat germplasm N0308

Research Focus **Project 1: Identification and molecular mapping of powdery mildew resistance gene *PmG25* in common wheat originated from wild emmer (*Triticum turgidum* var. *dicoccoides*)**

Results: The common wheat line N0308 carrying the powdery mildew resistance gene *PmG25* introgressed from wild emmer accession G25 was used to identify and map the gene(s) at early stage of resistance using genetic analysis and molecular markers, and get the closely linked markers for marker-assisted selection (MAS). The temporarily designed powdery mildew resistance gene *PmG25* was linked with 11 SSR markers and two EST-STS markers on the long arm of chromosome 5B. The *PmG25* locus was located on the chromosome bin 5BL-14- 0.75-0.76 in the test with a set of deletion lines.

Publications: Article has been published by Pakistan Journal of Botany **(SCI, IF: 1.20)** and African Journal of Microbiology Research **(SCI, IF: 0.54)**

Project 2: Differential expression of resistance to powdery mildew at the early stage of development in wheat line N0308

Results: A SSH (suppression subtractive hybridization) cDNA library was constructed from wheat leaves after inoculation with *Bgt* isolate E09 at early stage. 175 positive clones from the library were subjected to sequencing, and 90 expressed sequence tags (ESTs) were obtained after removing repeated and redundancy, and submitted to GenBank.. BlastX results in nr-protein database revealed that 47 ESTs were highly homologous with known proteins, involved in defense and stress response (22%), transcription (17%), and energy (13%), metabolism (11%), signal transduction (9%), protein synthesis and storage protein (6%), transporter (6%), cell growth and division (6%) and immune system (4%).Comparing the Expressed sequence tags (EST) sequences among the SSH-cDNA libraries, gene expression pattern of seven ESTs in resistance reaction of powdery mildew were analyzed by using semi-quantitative reverse transcription-polymerase chain reaction (RT-PCR). Expression of five genes (sulfatase, pathogenesis-related protein 17, betacarbonic anhydrase 2, thioredoxin h-like protein and Coronatine-insensitive) transcripts were induced and up-regulated to their highest levels at 72 hours after *Bgt* infection, while that of two genes (violaxanthin de-epoxidase and gag-pol-polyprotein) were expressed at the highest level at 12 and 18 hpi, respectively.

Publications: Article has been published by Genetics and Molecular Research **(SCI, IF: 0.99)**

Class/Division Obtained Awarded

Duration 3 years

Year of Degree Obtained June 2013

Name of the Degree **Master of Science in Horticulture**

Name of the Institution and Place Bangladesh Agricultural University, Mymensingh-2202, Bangladesh

Thesis Title	Study on variability, genetic divergence and correlation for yield and yield contributing characters in pointed gourd (*Trichosanthes dioica* Roxb.)
Research Focus	Seventeen accessions of pointed gourd evaluated for yield and other related characters. Twelve characters *i.e.* fruit weight, fruit length, fruit diameter, fruit cavity length, fruit cavity breadth, pulp wt, pulp seed ratio, number of seeds/fruit, seed weight/fruit, dry matter, number of fruits/plant and yield/plant exhibited high variability. Following the Mahalanobis D^2 analysis, all the seventeen accessions were grouped into five clusters. No relation was found between genetic divergence and geographic distribution of the accessions. On the basis of the data on genetic divergence and mean performance of yield and other traits, diverse and superior genotypes namely, accession TD01, TD06, TD09, TD18, and TD19. Correlation coefficient indicated that fruit yield per plant was highly significant and there was a positive association with fruits per plant and number of branches at first flowering. In path analysis, fruit number and fruit weight contributed maximum direct effect on yield which indicated their importance as selection parameters.
Cass/Division Obtained	First Class
Duration	2 years
Year of Degree Obtained	June 2003
Name of the Degree	**Bachelor of Science in Agriculture (B. Sc. Ag.)**
Name of the Institution and Place	Bangladesh Agricultural University, Mymensingh-2202, Bangladesh
Cass/Division Obtained	First Class
Duration	4 years
Year of Degree Obtained	1997
Name of the Degree	**Higher Secondary Certificate (H. S. C.)**
Name of the Institution and Place	Carmichael College, Rangpur, Bangladesh
Cass/Division Obtained	First Division
Board	Rajshahi
Year of Degree Obtained	1993
Name of the Degree	**Secondary School Certificate (S. S. C.)**
Name of the Institution and Place	Balarampur High School, Panchagarh, Bangladesh
Cass/Division Obtained	First Division
Board	Rajshahi
Year of Degree Obtained	1991

Training received	• Successfully completed 06 days (05/03/2019 to 10/03/2019) training on Learning techniques of surveillance and monitoring, scoring, spore collection, inoculation and seedling evaluation of wheat leaf rust, IIWBR, Karnal, India. • Participated in a 5 days training program named, "Digital Service Lab", organized by NATA, Bangladesh • Successfully completed 05 days (03/02/2019 to 07/02/2019) training on Technical report writing and editing, BARC, Farmgate, Dhaka • Successfully completed 09 days (20/02/2019 to 28/02/2019) training on Hands-on training on disease screening and surveillance of wheat blast at Jashore. • Successfully completed 11 days (23/9/2014 to 03/10/2014) training on Taking Action to Mitigate the Threat of Wheat Blast: Disease Surveillance and Monitoring Skills Trial at WRC, Dinajpur • Successfully completed 11 days (23/9/2014 to 03/10/2014) training on Standardization of stem rust field notes and germplasm evaluation, with discussions on stripe and leaf rust organized by Durable Rust Resistance in Wheat (DRRW), CIMMYT in Kenya. • Successfully completed 4 months (10/11/2014 to 9/3/2014) training on foundation trainging course for NARS Scientists organized by Bangladesh Agricultural Research council (BARC) at BARD, Comilla. • Successfully Completed the 5 (five) days training programm in Basic Knowledge of Computer Hardware and Software organized by Wheat research Centre, BARI, Bangladesh. • Participated in a 3 days training program named, "Wheat Improvement", organized by Wheat Research Centre, BARI, Bangladesh • Successfully completed 14 days (from 14/5/2006 to 27/5/2006) training on Administration, Office Management and Communication organized by Graduate Training Institute, Bangladesh Agricultural University, Mymensingh, Bangladesh

Publications

Principal Author: 09

1. **MA Alam**, MR Kabir, MSN Mandal, MA Hakim, M Farhad, MM Hossain. 2022. Evaluation of wheat Genotypes for heat stress and disease resistance in multiple environments of Bangladesh, Bangladesh Journal of Agriculture, 47 (2), 1-16
2. **Alam MA**, H Li , A Hossain, Mingju Li. 2021. Genetic Diversity of Wheat Stripe Rust Fungus *Puccinia striiformis* f. sp. *tritici* in Yunnan, China. Plants, 10(8), 1735.
3. **MA Alam**, M Skalicky, MR Kabir, MMr Hossain,MA Hakim, MSN Mandal, R Islam, MB Anwar, F Hassan, A Mohammadein, MA Iqbal, A Hossain, M Brestic, MA Hossain, KR Hakeem, AE Sabagh. 2021. Phenotypic and Molecular Assessment of Wheat Genotypes Tolerant to Leaf Blight, Rust and Blast Diseases. Phyton, 90(4):130 1-132020.
4. **Alam MA**, M Farhad, MA Hakim, NCD Barma, PK Malaker, MM Reza, MA Hossain and MJ Li. 2017. AMMI and GGE biplot analysis for yield stability of promising bread wheat genotypes in Bangladesh. Pakistan Journal of Botany, 49(3): 1049-1056.
5. **Alam MA**, W Hongpo, Z Hong, WQ Ji. 2014. Differential expression of resistance to powdery mildew at the early stage of development in wheat line N0308. Genetics and Molecular Research, 13(2): 4289-4301.
6. **Alam MA**, F Xue, M Ali, C Wang and W Ji. 2013. Identification and molecular mapping of powdery mildew resistance gene *PmG25* in common wheat originated from wild emmer (*Triticum turgidum* var. *dicoccoides*). Pakistan Journal of Botany, 45(1): 203-208.
7. **Alam MA**, MSN Mandal, F Xue and W Ji. 2013. Chromosomal location and SSR markers of a powdery mildew resistance gene in common wheat line N0308. African Journal of Microbiology Research 7(6): 477-482.
8. **Alam MA**, F Xue, C Wang and W Ji. 2011. Powdery mildew resistance genes in wheat: identification and genetic analysis. Journal of Molecular Biology Research, 1(1): 20-49.
9. **Alam MA**, ZI Sarker, M Farhad, MA Hakim, NCD Barma, MI Hossain and M Robiul Islam. 2015. Yield Stability of Newly Released Wheat Varieties in Multi-Environments of Bangladesh. International Journal of Plant & Soil Science, 6(3): 150-161

Co- Author: 10

1. Hossain MM, A Hossain, **MA Alam**, MZ Islam and S Maitra. 2023. Evaluation of Wheat Genotypes Suitable for Terminal Heat Stress. International Journal of Bioresource Science, 10(01): 51-58.
2. Mohi-Ud-Din M, MM Rohman, **MA Alam**, M Hasanuzzaman, T Islam. 2023. Wheat variety carrying *2N^{v}S* chromosomal segment provides yield advantage through lowering terminal heat–induced oxidative stress. Protoplasma, 260(1): 63-76.
3. Gade P, **MA Alam**, NCD Barma, R Majumder, R Garapaty, VD Paranjape, A Killian, K Vijayaraghavan, MR Kabir, MA Hakim, MZ Islam, MM Hossain, MM Rahman, M Rahman, MAA Khan, MR Islam, MM Hasan. 2021. Assessment of wheat variety adoption in Bangladesh through DNA fingerprinting. Crop cience, 61: 3564–3577.
4. Gad MA, H Li, **MA Alam**, M Sajjad, M Li. 2019. Geographical distribution and virulence phenotypes of *Puccinia striiformis* f. sp. *tritici* from wheat in Yunnan,China. ScienceAsia, 45: 572–580.
5. Islam, MZ, MA Hakim, MA Kayum MM Hossain, **MA Alam**, MR Kabir, MM Rahman, R Islam, R Begum.2019. Performance of eighteen advanced wheat lines grown under irrigated optimum and late sown conditions in different regions of Bangladesh. *J. Multidiscip. Sci. 2019, 1(1), 1-8.*
6. Hossain MM, A Hossain, M**A Alam**, AE Sabagh, KFI Murad, M Haque, Muniruzzaman, Z Islam, S Das, C Barutcular, F Kizilgei. 2018. Evaluation of fifty irrigated spring wheat genotypes grown under late sown heat stress condition in multiple environments of Bangladesh. Fresenius Environmental Bulletin, 27(9): 5993-6004.
7. Saidou M, CY Wang**, MA Alam**, CH Chen and WQ Ji. 2016. Genetic analysis of powdery mildew resistance gene using SSR markers in common wheat originated from wild emmer (Triticum dicoccoides Thell). Turk J Field Crops, 21(1): 10-15.
8. Sarker MAZ, **MA Alam**, A Hossain, MA Mannaf. 2014. Agro-economic performance of cropiversification in rice based cropping systems of northwest Bangladesh. Agriculture, Forestry and Fisheries,3(4): 264-270.
9. Sarker, KK, **MA Alam,** MK Hasan and MRH Mondol. 2014. Evaluation and future options for hillock crop production system in Lalmai region of Bangladesh. Agriculture, Forestry and Fisheries, 3(4): 313-319.
10. Farhad, M, MA Hakim, **MA Alam**, NCD Barma. 2014. Screening Wheat Genotypes for Coleoptile Length: A Trait for Drought Tolerance. American Journal of Agriculture and Forestry. 2(6): 237-245. doi: 10.11648/j.ajaf.20140206.11

	National Journal (full length paper 06) **Principal Author: 02** 1. **Alam MA**, MG Rabbani, E Rahaman, MR Kabir and MSN Mandal. 2008. Evaluation of some collected pointed gourd genotypes and their inter-relationships. International Journal of BioResearch, 4(1): 17-23. 2. **Alam MA**, MG Rabbani, E Rahaman, MSN Mandal and MR Kabir. 2007. Genetic divergence in some collected pointed gourd accessions. Journal of BioResearch, 4(1): 18-21. **Co- Author: 04** 1. Kabir MR, R Begum, MSN Mandal, A Hossain and **MA Alam**. 2009. Effect of biotic and abiotic factors on the quality of triticale seed. Bangladesh Journal of Progressive Science and Technology, 7(1): 80-85. 2. Roy H, A Hossain, SMR Karim, MAI Sarker and **MA Alam**. 2009. Effect of grass-legume weed mixture on the plant growth, dry matter accumulation. Bangladesh Journal of Progressive Science and Technology, 7(1): 93-96. 3. Kabir MJ, ME Baksh, MM Islam, A Hossain and **MA 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. 4. Ali MS, N Pervin, B Ahmed, **MA Alam** and SMA Haque. 2007. Combined effect of cowdung with uera super granule on yield and nutrient uptake by BRRI Dhan30. International Journal of Sustainable Agricultural Technology, 3(2): 11-14. **Book Chapter** 1. Naresh Chandra Deb Barma, Akbar Hossain, Md. Abdul Hakim, Khondoker Abdul Mottaleb, **Md. Ashraful Alam**, Md. Mostafa Ali Reza, andMd. Motiar Rohman. 2019. Progress and Challenges of Wheat Production in the Era of Climate Change: A Bangladesh Perspective. Springer Nature Singapore, 615-679
References	1. Dr. Naresh Chandra Deb Barma, Chief Scientific Officer, Regional Wheat Research Centre, Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur, Bangladesh, Email: ncdbarma@gmail.com, Mobile: +8801712226755 2. Dr. Paritosh Kumar Malaker, Chief Scientific Officer, Wheat Research Centre, Bangladesh Agricultural Research Institute (BARI), Dinajpur, Bangladesh, Email: pkmalakerwrc@gmail.com Mobile: +8801716456674 3. Dr. Ji Wanquan, Professor, Crop Genetics and Breeding, Northwest A&F University, Shaanxi, China, Email: jiwanquan2003@126.com, Mobile: +8613359215439

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