

CURRICULUM VITAE



Md. Abdur Rahim, Ph.D.

Professor

Department of Genetics and Plant Breeding

Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh

Cell Phone: +8801712107322

E mail: rahimgpb@sau.edu.bd or rahimgpb@gmail.com

https://www.researchgate.net/profile/Md_Abdur_Rahim6

Research Interest:

Climate Resilient Crop Breeding, Marker Assisted Breeding, Biotic and Abiotic Stresses, Genomics and Transcriptomics and Bioinformatics

Academic Qualification:

- | | |
|------------------------------|--|
| 2016-2018 | Postdoctoral Research , Department of Horticulture, Suncheon National University, Suncheon, South Korea
Research Topic: Development of Molecular Markers for Different Traits of Major Horticultural Crops for Marker Assisted Breeding |
| 2011-2013 | PhD in Agrobiotechnology , University of Padova, Padova, Italy
Research Topic: Association of the Expression Levels of Transcription Factors with the Phenotypes and Genotypes of Peach Fruits that Differ in their Qualitative Characteristics |
| 2005-2006 | Master of Science (MS) in Genetics and Plant Breeding , Sher-e-Bangla Agricultural University, Dhaka, Bangladesh
Research Topic: Characterization and Genetic Diversity Analysis in Rice (<i>Oryza sativa</i> L) |
| 1999-2002
(heldn in 2004) | Bachelor of Science in Agriculture, B.Sc.Ag(Hon's) , Sher-e-Bangla Agricultural University, Dhaka, Bangladesh |

Professional Experience:

- | | |
|----------------|---|
| 2018-till date | Professor , Dept. of Genetics and Plant Breeding, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh |
| 2018-2019 | Advanced Training on Development of Molecular Markers for MABC, Department of Horticulture, Suncheon National University, Suncheon, South Korea |
| 2016-2018 | Postdoctoral Research , Department of Horticulture, Suncheon National University, Suncheon, South Korea |
| 2014-2018 | Associate Professor , Dept. of Genetics and Plant Breeding, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh |
| 2011-2013 | PhD in Agrobiotechnology , University of Padova, Padova, Italy |
| 2008-2014 | Assistant Professor , Dept. of Genetics and Plant Breeding, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh |
| 2006-2008 | Lecturer , Dept. of Genetics and Plant Breeding, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh |

Administrative Experience:

- | | |
|-------------------------|--|
| 19.03.2025- till date | Chairman , Dept. of Genetics and Plant Breeding, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh |
| 09.09.2024 – 18.03.2025 | Associate Director (Research) , Sher-e-Bangla Agricultural University Research System (SAURES), Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh. |
| 19.03.2021- 18.03.2023 | Chairman , Dept. of Genetics and Plant Breeding, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka- 1207, Bangladesh |

Editorial Activities:

Sl. No.	Role	Name of the Journal
1.	Member, Editorial Board (2025-till now)	Discover Plants
2.	Executive Editor (2024 to till noe)	Journal of Bioscience and Environment Research
3.	Member, Editorial Board (2024-till now)	Journal of Sher-e-Bangla Agricultural University
4.	Member, Editorial Board (2024-till now)	Archives of Biology & Life Sciences (ABLS)
5.	Member, Editorial Board (2020 - till now)	Genomics & Gene Therapy International Journal
6.	Member, Editorial Board (2014 - 2024)	Advances in Zoology and Botany
7.	Guest Associate Editor (2022)	Research Topic "Phynylpropanoid Biosynthesis in Plants", Frontiers in Plant Science
8.	Guest Associate Editor (2022)	Research Topic "Anthocyanin and Proanthocyanin: Biosynthesis, Accumulation, Regulation", Frontiers in Plant Science
9.	Member, Editorial Board (2014 - till now)	Biennial Report, Sher-e-Bangla Agricultural University Research System (SAURES)

Teaching Experience:

Postgraduate level: Genomics and Bioinformatics, Molecular Genetics, Field Crops Breeding, Experimentation and Data Analysis

Undergraduate level: Cytology and Cytogenetics, Crop Plant Improvement, Genetics, and Plant Breeding

Skill and Expertise:

- Nucleic Acid (RNA & DNA) Extraction and Quantification (Nanodrop, Spectrophotomete)
- PCR Techniques: Routine PCR, qRT-PCR, RT-PCR
- Detection of Mutations, Polymorphisms and Epigenetic Differences in Crop Plants using High Resolution Melt (HRM) analysis
- Gene Cloning and Sequence Analysis
- Transformation Techniques (Agroinfiltration & Stable Transformation)
- Plant Regeneration via Tissue Culture
- Bioinformatics: RNA-seq, Microarray, Phylogenetic Analysis, Genome Annotation, Gene Expression Analysis
- Traditional Plant Breeding and Molecular Breeding via Marker Assisted Selection.
- Molecular Marker Development (SNP, InDel, SSR)
- Bioassay Techniques for Plant Pathogenic Bacteria and Fungus
- Image analysis
- Graphics: CorelDraw
- Data Analysis: Bioinformatics, phylogenetic analysis, DNASTAR, MSTAT-C, GENSTAT, STATISTIX 10, SPSS and others applications.

Research Supervision:

Supervised a number of MS students of Genetics and Plant Breeding Department, Sher-e-Bangla Agricultural University

Research Projects:

2022-2023: "Selection of potential sesame (*Sesamum indicum* L.) genotypes for yield and its contributing traits for hybridization program" funded by Ministry of Science and Technology, Govt. of the Peoples Republic of Bangladesh. (PI)

2022-2023: "Screening of cowpea (*Vigna unguiculata* (L.) Walp.) germplasm for salinity tolerance" funded by SAURES, SAU, Dhaka, Bangladesh. (PI)

- 2021-2022: “Morphogenetic Characterization of ‘Flowering Chinese Cabbage (*Brassica rapa* subsp. *chinensis* var. *parachinensis*)’ in Bangladesh” funded by SAURES, SAU, Dhaka, Bangladesh. (PI)
- 2021-2022: “Morphogenetic characterization of a health promoting new leafy vegetable rucola (*Eruca sativa*)” funded by Ministry of Science and Technology, Govt. of the Peoples Republic of Bangladesh. (PI)
- 2014-2015: “Introduction of an exotic species tomatillo (*Physalis ixocarpa* Brot.) as a new vegetable in Bangladesh and its comparative genetic analysis with tomato (*Solanum lycopersicum* L.) based on their agromorphogenic and nutritional traits” funded by Ministry of Science and Technology, Govt. of the Peoples Republic of Bangladesh.. (Co investigator)
- 2014-2015: “Adapting Agriculture to Climate change Vulnerability: A case of Aman Rice in Northwest Bangladesh” funded by Ministry of Science and Technology, Govt. of the Peoples Republic of Bangladesh. (Co investigator)
- 2007-2008: “Characterization and DNA fingerprinting in Lentil” funded by Ministry of Science and Technology, Govt. of the Peoples Republic of Bangladesh. (Co investigator)

Crop Cultivar Development Activities:

SAU Rucola 1: A health promoting leafy vegetable which exhibits antioxidant activities and fight against diabetes cancer and cardiovascular diseases.

Training/Courses:

1. **Training of Trainers (ToT) on Advance Breeding Techniques for Major Crops in Bangladesh, Three days**, From 28-30 April 2025, Bangladesh Agricultural Research Council (BARC), Dhaka, Bangladesh
2. **Plant Genetic Resources and Resilient Seed Systems for Sustainable Food Security, Two months**, 23 November 2020 to 22 January 2021, Wageningen Centre for Development Innovation (WCIDI), Wageningen, the Netherlands
3. **Summer School in Plant Bioinformatics: an Evolutionary and Functional Approach, Two days, 16-17 September**, 2013, The Italian Botanical Society and Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy
4. **5th International PhD School in Plant Development, Four days, 25-28 September 2012**, University of Milan & University of Siena, Certosa di Pontignano, Siena, Italy
5. **Advanced bioinformatics: Computational System Biology, Five days**, 3-7 October, 2011, International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy
6. **Scientific Publishing and Communication, Two days**, 1-2 September, 2011, Doctoral School of Bioscience and Biotechnology, University of Padova, Italy
7. **Training on Improved Production Technology of Oilseed Crops, Two days**, From 14-15 October 2009, Bangladesh Agricultural Research Council (BARC), Dhaka, Bangladesh
8. **Foundation Training for University Teacher's, Fifty (56) days**, From 19th April to 13th June 2008, Graduate Training Institute (GTI), Bangladesh Agricultural University, Mymensingh
9. **Certificate course on IELTS Examination Preparation**, Three Months, British Council, Dhaka, Bangladesh

Publications:

Book Chapters:

1. Busatto, N., **Rahim, M.A.** and Trainotti, L. **2013**. Peach ripening transcriptomics unveils new and unexpected targets for the improvement of drupe quality. In: Poltronieri P, Burbulis N, Fogher C (ed) From plant genomics to plant biotechnology. Woodhead Publishing Limited, 80 High Street, Sawston, Cambridge, CB22 3HJ, UK.
2. **Rahim, M.A.** and Trainotti, L. **2013**. Recent advances in temperate fruit crops: an omics perspective. In: Debmalya Barh (ed) OMICS Applications in Crop Science. Taylor & Francis Group LLC, USA.

Peer Reviewed Scientific Articles:

1. Rahaman, S.S., Hasan, M.N., Roy, J.C., Rabbi, A.K.M.Z., Afrin, K.S. and **Rahim*, M. A. (2026)**. Sesame improvement: traditional breeding to genomics-assisted breeding. *Mol Breeding* 46: 31. <https://doi.org/10.1007/s11032-026-01654-9>
2. Hasan, M. N., Afrin, K. S., Simi, T. I., and **Rahim*, M. A. (2025)**. Genome-wide identification, characterization of the *Dof* gene family in sesame (*Sesamum indicum* L.). *Ecological Genetics and Genomics*, 37, <https://doi.org/10.1016/j.egg.2025.100404>
3. Hasan, M.N., Simi, T.I., Rahaman, S.S., Rahim*, M.A. (2025). Combining Traditional Breeding with Molecular Techniques: An Integrative Approach. **Phyton-International Journal of Experimental Botany**, 94(8), 2313–2346. <https://doi.org/10.32604/phyton.2025.067633>
4. Hasan, N. and **Rahim, M.A.* (2025)**. Editorial: Climate-resilient crops: Integration of molecular tools into conventional breeding. *Journal of Bioscience and Environment Research*, 2(2): 1-3. <https://doi.org/10.69517/jber.2025.02.02.0001>

5. Simi, T.I., Hasan, M.N., Afrin, K.S., Susmi, F.A. and **Rahim, M.A.*** (2024). Genome-wide *in silico* identification, characterization and functional prediction of the *SPL* gene family in sesame (*Sesamum indicum* L.). *J. Crop Sci. Biotch.* <https://doi.org/10.1007/s12892-024-00269-w>
6. Islam, M.N., Sultana, S., Rashid, M.H.U. and **Rahim, M.A.*** (2024). Identification of potential sesame (*Sesamum indicum* L.) genotypes for yield and its contributing traits. *Bangladesh Journal of Agriculture.* **49**(1): 52–67. <https://doi.org/10.3329/bjagri.v49i1.74043>
7. **Rahim, M.A.***, Hossain, A., Afrin, K.S., Ara, A.M., Islam, M.N. and Huda, K.M.K. (2024). Salinity tolerance of cowpea (*Vigna unguiculata* L. Walp.) genotypes at seed germination stage. *Bangladesh Journal of Agriculture.* **49**(1): 117–127. <https://doi.org/10.3329/bjagri.v49i1.74071>
8. Zabbar, M. A., Parveen, S., **Rahim, M.A.**, Huda, K.M.K., Arif, M.A.I., Sharif, M.R., Jahan, I. and Rashid, M.H.U. (2024). Morphological Characterization and Genetic Diversity Analysis of Yield and Yield Contributing Parameters in Brinjal (*Solanum melongena* L.) genotypes. *SAARC Journal of Agriculture*, **22**(1): 59–71. <https://doi.org/10.3329/sja.v22i1.73118>
9. Susmi, F.A., Simi, T.I., Hasan, M.N. and **Rahim, M.A.*** (2024). Genome-wide identification, characterization and functional prediction of the SRS gene family in sesame (*Sesamum indicum* L.). *Oil Crop Science.* **9**(2): 69-80. <https://doi.org/10.1016/j.ocsci.2024.02.002>
10. **Rahim, M.A.***, Misra, P. and Cairns, J.R.K. (2023). Editorials: Advances in Metabolism and Chemodiversity -Focus -Anthocyanin and Proanthocyanin: Biosynthesis, Accumulation, Regulation. *Front. Plant Sci.*, **14**: 1222082. doi: 10.3389/fpls.2023.1222082
11. Carpi, A., **Rahim, M.A.**, Marin, A., Armellin, M., Brun, P., Miotto, G., Monte, R.D., Trainotti, L. (2023). Optimization of anthocyanins production in tobacco cells. *Int. J. Mol. Sci.* **24**(18): 13711. <https://doi.org/10.3390/ijms241813711>
12. **Rahim, M.A.***, Zhang, X. and Busatto, N. (2023). Editorial: Phenylpropanoid biosynthesis in plants. *Front. Plant Sci.*, **14**: 1230664. <https://doi.org/10.3389/fpls.2023.1230664>
13. Yeo, S.M., Hong, J.E., **Rahim, M.A.**, Shahriar, S.A., Choe, P., Jung, S.K. and Nou, I.U. (2023). Development of SNP Markers to Distinguish Various Watermelon Traits and Validation Using Fluidigm Genotyping Assay. *Plant Breeding and Biotechnology*, **11**: 141-153. <https://doi.org/10.9787/PBB.2023.11.2.141>
14. Tanni, S.T.†, Islam, M.N.†, Sultana, S., Rashid, M.H.U. and **Rahim, M.A.*** (2023). Genetic Variability Studies of ‘Flowering Chinese Cabbage (*Brassica rapa* subsp. *chinensis* var. *parachinensis*)’ in Bangladesh. *Advances in Zoology and Botany*, **11**(5): 384-391. DOI: 10.13189/azb.2023.110506
15. **Rahim, M.A.***, Tanni, S.T., Islam, M.N. and Robbani, M.G. (2023). Genetic variability studies of a novel health promoting leafy vegetable rucola (*Eruca sativa*) in Bangladesh. *Bangladesh journal of Agriculture.* **47**(2): 53-63.
16. Shahriar, S.A., Husna, A., Paul, T.T., Eaty, M.N.K., Quamruzzaman, M., Siddique, A.B., **Rahim, M.A.**, Ahmmed, A.N.F., Uddain, J. and Siddiquee, S. (2023). Colletotrichum truncatum Causing Anthracnose of Tomato (*Solanum lycopersicum* L.) in Malaysia. *Microorganisms*, **11**(1): 226. <https://doi.org/10.3390/microorganisms11010226>
17. Park, J.G., Hong, J.E., **Rahim, M.A.** and Nou, I.S. (2022). Development of SNP Markers for Identification of Squash F₁ Hybrid Cultivars Using Fluidigm-based Genotyping. *Plant Breeding and Biotechnology*, **10**: 163-173. <https://doi.org/10.9787/PBB.2022.10.3.163>
18. Wei, X.[#], **Rahim, M.A.**[#], Zhao, Y., Yang, S., Su, H., Wang, Z., Shahriar, S.A., Li, Z., Yang, Z., Yuan, Y. and Zhang, X. (2022). Inheritance and Genetic Mapping of Late-Bolting to Early-Bolting Gene, *BrEb-1*, in Chinese Cabbage (*Brassica rapa* L.). *Agronomy*, **12**(5):1048. <https://doi.org/10.3390/agronomy12051048>
19. Shahriar, S.A., Islam, M.N., Chun, C.N.W., Kaur, P., **Rahim, M.A.**, Islam, M.M., Uddain, J. and Siddiquee, S. (2022). Microbial Metabolomics Interaction and Ecological Challenges of Trichoderma Species as Biocontrol Inoculant in Crop Rhizosphere. *Agronomy*, **12**(4): 900. <https://doi.org/10.3390/agronomy12040900>.
20. Robin, A.H.K., Saha, G., Park, J.I., Laila, R., **Rahim, M.A.**, Bagchi, M, Kim, H.T., Jung, H.J. and Nou, I.S. (2021). *In silico* analysis and expression profiling revealed Rlm1’ blackleg disease-resistant genes in Chromosome 6 of *Brassica oleracea*. *Horticulture, Environment, and Biotechnology*, **62**(6): 969-983. <https://doi.org/10.1007/s13580-021-00370-x>
21. Hong, J.E., Afrin, K.S., **Rahim, M.A.**, Jung, H.J. and Nou, I.S. (2021). Inheritance of Black Rot Resistance and Development of Molecular Marker Linked to Xcc Races 6 and 7 Resistance in Cabbage. *Plants*, **10**(9): 1940. <https://doi.org/10.3390/plants10091940>
22. Shahriar, S.A., Islam, M.N., Chun, C.N.W, **Rahim, M.A.**, Paul, N.C, Uddain, J. and Siddiquee, S. (2021). Control of Plant Viral Diseases by CRISPR/Cas9: Resistance Mechanisms, Strategies and Challenges in Food Crops. *Plants*, **10**(7): 1264; <https://doi.org/10.3390/plants10071264>.
23. Wei, X.[#], **Rahim, M.A.**[#], Zhao, Y., Yang, S., Wang, Z., Su, H., Li, L., Niu, L., Rashid, M.H., Yuan, Y. and Zhang, X. (2021). Comparative Transcriptome Analysis of Early- and Late-Bolting Traits in Chinese Cabbage (*Brassica rapa*). *Frontiers in Genetics*, **12**: 590830. doi: 10.3389/fgene.2021.590830.
24. **Rahim, M.A.**, Afrin, K.S., Jung, H.J., Kim, H.T., Park, J.I. and Nou, I.S. (2021). Identification and characterization of carotenoid biosynthesis related genes in a novel dark skinned citrus mutant cultivar ‘Suneat’. *Horticulture, Environment, and Biotechnology*, **62**(1): 99-111. <https://doi.org/10.1007/s13580-020-00298-8>.
25. Afrin, K.S.[#], **Rahim, M.A.**[#], Rubel, M.H., Park, J.I., Jung, H.J., Kim, H.T. and Nou, I.S. (2020). Development of PCR-based molecular marker for detection of *Xanthomonas campestris* pv. *campestris* race 6, the causative agent

- of black rot of brassicas. *The Plant Pathology Journal*. **36**(5): 418-427. <https://doi.org/10.5423/PPJ.OA.06.2020.0103>.
26. Sultana, Z., Ahmed, N., Islam, M.S. and **Rahim, M.A.** (2020). Genetic variability and yield components of yard long bean (*Vigna unguiculata* var. *sesquipedalis* L.). *Agronomski Glasnik*, **82**(3): 107-122.
 27. Sultana, S., Harun-Ur-Rashid, M., Mahmud, F. and **Rahim, M.A.** (2019). Genetic variability studies for selection of elite germplasm in sesame (*Sesamum indicum* L.) *Agronomski Glasnik*, **80**(2): 87-104. <https://doi.org/10.33128/ag.81.2.3>.
 28. **Rahim, M.A.**, Resentini, F., Vecchia, F.D. and Trainotti, L. (2019). Effects on plant growth and reproduction of a peach R2R3-MYB transcription factor overexpressed in tobacco. *Frontiers in Plant Science*. **10**:1143. doi:10.3389/fpls.2019.01143.
 29. **Rahim, M.A.**, Rabbi, A.K.M.Z., Afrin, K.S., Jung, H.J., Kim, H.T., Park, J.I. and Nou, I.S. (2019). Differential expression pattern of lignin biosynthetic genes in dwarf cherry tomato (*Solanum lycopersicum* var. *cerasiforme*). *Plant Breeding and Biotechnology*, **7**(3):229-236. <https://doi.org/10.9787/PBB.2019.7.3.229>.
 30. Yun, Y.B., Jung, H.J., **Rahim, M.A.**, Park, J.I. and Kuk, Y.I. (2019). Molecular analysis of genes related to phenylpropanoid and ascorbate biosynthesis in salt and UV-B treated pakchoi grown under LEDs. *Botany*, **97**(9): 513-519. <https://doi.org/10.1139/cjb-2018-0183>.
 31. Jin, S.W., **Rahim, M.A.**, Jung, H.J., Afrin, K.S., Park, J.I., Kim, H.T., Kang, J.G. and Nou, I.S. (2019). Abscisic acid and ethylene biosynthesis-related genes are associated with anthocyanin accumulation in purple ornamental cabbage, *Brassica oleracea* var. *acephala*. *Genome*, <https://doi.org/10.1139/gen-2019-0038>.
 32. Afrin, K.S.#, **Rahim, M.A.**#, Jung, H.J., Park, J.I., Kim, H.T. and Nou, I.S. (2019). Development of molecular marker through genome realignment for specific detection of *Xanthomonas campestris* pv. *campestris* race 5, the pathogen of black rot disease. *Journal of Microbiology and Biotechnology*, **29**(5): 785-793. <https://doi.org/10.4014/jmb.1901.01050>.
 33. **Rahim, M.A.**, Afrin, K.S., Jung, H.J., Kim, H.T., Park, J.I., Hur, Y. and Nou, I.S. (2019). Molecular analysis of anthocyanin biosynthesis-related genes and the identification of molecular markers of purple hypocotyl color in broccoli (*Brassica oleracea* var. *italica* L.). *Genome*, **62**(4): 253-266doi:10.1139/gen-2018-0173.
 34. Hassan, M.Z., **Rahim, M.A.**, Jung, H.J., Kim, H.T., Park, J.I. and Nou, I.S. (2019). Genome-wide characterization of nbs-encoding genes in watermelon and their potential association with gummy stem blight resistance. *International Journal of Molecular Sciences*, **20**(4): 902. <https://doi.org/10.3390/ijms20040902>.
 35. **Rahim, M.A.**, Jung, H.J., Afrin, K.S., Lee, J.H. and Nou, I.S. (2018). Comparative transcriptome analysis provides insights into dwarfism in cherry tomato (*Solanum lycopersicum* var. *cerasiforme*). *PLoS ONE*, **13**(12): e0208770. <https://doi.org/10.1371/journal.pone.0208770>.
 36. Rauf, M.A. and **Rahim, M.A.** (2018). Genetic variability studies among yield and its contributing traits in mustard (*Brassica napus* L.). *Advances in Zoology and Botany*, **6**(4): 101-108.
 37. Jin, S.W., **Rahim, M.A.**, Afrin, K.S., Park, J.I., Kang, J.G. and Nou, I.S. (2018). Transcriptome profiling of two contrasting ornamental cabbage (*Brassica oleracea* var. *acephala*) lines provides insights into purple and white inner leaf pigmentation. *BMC Genomics*, **19**:797. <https://doi.org/10.1186/s12864-018-5199-3>
 38. Hassan, M.Z., **Rahim, M.A.**, Natarajan, S., Robin, A.H.K., Kim, H.T., Park, J.I. and Nou, I.S. (2018). Gummy stem blight resistance in melon (*Cucumis melo* L.): Inheritance pattern and development of molecular marker. *International Journal of Molecular Sciences*, **19**(10): 2914. <https://doi.org/10.3390/ijms19102914>.
 39. Hassan, M.Z., Robin, A.H.K., **Rahim, M.A.**, Natarajan, S., Kim, H.T., Park, J.I. and Nou, I.S. (2018). Screening of melon (*Cucumis melo* L.) genotypes identifies gummy stem blight resistance associated with *Gsb1* resistant loci. *Journal of Plant Biotechnology*, **45**:217-227.
 40. Afrin, K.S., **Rahim, M.A.**, Park, J.I., Natarajan, S., Kim, H.T., and Nou, I.S. (2018). Identification of NBS-encoding genes linked to black rot resistance in cabbage (*Brassica oleracea* var. *capitata*). *Molecular Biology Reports*, **45**(5): 773-785. <https://doi.org/10.1007/s11033-018-4217-5>.
 41. Afrin, K.S., **Rahim, M.A.**, Rubel, M.H., Natarajan, S., Song, J.Y. Kim, H.T., Park, J.I. and Nou, I.S. (2018). Development of race-specific molecular marker for *Xanthomonas campestris* pv. *campestris* race 3, the causal agent of black rot of crucifers. *Canadian Journal of Plant Science*, **98**:1119-1125. [dx.doi.org/10.1139/cjps-2018-0035](https://doi.org/10.1139/cjps-2018-0035).
 42. Kang, S.I.#, **Rahim, M.A.**#, Afrin, K.S., Jung, H.J., Kim, H.T., Park, J.I. and Nou, I.S. (2018). Expression of anthocyanin biosynthesis-related genes reflects the peel color in purple tomato. *Horticulture, Environment, and Biotechnology*, **59**(3): 435-445. <https://doi.org/10.1007/s13580-018-0046-7>.
 43. Afrin, K.S., **Rahim, M.A.**, Park, J.I., Natarajan, S., Rubel, M.H., Kim, H.T. and Nou, I.S. (2018). Screening of cabbage (*Brassica oleracea* L.) germplasm for resistance to black rot. *Plant Breed. Biotechnol.* **6**(1): 30-43.
 44. Jin, S.W.#, **Rahim, M.A.**#, Kim, H.T., Park, J.I., Kang, J.G. and Nou, I.S., (2018). Molecular analysis of anthocyanin-related genes in ornamental cabbage. *Genome*, **61**(2): 111-120. <https://doi.org/10.1139/gen-2017-0098>.
 45. **Rahim, M.A.**, Robin, A.H.K., Natarajan, S., Jung, H.J., Lee, J., Kim, H., Kim, H.T., Park, J.I. and Nou, I.S. (2018). Identification and characterization of anthocyanin biosynthesis-related genes in kohlrabi. *Applied Biochemistry and Biotechnology*, **184**: 1120-1141. DOI 10.1007/s12010-017-2613-2.
 46. Rahman, M.H., Hossain, I., Ahmad, M.U. and **Rahim, M.A.** (2017). Effects of boron and zinc on yield and quality of okra seed. *Advances in Bioresearch*, **8**(1): 202-211. [10.15515/abr.0976-4585.8.1.202211](https://doi.org/10.15515/abr.0976-4585.8.1.202211).
 47. Hossain, A.Y., Harun-Ur-Rashid, M., Parveen, S., Rahman, M.S., Akter, R. and **Rahim, M.A.** (2016). Evaluation of Breeding Potential of Tomato Germplasm using D² analysis. *Advances in Bioresearch*, **7**(4): 217-222.

48. Titumeer, S.M., **Rahim, M.A.*** and Zeba, N. (2015). Genetic variability, character association and genetic divergence in mungbean (*Vigna radiata* L. Wilczek). *AgronomskiGlasnik*, **76**(6): 305-326.
49. Lovisetto, A., Masiero, S., **Rahim, M.A.**, Mendes, M.A.M. and Casadoro, G. (2015). Fleishy seeds form in the basal Angiosperm *Magnolia grandiflora* and several MADS-box genes are expressed as fleishy seed tissues develop. *Evolution & Development*, **17**(1): 82-91. doi: 10.1111/ede.12106.
50. Siddikee, M.A., Zereen, M.I., **Rahim, M.A.**, Huda, K.M.K., Chowdhury, M.A.Z., Bhuiyan, M.S.R. (2015). Heterosis and genetic variability in intergenotypic crosses of Oleiferous *Brassica rapa* L. *Journal of Experimental Bioscience*, **6**(1): 65-72.
51. Bonghi, C., dal Molin, A., Avanzato, C., Ferrarini, A., Delledonne, M., **Rahim, M. A.**, and Musacchi, S. (2014, October). Effect of cool storage duration on ripening initiation of 'ANGELYS®' pear fruit. In V International Conference Postharvest Unlimited 1079 (pp. 129-136). DOI: 10.17660/ActaHortic.2015.1079.12.
52. **Rahim, M.A.**, Busatto, N. and Trainotti, L. (2014). Regulation of anthocyanin biosynthesis in peach fruits. *Planta*, **240**(5): 913-929. DOI 10.1007/s00425-014-2078-2
53. Jajo, A.#, **Rahim#**, M.A.#, Serra, S., Gagliardi, F., Jajo,N.K., Musacchi, S., Costa, G., Bonghi, C. and Trainotti, L. (2014). Impact of tree training system, branch type and position in the canopy on the ripening homogeneity of 'AbbéFétel' pear fruit. *Tree Genetics & Genomes*, **10**(5): 1477-1488. DOI 10.1007/s11295-014-0777-2
54. Afrin, K.S., Mahmud, F. Bhuiyan, M.S.R. and **Rahim, M.A.** (2012). Genetic Divergence in Advanced Lines of Oilseed Rape (*Brassica napus* ssp oleifera L.). *Agriculturae Conspectus Scientiicus*, **77**(2): 81-85.
55. Afrin, K.S., Mahmud, F., Bhuiyan, M.S.R. and **Rahim, M.A.*** (2011). Assessment of genetic variation among advanced lines of *Brassica napus* L. *AgronomskiGlasnik*, **73**(4-5): 201-225. <https://hrcak.srce.hr/79939>.
56. Islam, M., Saha, S., Akand, M.H. and **Rahim, M.A.** (2011). Effect of Spacing on The Growth and Yield of Sweet Pepper (*Capsicum annum*L.). *Journal of central European Agriculture*, **12**(2): 328-335.doi: 10.5513/JCEA01/12.2.917.
57. **Rahim, M.A.***, Mia, A.A., Mahmud, F., Zeba, N. and Afrin, K.S. (2010). Genetic Variability, Character Association and Genetic Divergence in Mungbean (*Vigna radiata* L. Wilczek). *Plant Omics*, **3**(1): 1-6.
58. Sheikh, M.M.I., Islam, S., Rahman, M.A., Rahman, M.M., Rahman, M.M., Rahman, M.M., **Rahim, M.A.** and Alam, M.F. (2010). Control of some human pathogenic bacteria by seed extracts of cumin (*Cuminum cyminum* L.). *Agriculturae Conspectus Scientificus (ACS)*, **75**(1): 39-44.
59. Islam, M., Saha, S., Akand, M.H. and **Rahim, M.A.** (2010). Effect of Sowing Date on The Growth and Yield of Sweet Pepper (*Capsicum annum* L.). *AgronomskiGlasnik*, **72**(1): 3-14. <https://hrcak.srce.hr/56757>.
60. Mahmud, F., Rasul, M.G., Mian, M.A.K. and **Rahim, M.A.** (2009). Combining ability and gene action for seed yield and yield components in *Brassica napus* L. *Int. J. Agric. Environ & Biotech.*, **2**(3): 235-242.
61. Mia, A.A., **Rahim, M.A.** and Mahmud, F. (2008). Genetic variability, correlation coefficient and path analysis in Sorghum (*Sorghum bicolor* L.). *Bangladesh J. Prog. Sci. & Tech.* **7**(1): 149-152.
62. Rahman, M.M., Podder, B.P., **Rahim, M.A.** and Karim, K.M.R. (2008). Estimates of genotypic and phenotypic variation, heritability and genetic advance under of some characters of sugarcane clones. *Indian Sugar*, **58**(4): 31-36.
63. Rahman M.M., Nahar, S.M.N., **Rahim, M.A.**, Mahmud, F. and Tareque, H.M. (2008). Correlation and Path Analysis in Some Promising Clones of Sugarcane. *Indian Sugar*, **58**(8): 31-36
64. Mahmud, F., Rasul, M.G. and Rahim, M.A. (2008). Genetic diversity analysis in some advanced lines of *Brassica napus*. *Science Asia*, **34**: 432-434. doi:10.2306/scienceasia1513-1874.2008.34.432.
65. **Rahim, M.A.**, Hossain, M.S., Bhuiyan, M.S.R. and Mia, A.A. (2007). Genetic diversity analysis in rice (*Oryza sativa* L.). *Bangladesh J. Prog. Sci. & Tech.* **5**(2): 421-424.
66. Mia, A.A., **Rahim, M.A.**, Mahmud, F., Akter, A. and Habiba, U. (2007). Genetic Divergence in Sorghum (*Sorghum bicolor*L.). *Journal of Science and Technology*, **5**: 89-92.
67. Islam, M.S., Khalequzzaman, M., Hossain, M.S., Bhuiyan, M.S.R. and **Rahim, M.A.** (2007). Genetic diversity in some boro rice genotypes. *Bangladesh J. Prog. Sci. & Tech.* **5**(2): 429-432.
68. **Rahim, M.A.**, Mia, A.A., Hossain, M.S., Mahmud, F. and Siddikee, M.A. (2007). Correlation and path analysis in rice (*Oryza sativa* L.). *Bangladesh J. Prog. Sci. & Tech.* **5**(1): 165-168.
69. Mahmud, F., Ullah, M.Z., Huda, K.M.K. Hossain, A.K.M.S. and **Rahim, M.A.** (2006). Genetic variability and characters association of yield components in chickpea (*Cicer arietinum* L). *Bangladesh J. Pl. Breed. Genet.* **19**(2): 53-56.
70. Mahmud, F., Huda, K.M.K., Ullah, M.Z., **Rahim M.A.** and Bhadra, A.K. (2006). Stability Analysis of Seed yield in Chickpea. *J. Agric. Educ. Technol.* **9**(1&2): 59-62.
71. Mahmud, F., Ullah, M.Z., Huda, K.M. and **Rahim, M.A.** (2005). Genetic divergence analysis in chickpea. *J. Agric. Sci. Technol.* **6**(1&2): 7-10.

PhD Thesis:

Rahim, M.A. (2014). Association of the Expression Levels of Transcription Factors with the Phenotypes and Genotypes of Peach Fruits that Differ in their Qualitative Characteristics. *PhD thesis*. University of Padova, Italy.

MS Thesis:

Rahim, M.A. (2006). Characterization and Genetic Diversity Analysis in Rice (*Oryza sativa* L). MS Thesis. Dept. of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University. Dhaka, Bangladesh.

Published Abstract:

1. Hassan, M.Z., **Rahim, M.A.**, Kim, H.T., Park, J.I. and Nou, I.S. (2018). Gummy stem blight resistance in melon: screening, inheritance pattern and development of molecular markers. **Cucurbitaceae 2018**. 12 – 15 November 2018 • UC Davis, California USA. p. 58.
2. Afrin, K.S., **Rahim, M.A.**, Kim, H.T., Park, J.I. and Nou, I.S. (2018). Development of molecular marker for specific to *Xanthomonas campestris* pv. *campestris* race 5, the pathogen of black rot disease of *Brassica* crops. **Annual Autumn Conference of the Korean Society for Horticultural Science**. October 17-20, 2018 / Yeosu Expo Convention Center, Jeollanam-do, Korea. *Hortic. Sci. Tech.* **36(suppl. II)** October 2018:
3. Hassan, M.Z., Robin, A.H.K., **Rahim, M.A.**, Natarajan, S., Kim, H.T., Park, J.I. and Nou, I.S. (2018). Gummy stem blight resistance in melon: Inheritance pattern and development of molecular markers. **2018 Annual Autumn Conference of the Korean Society for Horticultural Science**. October 17-20, 2018 / Yeosu Expo Convention Center, Jeollanam-do, Korea. *Hortic. Sci. Tech.* **36(suppl. II)** October 2018: p. 57.
4. **Rahim, M.A.**, Jung, H.J., Afrin, K.S. and Nou, I.S. (2018). Transcriptome analysis provides insights into dwarfism in tomato (*Solanum lycopersicum*). **15th Solanaceae Conference**. September 30-October 4, 2018, Chiang Mai, Thailand.
5. Song-I, K. **Rahim, M.A.**, Jung, H.J., Kim, H.T., Park, J.I. and Nou I.S. (2017). Anthocyanin-related genes enlighten the purple peel color in tomato advanced lines. **The XIV Solanaceae and III Cucurbitaceae Genomics Joint Conference**, 3-16 September, 2017, Valencia, Spain. p.77.
6. **Rahim, M.A.**, Robin, A.H.K., Natarajan, S., Jung, H.J., Lee, J., Kim, H., Kim, H.T., Park, J.I. and Nou, I.S. (2017). Regulation of anthocyanin biosynthesis in kohlrabi (*Brassica oleracea* var. *gongylodes* L.). **PAG Asia 2017, Plant and Animal Genome Conference**. May 29-31, 2017. Seoul, South Korea.
7. **Rahim Md. A.**, Busatto N., Trainotti L. (2013). The regulation of anthocyanin biosynthesis in peach (*Prunus persica* L.). **7th International Workshop on Anthocyanins**, 9-11 September, 2013, at the Faculty of Science, University Porto, Porto, Portugal. p. 58.
8. **Rahim Md. A.**, Busatto N., Trainotti L. (2012). Functional analysis of R2R3MYB and bHLH TFs in respect of anthocyanin pigment accumulation during peach fruit ripening. **Biologia Cellulare e Molecolare” & “Biotecnologie e differenziamento”** Abano Terme - Padova, 18 - 20 Giugno 2012 organized by University of Padova & Società Botanica Italiana.
9. **Rahim Md. A.**, A. Jajo, Serra S., Musacchi S., Bonghi C., Trainotti L. (2012). Impact of tree training system, branch type and position in the canopy on the ripening homogeneity of Abate pear fruit. **6th Rosaceous Genomics Conference**, 30th September to 4th October 2012. Mezzocorona, Italy.
10. A. Jajo, **Rahim Md. A.**, Serra S., Musacchi S., Trainotti L., Bonghi C. (2012). Effect of cool storage duration on ripening initiation of Angelys[®] pear fruit. **6th Rosaceous Genomics Conference**, 30th September to 4th October 2012. Mezzocorona, Italy.
11. **Md. Abdur Rahim**, Nicola Busatto and Livio Trainotti. (2012). Functional analysis of R2R3MYB and bHLH TFs in respect of anthocyanin pigment accumulation during peach fruit ripening. **Plant Biology Congress Freiburg 2012**, Freiburg, Germany.
12. Kim, Y.C., Yeon, S.M., and **Rahim, A.** (2009). Characterization of Plasmids pHEN2 and pHEN3 from *Sphingobium chungbukense* DJ77. **International Meeting of the Microbiological Society of Korea**, May 2009. p.277.
13. **Rahim, M. A.**, M. S. Hossain, M. S. R. Bhuiyan. (2007). Characterization and Genetic diversity analysis in rice (*Oryza sativa* L.). **Plant Breeding and Genetics Society of Bangladesh, 7th Biennial Conference** May 26, 2007. Bangladesh Rice Research Institute, Joydebpur, Gazipur, Bangladesh. p.50.

Popular Articles:

1. **Rahim, M.A. (2024)**. Plant Pigments: An Eco-friendly Alternative to Artificial Food Dyes (an Online Daily Of Bangladesh.). Published on 25th November 2024. Dhaka, Bangladesh. (<https://greenwatchbd.com/columns/63668/plant-pigments-an-eco-friendly-alternative-to-artificial-food-dyes>).
2. **Rahim, M.A. (2024)**. Fosoler Jat Udvhaboner Koushal (ফসলের জাত উদ্ভাবনের কৌশল). Kalbela (a Daily Bangla Newspaper in Bangladesh). Published on 09th November 2024. Dhaka, Bangladesh. <https://www.kalbela.com/ajkerpatrika/joto-mot-toto-path/137095>
3. **Rahim, M.A. (2024)**. Necessity of climate resilient crop breeding: A response to climate change. Bangladesh Post (a Daily English Newspaper in Bangladesh). Published on 26th October 2024. Dhaka, Bangladesh. (<https://bangladeshpost.net/posts/necessity-of-climate-resilient-crop-breeding-a-response-to-climate-change-148344>).
4. **Rahim, M.A. (2016)**. Rucola-a wonder medicinal plant! Daily Sun (a Daily English Newspaper in Bangladesh). Published on 23 February 2016. Dhaka, Bangladesh. <http://www.daily-sun.com/post/115862/Rucola%E2%80%94a-wonder-medicinal-plant>

5. **Rahim, M.A. (2016).** VejoshGuneSomriddhoRucola (ভেষজগুণেসমৃদ্ধশাক-রুকোলা). Krishikotha (A monthly agricultural magazine), Agricultural Information Service (AIS), Department of Agricultural Extension (DAE), Khamarbari, Farmgate, Dhaka. Choitra-1422 (চৈত্র ১৪২২). <http://www.ais.gov.bd>
6. **Rahim, M.A. (2016).** Plant anthocyanin: A powerful antioxidant (উদ্ভিড্জঅ্যান্থোসায়ানিন :উচ্চক্ষমতাসম্পন্নপ্রাকৃতিকঅ্যান্টিঅক্সিডেন্ট). Krishikotha (A monthly agricultural magazine), Agricultural Information Service (AIS), Department of Agricultural Extension (DAE), Khamarbari, Farmgate, Dhaka. Jaistho-1423 (জ্যৈষ্ঠ ১৪২৩). <http://www.ais.gov.bd>
7. **Rahim, M.A. (2016).** Plant anthocyanin: A very safe and powerful antioxidant (উদ্ভিড্জঅ্যান্থোসায়ানিনঃএকটিঅত্যন্তনিরাপদওশক্তিশালীপ্রাকৃতিকঅ্যান্টিঅক্সিডেন্ট). Agrilife24.com (news & views for life). Published on 28 February 2016. Dhaka, Bangladesh. <http://agrilife24.com/index.php/2013-08-31-19-55-36/99-2013-07-02-16-27-19/8150-2016-02-24-18-17-24>
8. **Rahim, M.A. (2010).** Global Warming and Priorities of Plant Breeding. The Daily Star (a Daily English Newspaper in Bangladesh). Published on 3rd June 2010. Dhaka, Bangladesh. (http://www.thedailystar.net/newDesign/print_news.php?nid=145077)
9. **Rahim, M.A. (2010).** Science Advancing with Synthetic Biology. The Independent (a Daily English Newspaper in Bangladesh). Published on 26th May 2010. Dhaka, Bangladesh. (<http://www.theindependentdigital.com/index.php?opt=view&page=13&date=2010-05-26>)
10. **Rahim, M.A. (2010).** Synthetic Biology: A New Paradigm in the Revolution of Life Science. Karshika, Sher-e-Bangla Agricultural University Teacher's Associations Periodical, Dhaka, Bangladesh. **6:** 41-43.

Members of Professional organizations:

- ❖ **Life Member**, Plant Breeding and Genetics Society of Bangladesh.
- ❖ **Member**, Sher-e-Bangla Agricultural University Teacher's Association.
- ❖ **Member**, Sher-e-Bangla Agricultural University Alumni Association.
- ❖ **Member**, University of Padova Alumni Association.
- ❖ **Member**, Krishibid Institution of Bangladesh.

(Dr. Md. Abdur Rahim)