MD HARUN-UR-RASHID-Curriculum Vitae
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Keywords: Molecular biology, Molecular genetics, Plant Breeding, Plant Genetics, Plant Physiology, Computer-Aided Drug Design (CADD)

RESEARCH OVERVIEW

My research uses a combination of molecular biology, proteomics, biochemistry, genetics, and plant breeding methods to answer fundamental questions related to plant physiology and developmental process of plant for mankind. Particularly, I am interested the process of plant development. My work spans plant genetics, plant breeding, enzymology, and genomics.

ACADEMIC QUALIFICATIONS

2018 **PhD** – The United Graduate School of Agricultural Sciences, Kagoshima University, Kagoshima, Japan
Molecular Characterization of Cysteine synthase in Mimosa pudica and Leucaena leucocephala
Md. Harun-Ur-Rashid, Dr. Masakazu Fukuta, Dr. Md. Amzad Hossain and Dr. Toyoaki Anai

2015 **Research Student** – University of the Ryukyus, Okinawa, Japan
Salt responsive micro RNA to improve salinity stress tolerance in torpedo grass

2006 **Master of Science (MS) in Genetics and Plant Breeding** – Sher-e-Bangla Agricultural University, Dhaka, Bangladesh
Characterization and Diversity analysis of the germplasm of oleiferous Brassica species
Md. Harun-Ur-Rashid, Dr. Md. Shahidur Rashid Bhuiyan and Dr. Ali Akbar

2004 **Bachelor of Science in Agriculture (Honors)** – Sher-e-Bangla Agricultural University, Dhaka, Bangladesh

PUBLICATIONS

International Peer-reviewed journal

1. Md. Naziur Rahman, Abu Yousuf Hossin, Shahriar Mannan Imon Talukder, Mt. Sumaiya Siddika, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Ridwanul Islam, Md. Yeamin Hossain, Mahfuj Ahmed, Brototi Chakraborty Dyuti, Zarin Tabassum, Ajoy Kumer, 2026. Computational identification and evaluation of Adenium obesum phytochemicals as potential EGFR inhibitors for targeted therapy against non-small-cell lung cancer. PLOS one. 21(8): e0357096. **IF: 2.8 (2025) Category Quartile: Q1** https://doi.org/10.1371/journal.pone.035709
2. Mahfuj Ahmed, Md. Yeamin Hossain, Md. Ridwanul Islam, Md. Shohag Rana, Nishat Tasnim Ananty, Mst. Sufara Akhter Banu, Abu Yousuf Hossin, Md. Golam Robbani, Md. Arifuzzaman, Md. Mahmudul Hassan, Kazi Md. Kamrul Huda, Shahanaz Parveen, **Md.**

Harun-Ur-Rashid*, 2026. Unveiling Core Genomic Regions Shaping Plant Architecture, Productivity, and Seed Quality Traits in Sesame (*Sesamum indicum* L.): Insights from Meta-QTL Study into breeding Targets. Theoretical and Applied Genetics. 139: 191 **(Corresponding author) IF: 4.1 (2025) Category Quartile: Q1** https://doi.org/10.1007/s00122-026-05288-5

3. Munni Datta, Shahanaz Parveen, Hosne Ara, Mahfuj Ahmed, Mst. Sufara Akhter Banu, Kazi Md. Kamrul Huda, **Md. Harun-Ur-Rashid*, 2026.** Evaluation of genetic variability, heritability, and character association of yield and yield contributing traits in BC_2 populations of *Brassica rapa* L. CABI Agriculture and Bioscience. 7(1): 1-13. **(Corresponding author) IF: 2.7 (2023) Category Quartile: Q1** https://doi.org/10.1079/ab.2026.0036
4. Md. Yeamin Hossain, Md. Ridwanul Islam, Mahfuj Ahmed, Shahanaz Parveen, Kazi Md. Kamrul Huda, Mst. Sufara Akhter Banu, Masashi Inafuku, **Md. Harun-Ur-Rashid*, 2026.** Unlocking the Genetic Blueprint of Erucic Acid Content in Mustard (*Brassica napus*): A Meta-QTL Exploration. The Scientific World Journal. 2026(1): 1-15. **(Corresponding author) Category Quartile: Q2** https://doi.org/10.1155/tswj/8457904
5. Md. Akram Hossain Chowdhury, Md. Shahidur Rashid Bhuiyan, Md. Shah-E-Alam, Md. Sarowar Hossain, Md. Fazlul Karim, Shahanaz Parveen, **Md. Harun-Ur-Rashid*, 2025.** Evaluation of combining ability and genetic analysis for salinity tolerance in a 7 × 7 F1 half-diallel population of groundnut (*Arachis hypogaea* L.). Discover Plants. 2: 327. **(Corresponding author)** https://doi.org/10.1007/s44372-025-00387-x
6. Md Abdul Helal Kafy, Shahanaz Parveen, Faria Ahmed, Fatema Akter Mim, Nusrat Jahan Moitry, Jannatul Ferdaus Zihan, Md. Abdul Zabbar, Kazi Md. Kamrul Huda, **Md. Harun-Ur-Rashid*, 2025.** Morphological and biochemical characterization of resistance mechanisms in eggplant genotypes against *Leucinodes orbonalis*. Discover Plants. 2: 309. **(Corresponding author)** https://doi.org/10.1007/s44372-025-00401-2
7. Sakila Akter, Md. Shahidur Rashid Bhuiyan, Shahanaz Parveen, Md. Azaharul Islam Arif, Nayema Islam Rupa, Md. Abdul Zabbar, Mst. Shamima Yesmin, Hosne Ara, **Md. Harun-Ur-Rashid*, 2025.** Genetic variability and trait association for important agro-morphological traits in advanced populations of *Brassica rapa* L. SAARC Journal of Agriculture. 23(1): 163–174. **(Corresponding author)** https://doi.org/10.3329/sja.v23i1.79688
8. Sikha Chakraborthy, Niloy Gain, Kaniz Fatima, Abul Kashem Chowdhury, **Md. Harun-Ur-Rashid,** Jamilur Rahman, **2025**. Combining ability and heterosis for early maturity and

yieldcontributing traits in field mustard (*Brassica rapa* L.). SABRAO Journal of Breeding and Genetics. 57 (2): 435–446. **IF**: **1.7 (2025) Category Quartile: Q2** http://doi.org/10.54910/sabrao2025.57.2.4.

9. Zarin Mushrat, Zeena Salwa, Nusrat Zemin, Mithila Fahrin Fame, Sharin Bintay Anis, Mohd. Kamran Khan, **Md. Harun-Ur-Rashid**, Anamika Pandey, Mst. Tanjina Shahanaj Turin, Md. Arifuzzaman, **2025.** Chapter three - Advancement in genome sequencing of wheat wild relatives. Editor(s): Mohd. Kamran Khan, Anamika Pandey, Mehmet Hamurcu, Sait Gezgin, Wheat Wild Relatives, Academic Press, Pages 59-89, ISBN 9780443220906, https://doi.org/10.1016/B978-0-443-22090-6.00003-5.
10. Md. Abdul Zabbar, Shahanaz Parveen, Md. Abdur Rahim, Kazi Md. Kamrul Huda, Md. Azaharul Islam Arif, Md. Raihan Sharif, Israt Jahan, **Md. Harun-Ur-Rashid***, **2024**. Morphological characterization and genetic diversity analysis of yield and yield contributing parameters in brinjal (*Solanum melongena* L.) genotypes. SAARC Journal of Agriculture. 22(2): 59–71. **(Corresponding author)** https://doi.org/10.3329/sja.v22i1.73118
11. Nayema Islam Rupa, Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur- Rashid***, Shahanaz Parveen, Md. Azaharul Islam Arif and Sakila Akter, **2023**. Evaluation of the potentiality of eight advanced populations of *Brassica rapa* based on yield and yield contributing characters. SAARC Journal of Agriculture. 21(2): 109–118. **(Corresponding author)** https://doi.org/10.3329/sja.v21i2.70320
12. Mst. Sufara Akhter Banu, Kazi Md. Kamrul Huda, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, S M Shahinul Islam, Narendra Tuteja, **2023.** Phenotypic and microarray analysis reveals salinity stress-induced oxidative tolerance in transgenic rice expressing a DEAD-box RNA helicase, OsDB10. Plant Molecular Biology. 113: 19–32. **IF: 3.7 (2025) Category Quartile: Q2** https://doi.org/10.1007/s11103-023-01372-2
13. Mst. Sufara Akhter Banu, Kazi Md. Kamrul Huda, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Narendra Tuteja, **2023**. A DEAD box helicase Psp68 positively regulates salt stress responses in marker-free transgenic rice plants. Transgenic Research. 32(4): 293–304. **IF: 2.0 (2024) Category Quartile: Q2** https://doi.org/10.1007/s11248-023-00353-x
14. Xiaochun Wei, Md. Abdur Rahim, Yanyan Zhao, Shuangjuan Yang, Zhiyong Wang, Henan Su, Lin Li, Liujing Niu, **Md. Harun-Ur-Rashid**, Yuxiang Yuan, Xiaowei Zhang, **2021.** Comparative transcriptome analysis of early- and late-bolting traits in Chinese Cabbage (*Brassica rapa*). Frontiers in Genetics. 12. **IF: 3.0 (2023) Category Quartile: Q2** https://doi.org/10.3389/fgene.2021.590830

15. **Md. Harun-Ur-Rashid**, Shigeki Oogai, Shahanaz Parveen, Hironori Iwasaki, Masashi Inafuku, Masakazu Fukuta, Md. Amzad Hossain, Toyoaki Anai, Hirosuke Oku, **2020**. Molecular cloning of putative chloroplastic cysteine synthase in *Leucaena leucocephala*. Journal of Plant Research. 133: 95–108. **IF: 2.2 (2025) Category Quartile: Q2** https://doi.org/10.1007/s10265-019-01158-y
16. Shahanaz Parveen, **Md. Harun-Ur-Rashid**, Masashi Inafuku, Hironori Iwasaki, Hirosuke Oku, **2019**. Molecular regulatory mechanism of isoprene emission under short-term drought stress in the tropical tree *Ficus septica*. Tree Physiology. 39(3): 440–453. **IF: 4.0 (2025) Category Quartile: Q1** https://doi.org/10.1093/treephys/tpy123
17. Shahanaz Parveen, Md. Asif Iqbal, Ishmael Mutanda, **Md. Harun-Ur-Rashid**, Masashi Inafuku, Hirosuke Oku, **2019**. Plant hormone effects on isoprene emission from tropical tree in *Ficus septica*. Plant, Cell & Environment. 42(5): 1715–1728. **IF: 6.9 (2025) Category Quartile: Q1** https://doi.org/10.1111/pce.13513
18. **Md. Harun-Ur-Rashid**, Hironori Iwasaki, Shigeki Oogai, Masakazu Fukuta, Shahanaz Parveen, Md. Amzad Hossain, Toyoaki Anai, Hirosuke Oku, **2018.** Cytosolic cysteine synthase switch cysteine and mimosine production in *Leucaena leucocephala*. Applied Biochemistry and Biotechnology. 186(3): 613–632. **IF: 3.5 (2025) Category Quartile: Q2** https://doi.org/10.1007/s12010-018-2745-z
19. **Md. Harun-Ur-Rashid**, Hironori Iwasaki, Shigeki Oogai, Masakazu Fukuta, Shahanaz Parveen, Md. Amzad Hossain, Toyoaki Anai, Hirosuke Oku, **2017**. Molecular characterization of cytosolic cysteine synthase in *Mimosa pudica*. Journal of Plant Research. 131: 319–329. **IF: 2.2 (2025) Category Quartile: Q2** https://doi.org/10.1007/s10265-017-0986-5

National Peer-reviewed journal

20. Tasnia Taiana, Shahanaz Parveen*, Md. Raihan Sharif, Mahfuj Ahmed, Abu Yousuf Hossin, Hosne Ara, Kazi Md. Kamrul Huda, **Md. Harun-Ur-Rashid*, 2026.** Genetic divergence of yield and related traits in tomato (*Solanum lycopersicum* L.). Bangladesh Journal of Agricultural Research. (Accepted). **(Corresponding author)**
21. Hosne Ara, Md. **Harun-Ur-Rashid***, Md. Yeamin Hossain, Jannatul Nesa, Kazi Md. Kamrul Huda, Shahanaz Parveen*, **2026**. Assessment of genetic diversity among *Brassica rapa* genotypes using multivariate analysis. (Accepted). **(Corresponding author)**
22. T. Islam, K. M. K. Huda, **M. Harun-Ur-Rashid**, F. T. Johora, S. Parveen, M. Z. Islam, R. Rahmatullah, R. Islam, **2025**. Response of boro rice (*Oryza sativa* L.) genotypes to genetic

diversity and character association for yield associated traits. Bangladesh Journal of Agriculture. 50(2): 120–131. https://doi.org/10.3329/bjagri.v50i2.86179

23. Md. Nazrul Islam, Sharmin Sultana, **Md. Harun-Ur-Rashid**, Md. Abdur Rahim, **2024**. Determination of the potentiality of different sesame (*Sesamum indicum* L.) genotypes. Bangladesh Journal of Agriculture. 49(1): 52–67. https://doi.org/10.3329/bjagri.v49i1.74043

24. Sadia Tabassum Tanni, Md. Nazrul Islam, Sharmin Sultana, **Md. Harun-Ur-Rashid**, Md. Abdur Rahim, **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

25. Bulbul Ahmed, Mousumi Sulatan, Banu, Mst. Sufara Akhter Banu, **Md. Harun-Ur-Rashid**, Kazi Md. Kamrul Huda, **2021**. Effect of different levels of salinity on grasspea genotypes. Journal of Experimental Bioscience. 12(1): 1–8.

26. Mst. Sufara Akhter Banu, Kazi Md. Kamrul Huda, Shahanaz Parveen, Md. Golam Robbani, Bulbul Ahmed, **Md. Harun-Ur-Rashid**, **2021**. Isolation, expression and purification of pea ascorbate peroxidase (pea-apx) in *Escherichia coli*. Journal of Experimental Bioscience. 12(1): 69–74.

27. Mst. Sufara Akhter Banu, Bulbul Ahmed, Shahanaz Parveen, **Md. Harun-Ur-Rashid,** Kazi Md. Kamrul Huda, **2021.** Agrobacterium-mediated Genetic Transformation of Rice var. BRRI Dhan 58. Plant Tissue Culture &Biotechnology. 31(1): 71–80. https://doi.org/10.3329/ptcb.v31i1.54113

28. Kazi Md. Kamrul Huda, Mst. Sufara Akhter Banu, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, MAM Hussen, **2019-2021.** Effect of temperature stress on *Brassica rapa* genotypes during germination and reproductive growth. Bangladesh Journal of Agriculture. 44-46: 19-29. https://doi.org/10.3329/bjagri.v46i1-6.59970

29. M. N. Jomadder, Kazi Md. Kamrul Huda, Mohammad Jony, M.S.Islam, Mst. Sufara Akhter Banu, **Md. Harun-Ur-Rashid,** Shahanaz Parveen, **2019-2021**. Genetic evaluation of boro rice (*Oryza sativa* l.) genotypes under irrigated and rainfed conditions. Bangladesh Journal of Agriculture. 44-46: 77-87. https://doi.org/10.3329/bjagri.v46i1-6.59976

30. Sabrin Sultana, **Md Harun-Ur-Rashid**, Firoz Mahmud, Md Abdur Rahim, **2019**. Genetic variability studies for selection of elite germplasm in sesame (*Sesamum indicum* L.). Agronomy journal. 81(2): 87–104.

31. Sithi Saha, Md. Ehsanul Haq, Shahanaz Parveen, Firoz Mahmud, Shukti Rani Chowdhury, **Md. Harun-Ur-Rashid, 2019.** Variability, correlation and path coefficient analysis:

principle tools to explore genotypes of Brinjal (*Solanum melongena* L.). Asian Journal of Biotechnology and Genetic Engineering. 2(3): 1–9. **(Corresponding author)**

32. Md. Nur-E-Nabi, Md. Ehsanul Haq, Montasir Ahmed, Md. Monir Hossain, Md. Shefat-al-Maruf, Firoz Mahmud, Shahanaz Parveen, **Md. Harun-Ur-Rashid**, **2019**. Genetic variability, correlation and path coefficient analysis in advanced generation of *Brassica napus* L. Journal of Scientific Research and Reports. 22(3): 1–12. **(Corresponding author)** https://doi.org/10.9734/jsrr/2019/v22i330090

33. Md. Ehsanul Haq, Naheed Zeba, Rozina Akter, Bilkish Begum, **Md. Harun-Ur-Rashid, 2017.** Screening and identification of salt tolerant genotypes based on agromorphogenic traits of tomato (*Solanum lycopersicum* L.). Annual Research & Review in Biology. 18 (4):1–11. **(Corresponding author)** https://doi.org/10.9734/ARRB/2017/36855

34. Md. Akkas Ali, Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Golam Robbani, Monika Sonom, **2016**. Breeding for an ideal plant type in *Brassica rapa* L. Plant Knowledge Journal. 5(1): 36–41. **(Corresponding author)**

35. Abu Yousuf Hossin, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Salehur Rahman, Runa Akter, Md. Abdur Rahim, **2016**. Evaluation of breeding potential of tomato germplasm using D^2 analysis. Advances in Bioresearch. 7(4): 217–222. **(Corresponding author)**

36. Taiaba Afrin, Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur-Rashid,** Shahanaz Parveen, **2016**. Variability and comparative analysis among advanced generations of *Brassica rapa* L. Plant Knowledge Journal. 5(1): 18–26. **(Corresponding author)**

37. Md. Harun-Ur-Rashid, Shahanaz Parveen, Md. Shahidur Rashid Bhuiyan, **2015**. Morphological attributes species identification of oleiferous *Brassica* species and better parents selection criteria for *Brassica juncea*. International Journal of Current Research. 7(9): 19847–19854. **(Corresponding author)**

38. Tasnia Taiana, **Md. Harun-Ur-Rashid,** Shahanaz Parveen, Md. Sarowar Hossain, Md. Azizul Haque, **2015**. Selection strategies for better parents in tomato using genetic parameters. Plant Knowledge Journal. 4(1): 33–39. **(Corresponding author)**

39. Golam Sarwar, **Md. Harun-Ur-Rashid,** Shahanaz Parveen, Md. Sarowar Hossain, **2015**. Correlation and Path coefficient analysis for agro-morphological important traits in Aman rice genotypes (*Oryza sativa* L.). Advances in Bioresearch. 6(4): 40–47. **(Corresponding author)**

40. Shahanaz Parveen, **Md. Harun-Ur-Rashid,** Md. Shahidur Rashid Bhuiyan, **2015**. Assessment of breeding potential of rape seed germplasm using D^2 analysis. Journal of Experimental Biosciences. 6(1): 59–64. **(Corresponding author)**
41. Md. Salehur Rahman, Shahanaz Parveen, **Md. Harun-Ur-Rashid**, Runa Akter, Abu Yousuf Hossin, Md. Golam Rabbani, **2015**. Correlation and path coefficient analysis of tomato germplasm. International Journal of Applied Sciences and Biotechnology. 3(2): 223–226. **(Corresponding author)** https://doi.org/10.3126/ijasbt.v3i2.12421
42. Golam Sarwar, **Md. Harun-Ur-Rashid,** Shahanaz Parveen, Md. Sarowar Hossain, **2015**. Evaluation of genetic diversity in agromorphological traits of forty-two Aman rice genotypes (*Oryza sativa* L.) using D^2 analysis. American Journal Experimental Agriculture. 8(5): 280–288. **(Corresponding author)**
43. Golam Sarwar, Md. Sarowar Hossain, **Md. Harun-Ur-Rashid,** Shahanaz Parveen, **2015**. Assessment of genetic variability for agro-morphological important traits in aman rice (*Oryza sativa* L.). International Journal of Applied Sciences and Biotechnology. 3(1): 73–79. **(Corresponding author)** https://doi.org/10.3126/ijasbt.v3i1.11896
44. Shahanaz Parveen, **Md. Harun-Ur-Rashid,** Md. Shahidur Rashid Bhuiyan, **2013**. Genetic variation and selection criteria for seed yield related traits in rape seed (*Brassica napus* L.). Bangladesh Journal of Plant Breeding and Genetics. 26(2): 15–22. **(Corresponding author)** https://doi.org/10.3329/bjpbg.v26i2.23845
45. Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur-Rashid,** Md. Aziz Zilani Chowdhury, **2012**. Impact of hybrid crop varieties and GM crops on crop diversity and nutritional food security. Review article: Plant Genetic Resources of Bangladesh 2012. Pp.267-273. A workshop of "Plant genetic resources in Bangladesh-2012" held on 18–19 May, 2012 at Bangladesh Agricultural Research Council, organized by Plant Breeding and Genetic Society of Bangladesh and Bangladesh Academy of Agriculture.
46. Hosneara; Md. Abdul Khaleque Mian, Obaidur Rahman, **Md. Harun-Ur-Rashid,** Naheed Zeba, **2012**. Comparative analysis of newly released BU Hybrid Mula-1 with standard radish (*Raphanus sativus*) varieties. Journal of Experimental Biosciences. 3(2): 85–90.
47. Md. Mosiur Rahman, Md. Aziz Zilani Chowdhury, M G Hossain, Md. Nurul Amin, Md. Abdul Muktadir, **Md. Harun-Ur-Rashid**, **2011**. Gene action for seed yield and yield contributing characters in turnip rape (*Brassica rapa* L.). Journal of Experimental BioSciences. 2(2): 67–76. **(Corresponding author)**

48. Labony Yeasmin, Shamim Ahmed, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Naheed Zeba, **2011**. Effect of nitrogen and potassium on *in vitro* development of microtuber of potato (*Solanum tuberosum* L.). Journal of Experimental Biosciences. 2(1): 107–112.
49. **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Shahidur Rashid Bhuiyan, **2010**. Genetic variability, Correlation and Path coefficient analysis in nineteen *Brassica rapa* germplasm. Journal of Sher-e-Bangla Agricultural University. 4(1): 84–89. **(Corresponding author)**
50. Shahanaz Parveen, **Md. Harun-Ur-Rashid,** Md. Shahidur Rashid Bhuiyan, **2010**. Selection criteria for high yielding genotypes in early F_2 generation of twelve inter varietal crosses of *Brassica rapa*. Journal of Sher-e-Bangla Agricultural University. 4(2): 69–72. **(Corresponding author)**
51. **Md. Harun-Ur-Rashid**, Md. Shahidur Rashid Bhuiyan, Md. Ali Akbar, Shahanaz Parveen, **2009**. Diversity analysis of the germplasms oleiferous *Brassica sp*. Journal of Sher-e-Bangla Agricultural University. 3(1): 30–34. **(Corresponding author)**
52. Shahanaz Parveen, Md. Shahidur Rashid Bhuiyan, Md. Sarowar Hossain, **Md. Harun-Ur-Rashid, 2008**. Variability study in F_2 progenies of the inter-varietal crosses of *Brassica rapa*. Journal of Sher-e-Bangla Agricultural University. 2(2): 34–40. **(Corresponding author)**

CONFERENCE PRESENTATIONS

Poster Presentation

- **Md. Harun-Ur-Rashid**, Fukuta Masakazu, Md. Amzad Hossain, Hirosuke Oku, Hironori Iwasaki, Shigeki Oogai, Toyoaki Anai (2016). ***Molecular characterization and expression of chloroplastic OASTL control cysteine metabolism in Leucaena leucocephala L. –*** 80th Annual Meeting of the Botanical Society of Japan, 16-19 th September at Okinawa Convention Center, Okinawa, Japan.
- **Md. Harun-Ur-Rashid**, Fukuta Masakazu, Md. Amzad Hossain, Hirosuke Oku, Hironori Iwasaki, Shigeki Oogai, Toyoaki Anai (2017). **Molecular characterization and expression of cytosolic OASTL control cysteine metabolism in *Mimosa pudica* L.** The 9th Asian Crop Science Association conference. 4-7 June, 2017, ICC, Jeju, Korea.

Oral Presentation

Md. Harun-Ur-Rashid, Masakazu Fukuta, Md. Amzad Hossain, Hirosuke Oku, Hironori Iwasaki, Shigeki Oogai, Toyoaki Anai (2017). ***Molecular characterization and docking dynamics simulation prediction of cytosolic OASTL switch cysteine and mimosine expression in Leucaena leucocephala***. The 9th Asian Crop Science Association conference. 4-7 June, ICC, Jeju, Korea.

Md. Harun-Ur-Rashid, Shahanaz Parveen, Masashi Inafuku, Hironori Iwasaki, Masakazu Fukuta, Md. Amzad Hossain, Hirosuke Oku (2019). ***Molecular Characterization of Chloroplastic Cysteine synthase in Leucaena leucocephala***. International Conference on Environmental Science and Resource Management (ICERM). 8-9 February, Mawlana Bhashani Science and Technology University, Tangail, Bangladesh.

Tasnia Taiana, Shahanaz Parveen, Md. Sarowar Hossain, **Md. Harun-Ur- Rashid** (2019). **Variability study and better parent selection criteria of tomato germplasms.** International Conference on Environmental Science and Resource Management (ICERM). 8-9 February, Mawlana Bhashani Science and Technology University, Tangail, Bangladesh.

Md. Harun-Ur-Rashid, Shahanaz Parveen, Masashi Inafuku, Hironori Iwasaki, Masakazu Fukuta, Md. Amzad Hossain, Hirosuke Oku (2019). ***Molecular cloning and characterization of chloroplastic cysteine synth*ase *in Leucaena leucocephala: its regulatory cross-talk of cysteine and mimosine synthesis.*** National Conference on DNA and Genome Research for Sustainable Development in Agriculture and Health. 2-3 May, Rajshahi University, Rajshahi, Bangladesh.

Md. Harun-Ur-Rashid, Shahanaz Parveen, Masashi Inafuku, Hironori Iwasaki, Masakazu Fukuta, Md. Amzad Hossain, Hirosuke Oku (2019). ***Cloning and characterization of putative chloroplastic cysteine synth*ase *in Leucaena leucocephala.*** Innovations in Plant and Food Sciences and International Conference on Biotechnology in Health and Agriculture. 11-13 November, University of Dhaka, Bangladesh.

Md. Harun-Ur-Rashid, Shahanaz Parveen, Masakazu Fukuta, Michael Chandra Roy, Hirosuke Oku (2020). ***Molecular characterization and docking dynamics simulation prediction of putative cytosolic oastl operate cysteine and mimosine metabolism in Leucaena leucocephala***. 9th International Plant Tissue Culture & Biotechnology Conference. 8-10 February, University of Dhaka, Bangladesh. **Best presenter**

Shahanaz Parveen, **Md. Harun-Ur-Rashid**, Hirosuke Oku (2020). ***Molecular regulatory mechanism of VOC emission under drought stress in Ficus septica.*** 9th International Plant Tissue Culture & Biotechnology Conference. 8-10 February, University of Dhaka, Bangladesh.

PROJECT MANAGEMENT & ADMINISTRATION

2023-2024 **Principal Investigator.** *Oil-producing rapeseed-mustard (Brassica spp.) genotypes: Trait Association, Genetic Analysis, and Fatty Acid Profiles*. Ministry of Science and Technology, Bangladesh.

2023-2024 **Principal Investigator.** *Comparison of breeding related traits in early segregating generation of Brassica rapa L.* Sher-e-Bangla Agricultural University Research System, Dhaka, Bangladesh.

2022-2023 **Principal Investigator.** *Unraveling the trait association between seed yield and yield related parameters in oil yielding Brassica genotypes*. Ministry of Science and Technology, Bangladesh.

2022-2023 **Principal Investigator.** *Combining ability analysis for yield and yield contributing traits in intra-specific crosses of rapeseed (Brassica rapa L.) (Continuation)*. Sher-e-Bangla Agricultural University Research System, Dhaka, Bangladesh.

2021-2022 **Principal Investigator.** *Yield and yield attributing traits of some selected genotypes of Brassica rapa L. for early maturity and higher yield.* Ministry of Science and Technology, Bangladesh.

2021-2022 **Principal Investigator.** *Combining ability analysis for yield and yield contributing traits in intra-specific crosses of rapeseed (Brassica rapa L.)*. Sher-e-Bangla Agricultural University Research System, Dhaka, Bangladesh.

2020-2021 **Principal Investigator.** *Comparative study of morphological and qualitative parameters among modern cultivars and advanced lines of oil yielding Brassica genotypes*. Sher-e-Bangla Agricultural University Research System, Dhaka, Bangladesh.

2020-2021 **Principal Investigator.** *A comparative study of morphological and biochemical parameters among landraces and modern cultivars of Brassica genotypes in Bangladesh*. Ministry of Science and Technology, Bangladesh.

2019-2020 **Principal Investigator.** *Genetic diversity and superior parents selection for the improvement of Boro rice among the germplasm of Bangladesh.* Ministry of Science and Technology, Bangladesh.

2019-2020 **Principal Investigator.** *Genetic studies for parental selection among diversified brinjal (Solanum melongena l.) genotypes*. Sher-e-Bangla Agricultural University Research System, Dhaka, Bangladesh.

2018-2019 **Principal Investigator.** *Characterization of fifteen advanced lines of Brassica rapa for future use*. Sher-e-Bangla Agricultural University Research System, Dhaka, Bangladesh.

2013 –2014 **Principal Investigator.** *Selection criteria of high yielding and short duration genotypes of tomato.* Dept. of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh.

2012–2013 **Institutional Focal Point** of Sher-e-Bangla Agricultural University. *Capacity building and regional collaboration for enhancing the conservation and sustainable use of plant genetic resources in Asia.*

2010 –2011 **Co-Investigator.** *In vitro screening and control of salt tolerant genotypes in Tomato.* Dept. of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh.

2007 –2008 **Co-Investigator.** *Development and Evaluation of new plant type rice for high yielding varieties in Aman season.* Dept. of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh.

2010 –2014 **Advisor.** Sher-e-Bangla Agricultural University Debating Society.

2010 –2014 **Advisor.**Yes Group Sher-e-Bangla Agricultural University, a sister organization of Transparency International Bangladesh

***Student Supervision* (MS thesis)**

1. Tasnia Taiana (Reg. No. 08-03087), 2014 (**Character association and genetic diversity in tomato (*Solanum lycopersicum* L.)**
2. Sithi Saha (Reg. No. 08-02804), 2014 **(Variability, correlation and path coefficient analysis in brinjal (*Solanum melongena* L.)**
3. Md. Azaharul Islam Arif (Reg. No. 18-09317), 2020 (**Character association of fifteen advanced populations of *Brassica rapa* based on yield and yield contributing characters**)
4. Saurin Shahid (Reg. No.19-10135), 2021 (**Assessment of genetic diversity in boro rice genotypes**)
5. Fatema Tuz Zohora (Reg. No.14-05960), 2022 **(Genetic analysis of morphological parameters in oil yielding *Brassica* genotypes in Bangladesh)**
6. Mst Shamima Yesmin (Reg. No.16-07120), 2023 **(Gene action and heterosis for quantitative traits in *Brassica rapa* L.)**
7. Rabeya Basri Omi (Reg. No. 21-010029), 2024 **(Variability comparison and interrelationship of yield and component characters in advanced segregating generations of *Brassica rapa*)**
8. Md. Farhan Masud Himu (Reg No. 17-08026), 2024 **(Genetic insights into morphological diversity and yield determinants in F_2 of oil yielding *Brassica* spp.)**
9. Hasibul Islam (Reg No. 18-08516), 2025 **(Genetic variability, interrelationship and multi-trait selection in F_2 populations of *Brassica rapa*)**
10. Rudaiba Yasmin (Reg No. 17-07780), 2025 **(Assessment of genetic diversity and characterization of tomato (*Solanum lycopersicum* L.) genotypes)**

Co-supervisor (MS thesis)

1. Golam Sarwar (Reg. No. 0803106), 2013 (**Correlation, path analysis and genetic diversity in aman rice (*Oryza sativa* L.))**
2. Taiaba Afrin (Reg. No. 07-02330), 2014 (**Variability and comparative analysis in F_4 populations of *Brassica rapa***)

3. Shikha Chakraborty (Reg. No. 18-09305), 2020 **(Combining ability and heterosis in F_1 populations derived from 6×6 half diallel cross of mustard (*Brassica rapa*))**

4. Zannatul Anika (Reg. No. 19-10247), 2021 (**Characterization and diversity analysis of ridge gourd** (*Luffa acutangula*) **germplasms**)

5. Papon Kumar Kundu (Reg. No. 14-0517), 2021 **(Phenotypic characterization and genetic divergence in brinjal genotypes (*Solanum melongena*))**

6. Sumon Chandra Shell (Reg. No. 19-10099), 2021 **(Genetic variability and character association of yield and yield contributing trails in brinjal (Solanum melongena L.) genotypes)**

7. Afia Anjum (Reg. No. 19-10207), 2021 **(Genetic diversity studies in pumpkin)**

8. Munni Datta (Reg. No. 15-06385), 2022 **(Comparative trial of twenty populations of *Brassica rapa* L.)**

9. Tanjina Islam (Reg. No. 15-06383), 2022 **(Genetic variability and characterization of yield and yield contributing characters in Boro rice (*Oryza sativa* L.))**

10. Md. Nazrul Islam (Reg. No. 26281/0564), 2022 **(Genetic variability studies of sesame (*Sesamum indicum* L.))**

11. Sumon Bepary (Reg. No. 15-06581), 2022 **(Genetic variability, correlation and path co-efficient analysis of yield and yield contributing characters of 25 tomato (*Solanum lycopersicum* L.) genotypes)**

12. Hosne Ara (Reg. No. 16-07103), 2023 **(Population selection in F_3 and backcross generation of *Brassica rapa* L.)**

13. Israt Jahan (Reg. No. 15-06571), 2024 **(Character association and genetic diversity analysis of yield and yield components in tomato *(Solanum lycopersicum* L.*)* genotypes)**

14. Zacika Alam Ome (Reg No. 17-07661), 2024 **(Assessment of combining ability and heterosis effect for yield and yield contributing traits in tomato (*Solanum lycopersicum* L.))**

15. Fariha Tamanna Tonny (Reg No. 18-08526), 2025 **(Assessment of genetic variability and yield contributing traits in F_2 population in *Brassica rapa*)**

Professional Experience:

Designation	**Professor (21.9.2022 to till now)**
Name of Organization	Department of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka, Bangladesh
Job Responsibility	To teach undergraduate and post graduate students To conduct research To supervise MS and PhD students
Designation	**Associate Professor (21.9.2018 to 20.9.2022)**
Name of Organization	Department of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka, Bangladesh
Job Responsibility	To teach undergraduate and post graduate students To conduct research To supervise MS students
Designation	**Assistant Professor (23.02.2012 to 20.9.2018)**
Name of Organization	Department of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka, Bangladesh

Job Responsibility	To teach undergraduate and post graduate students To conduct research To supervise MS students
Designation	**Lecturer (23.02.2010 to 22.02.2012)**
Name of Organization	Department of Genetics and Plant Breeding, Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka, Bangladesh
Job Responsibility	To teach undergraduate and post graduate students To conduct research To supervise MS students
Designation	**Agricultural Extension Officer (30.11.2008 to 22.02.2010)**
Name of Organization	Department of Agricultural Extension, Government of the People's Republic of Bangladesh
Job Responsibility	Train Agriculture Extension Workers and Farmers Motivate farmers to use modern technologies

Clone

1. Leucaena leucocephala Cy-OASTL mRNA for Cytosolic O-acetylserine thiol lyase, complete cds. LC306827 Authors: M. Fukuta, M., Rashid, H.M., Oku, H. and Inafuku Publication date : 2018/6/14 Source: DDBJ (DNA Data Bank of Japan) Report number: LC306827
2. Leucaena leucocephala Ch-OASTL mRNA for chloroplastic O-acetylserine thiol lyase, complete cds GenBANK: LC342269.1 Authors: H. Harun-Ur-Rashid, M., Oogai, S., Parveen, S., Inafuku, M.,Iwasaki, H., Fukuta, M., Amzad Hossain, M. and Oku, H. Publication date: 2020/1/11 Source: DDBJ (DNA Data Bank of Japan) Report number: LC342269

Membership

Life member, Plant Breeding and Genetics Society of Bangladesh

Life Member, Krishibid Institution of Bangladesh

Life Member, Japanese Universities Alumni Association Bangladesh

Member, Kagoshima University Alumni Association Bangladesh

Member, Plant Biotechnology Society of Bangladesh

Member, American Society of Plant Biologist

Member, Botanical Society of Japan

Member, Botanical Society of Bangladesh

Award/Prizes

	Award/Fellowship	**Year**
1.	The best presenter in the session "Genomics, Proteomics and Bioinformatics" of the 9th International Plant Tissue Culture and Biotechnology Conference 2019, held at the Department of Botany, University of Dhaka during February 08-10, 2020 organized by Bangladesh Association for Plant Tissue Culture and Biotechnology	February, 2020
2.	MEXT Fellowship	October, 2014

3.	Merit Scholarship in undergraduate and postgraduate study	1999 to 2007
4.	Junior Scholarship in High School	1993

Training

Title:	**Workshop on Participatory plant breeding**
Date:	22 - 24 July, 2014
Place:	Bangladesh Jute Research Institute (BJRI) auditorium, Dhaka
Organizer:	UBINIG and Plant Breeding and Genetics Society of Bangladesh (PBGSB) supported by Local Initiatives for Biodiversity, Research and Development (LI-BIRD) and funded by Development Fund (DF), Norway.
Title:	**Training on Curriculum Development and Teaching-learning Assessment**
Date:	17-21 December, 2013
Place:	Sher-e-Bangla Agricultural University, Dhaka
Organizer:	Higher Education Quality Enhancement Project (HEQEP) funded by World Bank

Organizational/Managerial Skills

General Secretary, Plant Breeding and Genetics Society of Bangladesh (PBGSB) (2023 to…..)

Former Advisor, Sher-e-Bangla Agricultural University Debating Society

Advisor, Yes Group Sher-e-Bangla Agricultural University, a sister organization of Transparency International Bangladesh (2012-2014)

Assistant Hall Provost, Begum Fazilatunnesa Mujib Hall (2012-2014)

President, Sher-e-Bangla Agricultural University Debating Society (SAUDS)-2003-2004

General Secretary, Ag-Biotech and Information Technology Forum (ABIT Forum)- A science club of Sher-e-Bangla Agricultural University-2003-2004

Founder member of Sher-e-Bangla Agricultural University Debating Society (SAUDS)

Founder member of Ag-Biotech and Information Technology Forum (ABIT Forum)- A science club of Sher-e-Bangla Agricultural University

Referee

1. **Professor Md. Amzad Hossain, Ph.D.**
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