

## **MD HARUN-UR-RASHID-Curriculum Vitae**

Professor

Department of Genetics and Plant Breeding  
Sher-e-Bangla Agricultural University (www.sau.edu.bd)  
EMAIL: [sumonsau@sau.edu.bd](mailto:sumonsau@sau.edu.bd), [sumonsau@gmail.com](mailto:sumonsau@gmail.com)  
**ORCID ID:** <https://orcid.org/0000-0002-9162-3144>  
Web of Science Researcher ID: I-3653-2019

**Keywords:** Molecular biology, Molecular genetics, Plant Breeding, Plant Genetics Plant Physiology

### **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. Shabidur 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. Harun-Ur-Rashid**, Hironori Iwasaki, Shigeki Oogai, Masakazu Fukuta, Shahanaz Parveen, Md. Amzad Hossain, Toyoaki Anai and Hirosuke Oku, **2017**. Molecular characterization of cytosolic cysteine synthase in *Mimosa pudica*. Journal of Plant Research. 131: 319–329. **IF: 2.4 (2024) Category Quartile: Q2**
2. **Md. Harun-Ur-Rashid**, Hironori Iwasaki, Shigeki Oogai, Masakazu Fukuta, Shahanaz Parveen, Md. Amzad Hossain, Toyoaki Anai and Hirosuke Oku, **2018**. Cytosolic cysteine synthase switch cysteine and mimosine production in *Leucaena leucocephala*. Applied Biochemistry and Biotechnology. 186(3): 613–632. **IF: 3.3 (2025) Category Quartile: Q2**
3. **Md. Harun-Ur-Rashid**, Shigeki Oogai, Shahanaz Parveen, Hironori Iwasaki, Masashi Inafuku, Masakazu Fukuta, Md. Amzad Hossain, Toyoaki Anai and Hirosuke Oku, **2020**.

- Molecular cloning of putative chloroplastic cysteine synthase in *Leucaena leucocephala*. Journal of Plant Research. 133: 95–108. **IF: 2.4 (2024) Category Quartile: Q2**
4. Shahanaz Parveen, Md. Asif Iqbal, Ishmael Mutanda, **Md. Harun-Ur-Rashid**, Masashi Inafuku, and Hirosuke Oku, **2019**. Plant hormone effects on isoprene emission from tropical tree in *Ficus septica*. Plant, Cell & Environment. 42(5): 1715–1728. **IF: 6.3 (2025) Category Quartile: Q1**
  5. Shahanaz Parveen, **Md. Harun-Ur-Rashid**, Masashi Inafuku, Hironori Iwasaki and 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: 3.7 (2025) Category Quartile: Q1**
  6. Xiaochun Wei, Md. Abdur Rahim, Yanyan Zhao, Shuangjuan Yang, Zhiyong Wang, Henan Su, Lin Li, Liuqing Niu, **Md. Harun-Ur-Rashid**, Yuxiang Yuan and Xiaowei Zhang, **2021**. Comparative transcriptome analysis of early- and late-bolting traits in Chinese Cabbage (*Brassica rapa*). Frontiers in Genetics.12. **IF: 2.8 (2023) Category Quartile: Q2**
  7. 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 (2025) Category Quartile: Q1**
  8. 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: 3.8 (2025) Category Quartile: Q1**
  9. Sikha Chakraborty, Niloy Gain, Kaniz Fatima, Abul Kashem Chowdhury, **Md. Harun-Ur-Rashid**, Jamilur Rahman, **2025**. Combining ability and heterosis for early maturity and yield-contributing traits in field mustard (*Brassica rapa* L.). SABRAO Journal of Breeding and Genetics. 57 (2): 435–446. **IF: 1.7 (2025) Category Quartile: Q2**
  10. 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>.

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. Md. Abdul Zabbar, Shahanaz Parveen, Md. Abdur Rahim, Kazi Md. Kamrul Huda, Md. Azaharul Islam Arif, Md. Raihan Sharif, Israt Jahan and **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. <https://doi.org/10.3329/sja.v22i1.73118> **(Corresponding author)**
13. 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 agromorphological 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>
14. Md Abdul Helal Kafy, Shahanaz Parveen, Faria Ahmed, Fatema Akter Mim, Nusrat Jahan Moitry, Jannatul Ferdous 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). <https://doi.org/10.1007/s44372-025-00401-2> **(Corresponding author)**

*National Peer-reviewed journal*

15. 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.
16. 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.
17. Bulbul Ahmed, Mousumi Sulatan, Banu, Mst. Sufara Akhter Banu, **Md. Harun-Ur-Rashid**, and Kazi Md. Kamrul Huda, **2021**. Effect of different levels of salinity on grasspea genotypes. Journal of Experimental Bioscience. 12(1): 1–8.
18. Mst. Sufara Akhter Banu, Kazi Md. Kamrul Huda, Shahanaz Parveen, Md. Golam Robbani, Bulbul Ahmed and **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.
19. Mst. Sufara Akhter Banu, Bulbul Ahmed, Shahanaz Parveen, **Md. Harun-Ur-Rashid** and Kazi Md. Kamrul Huda, **2021**. Agrobacterium-mediated Genetic Transformation of Rice var. BRRI Dhan 58. Plant Tissue Culture & Biotechnology. 31(1): 71–80.
  20. Kazi Md. Kamrul Huda, Mst. Sufara Akhter Banu, **Md. Harun-Ur-Rashid**, Shahanaz Parveen and MAM Hussien, **2019-2021**. Effect of temperature stress on *Brassica rapa* genotypes during germination and reproductive growth. Bangladesh Journal of Agriculture. 44-46: 19-29.
  21. M. N. Jomadder, Kazi Md. Kamrul Huda, Mohammad Jony, M.S. Islam, Mst. Sufara Akhter Banu, **Md. Harun-Ur-Rashid** and 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.
  22. Sabrin Sultana, **Md Harun-Ur-Rashid**, Firoz Mahmud and Md Abdur Rahim, **2019**. Genetic variability studies for selection of elite germplasm in sesame (*Sesamum indicum* L.). Agronomy journal. 81(2): 87–104.
  23. Sithi Saha, Md. Ehsanul Haq, Shahanaz Parveen, Firoz Mahmud, Shukti Rani Chowdhury and **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)**
  24. Md. Nur-E-Nabi, Md. Ehsanul Haq, Montasir Ahmed, Md. Monir Hossain, Md. Shefat-al-Maruf, Firoz Mahmud, Shahanaz Parveen and **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)**
  25. Md. Ehsanul Haq, Naheed Zeba, Rozina Akter, Bilkish Begum and **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)**
  26. Md. Akkas Ali, Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Golam Robbani and Monika Sonom, **2016**. Breeding for an ideal plant type in *Brassica rapa* L. Plant Knowledge Journal. 5(1): 36–41. **(Corresponding author)**
  27. Abu Yousuf Hossain, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Salehur Rahman, Runa Akter and Md. Abdur Rahim, **2016**. Evaluation of breeding potential of tomato

- germplasm using  $D^2$  analysis. *Advances in Bioresearch*. 7(4): 217–222. **(Corresponding author)**
28. Taiaba Afrin, Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur-Rashid** and Shahanaz Parveen, **2016**. Variability and comparative analysis among advanced generations of *Brassica rapa* L. *Plant Knowledge Journal*. 5(1): 18–26. **(Corresponding author)**
29. **Md. Harun-Ur-Rashid**, Shahanaz Parveen and 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)**
30. Tasnia Taiana, **Md. Harun-Ur-Rashid**, Shahanaz Parveen, Md. Sarowar Hossain and Md. Azizul Haque, **2015**. Selection strategies for better parents in tomato using genetic parameters. *Plant Knowledge Journal*. 4(1): 33–39. **(Corresponding author)**
31. Golam Sarwar, **Md. Harun-Ur-Rashid**, Shahanaz Parveen and 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)**
32. Shahanaz Parveen, **Md. Harun-Ur-Rashid** and 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)**
33. Md. Salehur Rahman, Shahanaz Parveen, **Md. Harun-Ur-Rashid**, Runa Akter, Abu Yousuf Hossain and 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)**
34. Golam Sarwar, **Md. Harun-Ur-Rashid**, Shahanaz Parveen and 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)**
35. Golam Sarwar, Md. Sarowar Hossain, **Md. Harun-Ur-Rashid** and 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)**
36. Shahanaz Parveen, **Md. Harun-Ur-Rashid** and 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)**
37. Md. Shahidur Rashid Bhuiyan, **Md. Harun-Ur-Rashid** and 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.
38. Hosnara; Md. Abdul Khaleque Mian, Obaidur Rahman, **Md. Harun-Ur-Rashid** and 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.
39. Md. Mosiur Rahman, Md. Aziz Zilani Chowdhury, M G Hossain, Md. Nurul Amin, Md. Abdul Muktedir and **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)**
40. Labony Yeasmin, Shamim Ahmed, **Md. Harun-Ur-Rashid**, Shahanaz Parveen and 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.
41. **Md. Harun-Ur-Rashid**, Shahanaz Parveen and 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)**
42. Shahanaz Parveen, **Md. Harun-Ur-Rashid** and Md. Shahidur Rashid Bhuiyan, **2010**. Selection criteria for high yielding genotypes in early F<sub>2</sub> generation of twelve inter varietal crosses of *Brassica rapa*. Journal of Sher-e-Bangla Agricultural University. 4(2): 69–72.  
**(Corresponding author)**
43. **Md. Harun-Ur-Rashid**, Md. Shahidur Rashid Bhuiyan, Md. Ali Akbar and Shahanaz Parveen, **2009**. Diversity analysis of the germplasms oleiferous *Brassica sp.* Journal of Sher-e-Bangla Agricultural University. 3(1): 30–34. **(Corresponding author)**
44. Shahanaz Parveen, Md. Shahidur Rashid Bhuiyan, Md. Sarowar Hossain and **Md. Harun-Ur-Rashid**, **2008**. Variability study in F<sub>2</sub> 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.*** – 80<sup>th</sup> Annual Meeting of the Botanical Society of Japan, 16-19<sup>th</sup> 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 9<sup>th</sup> 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 9<sup>th</sup> 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 synthase 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 synthase 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****. 9<sup>th</sup> International Plant Tissue Culture & Biotechnology Conference. 8-10 February, University of Dhaka, Bangladesh.

Shahanaz Parveen, **Md. Harun-Ur-Rashid**, Hirosuke Oku (2020). ***Molecular regulatory mechanism of VOC emission under drought stress in *Ficus septica****. 9<sup>th</sup> 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)**

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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***)

#### **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<sub>4</sub> populations of *Brassica rapa***)
3. Shikha Chakraborty (Reg. No. 18-09305), 2020 (**Combining ability and heterosis in F<sub>1</sub> 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 traits 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<sub>3</sub> 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**)

#### **Student Supervision (PhD thesis)**

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I serve as a supervisory team member for two PhD students.

### **Professional Experience:**

<b>Designation</b>	<b>Professor (21.9.2022 to till now )</b>
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
<b>Designation</b>	<b>Associate Professor (21.9.2018 to 20.9.2022 )</b>
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
<b>Designation</b>	<b>Assistant Professor (23.02.2012 to 20.9.2018)</b>
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
<b>Designation</b>	<b>Lecturer (23.02.2010 to 22.02.2012)</b>
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
<b>Designation</b>	<b>Agricultural Extension Officer (30.11.2008 to 22.02.2010)</b>
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

### **Membership**

Life member, Plant Breeding and Genetics Society of Bangladesh

Life Member, Krishibid Institution of Bangladesh

Life Member, Japanese Universities 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**

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**Award/Fellowship**

**Year**

- |  |                |
|--|----------------|
| 1. The best presenter in the session “Genomics, Proteomics and Bioinformatics” of the 9 <sup>th</sup> 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***

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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***

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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*

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1. **Professor Md. Amzad Hossain, Ph.D.**  
Subtropical Field Science Center  
Faculty of Agriculture  
University of the Ryukyus  
1 Senbaru, Nishihara, Okinawa 903-0213, Japan  
Phone: +81-90-6869-1905  
Email: amzad@agr.u-ryukyu.ac.jp
2. **Professor Rafiq Islam, Ph.D.**  
**Retired**  
Department of Natural Sciences  
Northwest Missouri State University  
800 University Drive | Maryville, MO 6446  
Phone: +1 660.562.1210  
E-mail: islamr\_nwra@nwmissouri.edu
3. **Associate Professor Masakazu Fukuta, Ph.D.**  
Department of Subtropical Biochemistry and Biotechnology  
Faculty of Agriculture  
University of the Ryukyus  
1 Senbaru, Nishihara, Okinawa 903-0213, Japan  
Phone: +81-90-4184-8032  
E-mail: msfukuta@agr.u-ryukyu.ac.jp