

Resume of Md. Arafat Hossain



- a. **Full name, date of birth and age:** Md. Arafat Hossain, 30-11-1989,
- b. **Present position:** Senior Scientific Officer (SSO), Biotechnology Division
- c. **Institution/organization:** Bangladesh Rice Research Institute, Gazipur-1701, Bangladesh
- d. **Mailing Address:**

Md. Arafat Hossain,
Scientific Officer,
Biotechnology Division,
Bangladesh Rice Research Institute, Gazipur-1701,
Telephone: +8802 9294117-21 Ext. 253,
Cell phone: 01717053766, Fax: +8802 49272000,
E-mail: arafatbsmrau.07@gmail.com

- e. **Educational Qualifications:**

Sl. No.	Degree obtained with year	Subject/Discipline	University/School/College	CGPA
1.	M.S., 2013	Agronomy	BSMRAU	3.29
2.	BS(Ag), 2010	Agriculture	BSMRAU	3.45
3.	HSC, 2006	Science	GUSK College	4.00
4.	SSC, 2004	Science	GUSK High School	4.69

- f. **Area of Specialization:** Plant Biotechnology
- g. **Professional experience with duration (list in order of last assignment first)**

Employer	Designation	Duration	Major areas of research
BRRI, Gazipur, Bangladesh	Scientific Officer	09/2014 to 05/2025	Plant Biotechnology
BRRI, Gazipur, Bangladesh	Senior Scientific Officer	05/2025 to till	Plant Biotechnology

h. Publications:

1. Total number of referred publications in national and international journals:

2. List of publications with full reference:

1. **Md Arafat Hossain**¹, Md Masud Rana^{2*}, S M Hisam Al Rabbi¹, Toshiaki Mitsui³. Management of puddled soil through organic amendments for post-rice mungbean. *Asian Journal of Agriculture and Biology*, 2020;8(x):x-x, DOI: 10.35495/ajab.2020.04.255.

Available at <https://www.researchgate.net/publication/346190969>

2. Mashfiqur Rahman^{1*}, Harunor Rashid², Mustafa Kamal Shahadat², Al-Arafat Topu³, **Arafat Hossain**⁴ and Sheikh Arafat Islam Nihad⁴. Field performance of some potato varieties under different saline conditions of Bangladesh. *African Journal of Agricultural Research*, DOI: 10.5897/AJAR2021.15578, Vol. 17(11), pp. 1480-1487, November, 2021.

Available at <https://doi.org/10.5897/AJAR2021.15578>

3. Zakaria Alam, Sanjida Akter, Md Anwar Hossain Khan, Md Abu Kawochar, Md Iqbal Hossain, Md Harunor Rashid, Md Mushfiqur Rahman, Mohammed Shalim Uddin, Nadira Mokarroma, Abul Fazal Mohammad Shamim Ahsan, **Md Arafat Hossain**, Md Hasan Sofiur Rahman, Atikur Rahman, Sharif Ahmed and Abul Bashar. Genotype-by-Environment Interaction Effect on Sweet Potato (*Ipomoea Batatas* L.) Root Yield and its Adaptation of Diverse Agro-Ecology.

Available at: SSRN 4604834

4. **Md Arafat Hossain***, Jannatul Ferdous, Ripon Kumar Roy, S.M. Hisam Al Rabbi, Shahanaz Sultana and Enamul Haque. Assessing the Genetic Variation of Swarna rice (*Oryza sativa* L.) Cultivars using SSR marker. *Current Applied Science and Technology*. (2024):24(4) <https://doi.org/10.55003/cast.2023.258834>

5. **Md Arafat Hossain***, Md Abdullah Al Mamun, S.M. Hisam Al Rabbi, Sanjida Akter and Ripon Kumar Roy. Selection of stable rice Genotypes through WAASB and MTSI indices. *Current Applied Science and Technology*. (2025) <https://doi.org/10.55003/cast.2025.263298>

6. Rishad Sharmin, Md Golam Rasul, M Mizanur Rahman, **Md Arafat Hossain***, M Mehfuz Hasan. In Vitro Selection of Rice Somaclonal Variants for Salt Tolerance. *Bangladesh Journal of Agriculture*. 2025.49(2):16-30. <https://doi.org/10.3329/bjagri.v49i2.78234>
7. Al Mamun, Md. A., Sarkar, Md. A. R., Sarker, M. R., McKenzie, A. M., Nihad, S. A. I., **Hossain, Md. A.**, & Hossain, A. (2025). Temperature variability and its effect on seasonal yield of rice in Bangladesh: a long-term trend assessment. *Cogent Food & Agriculture*, 11(1). <https://doi.org/10.1080/23311932.2024.2447903>
8. M S Rahman, J Ferdaous, S Jafrin, M E Hoque, **M A Hossain**, S Sultana. Optimizing Hormonal Effects and Incubation Periods on In Vitro Regeneration in High-Yielding Indica Rice. *Bangladesh Rice Journal*. (2023) 27(2):17-24. <https://doi.org/10.3329/brj.v27i2.77695>

Research Article (Abstract)

1. Rahman MM, Karmakar B, **Hossain MA**, Ibrahim M, Ahmed B, Kabir MH 2020: Model demonstration for rapid dissemination of agricultural technology. In: Development: Road to SDGs” held at Shylet Agricultural University, Shylet, Bangladesh organized by Bangladesh Agricultural Extension Society (BAES) on 23-24 January 2020.p100-101.
2. M. Enamul Hoque*, Shahanaz Sultana, Jannatul Ferdous, Nilufar Yasmin, Shaikh S.M. Hisam Al Rabbi, Ripon Kumar Roy, **Md. Arafat Hossain** and Shampa Das Joya. Biotechnology Division of BIRRI: A Centre of Excellence for Rice Biotechnological Research in Bangladesh. An abstract published in the Annual Plant Tissue Cult. & Biotech. Conf. Dhaka, Bangladesh, 31 August, 2019, Department of Botany, University of Dhaka.
3. **Md. Arafat Hossain**, Jannatul Ferdous, Shahanaz Sultana, Ripon Kumar Roy and Md. Enamul Hoque. Genetic Diversity of Swarna Rice Genotypes using Molecular Marker. An abstract published in 10th Biennial conference of Plant Breeding and genetics Society of Bangladesh on 7-8 January 2017.p68-69.

Leaflet:

1. Dr. Md. Enamul Hoque, Dr. Shahanaz Sultana, Dr. Jannatul Ferdous, Dr. Nilufar Yasmin Shaikh, Dr S.M. Hisam Al Rabbi, Ripon Kumar Roy, **Md. Arafat Hossain**, Shampa Das Joya. 2018.**BRRIdhan87-high yielding, lodging resistant Aman rice variety**. A leaflet published by Biotechnology Division, Bangladesh Rice Research Institute, Gazipur-1701.

2. Dr. Md. Enamul Hoque, Dr. Shahanaz Sultana, Dr. Jannatul Ferdous, Dr. Nilufar Yasmin Shaikh, Dr S.M. Hisam Al Rabbi, Ripon Kumar Roy, **Md. Arafat Hossain**, Shampa Das Joya. 2018. **BRRIdhan89-high yielding Boro rice variety**. A leaflet published by Biotechnology Division, Bangladesh Rice Research Institute, Gazipur-1701.
3. Dr. Md. Enamul Hoque, Dr. Shahanaz Sultana, Dr. Jannatul Ferdous, Dr. Nilufar Yasmin Shaikh, Dr S.M. Hisam Al Rabbi, Ripon Kumar Roy, **Md. Arafat Hossain**, Shampa Das Joya. 2018. **BRRIdhan92-high yielding water saving Boro rice variety**. A leaflet published by Biotechnology Division, Bangladesh Rice Research Institute, Gazipur-1701.
4. Dr. Md. Enamul Hoque, Dr. Shahanaz Sultana, Dr. Jannatul Ferdous, Dr. Nilufar Yasmin Shaikh, Dr S.M. Hisam Al Rabbi, Ripon Kumar Roy, **Md. Arafat Hossain**, Shampa Das Joya. 2018. **BRRIdhan103 -Anther culture derived high yielding T.aman rice variety**. A leaflet published by Biotechnology Division, Bangladesh Rice Research Institute, Gazipur-1701.

Research Achievements:

1. **BRRIdhan86** (A High yielding Double haploid Rice Variety).
2. **BRRIdhan87** (A High Yielding Rice Variety for Rainfed Condition)
3. **BRRIdhan89** (A High Yielding Rice Variety for Dry Season/ Irrigated Condition)
4. **BRRIdhan92** (A High Yielding Rice Variety for Dry Season/ Irrigated Condition)
5. **BRRIdhan96** (A Short Duration High Yielding Rice Variety for Dry season/Irrigated Condition)
6. **BRRIdhan103** (A High yielding Double haploid Rice Variety for Rainfed Condition).
7. Identifying QTL for taller seedling height of Rice.