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Academic qualification

2026	Doctor of Philosophy in Biofunctional Chemistry Okayama University, Japan
2015	Master of Science (M.S.) in Biotechnology Bangladesh Agricultural University, Mymensingh
2013	Bachelor of Science in Agriculture (Hons.) Bangladesh Agricultural University, Mymensingh.
2008	Higher Secondary Certificate (HSC) Nazmul Smriti College, Dhaka Board, Science Group
2006	Secondary School Certificate (SSC) Taragonj Pilot High School, Dhaka Board, Science Group

Professional Experience:

Organization	Division	Designation	Duration	
			From	To
Bangladesh Rice Research Institute	Agronomy	Senior Scientific Officer	3 rd February, 2026	Present
Bangladesh Rice Research Institute	Agronomy	Scientific Officer	27 th October, 2019	3 rd February, 2026

Dissertation: (Ph.D. Dissertation, 2026)

- Title: A role of apoplastic flow in salt stress mitigation by salicylic acid and chitosan
Supervised by: Dr. Yoshiyuki Murata

Thesis: (MS Thesis, 2015)

- Title: Genetic diversity analysis of guava using RAPD markers.
Supervised by: Dr. Md. Shahidul Islam

Publications: 15

- Rhaman, M.S., Khan, F.H., **Galib, M.AA.** Shirazy, B. J., Hoque, M.A., Ghaffari, H., Hussain, S., Brestic M, Murata, Y. 2026. Glutathione and salicylic acid combined application mitigates salt-induced damage during early seedling growth of rice through stomatal, oxidative, and carbonyl regulation. *Acta Physiologiae Plantarum* 48: 58. <https://doi.org/10.1007/s11738-026-03922-9>
- Rhaman, M. S., Rehman, S. U., Jahan, I., Shirazy, B. J., Chakroborty, J., **Galib, M. A. A.**, Akter, R., Farzana, S., Xie, Y. 2026. Reactive oxygen and carbonyl species: Dual regulators of abiotic stress signaling and tolerance in plants. *Stresses* 6(2): 23. <https://doi.org/10.3390/stresses6020023>
- Rhaman, M.S., **Galib, M.A.A.**, Khan, F.H., Shirazy, B. J., Xie, Y., Farooq, M., Brestic, M., Murata, Y. 2026. Nitrogen and Phosphorus Deficiency Coordinate Stomatal Closure and Disrupt Leaf Thermoregulation and Stress Metabolism in Rice Seedlings. *Journal of Soil Science and Plant Nutrition* **26**: 7293-7306. <https://doi.org/10.1007/s42729-026-03346-x>
- Zhao, M., **Galib, M.A.A.**, Nakamura, T. Nakamura, Y., Hirai, Y., Nakashima, Y., Munemasa, S., Mori, I.C., Murata, Y. 2025. Suppression of Na⁺ uptake via apoplastic flow by chitosan in rice. *Journal of Soil Science and Plant Nutrition*. <https://doi.org/10.1007/s42729-025-02857-3>
- **Galib, M.A.A.**, Farzana, S., Chakrobarty, T., Islam, M.Z., Shirazy, B.J., Rahman, M.A., Imran, S., Arif, M.T.U., Rahman, M.S. 2025. Multivariate analysis for identifying high-yielding rice cultivars based on seed yield and morphological traits. *Discover Plants* 2(256):1-12. <https://doi.org/10.1007/s44372-025-00345-7>
- **Galib, M.A.A.**, Farzana, S., Tarek, M.K.H., Hossen, M.T., Ety, M.T.J., Chakrobarty, T. 2022. Organic and Inorganic Fertilizer Management for Boro Rice Cultivation in a Single Boro Cropping Area. *Asian Research Journal of Agriculture*, 15(4): 203-217. <https://doi.org/10.9734/arja/2022/v15i4371>
- **Galib, M.A.A.**, Chakrobarty, T., Hera, M.H.R., Farzana. S., Rahman, M.M. 2022. Effect of Potassium Fertilizer and Alternate Wetting and Drying (AWD) Irrigation System for Boro Rice Cultivation in Faridpur Region. *International Journal of Natural and Social Sciences*, 9(1): 1–13. <https://doi.org/10.5281/zenodo.6665068>
- Islam, M.Z., **Galib, M.A.A.**, Akand, M.M., Lipi, L.F., Akter, A., Matin, M.Q.I., Ivy, N.A. 2022. Combining Ability and Heterotic Studies in Aromatic Rice Through Line by Tester Analysis. *SABRAO Journal of Breeding and Genetics* 54(2): 221-235. <http://doi.org/10.54910/sabrao2022.54.2.2>
- Mahfuz, S.M.N., Farzana, S., **Galib, M.A.**, Chakrobarty, T., Hassan, L. 2020. Estimating Genetic Variability in Dual Saline and Submergence Condition of

Rice (*Oryza sativa* L.). Journal of Bangladesh Agricultural University, 18(4): 993–1000. <https://doi.org/10.5455/JBAU.129086>

- Farzana, S., Rasel, M., Arif, M.T.U., **Galib, M.A.A.**, Sarker, K.K., Hossain, M.A. 2020. Exogenous salicylic acid and thiourea ameliorate salt stress in wheat by enhancing photosynthetic attributes and antioxidant defense. Journal of Bangladesh Agricultural University, 18(2): 272– 282. <https://doi.org/10.5455/JBAU.86574>
- Farzana, S., Rasel, M., Arif, M.T.U., Hossain, M.A., Azam, M.G., **Galib, M.A.A.**, Mahamud, A.G.M.S.U., Hossain, M.A. 2021. Salicylic acid and thiourea ameliorate the negative impact of salt stress in wheat (*Triticum aestivum* L.) seedlings by up-regulating photosynthetic pigments, leaf water status, and antioxidant defense system. Journal of Phytology, 13: 130-145. <https://doi.org/10.25081/jp.2021.v13.7217>
- Farzana, S., Sarkar, A., Hosenuzzaman, M., **Galib, M.A.A.**, Hoque, M.A. 2021. Effects of zinc on growth and yield of rice cv. BRRI dhan29 under alternate wetting and drying water management practice. Journal of Agriculture, Food and Environment, 2(3): 25-30. <https://doi.org/10.47440/JAFE.2021.2305>
- Farzana, S., Dey, J.R., Hosenuzzaman, M., Hossain, M., **Galib, M.A.A.**, Hoque, M.A. 2021. Effects of nitrogenous fertilizers on rice yield under continuous flooding and alternate wetting and drying conditions. Journal of Agriculture, Food and Environment, 2(3): 31-37. <https://doi.org/10.47440/JAFE.2021.2306>
- Singha, T., Mahamud, M.A., Imran, S., Paul, N.C., Hoque, M.N., Chakrobarty, T., **Al Galib, M.A.**, Hassan, L. 2021. Genetic diversity analysis of advanced rice lines for salt tolerance using SSR markers. Asian Journal of Medical and Biological Research, 7(2): 214–221. <https://doi.org/10.3329/ajmbr.v7i2.55001>
- Chakrobarty, T., **Galib M.A.A.**, Islam M.Z., Rahman M.A. 2021. Adoption and adaptability of modern Aman rice cultivars in Faridpur region- Bangladesh. SABRAO journal of breeding and genetics 53(4):659-672. <https://doi.org/10.54910/sabrao2021.53.4.9>

Proceedings of Seminar/Workshop/Symposium (01)

1. **Galib M.A.A.**, Zhao M., Nakamura T., Munemasa S., Nakashima Y., Mori I.C., Nakamura Y., Murata Y. Salt stress mitigation via suppression of apoplastic flow by chitosan in rice. Japan Society of Agricultural Chemistry Chugoku-Shikoku Branch 67th lecture program, Vol 67, Page 73. Yonago convention center, Totorri, 27 January, 2024. Website link: https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=202402277244934462

References

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