

# Sanjida Akter

Scientific Officer (Entomology Division)

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Language spoken: Bengali

English Proficiency: IELTS, Overall score: 6.5

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## Master of Science (MS)

Department : Plant Biotechnology  
University : Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Bangladesh  
Obtained CGPA : **3.86** Scale of 4.00  
Passing year : 2017

## Bachelor Of Science (BS)

Department : Agriculture  
University : BSMRAU, Bangladesh  
Obtained CGPA : **3.84** Scale of 4.00  
Passing year : 2014

## Professional Experience

- \* **10<sup>th</sup> January 2022 - now**, Scientific Officer, Entomology Division, BRRI, Gazipur, Bangladesh.
- \* **27<sup>th</sup> October 2019 – 3<sup>rd</sup> January 2022**, Scientific Officer, Regional Station, Habiganj, BRRI, Bangladesh.

## Ongoing Responsibilities

"Effect of temperature and humidity on the biology and life cycle of rice leaf folder, *Cnaphalocrosis medinalis*.

"Suppression of serotonin synthesis in rice using CRISPR Cas9 for insect control.

"Use of nano-particle for controlling rice insect pests.

"Screening of rice germplasm, advance lines against BPH, WBPH and GLH.

"Study on entomogenous fungi to control brown planthopper (BPH)

## Technical skill

### Molecular Lab expertise

- Tissue culture, Bacteria culture, Fungus Culture;
- DNA Extraction, PCR, Gel Documentation, Gel electrophoresis, Spectrophotometer;
- *Agrobacterium* mediated transformation.

### Genomics tools

NCBI BLAST, Primer3 plus, Chopchop, Chromas, MEGA.

### Analytical software

STAR, Statistix 10, Polo Plus.

## Scientific Publications

1. Alam, M. J., **Akter, S.**, ... & Alam, Z. (2024). Cropping system-based fertilizer strategies for crop productivity and soil health under minimum tillage in grey terrace soil. *Heliyon*, 10(1).
2. Alam, Z., **Akter, S.**, Khan, M.A.H., Amin ... & D., Sarker, U. (2024). Multivariate analysis of yield and quality traits in sweet potato genotypes (*Ipomoea batatas* L.). *Scientia Horticulturae*, 328, 112901.
3. Alam, Z., **Akter, S.**, Khan, M.A.H., ... & Sarker, D. (2024). Sweet potato (*Ipomoea batatas* L.) genotype selection using advanced indices and statistical models: a multi-year approach. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e31569>
4. Alam, M. J., **Akter, S.**, ... & Alam, Z. (2024). Dataset on utilizing cropping system-based fertilization techniques to improve soil health and crop output while minimizing tillage. *Data in Brief*, 110385.
5. Alam, Z., **Akter, S.**, Khan, M. A. H., Alam, M. S., Sultana, S., Akhter, S., ..., Islam, M. M. (2023). Yield performance and trait correlation of BARI released sweet potato varieties studied under several districts of Bangladesh. *Heliyon*, 9(7).

6. Haque, M. M., Akhter, S., Biswas, J. C., Ali, E., Maniruzzaman, M., **Akter, S.**, Solaiman, Z. M. (2023). Influence of nitrogen sources on grain yield of wheat and net global warming potential. *Archives of Agronomy and Soil Science*, 69(14), 3314-3327.
7. Roy, T. K., Sannal, A., **Akter, S.**, Tonmoy, S. M. M. S., Chakrobarty, T., Hasan, M. R., & Bari, M. N. (2023). Pesticidal effect of naphthalene and different botanicals against anguimous grain moth (*Sitotroga cerealella*). *Bangladesh Journal of Scientific and Industrial Research*, 58(3), 155-162.
8. Roy, T. K., Tonmoy, S. S., Sannal, A., **Akter, S.**, Hasan, K., Tarek, M.M., Hasan, M. R. (2023). Yield performance of some short duration high yielding rice varieties during boro season in northern region of Bangladesh. *International Journal of Natural and Social Sciences*, 9(4).
9. **Akter, S.**, Ali, P., Datta, J., Barman, H., Islam, M. S. A., Haque, S. S., Bari, M. N., Sultana, S. (2023). Poster on resistance of rice to insect pests mediated by suppression of serotonin biosynthesis using CRISPR/Cas9. In *International Conference on Biodiversity, food security, sustainability and climate change*, AAU, India.
10. **Akter, S.**, Rahman, G. K. M. M., Hasanuzzaman, M., Alam, Z., Watanabe, T., Islam, T. (2021). Zerovalent iron modulates the influence of arsenic-contaminated soil on growth, yield and grain quality of rice. *Stresses*, 1(2), 90-104.
11. Alam, Z., Hoque M. A., **Akter, S.**, Islam, M. M., Biswas, A. (2019). Enhancement of Potato Shelf Life: Role of Pre-Harvest Potassium Application. *Sustainable Food Production*. 6; 24-32.

### Scholarships

- ❖ National Science and Technology fellowship, Bangladesh ministry of science and technology - **2015-2016**.
- ❖ Merit Scholarship, Bangabandhu Sheikh Mujibur Rahman Agricultural University – **2016 & 2017**.
- ❖ Junior School Scholarship, Bangladesh Educational Board - **2005**.

### Trainings

- Hands on training on identification of rice arthropods.
- Hands on training on advanced molecular biology and bioinformatics.
- Bioinformatics for future rice.
- Genome editing and genetic transformation.
- Eco-friendly plant protection techniques.
- Hands on training on HPLC, LCMS and ICPOES.
- Hands on training on data analysis on spread sheet.
- Hands on training for using high throughput phenotypic system for C4 rice research.
- Hybrid rice cultivation and seed production technologies.
- Modern rice production technology.

### Referees

#### Referee 1

#### **Dr. Sheikh Shamiul Haque**

Chief Scientific Officer & Head  
Entomology Division  
BRRI, Gazipur-1701  
Phone: 01715011351  
E-mail: shamiulent@gmail.com

#### Referee 2

#### **Md. Tofazzal Islam, PhD.**

Professor and Founding Director,  
Institute of Biotechnology and Genetic Engineering (IBGE), BSMRAU, Bangladesh.  
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**Dated: 27/05/2024**

**Name: Sanjida Akter**