Sanjida Akter

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Scientific Officer
Entomology Division
Bangladesh Rice Research Institute Gazipur-1701

Master of Science (MS)

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

Bachelor Of Science (BS)

Department	:	Agriculture
University	:	Bangabandhu Sheikh Mujibur Rahman Agricultural University
Obtained CGPA	:	**3.84** Scale of 4.00
Passing year	:	2014

Professional Work Experience

- **10/01/2022- now**, Scientific Officer, Entomology Division, Bangladesh Rice Research Institute, Gazipur 1701, Bangladesh.
- **27/10/2019 - 03/01/2022**, Scientific Officer, Habiganj Regional Station, Bangladesh Rice Research Institute, Habiganj 3300, Bangladesh.

Research Experience

- Insect resistant rice variety development.
- Genome editing by knocking out CYP71A1 gene through CRISPR Cas9 technology in rice.
- Research on enhancing the chemical insecticide efficacy using biosynthesized Nano-particles.
- Routine screening of rice germplasm against rice insect pests (BPH) under Glasshouse and field condition.

Synergistic Activities

Monitoring insect pest and natural enemy incidence pattern using light trap and surveying farmer's field. Monitoring team member of Variety development program at BRRI regional station Habiganj on RYT (Regional Yield Trial), MLT (Multi-Location Yield Trial), Bacterial Blast Resistance Rice; Long-term missing element trial for diagnosing the limiting nutrient in soil; Influence of Nitrogen and Potassium rates on performance of modern rice; Effect of planting time on growth and yield of some BRRI released Boro varieties; seedlings raising techniques through polythene covering.

Technical skill

Molecular Lab expertise

- Vector construction, callus induction, *Agrobacterium* mediated transformation.

- Tissue culture, Bacteria culture, Fungus Culture, BPH and Stem borer rearing.
- DNA Extraction (Plant, Bacteria, Fungus, Insect), PCR, Gel Documentation, Gel electrophoresis, SDS PAGE Gel electrophoresis, Nano photometer, Spectrophotometer, LCMS.

Genomics online tool

BLAST, Primer3 plus, Chromas, U Gene pro, MEGA.

Biometrical analysis software

R Program, SPSS, STAR, Statistix 10.

Master's Dissertation project

Research Title: Effect of Zero valent Iron on Arsenic uptake by rice and Microbial population in soil.

Outcome: Understanding the effect of Iron nanoparticles on rice growth, yield and arsenic content in rice plant. Understanding the effect of Iron nanoparticles on arsenic content, available nutrient and microbes in soil.

Scientific Publications

1. Roy, T. K., Tonmoy, S. S., Sannal, A., **Akter, S**., Tarek., K. H, Rana, M. M., & Hasan, M. R. (January, 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), 15-21.
2. **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.
3. 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, Vol. 6, pp. 24-32.

English Language Proficiency

The medium of instruction in Bachelor of Science (Hons.) and Master of Science (MS) was English.

Scholarship/Membership

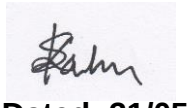
- ❖ National Science and Technology fellowship from Bangladesh ministry of science and technology - **2015-2016**.
- ❖ Merit Scholarship, Bangabandhu Sheikh Mujibur Rahman Agricultural University - **2016**.
- ❖ Junior School Scholarship, Bangladesh Educational Board - **2005**.
- ❖ General member of Krishibid Institution Bangladesh.

- ❖ General member of Bangladesh Entomological Society.
- ❖ Lifetime member of Bangladesh Association for the Advancement of Science (BAAS), Bangladesh.

Trainings

- Genome editing and genetic transformation
- Hands on training for using high throughput phenotypic system for C4 rice research.
- Hands on training on Advanced Molecular Biology and Bioinformatics.

- Hands on training in HPLC, LCMS and ICPOES.
- Eco-Friendly Plant Protection Techniques (5 days).
- Hybrid Rice Cultivation and Seed Production Technologies.
- Modern Rice Production Technology.
- Hands on training on Identification of Rice Arthropods.



Dated: 31/05/2023
Name: Sanjida Akter