ABU JAR AL GIFARY

Address: Tarash Uttar Para, Tarash -6780, Tarash, Sirajganj.

Office address: Department of Botany, BSMRSTU, Gopalganj.
Mobile Number: 01785232253
Email: abujaralgifary97@gmail.com
LinkedIn: https://www.linkedin.com/in/abu-jar-al-gifary-0664b01ab/

Career Objective:

To pursue a challenging career with dedication and provide my efficiency to the fullest in a professional organizational environment wherever I serve my duties that will discover the potential in me.

Current professional designation: Lecturer, Department of Botany at BSMRSTU, Gopalganj-8100.

Date of joining as a lecturer of Botany at BSMRSTU, Gopalganj: 03 October, 2023.

Academic Qualification:

Exam Title	Concentration/Major	Institute	Result	Passing Year	Duration	Achievement
Master of Science (M.S.) (Thesis)	Botany (Plant Genetic Engineering and Biotechnology)	University of Dhaka	CGPA:4.00 out of 4.00	2019	1	National Science and Technology Fellowship 2019.
Bachelor of Science (B.S.)	Botany	University of Dhaka	CGPA:3.96 out of 4.00	2018	4	Quazi Abdul Fattah and Khurshida Banu Fattah Gold Medal 2018, Dean's Award (2017-18), UGC Honors Board Scholarship 2018.
Higher Secondary School Certificate (H.S.C)	Science	Rajshahi College, Rajshahi	CGPA:5.00 out of 5.00	2014	2	H.S.C Board Scholarship 2014. Issued by Education Board Rajshahi.
Secondary School Certificate (S.S.C)	Science	Tarash Islamia Pilot High School	CGPA:5.00 out of 5.00	2012	2	S.S.C Board Scholarship 2012. Issued by Education Board Rajshahi.

Fellowship and Conference Poster Presentation Summary:

Title	Topic	Institute	Country	Location	Year	Duration
National Science and Technology (NST) Fellowship 2019	*In vitro* regeneration and analysis of drought responsive *OsNAC1*gene in *Oryza sativa* L.	Ministry of Science and Technology, People's Republic of Bangladesh.	Bangladesh	Dhaka, Bangladesh.	2019	One (01) Year
9th International Plant Tissue Culture and Biotechnology Conference 2019	Development of salt and drought tolerant rice varieties through *Agrobacterium*-mediated genetic transformation.	Department of Botany, University of Dhaka.	Bangladesh	Dhaka, Bangladesh.	Held in 2020	Three (03) Days

Thesis and Publication:

Thesis Title: *In vitro* regeneration and analysis of drought responsive *OsNAC1* gene in *Oryza sativa* L**.**

Associated with: Plant Breeding and Biotechnology Laboratory, Department of Botany, University of Dhaka.

Duration: One (01) Year.

Abstract:

This thesis aimed to develop a transformation compatible regeneration protocol for BR 28, BR 29 and Biramsundari rice cultivars to develop drought tolerant rice varieties through *Agrobacterium*-mediated genetic transformation in the future. The study found that in N6+2mg/ 2.4-D, Biramsundari had the highest callus response rate (60%) followed by BR 29 (31.66%) and BR 28 (15%). The callus was then transferred to the regeneration medium supplemented with 0.2mg/I NAA and 2mg/1 kinetin, where callus turned green, and shoots and roots developed simultaneously. The study also analyzed the abiotic stress-responsive gene *OsNAC1/OMTN4* and found that *OsNAC1* is a known negative regulator of drought. The expression of *OsNAC1* in BR-28 and BR-29 was examined, and the result showed that *OsNAC1* expressed in the mature leaf of BR-28 and no expression found in BR-29. A phylogenetic tree was constructed to see the relationship between *OsNAC1* in *Oryza sativa* L. with the copies in other species, and the tree showed that the closest ancestor of *Oryza sativa* L. *OsNAC1* is a hypothetical protein KAG8074923.1 from wild rice *Zizania palustris*. Down-regulated lines of *OsNAC1* will be developed in the future to induce drought resistance in local *indica* rice varieties.

Publication Title: Characterization of Multiple Grain Rice (*Oryza sativa* L.) Biramsundari from Bangladesh.

Author: Rita Sarah Borna, S. Mitra, A. J. A. Gifary and R. H. Sarker *
Plant Breeding and Biotechnology Laboratory, Department of Botany, University of Dhaka, Dhaka-1000, Bangladesh

Publisher: Plant Tissue Cult. & Biotech. 31(2): 115-122, 2021 (December) ISSN 1817-3721, E-ISSN 1818-8745

DOI: https://doi.org/10.3329/ptcb.v31i2.57339

My role: Co- author.

Paper Abstract:

Biramsundari is a rice germplasm from Bangladesh showing one to four grains in a single seed. Comparative study of morphological traits revealed that BS is a taller rice variety compared to modern rice varieties with longer and wider flag leaves, longer panicle length and higher thousand seed weight (TSW) than transplanted aman rice variety BRRI dhan 49. Flower morphological analysis unveil that multiple grains of Biramsundari are originating from multiple number of carpels in each floret. About 40.1% flower contains three carpels. Fluorescent microscopic study also confirms the zygotic origin of multiple grain formation in Biramsundari. Molecular characterization of Biramsundari was performed by using TeaCpSSR27 and TeaCpSSR28 chloroplast microsatellite markers. The results of this investigation reveal that atpF and rsp14-psaB intergenic spacer regions of Biramsundari have variation compared to sequences of with *O. sativa ssp. indica*, *O. sativa ssp. japonica* and *O. rufipogon*.

Specialization:

Fields of Specialization
• Plant Tissue Culture and Biotechnology • Plant Molecular Biology • Abiotic Stress Tolerance • Plant Genetic Engineering • Microsoft Office (MS Word, Excel and PowerPoint) • Internet Web Browsing and Troubleshooting. • Plant Breeding and Plant Biology/Botany.

Extra-Curricular Activities:

1) Volunteer at plastic free week challenge and plogging by Swedish Alumni Network Bangladesh.
2) Former member at Dhaka University Science Society, Bangladesh Biology Olympiad and Tarupallab.
3) Actively participated and worked as a volunteer in 9th International Plant Tissue Culture and Biotechnology Conference held on February, 2020 at Department of Botany, University of Dhaka.

Language Proficiency:

Language	Reading	Writing	Speaking
English	High	High	High

Personal Details:

Father's Name	: MD. ANAWAR HOSSAIN
Mother's Name	: MOST. KHADIGATUL KOBRA BIN HOSSAIN
Date of Birth	: April 24, 1997
Gender	: Male
Height (Meter)	: 1.69
Weight (Kg)	62
Marital Status	: Single
Nationality	: Bangladeshi
NID Number	5108084533
Birth Certificate Number	19978838984116566
Religion	: Islam
Permanent Address	: Village/ Road: Tarash Uttar Para, Post: Tarash-6780, Upazila: Tarash, District: Sirajganj.
Current Location	: Department of Botany, BSMRSTU, Gopalganj-8100.
Blood Group	: B+

Reference (s):

	Reference: 01	Reference: 02
Name	: Dr. Tahmina Islam	Dr. Rifat Samad
Organization	: Dhaka University	Dhaka University
Designation	: Associate Professor	Associate Professor
Address	: Plant Breeding and Biotechnology Laboratory, Department of Botany, University of Dhaka.	Plant Physiology Laboratory, Department of Botany, University of Dhaka.
Phone (Off.)	: +88-01323580047	+880-2-9661920
Phone (Res.)	: N/A	N/A
Mobile	: 01323580047	01716035767
E-Mail	: t.islam@du.ac.bd	rifat.bot@du.ac.bd
Relation	: Academic faculty	Academic faculty