

BIODATA OF JANNATUL FERDOUS

Name : **Dr. Jannatul Ferdous**
Designation : Senior Scientific Officer
Mailing Address : Biotechnology Division,
Bangladesh Rice Research Institute,
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Date of Birth : 02 May 1972
Nationality : Bangladeshi
Sex : Female
Marital Status : Married

Service Experience

Position : Senior Scientific Officer
Division : Biotechnology
Organization : Bangladesh Rice Research Institute
Duration : Since 2002 till to date
Area of Research : i) Development of elite rice varieties through anther culture techniques.
ii) Identification of QTLs for high yield and salinity tolerant.
iii) Introgression of *SUB1* QTL in BRRI dhan44 through marker assisted backcross breeding.
iv) Gene pyramiding for resistance to Bacterial Blight (BB)
v) Improvement of upland rice variety for yield and quality through marker assisted backcross breeding.
vi) Salt tolerant gene cloning

Educational Background:

Name of Institution	Degree/Name of Examination	Year of passing	Class/ Division obtained
Universiti Putra Malaysia, Malaysia	Doctor of Philosophy (Plant Breeding)	2012	Degree Awarded
Bangladesh Agricultural University, Mymensingh	Master of Science (Genetics & Plant Breeding)	2001	First Class (Grade-A)
Bangladesh Agricultural University, Mymensingh	Bachelor of Science in Agriculture	1995 (Held in 1999)	First Class (Grade-A)
Pabna Edward College, Pabna	Higher Secondary Certificate	1990	First Division
Pabna Govt. Girls High School, Pabna	Secondary School Certificate	1988	First Division

Publication

1. **Ferdous, J.** and Shamsuddin, A.K.M. 2002. Gene action for grain yield and its sink characters in spring wheat. *Bangladesh Journal of Plant Breeding and Genetics*. 15(1): 45-48.
2. **Ferdous, J.** and Shamsuddin, A.K.M. 2001. Effects of Source-sink Manipulation on grain yield and important sink characters in spring wheat. *Bangladesh Journal of Plant Breeding and Genetics*. 14(2): 7-12.
3. Alam M.S., Rahim M.A., Jasmine H.S., Begum M and **Ferdous J.** 2004. Growth, yield attributes and yield of mukhi kachu as influenced by planting time. *Bangladesh J. Environ. Sci.* 10 (1): 11-16.
4. Islam, M.M.; Khan, M.S.; Rahman, M.J.; Mallik, S.A. and **Ferdous, J.** 2006. Effect of tillage practices and crop residue on wheat-fallow-taman rice cropping pattern. *Bangladesh Journal of Agriculture and Environment*. 2(2): 1-7.
5. **Ferdous, J.**; Haque, M.E.; Ali, M.S.; Baksha, R. and Sultana, S. 2005. Effect of NaCl on callus induction and subsequent plant regeneration in some fine grain and aromatic rice varieties.. *Molecular Biology & Biotechnology Journal*.3 (1&2): 19-22.

- 6 Mohiuddin, A.K.M.; Shahanaz, S.; **Ferdous, J.** and Karim, N.H. 2006. Increased regeneration efficiency in seed derived callus of rice (*Oryza sativa* L.). Plant Tissue Cult. & Biotech. 16 (1): 45-52.
- 7 Baksha, R.; **Ferdous, J.**; Haque, M.E.; Ali, M.S. 2006. *In vitro* plant regeneration from mature embryos -derived calli of cultivated (*Oryza sativa* L.) and wild rice (*Oryza barthii*). Bangladesh Journal of Plant Breeding and Genetics. 19(2): 1-6.
- 8 Baksha, R.; Haque, M.E.; **Ferdous, J.** and Ali, M.S. 2006. Improvement of in vitro plant regeneration system of aromatic and fine grain rice varieties. Molecular Biology & Biotechnology Journal.4 (1&2): 45-48.
- 9 Mohiuddin, A.K.M.; Shahanaz, S.; **Ferdous, J.** and Karim, N.H. (2010) Recovery of Green Plantlets from Albino Shoot Primordia Derived from Anther Culture of Indica Rice (*Oryza sativa* L.) Bangladesh Rice Journal, 15(1), 39–47.
- 10 Mohiuddin, A.K.M.; Karim, N.H.; Shahanaz, S. and **Ferdous, J.** (2011) Recovery of Green Plantlets from Albino Shoot Primordia Derived from Anther Culture of Indica Rice (*Oryza sativa* L.) Tropical Life Sciences Research, 22(1), 1–12.
- 11 **Ferdous, J.**, Hanafi, M. M., Rafii, M. Y. and Muhammad, K (2012). A quick DNA extraction protocol: Without liquid nitrogen in ambient temperature. African Journal of Biotechnology, 11(27): 6956-6964
- 12 Hasanuzzaman M., Hakim M. A., **Ferdous J.**, Islam M. M. and Rahman L. 2012. Combining ability and heritability analysis for yield and yield contributing characters in chilli (*Capsicum annuum*) landraces. Plant Omics Journal. 5(4):337-344.
- 13 Shamsuddeen Rufai, M. M. Hanafi, M. Y. Rafii, S. Ahmad, I. W. Arolu, and **Ferdous J.** 2013. Genetic Dissection of New Genotypes of Drumstick Tree (*Moringa oleifera* Lam.) Using Random Amplified Polymorphic DNA Marker. BioMed Research International. Available at <http://dx.doi.org/10.1155/2013/604598>
- 14 Hossain AKMM, Mian MH, Hakim MA and Islam MM and **Ferdous J.** 2012. Isolation and Selection of *Bradyrhizobium* from the Root Nodules of Indigo Plants (*Indigofera tinctoria* L.). African Journal of Biotechnology. 11(58): 12183-12191.
- 15 Naher L, Yusuf U K, Siddiquee S, **Ferdous J** and Rahman M A. 2012. Effect of media on growth and antagonistic activity of selected *Trichoderma* strains against *Ganoderma*. African Journal of Microbiology Research. 6: (48), 7449-7453.
16. Nadia I, Mohiuddin A.K.M., Sultana S and **Ferdous J.** 2014. Diversity analysis of indica rice accessions (*Oryza sativa* L.) using morphological and SSR markers. Annls of Biological Research. 5 (11): 20-31.

Thesis and Dissertation:

MS Ferdous, J. 2001. Effects of source-sink manipulations on yield and inheritance of sink character in spring wheat. Department of Genetics and Plant Breeding. Bangladesh Agricultural University, Mymensingh. 100 p.

PhD Ferdous, J. 2012. Morphological, nutritional and molecular characterization of selected genotypes for upland rice improvement through marker assisted backcross breeding. U niversiti Putra Malaysia. 197p.

Resource Speaker in Training

1. Training program on **Gene cloning and rice transformation** at Biotechnology Division, BRRI, Gazipur during 15-24 April 2013.
2. Training program on **Genetic data analysis software** at Biotechnology Division, BRRI, Gazipur during 23-28 June 2013.
3. Training program on **Two-month rice production training course for BRRI scientists** at Training Division, BRRI, Gazipur 11 March 2014.

Visit/ Colleboration:

International Rice Research Institute (IRRI), Taq DNA polymerase isolation and purification Program, in the Plant Breeding, Genetics and Biotechnology Division under STRASA phase2 during 6-20 January 2013.

Training:

Sl. No.	Name of Training	Duration	Venue
1.	Plant Tissue Culture Techniques and Application	20-28 August, 2003	BRRI, Gazipur
2.	BCA (Bangladesh Country Almanac)	08-09 May, 2006	BRRI, Gazipur
3.	Training on Managing References effectively and professionally	15 June, 2008	Department of Biological & Agricultural Engineering, Faculty of Engineering, University Putra Malaysia
4.	Online database training in Scopus and Science Direct.	24 May, 2010	Taining Room. A Block. Perpustakaan Sultan Abdul Samad. University Putra Malaysia
5.	Training on Theoretical and Applied Molecular Breeding	24-29 September, 2012	Plant Breeding Division, BRRI, Gazipur

6.	Capacity Building Component of Development of Salt II Technologies in rice	15 August- 15 November, 2014	Arcadia Biosciences, California, USA
7.	Use of ARMIS software and its operation	23 December, 2014	Bangladesh Agricultural Research Institute, Gazipur
8.	Biosafety Measures in Transgenic Crop	30-31 March, 2015	Bangladesh Agricultural Research council Farmgate, Dhaka

Workshop:

Sl. No.	Name of Workshop	Duration	Venue
1.	The BRRI 20 th – Extension Workshop on – “Emerging Technologies for Sustainable Rice Production in Bangladesh.	April 19-21, 2004	BRRI, Gazipur
2.	Participatory Workshop Towards Establishing of Property Rights of BRRI Released Varieties	March 17-18, 2003	BRRI, Gazipur
3.	Tag Man Gene expression workshop with applied biosystem stepOne TM Real Time PCR system.	2 February 2012	Institute of Tropical Agriculture, UPM, Serdang. Malaysia
4.	Workshop on Bioinformatics Applications in Agriculture.	13 April 2010	Faculty of Computer Science and information technology, UPM, Serdang. Malaysia
5.	Technique and skill important in using the integrated SAS and excel packages in data handling, statistical analysis and the analysis output and presentation.	14-15 December 2009.	Biometry Laboratory, Faculty of Agriculture, UPM, Serdang. Malaysia

Seminar, Symposium and Conference attended

International Conference on Biotechnology in addressing the development needs of Bangladesh 25-26 May 2013 at The Westin, Gulshan 2, Dhaka.

International forum on Women in Science and Technology in Muslim Countries. 20-22 September 2011. Swiss Garden Hotel. Kuala Lumpur.

3rd Seminar on Forest Biotechnology. Strengthening Bioinformatics Capabilities in Forest Biotechnology. 11-12 November 2008. Forest research Institute Malaysia (FRIM). Malaysia.

2009 Plant Biotechnology Postgraduate Symposium. 17 December 2009. Main Hall. Faculty of Medicine and Health Sciences. UPM. Serdang.

Seminar on Enhancing and optimizing local feed resources in livestock production. 10 November 2010. Dewan Taklimat, UPM. Serdang.

UPMISA International Seminar, Exhibition and International Cultural Show 2010. 5 January 2010. Experimental hall (PKKSSAAS) UPM.

Resigtration officer of resigtration committee. UPMISA International Seminar, Exhibition and International Cultural Show 2010. 5 January 2010. Experimental hall (PKKSSAAS) UPM.

Guide to thesis writing Seminar. 24 March 2011. Dewan Kuliah Utama. Faculty of Madicine and health Sciences UPM.

19th Malaysian Society of plant physiology Conference at Copthorne Orchid Hotel, Penang. 18-20 November 2008.

Writing Paper for ISI indexed Journal and targeting a suitable journal. 4 May 2012. UPM. Malaysia.

Sarawak Rice Conference (SARICON) 2011. 25-27 October 2011. Riverside Majestic Hotel. Kuching. Malaysia.

Seminar and Workshop on Molecular Markers and Application of Bioinformatics in Agricultural Biotechnology. 16-20 November 2009. UPM, Serdang. Malaysia.

Seminar on Trangenic Technology in agriculture and officiation of Trangenic greenhouse UPM. 13 December 2010. UPM Serdang. Malaysia.

17th Malaysian Society for Molecular Biology and Biotechnology (MSMBB) Scientific Meeting, The Saujana, Kualamumpur, Malaysia. 23-25 June 2008.

Seminar on Biosafety awareness. Crystal Crown Hotel, Kualamumpur, Malaysia, 12 June, 2008.

Proceedings:

Iftekharuddaula, K.; Ghosal S. ; Hoque, M.E ; **Ferdous, J.** ; Yasmeen, R. ; Moni, Z. R. ; Septiningsih, E. M. 2013. Haplotype diversity of some new submergence tolerant rice germplasm and introgression of SUB1 QTL into three rainfed lowland rice varieties of

Bangladesh. In abstract book of 7th international rice genetics symposium. 5-8 November 2013. Dusit Thani Hotel, Manila, Philippines, p 233-234.

Hoque, M.E.; Islam M. M.; Sultana S.; **Ferdous, J.**; Ali M.S. 2013. Genetic diversity of some Bangladeshi Aus rice genotypes. In abstract book of 7th international rice genetics symposium. 5-8 November 2013. Dusit Thani Hotel, Manila, Philippines, p 233-234.

Ferdous, J. 2008. Improvement of rice yield by using a transgenic approach. BioTech colloquium VII. April 8-10. P 17.

Mohiuddin, A.K.M.; Karim, N.H.; Sultana, S. and **Ferdous, J.** 2008. Recovery from initial albinism of anther culture derived plantlets of indica rice (*Oryza sativa* L.). In proceeding of Plant Tissue Culture and Biotechnology Conference 2008. 11-13 April, 2008, Dhaka, Bangladesh. P 39.

Ali, M.S.; Itequaruddaula, M.; Sultana, S.; **Ferdous, J.**; Haque, M.E. and Islam M.S. 2007. Genetic potentials of some wide-cross progenies. In proceeding of Plant Breeding and Genetics Society of Bangladesh. 7th annual conference 2007. May 26. P 59-73.

Ferdous, J.; Baksha, R.; Hoque, M.E.; Ali, M.S. 2007. Optimization of in vitro plant regeneration system for BRRI released variety towards rice transformation. In proceeding of Plant Breeding and Genetics Society of Bangladesh. 7th annual conference 2007. May 26. P 59-73.

Seminar Paper

1. **Ferdous, J.** 2006. Effect of Salts in callusing and regeneration ability of Aromatic varieties. Paper presented at the Thursday seminar at Bangladesh Rice Research Institute (BRRI). April 6, 2006. Gazipur.
2. **Ferdous, J.** 2007. Development of Homozygous lines through Anther Culture of Aromatic Rice. Paper presented at the Thursday seminar at Bangladesh Rice Research Institute (BRRI). May 31, 2007. Gazipur.
3. **Ferdous, J.** 2009. Rice yield improvement through transgenic approach. Paper presented at the Special Seminar at Bangladesh Rice Research Institute (BRRI). May 27, 2009. Gazipur.
4. **Ferdous, J.** 2013. *In vitro* starch digestibility and glycemic index (GI) rice differing in amylase content. Paper presented at the Thursday seminar at Bangladesh Rice Research Institute (BRRI). December 26, 2013. Gazipur

5. **Ferdous, J.** 2013. A combined approach of backcross breeding and marker assisted foreground selection for development of high amylase content and vitamin E enriched rice lines in BC₁F₁ generation. Paper presented at the Thursday seminar at Bangladesh Rice Research Institute (BRRI). December 4, 2014. Gazipur

Member of different professional organization:

- Plant Breeding and Genetics Society of Bangladesh
- Bangladesh Krishi Bid Institution (BKI)
- Bangladesh Association of Plant Tissue Culture and Biotechnology
- Organization for Women in Science for the Developing World (OWSD)

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