

CURRICULUM VITAE OF SHARMISTHA GHOSAL



Contact details:

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Personal details:

1. Name : **SHARMISTHA GHOSAL**
2. Father's Name : Late Ananda Mohan Ghosal
3. Mother's Name : Shefali Ghosal
4. Sex : Female
5. Marital Status : Married
6. Religion : Sanaton
7. Date of birth : 17 July, 1979
8. Nationality : Bangladeshi
9. National ID NO : 3323007201139
10. Permanent Address : C/O: Priya Lal Biswas, Vill.- Rasulpur, P. O.- Bahara, P.S-Madharpur, P. S.- Madharpur, Dist.- Habigonj, Post Code: 3334, Bangladesh

Educational qualifications:

Name of the degree	Board/ Institute	Year	GPA/ Class	Marks obtained (%)	Duration
PhD (Genetics major Plant breeding & MBB minor)	University of Philippines Los Banos	On going			
Master of Science (M S) in Genetics & Plant Breeding (GPB)	Bangladesh Agricultural University, Bangladesh	2005	A	CGPA=3.89 (out of 4.00)	1.5 years
Bachelor of Science in Agriculture (BScAg)	Bangladesh Agricultural University, Bangladesh	2002 (held in 2004)	1 st	64.76 %	4 years
Higher Secondary Certificate (HSC)	Jessore, Bangladesh.	1997	1 st	70.60 %	2 years
Secondary School Certificate (SSC)	Jessore, Bangladesh.	1995	1 st	78.90 %	10 years

Thesis Work: MS Thesis on *in vitro* regeneration of *Brassica* spp. (Rapeseed, Mustard & Cole crops).

Field of specialization: Genetics and Plant Breeding. Varietal development through molecular breeding approach.

Job experiences:

Position	Organization	Job responsibility	Duration
Scientific Officer (SO)	Bangladesh Rice Research Institute	Rice variety development for favorable and unfavorable (stress) environment.	12 Nov, 2007 to 21 Nov, 2012
Senior Scientific Officer (SSO)			22 Nov, 2012 to date

Research Projects affiliated:

SL No	Name of the project	Worked as	Activities
1	Stress Tolerant Rice for Poor Farmers in Asia and South Africa (STRASA-IRRI)	Co-PI	Development of submergence tolerance varieties through Introgression of Sub1 QTL, PVS & baby trial, screening of germplasm tolerance to submergence, maintenance of pedigree nursery and conduction of advanced yield trials.
2	Improving rice productivity of submergence and salinity prone Southern belts of Bangladesh. (BMGF-IRRI)	Co-PI	Conduction of PVS Trial at coastal region extension of released variety and evaluation of promising lines from IRRI & BRRRI.
3	Pyramiding Bacterial Blight Resistant Genes into the Genetic Background of BR11-derived Submergence Tolerant Rice Lines (NATP-BRRRI)	Co-PI	Pyramiding <i>Sub1</i> , <i>Xa21</i> & <i>xa13</i> QTLs into the genetic background of rice variety BRRRI dhan52.
4	Development of Rice Varieties with Enhanced Submergence Tolerance Through Marker Assisted Breeding (BAS-BRRRI)	Co-PI	Introgression of <i>SUB1</i> QTL into the genetic background of rice variety
5	Improvement of Rice Varieties/Breeding Lines for Low Water Availability in South and Southeast Asia (UKM, Malaysia-BRRRI)	Co-PI	Development of rice varieties for water use efficiency.
6	Integrated Agricultural Productivity Project (IAPP-BRRRI)	Co-PI	Introgression of <i>SUB1</i> QTL into the genetic background of RLR rice varieties (BNR22 & BRRRI dhan49) and dissemination of BRRRI varieties through PVS and Validation Trial
7	Rice variety development for shallow flooded ecosystem (Core program-BRRRI).	Co-PI	Developments of rice varieties tolerant to shallow flood.

Research achievements:

1. Participated in the development of two submergence tolerance rice varieties (BRRRI dhan51 and BRRRI dhan52)
2. Development of homogygous lines through introgression of flash flood tolerant QTL *SUB1* into RLR rice varieties viz. BRRRI dhan33, BRRRI dhan39, BRRRI dhan44 and BRRRI dhan49.
3. Development of pyramided BR11-Sub1-Xa21-xa13 homozygous lines for submergence & bacterial blight resistance.

Professional Training:

SL No	Name of the course	Year	Duration	Sponsoring agency
1	Hybrid Rice Development and Seed Production	2008	5 days	BRRRI
2	Breeder Seed Production and Preservation of Rice	2009	5 days	BRRRI
3	Marker Assisted Breeding for Agricultural Crops	2009	10 days	BARC and FAO
4	Participatory Variety Selection	2009	2 days	BRRRI-IRRI
5	Research Methodology	2009	13 days	GTI, Bangladesh
6	GSR-Hybrid Rice Seed Production Training Course	2010	3 days	BRRRI and IRRI
7	1-Month Rice Production Training Course	2010	1 month	BRRRI
8	Genetic Theory of Hybrid Rice Breeding	2011	15 days	BRRRI and China
9	Integrated Techniques of Hybrid Rice Seed Production	2011	20 days	BRRRI and China
10	Hybrid Rice Technology for Asian Countries	2011	4 month	YLHTACL, China
11	Training on Rice and Wheat Cultivation for Unfavorable Ecosystem	2011	2 days	BARC
12	Training on Theory and Practice of Molecular Breeding in Rice	2012	7 days	BRRRI
13	Foundation Training Course for NARS Scientists	2012	4 months	BARD
14	Theoretical and Applied Molecular Breeding	2012	6 days	BRRRI
15	Research Data Management101	2015	3 days	IRRI, Philippines

BRRRI =Bangladesh Rice Research Institute, BARC=Bangladesh Agricultural Research Council, FAO=Food and Agriculture Organization, GTI=Graduate Training Institute, IRRI=International Rice Research Institute, YLHTACL=Yuan Longping High-Tech Agri. Co., Ltd. ,BARC=Bangladesh Agricultural Research Council, BARD=Bangladesh Academy of Rural Development.

Award /fellowship received:

1. Awarded 3rd position in One Month Rice Production Training,
2. Awarded Crest of Honour (4th position) in Foundation Training Course for National Agricultural Research System Scientists (duration 4 months),
3. Awarded 1st position in the training course on Theoretical and Applied Molecular Breeding (duration 7 days)
4. "Lee Foundation Rice Scholarship" awardee for PhD at International Rice Research Institute and University of Philippines Los Banos.

Publications:

a) National:

- I** Ghosal S, L Hasan, P L Biswas and M A Proshan. 2008. *In Vitro* Regeneration of *Brassica Species* (Rapeseed, Mustard and Cole crops). Bangladesh Journal of Agricultural Sciences, Vol. 35 (1):11-16.
- II** Ghosal S, M J Hasan and P L Biswas. 2009. Genetic Variability, Correlation Studies and Path Analysis of Yield and Yield Contributing Traits in Irrigated Hybrid rice. International Journal of Bio Research, Vol. 6 (2) 20-20.
- III** Ghosal S, P. L. Biswas, M. Khatun and S. Khatun. 2010. Genetic variability and character associations in irrigated rice (*Oryza sativa L.*). Bangladesh Journal of Plant Breeding and genetics. 23 (2): 23-27.
- IV** Ghosal S, M A Syed, M Khatun, P L Biswas and T L Aditya. 2012. Evaluation of Selection Criteria in Premium Quality Rice Genotypes Through Genetic Variability, Character Association and Path Analysis. Bangladesh Rice Journal. 16 (1): 59-62.
- V** Biswas P L, A K Paul, M K Hossain, A Akter, H Begum and S Ghosal. 2009. Variability and Character Association Studies in Hybrid rice. International Journal of Bio Research, Vol. 7 (1) 48-52
- VI** Biswas P L, A K Paul, M J Hasan, A Akter and S Ghosal. 2009. Estimates of Genetic Parameter, character Association and Path Analysis in Hybrid rice. Eco-Friendly Agriculture Journal, Vol.2 (12):1029-1032
- VII** Roy, A. K., M. A. K. Miah, B. C. Nath, S. Ghosal and P. L. Biswas, 2009. Genetic Parameters and Correlation Among Floral Characters in Local Fine rice. The Journal of Science and Technology, Vol. 6.
- VIII** Biswas P L, A Ansari, M U Kulsum, A Akter and S Ghosal. 2010. Study on Genetic Parameter, Character Association and Path Analysis in Restorer Lines of Hybrid rice (*Oryza sativa L.*). Bangladesh Journal of Progressive Science and Technology, Vol. 8 (1)
- IX** Biswas P L, S Ghosal, M K Hossain, and U K Nath. 2010. Genetic Variability, Correlation and Path analysis in Maintainer lines of Hybrid rice (*Oryza sativa L.*). Bangladesh Journal of Progressive Science and Technology, Vol. 8 (1)
- X** Aditya T L, S Ghosal, N Sharma, M R Islam, R. Bhuiyan, B Karmakar, R R Majumder, H Khatun, F M Moinuddin, T H Ansari and K M. Iftekharuddaula. 2010. General adaptability through genotype-environment interaction of some somaclonal lines in rice. Bangladesh J. prog. Sci. & Tech. 8(1): 006-008
- XI** Biswas, P. L., H. N. Barman, S. S Ghosal, Tohiduzzaman and M. Hazrat Ali, 2011. Stability study for growth duration and grain yield of exotic hybrid rice genotypes in Bangladesh. Bangladesh Journal of Agricultural Research 36 (1): 97-102
- XII** Khatun, M., S Ghosal, M R Hasan, R R Majumder and H Begum, 2011. Correlation and Path Coefficient Analysis of Rice Genotypes (*Oryza Sativa L.*). Eco-Friendly Agriculture Journal, Vol.4 (12): 768-773.

b) International:

- I** Ray, B. P., K. M. Iftekharuddaula and S. Ghosal. 2014. Marker Assisted Backcross for the development of submergence tolerant rice (*Oryzasativa L.*). J. Biol. Chem. Research. 31(1): 1-5.
- II** Iftekharuddaula, K. M., H. U. Ahmed, S. Ghosal, Z. R. Moni, A. Amin and M. S. Ali, 2015: Development of New Submergence Tolerant Rice Variety for Bangladesh Using Marker-Assisted Backcrossing. Rice Sci.22(1): 16-26.
- III** Iftekharuddaula, K.M., S. Ghosal, Z. J. Gonzaga, A. Amin, H. N. Barman, R. Yasmeen, M. M. Haque, J. Carandang, B. C. Y. Collard and E. M. Septiningsih. 2015. Allelic diversity of newly characterized submergence-tolerant germplasm from Bangladesh. Genet Resour Crop Evol. DOI 10.1007/s10722-015-0289-4.

c) Abstract:

1. Iftekharuddaula, K., **S. Ghosal**, E. Hoque, J. Ferdous, R. Yasmeen, Z. R. Moni, E. M. Septiningsih. 2013. Haplotype diversity of some new submergence tolerant germplasm and introgression of *SUB1* QTL into three rainfed lowland rice varieties of Bangladesh. Abstract published in the 7th International Rice Genetics Symposium at Manila, Philippines held on 5-8 November 2013.

d) Book/Monograph:

1. Iftekharuddaula, K. M., M. A. I. Khan. **S. Ghosal** 2013. SPGR Sub-Project Completion Report on "Pyramiding bacterial blight resistant genes into the genetic background of BR11-derived submergence tolerant rice lines". BARC, Farmgate, Dhaka. 35P.

e) Seminar/ workshop:

1. Development of short duration Rice varieties with enhanced Submergence tolerance through introgression of SUB1 QTL and haplotype diversity of newly identified submergence tolerant germplasm of Bangladesh. K M Iftekharuddaula, **S Ghosal**, K. Islam, H N Barman, R. Yasmeen, H U Ahmed, BCY Collard and E M Septiningsih. Paper presented in BAS-TWAS_ROCASA workshop on "Initiatives in Science Education, Research and Capacity Building". 15 Sep, 2013.
2. Development and dissemination of Submergence tolerant Rice variety in northern part of Bangladesh
K M Iftekharuddaula, **S Ghosal**, B P Ray, S M Shahariar, Md S Miah, Z R Moni and Md G Ali. Paper presented in mid term evaluation workshop of IAPP at BRRRI on 06 May 2014.

Computer literacy:

Microsoft Office, Conventional and Molecular Biometrical soft-wares viz. Power Marker 3.25, GGT 2.0, NTSYSPC2.2, QGENE, QTL Cartographer, Map Manager QTX, AlphaEaseFC5.0 etc.

Language Proficiency:

1. Bengali (Mother Language)
2. English (Excellent in speaking, writing, and reading)

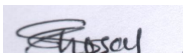
Membership of the professional association:

- a) Life member, Plant Breeding and Genetic Society of Bangladesh.
- b) Member, Krishibid (Agriculturist) Institution of Bangladesh.
- c) Member, Bangladesh Association of Advanced Science (BAAS)
- d) Member, BRRRI Scientists Association (BRRISA).

Referees:

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I do hereby declare that the above statements are correct and complete to the best of my knowledge.



Sharmistha Ghosal

Date: 26.01.2016