Curriculum vitae

Dr. Md. Hafizar Rahman

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Hybrid Rice Division
Bangladesh Rice Research Institute
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1.0. Personal Information

1.1.	Name	:	Dr. Md. Hafizar Rahman
1.2.	Address	:	Scientific Officer, Hybrid Rice Division, BRRI
1.5.	Date of birth	:	15 January 1976
1.6.	Place of birth	:	Joypurhata, Bangladesh
1.7.	Marital status	:	Married
1.8.	Sex	:	Male
1.9.	Nationality	:	Bangladeshi by birth
1.10.	Basic degree	:	B. Sc. Agriculture (4 yrs degree)
1.11.	Date of entry in to service	:	14 September 2006 in BRRI
1.12.	Experience	:	More than 14 years practical experiences on conventional and hybrid rice breeding

2.0. Education

Degree/ Certificate	Major SubjectStudied	Class/Grade/Division	University/Institute/Board	Year
Ph. D.	Molecular and Morphological Research	Satisfactory	Bangladesh Agricultural University, Mymensingh	2020
MS (Genetics and Plant Breeding)	Principle of Plant Breeding, Heterosis Breeding, Biotechnology, Molecular Genetics, Tissue culture, Quantitative Genetics, Genetics .	GPA 3.17 out of 4 (84%)	Bangobandhu Sheikh Mujibur Rahman Agricultural University , Salna, Gazipur	2010
MS (Agronomy)	Soil fertility management in crop production, Water management in crop production, Agronomic research methodology, Stress agronomy, crop land Agroforesty, Fodder production and pasture management,Advanced crop husbandary, Crop yield process, Seed technology, Weed management, Environmental magronomy and production management of minor crop.	Upper Second Class (72.16%)	Bangladesh Agricultural University, Mymensingh	2003
B. Sc. Ag (4 yrs Degree)	Genetics and Plant Breeding Cytogenetics, Biochemistry Statistics, Plant Pathology, Entomology, Agronomy, soil science, Horticulture and Crop Botany	2nd Class (58.00%)	Bangladesh Agricultural University, Mymensingh	1998 (Held, 2001)
HSC (Science) (2 yrs)	Biology, Chemistry, Physics, Mathematics and English	1st Division (60.15%)	Rajshahi	1994
SSC (Science) (10 yrs)	English, General Science, Biology, General and Higher Mathematics.	1st Division (75.10%)	Rajshahi	1992

PhD=Doctor of Philosophy, MS=Master of Science, B Sc Ag = Bachelor of Science in Agriculture; HSC= Higher secondary School Certificate; SSC= Secondary School Certificate.

3.0Training :

(a) In Country:

Organization	Year	Duration		Name of programme
		Month	Days	
i) SID/DANIDA, SEED WING, MOA	2005	05	-	i) Training course on Hybrid Rice Seed production
ii) Bangladesh Rice Research Institute, Gazipur 1701	2006	-	05	ii) Hybrid Rice Development and Seed production
iii) Bangladesh Rice Research Institute, Gazipur 1701	2011	-	02	iii) GSR-Hybrid Rice Seed Production Training Course

iv) ESCAP	2011	-	14	iv) Genetic theory of hybrid rice breeding
v) ESCAP	2011	-	20	v) Integrated techniques of hybrid rice seed production
vi) Bangladesh Rice Research Institute, Gazipur 1701	2012	-	06	vi) Theoretical and Applied Molecular Breeding
vii) Bangladesh Rice Research Institute, Gazipur 1701	2012	-	03	vii) Breeder Seed Production and Preservation of Rice
viii) Bangladesh Rice Research Institute, Gazipur 1701	2013	-	03	viii) Rice Breeder Seed Production and Preservation Training Course
ix) Bangladesh Rice Research Institute, Gazipur 1701	2013	-	06	ix) Genetic data analysis software
x) Rural Development Academy (RDA), Bogra	2014	-	05	x) Attachment Programme with RDA, Bogra
xi) Bangladesh Academy for Rural Development, Kotbari, Comilla	2014	04	-	xi) Foundation Training Course for NARS Scientists
xii) Graduate Training Institute, BAU, Mymensingh	2014	-	13	xii) Research Methodology
xiii) Bangladesh Rice Research Institute, Gazipur 1701	2014	-	06	xiii) Rice production, Communication and Office Management Training Course
xiv) Bangladesh Rice Research Institute, Gazipur 1701	2015	-	05	xiv) Experimental Design and Data Analysis Training Course

(b) Abroad:

Country	Year	Duration		Name of programme
		Month	Days	
i) China.	2006	-	07	i) Training course on Hybrid Rice Seed production technology
ii) China.	2008	04	-	ii) Training Course on "Hybrid Rice Technology for Developing Countries"
iii) China	2015	01	-	iii) Seminar on "Hybrid Rice Technology for Developing Countries"

4.0 Experience:

Position	Institute	From	To	Duration
Scientific Officer	Hybrid Rice Division, BRRI Gazipur, Bangladesh	14 September. 2006	Date	14 Yrs, 06 Mons

5.0 Relevant activities and achievements

Relevant Activities	**Achievements**
(i) Taken part as a resource speaker in the training programs.	Hybrid rice development and seed production technology for scientists, field staff and farmers.
(ii) Taken part in the development of BRRI hybrid dhan2, BRRI hybrid dhan3 and BRRI hybrid dhan4 rice varieties (2006- to date).	BRRI hybrid dhan2, and BRRI hybrid dhan3 for Boro season having average yield potential 8.0-9.0 t/ha. BRRI hybrid dhan4 for T Aman season having average yield potential 6.5 t/ha.
(iii) Improvement of hybrid seed production practices particularly in local climatic conditions (2006- to date).	Applying improved hybrid seed production practices F1 hybrid seed yield has been possible to increase from 1.5 to 2.5 ton/ha.

6.0 Research Interests

i) Breeding rice for high-yield, Hybrid rice seed production and purification.

7.0. Current research program

i) Determination of suitable row ratio and spacing for increasing seed yield in hybrid rice seed production.
ii. CMS seed multiplication of BRRI IA and IR58025A lines
iii. Seed multiplication of newly developed and promising CMS line
iv. F_1 Hybrid seed production of BRRI hybrid dhan2, 3 &5
v. F1 seed production of promising hybrids
vi. Nucleus seed production of A, B and R lines of promising hybrids
vii. CMS seed multiplication of Promising A lines
viii. Effect of different doses and time of GA_3 application on hybrid rice seed production of promising hybrids
ix.Determination of seeding interval of A and R line for hybrid seed production.
x. Evaluation of exotic hybrids rice were grown during boro season

xi. Establishment of crossing block for nucleus seed production

xii. Demonstration plots of rice hybrids and its parental materials

8.0. Other Relevant Activities/Information

- Computer skills: MSword, MSExcel, PowerPoint, (statistical software e.g. MSTATC) etc.
- English communication: Ability on fluently speaking, listening, reading and writing.

9. LIST OF PUBLICATIONS

9.1 Scientific Journals (40)

As Principal author (10)

1. **Rahman M. H. ;** M. H. Ali; M. M.Ali and M. M. Khatun.2006. Effect of different level of nitrogen on growth and yield of transplant *aman* rice cv BRRI dhan32. *Int. J. Sustain. Crop Prod. 2 (1):28-34. (February 2007).*
2. **Rahman M. H.** , M. M. Khatun , M. U. Kulsum, M. J. Hasan. Influence of transplanting time of cytoplasmic male sterile (CMS) line with respect to restorer line on hybrid rice seed production. *Intl. J. BioRes. 4(5):20-23 (May, 2008).*
3. **Rahman M. H.,** M. M. Khatun, A. K. M. S. H. Chowdhury, M. A. A. Mamun and M. M. Ali. Effect of number of seedling on growth and yield of BRRI dhan32.*Intl. J. BioRes. 2(2):23-29 (April, 2007).*
4. **Rahman M. H.,** M. M. Khatun, M. A. A. Mamun M. Z. Islam and M. R. Islam. Effect of number of seedling hill^{-1} and nitrogen level on growth and yield of BRRI dhan32. *J. Soil.Nature. 1(2):1-7. (July, 2007).*
5. **Rahman M. H.,** M. H. Ali, A. K. Paul, M. M. Khatun and M. A. Mannan. Growth analysis of some advance lines of hybrid rice.*Intl. J. BioRes. 7(4):80-84 (October, 2009).*
6. **Rahman M. H.,** M. H. Ali, M. M. Khatun,M. J. Hasan and M. A. Monsur. Evaluation of exotic advance hybrid rice lines with check varieties in Bangladesh condition.*Eco-friendly Agril. J. 3(4):214-217,2010 (April).*
7. **Rahman M. H.,** M. H. Ali, M. J. Hasan, M. U. Kulsum and M. M. Khatun,. Outcrossing rate in row ratio of restorer and CNS lines for hybrid rice seed production. *Eco-friendly Agril. J. 3(5):233-236, 2010 (May).*
8. **Rahman M. H.,** M. M. Khatun, M. S. R. Khan, M. A. K. Mian and Golm Rasul. Effect of GA3 and row ratio of restorer (R) and CMS lines (A) on different characters and seed production of BRRI Hybrid dhan2. Bangladesh J. Agril. Res. 37(4): 665-676, December-2012.
9. **Rahman M. H** and M. M. Khatun. Effect of transplanting date and nitrogen fertilizer on the yield of Lily dhan-1. *Eco-friendly Agril. J. 3(10):469-472, 2010 (October).*
10. **Rahman M. H.,** M. M. Khatun, M. S. R. Khan, M. M. Haque and Golm Rasul. Effect of GA3 and row ratio on floral traits of component lines BRRI Hybrid dhan2. Bangladesh J. Agril. Res. 38(1): 155-163, March 013.

***As co-author* (30)**

1. Ahamed F., **M. H. Rahman,** A. Haque, M. A. Islam, amd M. L. Das. Callus induction and plant regeneration in *Brassica Spp*. Through in vitro culture. *Eco-friendly Agril. J. 3(4):210-213, 2010 (April).*
2. Islam S. S, **M. H. Rahman,** M. U.Kulsum, M. M. Khatun and M A A Khan. Efficacy of fungicidal in controlling Alternaria blight of radish seed crop. *Int. J. BioRes. 3(4):20-26 (October, 2007).*
3. Islam S. S., **M. H. Rahman,** M. J. Hasan, M. Ashadusjaman and M. M. Khatun. Efficacy of fungicidal seed teratment in controlling *Alternaria spp*. in radish seed. *Int. J. Sustain. Crop Prod. 2 (5): 46-50. (November, 2007).*
4. Rahman M., M. M. Islam, R. K. Roy, **M. H. Rahman** and S. A. Rezvi. Multivariate analysis of maize. *Int. J. BioRes. 8(61):59-64 (January, 2010).*
5. Khatun M. M., N. Sultana, **M. H. Rahman** and M. Ashadusjaman. Effect of blanching time on nutritional quality of bush bean at different pod age stages.*Int. J. Soil. Nature (1):15-20 (March 2007).*
6. Khatun M. M., N. Sultana, **M. H. Rahman,** M. A. A. Mamun and M. M. Hossain. Effect of freezing on nutritional quality of bush bean at different pod age stages. *Int. J. Sustain. Crop Prod. 2 (2):10-15. (May, 2007).*
7. Islam M. Z., M. A. Baset mia, A. Akter and **M. H. Rahman.** Biochemical attributes of mutant rice under different saline levels. *Int. J. Sustain. Crop Prod. 2 (3):17-21. (August, 2007).*
8. Arifuzzaman M, M. P Ali, B. K Biswas M Shah-E-Alam and **M. H. Rahman**. Study of genetic divercence in groundnut (Arachis hypogaea L).*Intl. J. BioRes. 3(6):37-42 (December, 2007).*
9. Khatun M. M., N. Sultana, **M. H. Rahman** M. M. Hossain and A. K. M. A. Islam. Effect of pod age on nutritional value bush bean genotypes. *Eco-friendly Agril. J. 2(11): 901-904, 2009 (November).*
10. Kulsum M U, M. H Ali, M. J. Hasan, **M. H. Rahman** and A. W. Julfiquar. Performance of some hybrid rice in local condition of Gazipur. *Eco-friendly Agril. J. 2(6): 600-606, 2009 (June).*
11. Debnath N .R. M. G. Rasul, M. M. H. Sarker. **M. H. Rahman** and A. K. Paul. Genetic divergence in buck wheat (*Fagopyrum esculentum Moench*). *Int. J. Sustain. Crop Prod. 3 (2):60-68. (February 2008).*
12. Kulsum M. U, M. J. Hasan, K. M. Hossain, **M. H. Rahman,** and A. Akter. Floral characteristics of some CMS lines and their corresponding maintainer. *Eco-friendly Agril. J. 3(3):145-149, 2010 (March).*
13. Hasan M. J. M. U. Kulsum, **M. H. Rahman,** A. Akter and S. H. Bulbul. Diversity studies of 32 maintainer lines of hybrid rice (*Oryza sativa* L). *Eco-friendly Agril. J. 3(3):150-153, 2010 (March).*
14. Hasan M. J. M. U. Kulsum, **M. H. Rahman,** A. Akter and A. K. Shamsuddin. Multivariate analysis in pollen parent (restorer line) of hybrid rice (*Oryza sativa* L*). Bangladesh J.*

Pl. Breed. Genet. 22(2):63-66, 2009).

15. Hasan M. J. M. U. Kulsum, **M. H. Rahman,** A. Akter and M. K. Hossain. Characterization of floral traits of BRRI developed component lines of hybrid rice. *Bangladesh J. Pl. Breed. Genet. 22(2)* : 47-50, 2009.
16. Kulsum M. U, M. J. Hasan, H. Begum, M. M. Billah and M**. H. Rahman**. Genetics diversity of some restorer lines for hybrid rice development. Bangladesh J. Agril. Res. 36(1): 21-28, March-2011.
17. A. Ansari, M. G. Rasul, P. L. Biswas, A. K. Paul and **M. H. Rahman**. Genetic variability in some maintainer lines of hybrid rice. *Bangladesh J. Pl. Breed. Genet. 23(21)*: 35-40, 2010.
18. M. J. Hasan, Kulsum M. U, **M. H. Rahman,** M. M. H. Chowdhury and A. Z. M. K. A. Chowdhury. Genetics diversity analysis of parental lines for hybrid development in rice (Oryza sativa L.). Bangladesh J. Agril. Res. 37(4): 617-624, December-2012.
19. M. S. R. Khan, M. Samsuddoha, M. M. Khatun and **M. H. Rahman**. Correlation and path analysis of different traits in various component lines of hybrid rice. *Eco-friendly Agril. J.5 (10):193-201, 2012 (October).*
20. M. J. Hasan, Kulsum M. U, Kulsum, **M. H. Rahman,** M. H. Ali and A.W. Julfiquar. Genetic variability of some cytoplasmic male sterile lines (CMS) of rice (Oryza sativa L.) genotypes. Bangladesh J. Agril. Res. 36(2): 263-270, June-2011.
21. M. U, Kulsum M. J. Hasan, Kulsum. A. Akter, **M. H. Rahman,** and P. Biswas. Genotype-enviornment interaction and stability analysis in hybrid rice: an application of additive main effects and multiplicative interaction. Bangladesh J. Bot. 42 (1): 73-81, 2013 (June).
22. M. S. R Khan, M**. H. Rahman,** F. Ahamed. T. R. Khan and M. R. Hasan. Morphological characterization of component lines for Developing of hybrid rice. Eco-friendly Agril. **J.** 7(02): 12-19, 2014 (February).
23. M. O. Begum, M. J. Alam, M. Shamsuddoha and **M. H. Rahman**. Effect of planting density on growth and yield in sesame. *Intl. J. BioRes. 12(3):13-16 (March, 2012).*
24. Hasan M. J. M. U. Kulsum, **M. H. Rahman,** M. Nur-E-Elahi and A. K. M. Shamsuddin. Genetic diversity in restorer lines of hybrid rice (Oryza sativa L.). *Bangladesh J. Pl. Breed. Genet. 25(2)*: 09-14, 2012.
25. M. S. R Khan, M**. H. Rahman,** T. R. Khan, M. G. Rasul and Ivy. **Variability study in parental** lines and hybrid rice. Eco-friendly Agril. **J.** 7(02): 25-31, 2014 (February).
26. Hasan M. J. M. U. Kulsum, **M. H. Rahman,** A. Akter and A. K. M. Shamsuddin. Comparative study of floral characteristics in the component lines of hybrid rice (Oryza sativa L.). *Bangladesh J.Bot. 43(1)*: 1-8, 2014 (June).
27. Anowara Akter, M Jamil Hasan, Umma Kulsum, **M H Rahman**, M Khatun and M R Islam. 2015. GGE biplot analysis for yield stability in Multi-environment trials of promising hybrid rice (*Oryza sativa* L.). Bangladesh Rice J. 19(1): 1-8.

28. M J Hasan, **M H Rahman**, A Akter, M U Kulsum and A Islam. 2015. Assessment of appropriate GA_3 rate and row ratio for better seed yield of a promising hybrid rice variety. Bangladesh Rice J. 19(1): 57-61.
29. Anowara Akter, M Jamil Hasan, M U Kulsum, **M H Rahman**, A K Paul, L F Lipi and Salma Akter. 2015. Genotype × Environment Interaction and Yield stability analysis in hybrid rice (*Oryza sativa* L.) By AMMI biplot. Bangladesh Rice J. 19(2): 83-90.
30. M. J. Hasan, M. U. Kulsum, **M. H. Rahman**, M. H. Ali and M. E. Mahmud. 2013-2015. Genetic variability, Correlation and path analysis for yield related traits in hybrid rice. Bangladesh J.Agri. 38-40: 91-96.

A) Short Communication (1)

1. M J Hasan, **M H Rahman**, A Akter and M U Kulsum.2015. Optimization of GA3 and row ratio for seed yield of a promising hybrid rice varity. Bangladesh J. Bot. 44(4): 671-674.

B) Seminar/Workshop /Symposium/Proceedings - International

(a) As co-author (5)

1. A.W. Julfiquar**,** M.J. Hasan, U.Kulsum, **M.H. Rahman** and M.H. Ali. Development of hybrids of rice in public sector research. Souvenir Bangladesh Seed Conference and Fair. 28-30 April, 2009. Bangladesh-China Friendship Conference Centre, Dhaka.

2. M.J. Hasan, U.Kulsum, **M.H. Rahman**, M.H. Ali and and A.W. Julfiquar. Genetic variability in some cytoplasmic male sterile lines (CMS) of hybrid rice. Proceeding of the International Conference on Plant Breeding and Seed for food security. Pp 169-173. 10-12 March, 2009, BARC, Dhaka, Bangladesh
3. A.W. Julfiquar, M.J. Hasan, U.Kulsum, **M.H. Rahman**, and M.H. Ali. Progress of hybrid rice research and development in Bangladesh. Proceeding of the International Conference on Plant Breeding and Seed for food security. Pp 38-48. 10-12 March, 2009, BARC, Dhaka, Bangladesh
4. Helal Uddin Ahmed, Md. Jamil Hasan, Ashish Kumar Paul, Priya Lal Biswas, Umma Kulsum, Afsana Ansari, Anwara Akter, and **M.H.Rahman**.Country report: hybrid rice in Bangladesh. Proceeding of the 6th International Hybrid Rice Symposium held at Hyderabad, India on 10-12 September, 2012

C) Abstract

(a) As co-author (1)

1. M.J.Hasan, U.Kulsum, **M.H.Rahman**, M H. Ali, and A.W.Julfiquar. 2009. Genetic Variability in some Cytoplasmic Male Sterile (CMS) Line of Hybrid Rice. Souvenir and

abstract on International Conference on Plant Breeding and Seed for Food Security.10-12, March, 2009, BARC. Farmgate, Dhaka, Bangladesh. 34.

D) Booklets (Bangla)

(a) As co-author (2)

2. Masuduzzaman, A. S. M., A. Akter, M. K. Hossain, P. L. Biswash, M. J. Hasan, A. Ansari, M.U. Kulsum, **M. H. Rahman** and A. K. Paul. 2010. Hybrid rice cultivation and seed production mechanism. Bangladesh Rice Research Institute. Mita printing, Baddha, Dhaka-1212.

3. M. J. Hasan, A. K. Paul, P. L. Biswash, M. K. Hossain, M.U. Kulsum**,** A. Ansari, A. Akter and **M. H. Rahman**. 2017. Cultivation practice in BRRI hybrid dhan4. BRRI.

11.Thesis:

i. Hybrid seed production in BRRI Hybrid dhan2 at different GA3 and Row ratio levels.

ii. Effect of number of seeding per hill and level of nitrogen on the growth and yield of transplant Aman dhan32

iii. Morpho-Molecular Characterization and Growth Regulator Dependent Breeding Strategies for Hybrid Rice Seed Production

12. Achievement

(i) Taken in the varietal development process for BRRI hybrid dhan2, BRRI hybrid dhan3 and BRRI hybrid dhan4 Hybridization, identification of suspective maintainers and restorers, evaluation of heterotic hybrids and development of seed production packages for BRRI hybrid dhan2, BRRI hybrid dhan3 and BRRI hybrid dhan4.

13. Professional Activities

13.1 Proessional Membership

i. Life member, Seed Science Society.

ii. Member, Plant Breeding and Genetics society of Bangladesh.

iii. Member, Krishibid Institution of Bangladesh, Dhaka, Bangladesh.

iv. Member,Botany Society

Referees

1. Dr. Md. Jamil Hasan Head & Principal Scientific Officer Hybrid Rice Division Bangladesh Rice Research Institute Gazipur-1701, Bangladesh E-mail: jamilbrri@yahoo.com	2. Dr. Md.Golam Rasul Professor, Bangobandhu Sheikh Mujibur Rahman Agricultural University, Salna, Gazipur.

(Dr.Md. Hafizar Rahman)