CURRICULUM VITAE

Partha Sarathi Biswas

Principal Scientific Officer, Plant Breeding Division, Rice Research Institute, Gazipur, Bangladesh

PERSONAL DETAILS

Father's name: Ananta Kumer Biswas
Mother's name: Dulali Biswas
Name of spouse: Sathi Rani Sikder
Email: psbiswasbrri@yahoo.com, psbiswasbrri@gmail.com
Cell Phone: +8801552480813, +8801304447316
Date of Birth: 27 December, 1971
Sex: Male
Nationality: Bangladeshi (by birth)
National ID:
Social Status: Married, 2 children

Present Address: 224/25, K-Block, West Joydebpur, Gazipur-1701

Permanent address : Vill- Gandharba, Post. Amrajhuri, Upazilla – Kawkhali, Dist. Pirojpur

Profession: Government Service

EDUCATION/RESEARCH

- **Postdoctoral Fellow** in Molecular Plant Breeding, International Rice Research Institute, Philippnes (2016-2018)
- **PhD** in Genetics and Plant Breeding in 2012, Bangladesh Agricultural University, Mymensingh, Bangladesh. Thesis research at IRRI, Philippines (2008 to 2011).
- **MS** in Genetics and Plant Breeding in 2004, Bangladesh Agricultural University, Mymensingh, Bangladesh
- **B.Sc in Agriculture** in 1992 (held on 1996)**,** Bangladesh Agricultural University, Mymensingh, Bangladesh

SUMMARY OF WORK EXPERIENCE

Principal Plant Breeder (April15, 2012 to date):
Working as team the leader for the development of nutritionally improved rice for favorable Boro and cold prone environments. Map QTLs for cold tolerance, arsenic phyto-toxicity tolerance and, iron and zinc content in grains. Apply MAS strategies using trait based SNP markers for enrichment of favorable allele frequencies cold tolerance, BLB and blast disease resistance, grain quality traits in the breeding program. Practice genomic selection approaches to capture small effect QTLs and genes underlying grain yield of rice to enhance

genetic gain. Also, worked as team leader for the development and evaluation of transgenic Provitamin-A enriched (Golden) rice and micronutrient (Zinc, iron) enriched rice.

Postdoctoral Fellow (1 December 2016 to 30 November 2018)
Working with IRRI's irrigated rice breeding team for population improvement through forward breeding tools and genomic selection strategies targeting to enhance genetic gain in grain yield and quality traits with resistance to major insect pests and diseases of rice.

Senior Plant Breeder (June 1, 2006 to April 14, 2012):
Served as team leader for the development of Favorable Irrigated (Boro) rice, micronutrient (Zinc, iron) enriched rice, Cold tolerant rice and Arsenic tolerant rice suitable for Bangladesh condition. Develop and evaluate transgenic Provitamin-A enriched BRRI dhan29 Golden rice through marker assisted backcrossing at IRRI Philippines as PhD thesis scholar (2008-2011).

Plant Breeder (August 20, 1998 to May 31, 2006):
Served as co-investigator to develop rice variety for Favorable Irrigated (Boro) and Deepwater rice ecosystem.

RESEARCH EXPERIENCES

- Extensive research experience on molecular plant breeding technologies of rice, especially on QTL mapping and validation, marker assisted selection (MAS and MABS), Forward breeding, haplotype diversity analysis, haplotype characterization, locus validation, precision phenotyping using drone, genomic selection, etc.
- Extensive rice research experience on conventional breeding approach, conducting and evaluating breeding trials for micronutrient enriched rice suitable for irrigated and rainfed ecosystem, cold affected areas, haor areas, arsenic affected areas, cold affected areas
- Extensive rice research experience on participatory variety selection (PVS) and variety development program for cold prone irrigated and haor environments
- Experience on coordinating research activities with multi-partner and multi-disciplinary research project (BRRI-BSMRAU-Cornell FFP project for Arsenic tolerant rice, IRRI – BRRI collaborative projects for the development of Zinc enriched rice and Provitamin A enriched transgenic Golden rice)
- Experience on strong communication and coordination with different collaborators in national and international level. (eg. BSMRAU, BARC, BINA, BARI, DAE, IRRI, DANIDA, Cornell University etc.).
- Extensive experience on coordination of capacity building and training program for scientists, researchers, extension personnel and farmers
- Experienced on breeding research program preparation, execution and report writing
- Improvement of standard boro rice vatrieties. Varietal Development Program. Irrigated rice (Boro). Plant breeding division. BRRI Gazipur. **2004-05, 2005-06, 2006-07, 2007-08**, **2011-12, 2012-13, 2013-14, 2014-15, 2015-16 and 2016-17, 2018-19, 2019-20.**

- Breeding for cold tolerant rice. Irrigated rice (Boro). Plant breeding division. BRRI Gazipur.**1988-1999**, **2005-06, 2006-07, 2007-08, 2011-12**, **2012-13, 2013-14, 2014-15, 2015-16 and 2016-17, 2018-19, 2019-20**
- Breeding for Iron dense rice. Varietal Development Program for T. Aman and Boro**.** Plant Breeding Division, BRRI, Gazipur. **2004, 2005, 2006 & 2007, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16 and 2016-17**
- Breeding for Super high yielding rice varieties (NPT). Varietal Development Program for Boro. Plant Breeding Division, BRRI, Gazipur. **2004-05, 2005-06, 2006-07, 2007-08**.
- Breeding for low amylose rice. Irrigated rice (Boro) Plant breeding division. BRRI Gazipur. **2005-06, 2006-07, 2007-08 & 2011-12**
- Participatory variety selection (pvs) and validation trial for cold tolerant genotypes in cold prone areas in Rangpur region under IAPP, **Boro 2011-12**
- Arsenic tolerant rice variety development in Bangladesh. Varietal Development Program for Boro. Plant Breeding Division, BRRI, Gazipur. **2005-06, 2006-07 & 2011-12**.
- Breeding for disease resistance. Irrigated rice. Plant Breeding Division, BRRI, Gazipur. **2004-05, 2005-06, 2006-07, 2007-08 & 2011-12.**
- Participatory variety selection (pvs) intervention in Sunamganj for irrigated boro rice, Plant breeding division. BRRI Gazipur. **2004-05, 2005-06 & 2006-07**
- Breeding for insect resistance. Irrigated rice (Boro). Plant Breeding Division, BRRI, Gazipur. **2004-05, 2005-06, 2006-07 & 2007-08**
- Varietal Development Program for DWR. Plant Breeding Division, BRRI, Gazipur**. 1999, 2000-01 & 2001-02**
- Validation and delivery of new technologies for increasing the productivity of flood prone rice lands in Bangladesh under IFAD project, Varietal development program for DWR. Plant Breeding Division, BRRI, Gazipur. **1999, 2000 & 2001**

CONTRIBUTION TO RESEARCH AND DEVELOPMENT

- Actively participated in the development of BRRI dhan45, BRRI dhan55, BRRI dhan59, BRRI dhan60, BRRI dhan62, BRRI dhan64, BRRI dhan68, BRRI dhan72, BRRI dhan74, BRRI dhan84 and BRRI dhan100
- Lead the breeding team that developed Zinc enriched rice variety BRRI dhan64 released in 2014, BRRI dhan72 and BRRI dhan74 released in 2015 and BRRI dhan84 released in 2017 and worked as co-investigator and released BRRI dhan62 in 2013.

- Lead the team that developed irrigated variety BRRI dhan59 and BRRI dhan60 released in 2013 and BRRI dhan68 released in 2014 and worked as co-investigator and released BRRI dhan55 in 2011.
- More than 3000 elite breeding lines enriched in iron and zinc were developed and evaluated. Some of them are now under evaluation in advanced yield trials as future candidate for variety release.
- Also, 2000 elite breeding lines, 15000 fixed lines and 60,000 RGA derived segregating lines have been developed for favorable boro and cold tolerant rice.
- A set of beta-carotenoid enriched BRRI dhan29 golden rice introgression lines have been developed through marker assisted backcrossing under PhD thesis research at IRRI (Feb 2008-May 2010), Philippines. Some of these lines were identified superior in the confined field trials in different regional stations of BRRI. One of the selected line is now under review of food and environmental safety clearance by the National Committee on Biosafety.
- Molecular makers associated with seedling stage cold tolerance, arsenic phyto-toxicity tolerance and high grain content have been developed through QTL mapping. Lead the team that map QTLs for cold tolerance, arsenic phyto-toxicity tolerance and grain Zinc content in rice. Lead the team that map QTLs for cold tolerance, arsenic phyto-toxicity tolerance and grain Zinc content in rice.
- Lead the team that developed simple and quick protocol for seedling stage cold tolerance screening and arsenic phyto-toxicity tolerance in rice
- Lead the team that developed simple and quick protocol for seedling stage cold tolerance screening and arsenic phyto-toxicity tolerance in rice
- Simple and quick protocol for seedling stage cold tolerance screening and arsenic phyto-toxicity tolerance have been developed.

THESIS/DISSERTATION SUPERVISED

- Namita Das, 2014. A Study on Simple Sequence Repeat (SSR) Marker Polymorphism in Rice. BS Thesis, Jahangir Nagor University, Savar, Dhaka, Bangladesh
- Sheikh Jafor Mohiuddin, 2015. Molecular Mapping 0f Quantitative Trait Loci Conferring Grain Zinc Content in Rice (*Oryza sativa* L.). MS Thesis. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh
- AparajitaKundu, 2015. Haplotype Diversity Analysis in Cold Tolerant Rice (*Oryza sativa* L*.).* MS Thesis. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh
- NasiraAkter, 2016. Characterization of Near Isogenic Lines of BRRI dhan29 for Cold Tolerance at Seedling Stage*).* MS Thesis. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh

- Namita Das, 2016. Development of Molecular Markers forCold Tolerance at Seedling Stagein Rice (*Oryza sativa*L.). MS Thesis, Jahangir Nagor University, Savar, Dhaka, Bangladesh
- Md. Mozahidulhaque 2016. Marker Assisted Selection for Cold Tolerance at Seedling Stage in Rice (*Oryza sativa* L.). MS Thesis. Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh
- Md. Mahathir Sarker 2016. Marker Assisted Introgressionof Seedling Stage Cold Tolerance into BRRI dhan28. MS Thesis. Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh

THESIS EXAMINED AND ACTED AS EXAMINATION COMMITTEE MEMBERS

- RozinaAkter, 2015. Evaluation of Tomato (*Solanum lycopersicum* L.) Genotypes on Agromorphogenic, physiological, Antioxidant and Nutritional Traits under Drought. MS Thesis, Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh
- Sazia-E-Jannat, 2015. Evaluation of New Plant Type Advanced Lines of Rice for Aman Season as High Yielding Varieties. MS Thesis, Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh
- Kamrul Islam, 2015. Variability and Interrelationship in Traits of F4 Population of Rice (Oryza sativa L.) Leading to Selection of high Yielding Boro Lines. MS Thesis, Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh
- Ruhul Amin, 2015. Genetic and Morphological Diversity of Natural Population of Chilli (*Capsicum spp.*). MS Thesis, Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh
- TasniaTaiana, 2015. Variability, Correlation, Path Coefficient and Diversity Analysis in Tomato (*Solanum lycopersicum* L.). MS Thesis, Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh
- Abu Bakar Siddique, 2019. Genotype – Stress interaction under Salinity and drought condition in tomato (Solanum lycopersicum L.), MS Thesis, Sher-e-Bangla Agricultural Univerisity, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh

REVIEWER OF JOURNAL AND PROJECT PROPOSAL

Reviewer of 1. Rice Journal 2. Bangladesh Journal Progressive Science and Technology 3. Bangladesh Journal of Plant Breeding and Genetics 4. Bangladesh Annals of Agriculture 5. 3 Biotech (**IF 2.45**) 6. Plant Science (Elsevier Journal, **IF: 3.71**) 7. Crop Breeding, Genetics and Genomic (Hapres – An Academic Publisher) 8. Breeding Science (**IF1.743**) 9. Frontier in Genetics (**IF: 3.517**) 10. Journal of Advance Research (Elsevier Journal, **IF5.045**)	Reviewed more than 20 manuscript of full length research Articles

11. Scientific Report (**IF3.998**)	
Reviewer of Project Proposal of BSMRAU and BAS	Reviewed 02 (two) research proposals

AWARDS/ GRANTS/ SCHOLARSHIP

1. 2021 করোনাকালীন নিরবিচ্ছিন্নভাবে গবেষণা ও এ সংক্রান্ত অন্যান্ন কার্যক্রম অব্যাহত রাখায় উদ্ভিদ প্রজনন বিভাগের অন্যান বিজ্ঞানী, কর্মকর্তা, কর্মচারী ও শ্রমিকবৃন্দের সাথে ব্রি কর্তৃক প্রদত্ত সম্মাননা সনদ প্রাপ্তি।
2. 2019 TRB Project Annual Award 2019, BRRI-BMGF-IRRI TRB Project, BRRI, Gazipur
3. 2017 উদ্ভিদ প্রজনন বিভাগের অন্যান্য বিজ্ঞানীদের সাথে বঙ্গবন্ধু কৃষি প্রদক ১৪২২ অর্জন।
4. 2016 : Plant Breeding Award for Young Scientist 2016, Plant Breeding and Genetics Society of Bangladesh
5. 2015 : BRRI Award 2015 As the best scientist of the year, BRRI Gazipur
6. 2008 : ALUF-GCGH SCHOLARSHIP/Grants of University of Freiburg, Germany for PhD thesis Research at IRRI
7. 1998 : Distinction in the Rice Production, Communication and Office Management Training, BRRI Gazipur

EXCUTION OF DONOR FUNDED RESEARCH PROJECTS

- Principal Investigator of the project 'Food for Progress: Development of Arsenic tolerant rice in Bangladesh' funded by USDA-Cornell University from October 1, 2011 to May 31, 2014.
- Principal Investigator of the project 'Zinc Rice Bangladesh NARS Partnerships' funder by HarvestPlus-IRRI from 5 March 2012 to date
- Principal Investigator of the project 'The deployment and validation of high beta-carotene rice varieties in the Philippines and Bangladesh to combat Vitamin A deficiency' funded by BMGF-IRRI from 5 March 2012 to date
- Principal Investigator of the project ' Development of Research Capacity of Bangladesh Rice Research Institute' funded by KOICA, The Republic of Korea from 2012 – 2013
- Principal Investigator of the project ' Development of cold tolerant and Micronutrient Enriched Rice' funded by GAFSP-World Bank from January 2013 – June 2016
- Co-investigator of the project Validation and delivery of the Technologies in the Farmers Field funded by IFAD thru IRRI from 2000-2003.
- Co-investigator of the project 'Participatory Variety Selection Intervention in Sunamganj for Irrigated Boro Rice' under BRRI – Intercooperation Collaboration funded Swiss Development and Cooperation (SDC) from 2004 -2006.
- Co-investigator of the project ' Arsenic Tolerant Rice variety Development in Bangladesh' funded by IRRI from 2006-2007

PARTICIPATION IN TECHNOLOGY TRANSFER SYSTEMS

- Worked as principal investigator for advanced yield trials for cold tolerant rice in haor areas of Kisoreganj, Habiganj and Sunamganj during 2019 – to date.
- Worked as principal investigator for the participatory variety selection for cold tolerant rice in Rangpur region under WB-BRRI IAPP project during 2013-2015
- Worked as principal investigator for the participatory variety selection for short duration boro rice in the haor areas of Sunamganj under SDC-IC-BRRI collaboration during 2004-2007
- Worked as principal investigator for the participatory variety selection for shallow flooded deepwater rice during 1999-2001
- Participated in Seed production and Demonstration Program (SPDP) of BRRI dhan31 and BRRI dhan32 as working scientist held at different locations of Jhalakathi district in 1999.
- Participated in the Agriculture fair and seed fair under different nation programs

MONITORING AND EVALUATION

- Participated as a member of the monitoring team formed for inspecting spikelet sterility in Boro rice in Haor areas of Baniachong Upzila Habiganj during May 2019
- Participated as a member of the field monitoring team for the investigation of irregular in BRRI dhan64 in Chalan bill area of Natore during 2016
- Participated as a member of the field monitoring team for the investigation of spikelet sterility in BRRI dhan62 in Mymensigh regions during 2015
- Participated as a BRRI representative in the evaluation committee for pilot production plot of BRRI developed two rice hybrids (IR68877H and IR69690H) during 1999.

SPECIAL PROJECT PREPARATION

- Actively participated in the preparation of IRRI-BRRI-KGF-Haor Project “Development of Short Duration Cold Tolerant Rice Varieties for Haor Areas of bangladesh
- Actively participated in the preparation of TRB-BRRI Phase II Project proposal
- Actively participated in the preparation IRRI-BRRI project proposal for the development and deployment of provitamin A enriched rice (Golden rice)in Bangladesh)
- Actively participated in the preparation research project proposal for contained and confined field trials of provitamin A enriched rice (Golden rice).
- Actively participated in the preparation of BRRI-IC collaborative research project ‘Participatory variety selection (PVS) intervention in haor areas of Sunamganj.
- Actively participated in the preparation of BRRI-IRRI collaborative research project ‘ Development of Rice with elevated Iron and Zinc: Phase -1-Understand and Exploit GXE Interaction for High Iron and Zinc in the Polished Grain
- Actively participated in the preparation of BRRI-KOICA collaborative research project: Development of research capacity of Bangladesh Rice Research Institute

MANAGEMENT OF RESEARCH PROGRAM/STATION/DIVISION

- Served at BRRI RS Bhanga as Head In charge in 7 September 2014 - 02February 2015
- Actively participated in different office and research management activities assigned by the head of the division
- Worked as a Project leader in Breeding for super high yielding rice varieties since 2003
- Working as project leader for standard boro, cold tolerance, arsenic tolerance rice breeding program since 2011

- Working as deputy project manager (DPM) of IAPP project (BRRI part) for the improvement of livelihood of poor people of Rangpur and Barisal regions
- Principal Investigator of the project 'Food for Progress: Development of Arsenic tolerant rice in Bangladesh' funded by USDA-Cornell University from October 1, 2011 to May 31, 2014.
- Principal Investigator of the project 'Zinc Rice Bangladesh NARS Partnerships' funder by HarvestPlus-IRRI from 5 March 2012 to date
- Principal Investigator of the project 'The deployment and validation of high beta-carotene rice varieties in the Philippines and Bangladesh to combat Vitamin A deficiency' funded by BMGF-IRRI from 5 March 2012 to date
- Principal Investigator of the project ' Development of Research Capacity of Bangladesh Rice Research Institute' funded by KOICA, The Republic of Korea from 2012 – 2013
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- Co-investigator of the project ' Arsenic Tolerant Rice variety Development in Bangladesh' funded by IRRI from 2006-2007

RESOURCE PERSON IN TRAINING PROGRAMME AND SEMINAR

- Resource speaker of Sunday seminar at BRRI on Bio-safety issues of transgenic crops, March 2020
- Participated as a resource person in the training tiled "
- Resource speaker of Scientific report writing held on 18-22 October 2020 at BRRI Gazipur
- Resource speaker of Thursday seminar at BRRI on Breeding Strategies for Accelerated Genetic Gain in Irrigated Rice, June 2019
- Presented a paper on Strategies for increasing Aus rice cultivation
- Presented research progress and program of BRRI on Rice Breeding activities in the Annual Research Review Workshop on crop improvement program of NARS Institute : Research Progress 2018-19 and research program 2019-20 held on 22-23 September 2019 at BARC, Dhaka
- Resource Speaker in the workshop on "Knowledge Sharing and Capacity Building on Applications Agri-biotechnology for Nutrition and Food Security in Bangladesh" organized by Farming Future of Bangladesh and Cornell Alliance for Science on September 22, 2019.
- Resource speaker in the training course for BRRI Scientific Officers on Basic Molecular Biology and Disease resistance held on 23-28 March 2019 at BRRI Gazipur
- Resource speaker in the training courses for UAO/BS held at BRRI Gazipur as a trainer
- Resource speaker in the molecular rice breeding training program for scientist of BRRI under NATP
- Resources speaker in the Experimental Design for Rice Breeding course for Vietnam's scientists at Field Crop Research Institute at Hai Duong, Vietnam in 2018
- Resources speaker in the Molecular Breeding Courses for African scientists at IRRI, Los Banos in 2018
- Resource person for Molecular Breeding course in 2014 at BRRI Gazipur, Bangladesh
- Resource person for Molecular Breeding course in 2015 at BARI Gazipur, Bangladesh
- Resource person for Biosafety Measures in Transgenic Crops in 2015 at Bangladesh Agricultural Research Council, Dhaka, Bangladesh
- Resource person for Biosafety Measures for Field and Laboratory experiment with GE Plants in 2015 at Cotton Development Board, Dhaka, Bangladesh
- Resource person for Rice Production course at BRRI, Gazipur, Bangladesh

ATTENDED TRAINING COURSES

Sl	Title	Duration	Venue
	In Country		
1	Rice production, Communication and Office management	18 October – 15 December 1998	BRRI, Gazipur
2	Workshop-cum-training in Rice Breeding & Hybrid Rice Development (TCTTI Project)	4 days, 1999	BRRI, Gazipur
3	Foundation training course for NARS scientists	17 Oct 1999 – 30 January 2000	BARD, Cumilla
4	Project Development Management	08-12 April 2012	BARC, Dhaka
5	Bioinformatics for Sustainable Development in Agriculture	19-21 March 2019	BARC, Dhaka
6	Molecular Biology Application in Plant Breeding	8 June – 03 July 2014	BRRI, Gazipur
7	Public Procurement Management	02-07 March 2019	BIM, Dhaka
8	Application of Bioinformatics in Rice Improvement	14 - 24 January 2020	BRRI, Gazipur
	In abroad		
1	Institutional Management	17- 28 April 2000	AIT, Thailand
2	Planning Rice Breeding Program for Impact	9-27 February 2004	IRRI, Philippines
3	Introgression of Beta-Carotene locus (Golden Rice trait) into a popular rice variety of Bangladesh through marker assisted backcrossing	7 February 2008 – 3 June 2011	IRRI, Philippines
4	Bioinformatics Workshop for Crop Research	24-28 March 2008	IRRI, Philippines
5	Introduction to R Course	28-29 April 2009	IRRI, Philippines
6	Basic Experimental Designs and Data Analysis using Crop Stat	22-26 February 2010	IRRI, Philippines
7	Training for Quality Assurance Managers and Trial Managers and Trial Personnel for confined field trials and field testing	25 June 2010	IRRI, Philippines
8	SNP Data Analysis Training Course	8-11 March 2011	IRRI, Philippines
9	Training workshop on Cold tolerant rice breeding and agricultural machineries	2012	RDA, Korea

10	Carotenoid Analysis Training	18-22 March 2013	Bogor, Indonesia
11	Post doctoral research on rice breeding and molecular breeding	1 December 2016 – 30 November 2018	IRRI, Philippines
12	Introduction to R and Data Management, Statistical Analysis, GWAS, QTL mapping and RNA sequencing	17 August – 22 September 2017	IRRI, Philippines
13	Statistical Design and Analysis for Plant Breeding using R	13 – 17 August 2018	IRRI, Philippines

PROFESSIONAL ASSOCIATION

- IRRI Alumni
- General Secretary, AFSTRI, IRRI (2010)
- Life member, Bangladesh Plant Breeding and Genetics Society
- Life member, Bangladesh Association of Advanced Science
- Life Member, Krishibid (Agriculturist) Institution of Bangladesh
- Life Member, Korea-Bangladesh Alumni Association

THESIS RESEARCH

- PhD thesis (2012): Introgression of Beta-Carotene locus into a Popular Rice Variety of Bangladesh through Marker Assisted Backcrossing
- MS Thesis (2004): Heterosis and combining ability analysis in rice using cytoplasmic genetic male sterile lines

PUBLICATIONS

A. Research articles published in scientific journals

1. **Partha S. Biswas** (Corresponding author), B. P. Mallikarjuna Swamy, Md. Abdul Kader[1], Md. Alamgir Hossain, Raul Boncodin, Mercy Samia, Md. Lutful Hassan, M. Wazuddin, Donald MacKenzie and Russell Reinke. 2021. Development and Field Evaluation of Near-Isogenic Lines of GR2-EBRRI dhan29 Golden Rice. Front. Plant Sci., 25 February 2021 | https://doi.org/10.3389/fpls.2021.619739 (**Impact factor:** 4.402)

2. **B. P. Mallikarjuna Swamy, Severino Marundan Jr., Mercy Samia, Reynante L. , Democrito B. Rebong, Ronalyn Miranda, Anielyn Alibuyog, Anna Theresa Rebong, Ma. Angela Tabil, Roel R. Suralta, Antonio A. Alfonso, Partha Sarathi Biswas, Md. Abdul Kader, Russell F. Reinke, Raul Boncodin & Donald J. MacKenzie. 2021. Development and characterization of GR2E Golden rice introgression lines.** ***Scientific Reports*** volume 11**, Article number: 2496 (2021)**

3. Md. Abdul Kader, A. K. M. Shalahuddin , Tapas Kumer Hore , Ratna Rani Majumder , Md. Ehsanul Haq, Kaniz Fatema , Partha Sarathi Biswas and Khandakar Md. Iftekharuddaula. 2021. BRRI Dhan100: A Zinc Enriched Rice Variety Suitable for Irrigated Ecosystem in

Bangladesh. Asian Plant Research Journal. 8(1): 1-8, 2021; Article no.APRJ.69295. ISSN: 2581-9992

4. Shaikh J. Mohiuddin , Md. Ashraful Haque , Md. Manjurul Haque , Md. Tofazzal Islam , **Partha S. Biswas (Corresponding author)**. 2020. Genetic Analysis Reveals a Major Effect QTL Associated with High Grain Zinc Content in Rice (Oryza sativa L.). Plant Breed. Biotech. 2020 (December) 8(4): 327-340 https://doi.org/10.9787/PBB.2020.8.4.327
5. **P S Biswas**, H Khatun and M Anisuzzaman (2020) Molecular and Phenotypic Characterization for Cold Tolerance in Rice (Oryza sativa L.). Bangladesh Rice J. 23 (2): 1-15, 2019, doi.org/10.3329/brj.v23i2.48243
6. Nomita Das, Nazmul Alam, Kamal Hossain and **Partha S Biswas** (**Corresponding author**). 2019.Mapping quantitative trait loci for cold tolerance in rice at seedling stage. Bangladesh J. Bot. 48(4): 1021-1028, 2019 (December)
7. Satyen Mondal, Najibul Rehman Sofi, MM Emam Ahmed, Tuhin Halder and **Partha S. Biswas** (**Corresponding author**). 2019. Regulatory genes and enzymatic complex of flowering time in rice. Plant Breed. Biotech. 2019 (September) 7(3):1~000. https://doi.org/10.9787/PBB.2019.7.3.1
8. Joshua N. Cobb, Roselyne U. Juma, **Partha S. Biswas**, Juan D. Arbelaez, Jessica Rutkoski, Gary Atlin, Tom Hagen, Michael Quinn, EngHwa Ng. 2019. Enhancing the rate of genetic gain in public-sector plant breeding programs: lessons from the breeder's equation. Theoretical and Applied Genetics. 132:https://doi.org/10.1007/s00122-019-03317-0 (**Impact factor: 3.996**)
9. Cobb JN, **Biswas PS**, Platten JD**.** 2018. Back to the future: revisiting MAS as a tool for modern plant breeding. Theor Appl Genet. 2018 Dec 17. doi: 10.1007/s00122-018-3266-4. [Epub ahead of print] (**Impact factor: 3.996**)
10. Bertrand C. Y. Collard, Joseph C. Beredo, Bert Lenaerts, Rhulyx Mendoza, Ronald Santelices, VitalianoLopena, Holden Verdeprado, ChitraRaghavan,Glenn B. Gregorio, Leigh Vial, MattyDemont, **Partha S. Biswas**, KhandakarM. Iftekharuddaula, Mohammad AkhlasurRahman, Joshua N. Cobb andMohammad Rafiqul Islam.2017.Revisiting rice breeding methods – evaluating theuse of rapid generation advance (RGA) for routinerice breeding. Plant Production Science. ISSN: 1343-943X (Print) 1349-1008 (Online) DOI: 10.1080/1343943X.2017.1391705 (**RG Impact factor: 0.94**)
11. Syed MA, Iftekharuddaula KM, Rasul GM, Rahman GKMM, Panaullah GM, Duxbury JM, Hossain M, **Biswas PS**. 2019. Development and standardization of a simple and quick screening protocol for arsenic phyto-toxicity tolerance in rice. Food Sci. Tech. 7(3):31-40. (**Impact factor: 1.85**)
12. Syed MA, Iftekharuddaula KM, Akter N, **Biswas PS**, Hossain M. 2019. Assessment of genetic diversity in arsenic contaminated rice using SSR markers. Treds Appl. Sci. Res. 14(3): 1078-185. (**RG Impact factor: 0.23)**
13. **Partha S Biswas** (Corresponding author), HasinaKhatun, Nomita Das, Md Mahathir Sarker and M Anisuzzaman. 2017. Mapping and validation of QTLs for cold tolerance at seedling stage in rice from an indica cultivar Habiganj Biro VI (Hbj.BVI). 3 Biotech 7: 1-12 DOI 10.1007/s13205 -017-0993-1 (**Impact factor: 1.786**)
14. Hasina Khatun, **Partha S Biswas**(**Corresponding author**), Hung Goo Hwang, Kyung-Min Kim. 2016. A Quick and Simple In-house Screening Protocol for Cold-Tolerance

at Seedling Stage in Rice. Plant Breed. Biotech. 2016 4:373-378. http://dx.doi.org/10.9787/PBB.2016.4.3.373

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