

Curriculum Vitae of Dr. Md. Shahidul Islam



1. Name: **Md. Shahidul Islam**
2. Father's name: Late Md. Sirajul Islam
3. Mother's name: Mrs. Roshida Banu
4. Present address: Chief Scientific Officer & Head, Agronomy Division, BRFI Gazipur
Mobile: 01719868333, E-mail: shahidul.brfi@yahoo.com
5. Permanent address: Ramchandrapur (Basar Road)
P.O: Ghoramara, P.S: Boalia, District: Rajshahi-6100
5. Date of birth: 18 January, 1966 (Age: 55 year 6 Month)
6. Marital status: Married
7. Nationality: Bangladeshi (by birth)
8. Religion: Islam
9. Academic qualification:

Degree	Year	Institute	Board/University	Division/Class
PhD	2006	BAU	BAU	-
MS	1998	IPSA	IPSA	GPA=3.43
B.Sc.Ag (Hons)	1988	BAI	BAU	2 nd
H.Sc	1983	Rajshahi College	Rajshahi	1 st
SSC	1981	Govt. Laboratory School	Rajshahi	1 st

10. Previous service records:

Designation	From	To	Place of posting	Organization
Agro. Marketing Officer	17.2.1992	7.7.1992	Bogra	Auto-Equip. Ltd.
S.M.O	30.12.1993	20.11.1994	Khamarbari, Dhaka	DAE
S.O	21.11.1994	28.2.1998	BRFI, Gazipur	BRFI
S.S.O (In-charge)	1.3.1998	13.4.1999	BRFI, Comilla	BRFI
SSO	14.4.1999	17.2.2007	BRFI, Gazipur	BRFI
SSO	18.2.2007	10.1.2011	BRFI, Barisal	BRFI
SSO	11.1.2011	24.11.2011	BRFI, Gazipur	BRFI
CSA	24.11.2011	24.11.2013	CSISA, Barisal	IRRI
SSO	25.11.2013	15.4.2014	BRFI, Gazipur	BRFI
PSO	16.4.2014	31.10.2016	BRFI Rangpur	BRFI
PSO	01.11.2016	04.11.2018	BRFI, Gazipur	BRFI
CSO (In-charge)	05.11.2018	21.11.2019	BRFI, Gazipur	BRFI
CSO	22.11.2019	Till today	BRFI, Gazipur	BRFI

11. Training obtained:

A) Local:

Topic	Year	Duration	Place	Organization
1. Season long training on IPM	1994	23.2.94-19.5.94	CERDI, Gazi	DAE
2. Rice production	1994-95	3.12.94-31.1.95	BRFI, Gazipur	BRFI
3. PRA	2000	1 day	BRFI, Gazipur	IRRI-PETTRA
4. Hybrid Rice Technology	2001	03.1.01-05.5.01	BRFI, Gazipur	BRFI-China

5. Seed Technology	2007	23.9.07-19.12.07	BSMRAU	MOA
6. Data management & Report Writing	2011	December, 2011	BRAC L C	IRRI
7. Project management	2012	March, 2012	BRAC L C	IRRI
8. Project management	2012	13.5.12-17.5.12	ICDDRDB	IRRI
9. Disaster Management and writing project proposal	2013	2-4 December 2013	Dept. Environment	Ministry of Environment
10. Project management	2015	28-30 June	EIB	IAPP, MoA
11. Fertilizer Recommendation Guide	2017	June	BARC	BARC
12. Capacity Development for Advanced Agri. Research Methodology and Scientific Report Writing	2018	25.4.2018-29.4.2018	BRAC-CDM, Savar	KGF, BARC
13. Administration and financial management	2019	6.11.19-19.11.2019	BARD	NATP, BARC

B) Overseas:

Topic	Year	Duration	Place	Country
1. Rice Seed Health	1999	30.8.99-8.10.99	IRRI	Philippines
2. Soil and Rice Root Health	2006	25.9.06	IRRI	Philippines
3. Rice Based Farming Systems	2012	10-14 September	Kathmandu	Nepal

12. Participants in Workshop/ Seminar/ Meeting:

Title	Duration	Venue	Sponsor	Remarks
Cropping with climate change impact on Agriculture through Research and Extension	21-22 June, 2011	Washington Hotel, Dhaka	USAID	International
Costing and Planning Agriculture's Adaptation to Climate Change	16.5.2011	Bengal Inn Hotel, Dhaka	DFID BCAS	
Research and Extension Workshop	24-25 May 09	RARS, BARI	BARI	2007 & 2008
Long Term Development Perspective Plan in Bangladesh	29.03.09	Circuit House, Barisal	Planning Commission	
21 st Bangladesh Science Conference	18-20.2.09	BARI	BARI-BSMRAU	
Weed Science Society Conference	8.11.08	BARC	ACI	
National Workshop on Assessment of Fallow lands & Crop Production Plan of Southern Area	22.05.08	Shilpakola Academy, Patuakhali	BARC	National
Water Saving Technology in South Asia	3-5.4.07	RDA, Bogra	IRRI	International
Communication Development in Agricultural: Role of Mass media	12-13.3.07	DAE, Barisal	GOB	
Water Saving Technology in South Asia	26-27.9.06	IRRI	IRRI	International
STRASA	20-23.5.2014	NASC Complex New Delhi	IRRI	International
CURE	19-22.5.2015	DAR, Myanmar	IRRI	International

13. Scientific Publications: (List enclosed: *Encloser 1a*)

A). In Bangladesh: 30 (as main author: 20, as co-author: 10)

B). Overseas: 2 (as main author)

14. Popular Article Publications: 10

15. Research Experience

a. Research: (List of research program/project developed, research program/ project executed as Program Leader/ Project Investigator/Co- Investigator/Team Member*) *Encloser 2*

b.

Number of research programs developed	Number of research programs executed	Number of research projects developed	Number of research projects executed
29	27	-	-

- * *Acted as team member: RLRRC, CREMNET and Water Saving Technology Project (Funded by IRRI), PRA at Savar, Dhaka and Tanor, Rajshahi to identify researchable issues (PETTRA) and Soil and water salinity monitoring program in Barisal region after SIDR.*
- * *Acted as site Coordinator of IAPP and STRASA (Submergence) Project at Rangpur*
- * *Acted as Program director of BRRI's Agronomy Division Development and Research development Program (April 2018-June 2020).*

c. Management/Planning /Training

Number of programs developed	Number of programs executed	Number of projects developed	Number of projects executed
6 (Training)	6 (Training)	1	1

16. Other relevant experience(s):

Encloser 3

17. Research Achievements (List of technology developed/ disseminated):

Encloser 4

Number of research findings/ technology developed	Number of technology disseminated	Number of patents registered	Number of patents disseminated
20	10	-	-

18. Academic Experience: i) Research Supervisor for MS course of Patuakhali Science and Technology University and Hazi Muhammad Danesh Science and Technology University.
 iii) Bangabondhu Sekh Mujibur Rahman Agriculture University
 iv) Examiner of MS course at Bangladesh Agriculture University
 v) MS Student =5 (Completed 3)

19. Editorial Experience: i) Served as Editor of Krishibarta for 5 years
 ii) Thesis examiner (MS= 6, PhD= 1)
 iii) Journal Paper=15

20. Major Research Area: Weed Management, Drought Management, Fertilizer & Fertility Management, Nutrient Management for local & MV rice in Tidal Submergence and Flash Flood Submergence Ecosystem, Salinity Management, Cold Management, Seed Health & Seed Technology.

21. In-house training given:

- i) Effective Communication Methods and its' use in Agricultural Research and Development (Central)
- ii) Experimental Design, Setting Experiment and Methods of Data Collection (Regional)
- iii) Scientific Report Writing
- iv) Food Habit and Health Care
- v) Covid-19 and Precaution Measure

22. Experience on language:

<u>Language</u>	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
Bangla	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent

23. Computer background: MS word, MS Excel, IRRISTAT, CROPSTAT, MSTAT

M.S. Islam

(Dr. Md. Shahidul Islam)

List of Publication of Dr. Md. Shahidul Islam (CSO, Agronomy, BRRRI)

1. Ansari, T.H., M. Suratuzzaman and **M.S. Islam**. Status of health and germination of seed stored indifferent containers at farmer's level in Mymensingh. *Progress Agric.* 1996, 7(2): 09-111.
2. **Islam, M. Sh.** M.R. Islam and Z.U. Ahmed. Evaluation of nitrogen management based on chlorophyll meter (SPAD) value in modern rice varieties under wet and dry seasons. *Bangladesh Agron. J.* 1998. 8(1 & 2): 37-45.
3. **Islam, M. Sh.**, M. N.I. Miah, M.M. Haque, M.A. Rahman and R. Yesmeen. Effect of soil moisture deficit on yield and yield components of upland rice cultivars. *Progress Agric.* 1999. 10(1& 2):183-188.
4. **Islam M. Sh. Q.S.A. Jahan K. Bunarith, S. Viang Kum and S.D. Merca.** Evaluation of seed health of some rice varieties under different conditions. *Bot. Bull. Acad. Sin.* (2000) 41: 293-297.
5. **Islam, M. Sh.**, M.N.I. Miah, M.M. Haque, M.M. Kamal and N. Ahmed. Effect of soil moisture deficit on root growth of upland rice cultivars. *Bangladesh J. Agril. Sci.* 2001. 28(1): 79-86.
6. **Islam, M. Sh.** M.N. I. Miah, M.M. Haque, M.M. Kamal and N Ahmed. Effect of soil moisture deficit on shoot growth and development of upland rice cultivars. *Bangladesh J. Agril. Sci.* 2001. 28(2): 223-232.
7. Kamal, M.M. A.H.M. Jafar, **M. Sh. Islam**. S.H. Howlader, M.J.U. Chowdhury and T.K. Dey. Efficacy of seed treatment with fungicides to control seed borne by pathogens of true potato seed. *Bangladesh J. plant Pathol.* 2001. Vol.17(1 & 2): 23-26
8. M.M. Hussain, **M. Sh, Islam**, A. Saha, M.A. Zami and M.A. Afzal. Effects of organic materials on salinity level, organic matter content and rice yield in coastal saline soil. *Bangladesh J. Agril. Res.* 2002. 27(3): 341-348.
9. **Islam, M. Sh.** and M.B. Rahman. Effect of different nitrogen management practices on growth, yield and agronomic efficiency of direct-seeded boro rice. *Bangladesh J. Agril. Res.* 2003, 28-(3).
10. **Islam, M. S.**, M.A. Mazid, M.S. Alam, N. Ferdous and M.K.A. Bhuiyan. Bio-physical and socio-economic scenario of the high barind farms: a study of farmers' perceptions with emphasis on rice. *Journal of Agriculture and Rural Development.* 1(1): 69-76, 2003.
11. Kamal, M.M., M. Hossain, **M. Sh. Islam** and M. Moens. Survey of plant parasitic nematodes in nursery stocks of Belgium. *Bangladesh J. Zool.* 31(2): 177-183, 2003.
12. **Islam, M. Sh.** S.A. Sattar, M. Khan, J.U. Ahmed and M.A. Zami. Effects of N, K, rice straw and ash on the lodging behavior, growth and yield of rice cultivar BRRRI dhan 32. *Bangladesh Agron. J.* 2004, 10(1 & 2): 65-71.
13. Hossain, M.M., M.A. Mazid, B. Karmakar, M.M. Kamal **M. Sh. Islam**, M.A. Ali and M.A. Zami. Agronomic management of Hybrid rice for better yield. *Bangladesh Agron. J.* 2004, 10(1 & 2): 23-30.
14. Pervin, M.S, R. Yasmeen, **Islam, M. Sh.** and K.M Iftekharuddaula. Growth Behavior of Plants as Affected by N, P, K and S Fertilization at Post Submergence During T. Aman Season. *Bangladesh J. Prog. Sci. & Tech.* 3(1): 9-12, January, 2005.
15. **Islam, M. Sh.**, M. S. U. Bhuiya, A. R. Sarkar, A. R Gomosta and M. M. Hussain. Effect of Nitrogen management on growth and yield of hybrid and inbred rice varieties. *Int. J. BioRes.* 3(3):45-55, September 2007.
16. **Islam, M. Sh.**, and M. S. U. Bhuiya. Evaluation of Growth and Yield of Selected Hybrid and Inbred Rice (*Oryza sativa* L) Varieties in Boro Season. *The Agriculturists* 5(1 & 2): 30-34 (2007).
17. **Islam, M. Sh.**, and M. S. U. Bhuiya. Influence of Nitrogen on Growth Performance of Hybrid and Inbred Rice (*Oryza sativa* L) Varieties in Boro Season. *The Agriculturists* 5(1 & 2):77-85 (2007).

18. **Islam, M. Sh.**, M. S. U. Bhuiya, A. R. Sarkar, A. R. Gomosta and M. M. Hussain. Evaluation of growth and yield of selected hybrid and inbred rice (*Oryza sativa* L) varieties grown in net-house during T. Aman season. Bangladesh J. Agril. Res. 34(1): 67-73. March, 2009.
19. **Islam, M. Sh.**, M. S. U. Bhuiya, S Rahman and M. M. Hussain. Evaluation of SPAD and LCC Based Nitrogen Management in Rice. Bangladesh J. Agril. Res. 34 (4): 661-672, December, 2009.
20. M N H Mahmud, **M Sh. Islam**, M A Satter and M A Saleque. Assessment of Water and Soil Salinity for Boro Cultivation in Coastal Region of Barisal. Bangladesh Rice J. 15(1): 63-70, 2010.
21. **Islam, M.Sh.**, F. Rahman and M.A. Saleque. Organic manuring: its effect on rice yield and soil properties on tidal flooded ecosystem of Bangladesh. Bull. Inst. Trop. Agr., Kyushu Univ. 33: 13-17, 2010.
22. **Islam, M.Sh.** and M.A. Saleque. Interaction effect of nitrogen and time of planting of BRRI dhan27 in tidal flooded ecosystem. Bangladesh Rice J. 15(1): 71-75, 2010.
23. **Islam, M. Sh.**, F. Rahman and A. T. M. S. Hossain. Effects of NPK Briquette on Rice (*Oryza sativa*) in Tidal Ecosystem. The Agriculturists 9(1 & 2): 37-43 (2011).
24. **Islam, M.Sh.**, M.N.H. Mahmud, F. Rahman, M. Moniruzzaman and M.A. Saleque. Farmers' participatory site specific nutrient management in tidal flooded soil for high yielding Aus rice. Bangladesh Rice J. 17 (1 &2): 1-5, 2013.
25. Amin, M.F., D.K. Nath, **M. Sh. Islam** and M. A. Saleque. Site specific nutrient management in ganges tidal floodplain soil of Barisal for rice (*Oryza sativa*). Eco-friendly Agril. J. 6 (02): 21-24, 2013.
26. D. K. Nath, F. Haque, M.F. Amin, **M. Sh. Islam** and M. A. Saleque. Farmers' Participatory Site Specific Nutrient Management in Ganges Tidal Floodplain Soil for high yielding Boro rice. The Agriculturists 11(1 & 2): 40-45 (2013).
27. **Islam M. Sh.** D K Nath, A K M Ferdous, H Rashid and M A Saleque. Effect of Best Agronomic Practices on Modern Boro Rice Production in Southern Bangladesh. Bangladesh Agron. J. 2013, 16(2): 21-28.
28. Islam A. K. M. Saiful, M. T. Islam, **M. Sh. Islam**, A. K. M. Lutfor Rahman and M. A. Rahman, 2016. Performance Evaluation of BRRI Power Weeder in Low Land Rice (*Oryza sativa* L.) Cultivation. The Agriculturists 15 (1): 40-48 (June 2017).
29. **Islam M. Sh.**, A. B. M Jahid Hossain, M. S. Miah, S. M. Shahriar and M.A.A. Mamun. Evaluation of Aus Rice (*Oryza sativa* L.) Production in less Irrigated Situation in Northern Region of Bangladesh. The Agriculturists 15 (1): 110-115 (June 2017).
30. **Islam M. Sh.**, Z. Yesmin, A. Badshah and M. A. Ali. Feasibility of Introducing Rice Based Four Crops Pattern in Rangpur Region of Bangladesh. The Agriculturists 15 (1): 116-126 (June 2017).
31. Mamun M. A. A., S. A. Islam, **M. Sh. Islam**, A. J. Mridha and M. A. Saleque, 2017. Site-Specific Nutrient Management for Irrigated Rice in South Central Region of Bangladesh. Bangladesh Agron. J. 2017, 20(2): 1-9.
32. N Akter, M A Sobahan, **M. Sh. Islam** and S Parveen, Effect of water stress and potassium fertilizer on growth and yield of transplanted aman rice. South Asian Journal of Agriculture, 2021 July (Accepted).

অন্যান্য প্রকাশনার তালিকাঃ

ক) ওয়ার্কশপ পেপার

1. Panaullah, G.M., Z.U. Ahmed, P.K. Shaha, B. Rahman, **M.S. Islam**, V. Balasubramanian, and K.F. Bronson, 1999. The Chlorophyll Meter Technique and Traditional Split Application Methods of Nitrogen Fertilizer of Rice in Bangladesh: A Comparative Study. Paper presented on the “Workshop Cum Group Meeting on CREMNET Program”. Tanjuvar, Tamil Naru, India, 24-27 August, 1999.
2. Bashar, M. K. and **Islam, M. Sh.** Rice Research for Tidal Wetland Ecosystem of Barisal Region: Constraints, Progress and Prospects. Paper was presented in a workshop on “Crop Production in the Coastal Ecosystem-Challenges and Opportunities” organized by the Agrarian Research Foundation and held at the AIS, Khamarbari, Farmgate, Dhaka, Bangladesh on November 2, 2010.
3. **Islam, M. Sh.** Rice Production in tidal Ecosystem: Problems and Prospects. Paper was presented in a workshop on “Crop Production in the Coastal Ecosystem-Challenges and Opportunities” organized by the Agrarian Research Foundation and held at the AIS, Khamarbari, Farmgate, Dhaka, Bangladesh on November 2, 2010.
4. D. Nath, F. Haque, **M. Sh. Islam**, and M. A. Saleque. Farmers’ Participatory Site Specific Nutrient Management in Ganges Tidal Floodplain Soil for High Yielding Boro Rice. Paper presented in International Conference on Environment, Agriculture and Food Science, August 11-12, 2012, Thailand.
5. Amin, Fahomida, Deb Kumar Nath, **Md. Shahidul Islam** and M. A. Saleque. Farmers’ Participatory Site Specific Nutrient Management in Ganges Tidal Floodplain Soil for High Yielding Boro Rice. Paper presented in IRRI Young Scientists Conference 2012, November 8-9, 2012, Los Banos, The Philippines.
6. **M Sh Islam**, D K Nath, A K Ferdous, H Rashid and M A Saleque. Effect of Best Agronomic Practices on Modern Boro Rice Production in Southern Bangladesh. Paper was presented in 13th Conference of Bangladesh Society of Agronomy 2013, 20 September 2013, BARC, Farmgate, Dhaka.

খ) পোস্টার

D. K. Nath, M. F. Amin, A. A. Miajy, **M. Sh. Islam**, M. A. Saleque. Impact of Selective Agronomic Management Practices on Modern Boro Rice Production in Southern Bangladesh. Poster was presented in Young Rice Scientists Conference 2013, October 14-16, 2013, IRRI, Los Banos, The Philippines.

গ) বই

- ১। কামাল, এম. এম., এম. এস. ইসলাম, এ. খাতুন এবং এম. এ. ছালেক, ২০০৭. ধান উৎপাদনের আধুনিক প্রযুক্তি প্রশিক্ষণ ম্যানুয়েল। জুন, ২০০৭, বাংলাদেশ ধান গবেষণা ইনস্টিটিউট, আঞ্চলিক কার্যালয়, বরিশাল।
- ২। আধুনিক ধান চাষের কৃষক প্রশিক্ষণ ম্যানুয়েল। সম্পাদনায় মোঃ শহীদুল ইসলাম এবং মীর নূরুল হাসান মাহমুদ। জুন, ২০০৮, বাংলাদেশ ধান গবেষণা ইনস্টিটিউট, আঞ্চলিক কার্যালয়, বরিশাল।
- ৩। আধুনিক ধান চাষের কৃষক গাইড। রচনা ও সম্পাদনায় মোঃ শহীদুল ইসলাম এবং মীর নূরুল হাসান মাহমুদ। জুন ২০১০, বাংলাদেশ ধান গবেষণা ইনস্টিটিউট, আঞ্চলিক কার্যালয়, বরিশাল।
- ৪। আধুনিক ধান চাষের কলা- কৌশল কৃষক প্রশিক্ষণ ম্যানুয়েল। রচনা ও সম্পাদনায় ড. শামীম আরা বেগম, ড. মোঃ শহীদুল ইসলাম, ড. হারুন-উর-রশিদ, ড. মোঃ আবু ছালেক। জুলাই-২০১২। সিরিয়াল সিস্টেমস ইনিশিয়েটিভ ফর সাউথ এশিয়া (সিসা) ইন বাংলাদেশ।
- ৫। আধুনিক ধান চাষের কৃষক প্রশিক্ষণ ম্যানুয়েল। রচনা ও সম্পাদনায় মোঃ শহীদুল ইসলাম এবং ড. মোঃ রুহুল আমিন সরকার। সেপ্টেম্বর ২০১৬, বাংলাদেশ ধান গবেষণা ইনস্টিটিউট, আঞ্চলিক কার্যালয়, রংপুর।
- ৬। Comprehensive Report of IAPP BRRRI Rangpur: July 2012-June 2016. Compiled and Edited by **Dr. Md. Shahidul Islam** and Dr. Md. Ruhul Amin Sarker, June 2016.
- ৭। বোরো ধানের ফলন বৃদ্ধিতে করণীয়। বাংলাদেশ ধান গবেষণা ইনস্টিটিউট (ব্রি)। ডিসেম্বর ২০২০; প্রকাশনা নম্বর ৩১৪

ঘ) লিফলেট

- ১। বোরো ধানের চাষ পদ্ধতি ও কৃষিতাত্ত্বিক ব্যবস্থাপনা। নভেম্বর ২০২০, প্রকাশনা নম্বর ৩১২ (৩০০০ কপি)
- ২। ধান ক্ষেতের জন্য সঠিক আগাছানাশক নির্বাচন এবং নিরাপদ ও কার্যকরী আগাছানাশক প্রয়োগ। জুন ২০২১, প্রকাশনা নম্বর ৩১৮ (৩০০০ কপি)

ঙ) পপুলার আর্টিকেল

- ১। হাইব্রিড ধান চাষের কলাকৌশল, মোঃ শহীদুল ইসলাম। কৃষিবার্তা, মার্চ-এপ্রিল, ২০০২.
- ২। মাশরুমঃ গুরুত্ব ও উৎপাদন পদ্ধতি। মোঃ রুহুল আমীন ও মোঃ শহীদুল ইসলাম। কৃষিবার্তা, নভেম্বর- ডিসেম্বর ২০০২.
- ৩। কৃষক পর্যায়ে বোরো ধানের সুফলা বীজ উৎপাদন কৌশল, পার্থ সারথী বিশ্বাস এবং মোঃ শহীদুল ইসলাম। কৃষিবার্তা, জানুয়ারী- ফেব্রুয়ারী, ২০০৪.
- ৪। কিচেন গার্ডেনঃ সতেজ শাক-সবজির ভাল উৎস, মোঃ শহীদুল ইসলাম। কৃষিবার্তা, জুলাই- আগস্ট, ২০০৪.
- ৫। সফল চাষীর কথাঃ ড. মোঃ শহীদুল ইসলাম। কৃষিবার্তা, সেপ্টেম্বর-অক্টোবর, ২০০৯.
- ৬। বরিশাল অঞ্চলে পতিত জমিঃ কারণ ও তার প্রতিকার। ড. মোঃ শহীদুল ইসলাম। কৃষিবার্তা, জানুয়ারী-ফেব্রুয়ারী, ২০১০.
- ৭। ব্রি ধান৪৯-রোপা আমনের একটি সম্ভাবনাময় জাত। ড. মোঃ শহীদুল ইসলাম। কৃষিবার্তা, জুন, ২০১১.
- ৮। আকস্মিক বন্যা সহিষ্ণু ধানের জাত। ড. মোঃ শহীদুল ইসলাম ও খন্দকার মোঃ ইফতেখারুদৌলা। জুলাই, ২০১১.
- ৯। নাবীতে ব্রি ধান৪৬ এর আবাদ। ড. মোঃ শহীদুল ইসলাম, মোঃ আদিল বাদশাহ, শাহ আশাদুল ইসলাম, আব্দুল্লাহ আল মামুন ও ড. মোঃ আব্দুল জলিল মুধা। কৃষিবার্তা, আগস্ট, ২০১১.
- ১০। উন্নত মানের ধান বীজ উৎপাদন ও সংরক্ষণ, ড. মোঃ শহীদুল ইসলাম। কৃষিবার্তা, অক্টোবর, ২০১১.

Research program developed and executed by Dr. Md. Shahidul Islam, CSO (Agronomy)

Sl. No.	Short title of the program	Execution year
1	Weed management practices for upland rice	1995
2	Comparative performance study of different herbicides	1995-96
3	Root-shoot growth and yield of different drought tolerant upland rice varieties (MS Thesis research)	1997
4	SPAD and LCC based N management in rice (CREMNET)	1998-99
5	Fertilizer management for different hybrid rice varieties	1998-99
6	Fertilizer management to reduce lodging of BRR1 dhan32	1999-2000
7	Evaluation the performance of BRR1 weeder in low land condition	1999-2000
8	Nitrogen management for hybrid rice varieties (PhD Thesis)	2001-03
9	Roberst rice seedling raising and it's impact on yield	2005-06
10	Nitrogen management for hybrid rice in T. Aman season	2005-06
11	Weed management under aerobic/ AWD condition (IRRI)	2006-08
12	Nitrogen and Temperature interaction effect on BRR1 dhan27 in Aus season (Barisal and Rajshahi)	2007-08
13	Weed management practices in tidal flooded soil	2007-08
14	Nitrogen management for hybrid rice in tidal flooded soil	2007-08
15	Soil health improvement in Rice-Rice cropping pattern	2007-08
16	Effect of spacing and time of planting of BRR1 dhan44 under tidal situation	2007-08
17	Fertilizer management for BRR1 dhan44 under tidal submergence condition	2007-08
18	Performance evaluation of BRR1 dhan42 and 43 in drought prone area	2008
19	Performance evaluation of BRR1 dhan47 in saline area	2008
20	Performance of popular local and HYV under varying establishment methods	2009
21	Effect of seedling age on mortality, growth and yield of some HYV rice under tidal submergence ecosystem	2009
22	Effect of organic manure on growth and yield of Boro rice	2009-2010
23	Performance evaluation of NPK Briquette and USG in tidal flooded ecosystem	2010
24	Performance evaluation of submergence tolerance variety in tidal flooded ecosystem	2010
25	Increasing soil organic matter by using different manuring practices in Fallow-T. Aman- Boro cropping pattern	2011
26	Introducing improve cropping pattern for increasing cropping intensity and productivity (Rangpur)	2014-16
27	Production of quality Boro seedlings in dry and wet seedbed under cold prone areas at Rangpur	2014
28	Fertilizer management practices for submergence tolerant rice genotypes	2015-16
29	Yield maximization in hybrid and fine rice through different fertilizer management practices	2016
30	Increasing soil fertility in 4 crops pattern: T.Aus-T.Aman-Potato-Mungbean	2017
31	Nitrogen management at reproductive stage of rice	2018
32	Effect of imposed drought on growth and yield of rice at different stage	2018
33	Effect of Nano Zn particle in salinity mitigation of rice	2020

Relevant activities and contribution

BIRRI Job

Dr. Md. Shahidul Islam, PSO (Agronomy) was involved in following activities:

Activities
<p>1. Participation in technology transfer:</p> <p>i) SPDP: executed in Chilmary, Nagessory and Bhurungamari of Kurigram District (Documents attached),</p> <p>ii) Yield gap program: Acted as Principal Investigator at Shahjadpur (Pabna), Ghatail (Tangail) and Singra (Natore) (Documents attached),</p> <p>iii) Field day program: Organized field day at Shahjadpur (Pabna), Ghatail (Tangail) and Singra (Natore), Uzirpur (Barisal), Solna (Barisal Sador)</p>
<p>2. Resource person in training program:</p> <p>Acted as resource person in training classes for SMS, UAO, AEO, Immam, NGO personnel, SAAO and Farmer (about 250 classes)</p> <p>Arranged 3 separate training program for the SAAO, Farmers and BIRRI Staffs</p>
<p>3. Office management:</p> <p>In absence of Head, acted as Head in charge of Comilla and Barisal Regional Station for several times. Performed as Head, BIRRI Regional Station, Barisal from 28.1.2010 to 15.12.2010. Now working as Head, BIRRI Regional Station, Rangpur</p>
<p>4. Outstanding performance:</p> <p>i) Worked as Editor of Bimonthly 'Krishibarta' from 2001-2005 (Certificate attached),</p> <p>ii) Attended in Radio talk in National Agril. Programme "Desh Amar Mati Amar" and Regional program "Krishi Kotha" (Barisal) of Bangladesh Betar (Documents attached),</p> <p>iii) Handled about 40 groups of visitor from different parts of the country and also from abroad (Japan, IRRI, India, USA, UK, Chaina etc.),</p> <p>iv) Attended farmers for motivational tour from Nalchiti, Agoiljhara, Borguna Sador, Shariatpur and other part of the country,</p> <p>v) Participated 10 national and international (IRRI & RDA) Workshops,</p> <p>vi) Active and life member of 5 professional organization by holding different executive posts (Certificate attached).</p>
<p>5. Monitoring Team Member</p> <p>i) Increasing Boro area and yield in Bhola district (Formed by BIRRI: 2007-08)</p> <p>ii) Fallow land in Barisal region: Estimation, Causes and Solution (By BARC 2008)</p> <p>ii) Seed and fertilizer distribution program in Aila affected area (By MOA 2009)</p>

IRRI Job in CSISA Project (November 2011-November 2013)

Dr. Md. Shahidul Islam, Cropping Systems Agronomist is involved in following activities:

- i) Technology delivery and dissemination in farmers field by demonstration
- ii) Adaptive trials on matured technologies/ suitable varieties
- iii) Capacity building for the farmers, PNGO staffs, GO staffs & Officers
- iv) Conduct PRA, FGD, Workshop, Exposure visit for problem identification and knowledge sharing
- v) Working with CIMMYT & WorldFish and involved NGOs, GOs & Private Organizations
- vi) Highlight the scientific information by making scientific papers in different Journals
- vii) Highlight the success story of farmers in print and electronic media or through visitors

List of Technology/ Research findings developed by Dr. Md. Shahidul Islam

1. The critical threshold value of LCC for BRRRI dhan31 and BRRRI dhan29 is 3.0 UM 3.5 in T. Aman and Boro season, respectively (**Publication No. 2**).
2. The effect of soil moisture deficit is pronounced at reproductive stage; the reduction in panicle plant⁻¹ is 27%, grain panicle⁻¹ is 51% and yield plant⁻¹ is 78% compared to control (**Publication No. 3**).
3. The manually sorted seed shows the highest vigor and normal seedlings. Among the varieties, C-4/Malaqkit and IR59 have higher % of germination in all treatments except chemical control. The highest lethal seed infection is observed in farmer's saved seed caused by *Fusarium moniliforme* followed by *Alternaria padwickii* and *Curvularia* spp (**Publication No. 4**).
4. Water deficit during early and late vegetative stages affects root penetrability but not during reproductive stage. Root –shoot ratio is higher under stress condition compared to control. Water deficits reduced root length density in all tested cultivars except drought resistant cultivar Honumanjata. Reduction in root weight density is higher when water deficit is applied at late vegetative stage (**Publication No. 5**).
5. Soil moisture deficit at any growth stages of rice reduce plant height, tiller number, leaf area and absolute growth rate. Water deficit at early and late vegetative stage significantly decrease tiller number and leaf area but after re-watering the plants subjected to early vegetative stress recover 86% than the control (**Publication No. 6**).
6. The LCC based N management can save urea when the critical threshold value is 3.5 in BRRRI dhan28 in Boro season (**Publication No. 9**).
7. Lack of irrigation water appeared as the major physical constraint, absentee ownership of land is the critical social hindrance, non availability of agricultural credit and good quality seed are the constraints as identified through PRA in high Barind farms (**Publication No. 10**).
8. Application of rice straw and ash of rice husk does not increase K concentration in straw and it can not increase the culm strength or reduce lodging of BRRRI dhan32 (**Publication No. 12**).
9. Nitrogen application as basal or at flowering stage dose not increase the growth and yield of hybrid and inbred rice in T. Aman season (**Publication No. 15**).
10. Hybrid varieties show better growth and yield performance compared to inbred in Boro season when temperature is low (**Publication No. 16**).
11. The USG @ 80 kg ha⁻¹ and SPAD based N application with basal can save 80 and 40 kg N ha⁻¹ respectively, by showing similar growth performance with 160 kg N ha⁻¹ (**Publication No. 17**).
12. Vigorous root and shoot growth of hybrid varieties Sonarbangla-1 and BRRRI hybrid dhan1 at seedling stage was not reflected on later growth stage or on grain yield. (**Publication No. 18**).
13. Rice leaves showing higher SPAD reading (>35), had higher chlorophyll and nitrogen contents. About 25% lower leaf chlorophyll and 33% lower leaf N was observed at PI stage at critical SPAD threshold value (35) in T. Aman compared to Boro season. (**Publication No. 19**).

14. The LCC can be the substitute of SPAD meter and 20-30% N can be saved by using crop demand based N management especially in Boro season. The critical LCC value is 3.0 for Boro and 3.5 for T. Aman seasons in the varieties studied. (**Publication No. 19**).
15. Repeated application of organic materials for two years, does not increase the soil health due to tidal submergence and rapid rate of decomposition of organic materials. (**Publication No. 21**).
16. Nitrogen application in BRRI dhan27 in Aus season has no effect on growth and yield and planting in May instead of April is suitable in tidal flooded ecosystem. (**Publication No. 22**).
17. The NPK briquettes did not increase grain yield of rice significantly over USG and traditional fertilizer dose in tidal ecosystem (**Publication No. 24**).
18. T. Aus (BRRI dhan48)-T. Aman (BRRI dhan62)-Mungbean (BARI 6)-Potato (Cardinal) is the profitable cropping pattern with higher REY (31 t ha⁻¹) and higher gross margin in medium highland to medium lowland area of Rangpur (**Publication No. 30**).
19. T. Aus (BRRI dhan48)-T. Aman (BRRI dhan71)-Potato (Cardinal) is profitable cropping pattern in drought prone barind area of Alimgonj, Rajshahi and T. Aus (BRRI dhan48)-T. Aman (BRRI dhan56)-Mungbean (BARI 6) is profitable cropping pattern in Saline prone area Amtoli with higher REY (30 t ha⁻¹) and higher gross margin in medium highland to medium lowland area. There was no drastic change in soil fertility if proper Agronomic management is ensured.