CURRICULUM VITAE

Personal profile:

Name	**NILUFAR YASMIN SHAIKH**
Father's name	Md. Anwarul Quader Shaikh
Mother's name	Zahida Banoo Shaikh
Address (Permanent & Present)	House no. 52, Kallayanpur Main Road, East Kallyanpur, Post Office: Mohammadpur, Police station: Mirpur, Dhaka Uttar City Corporation, Dhaka-1207
Mobile	01715-792838
Email	biithiii@gmail.com; nilufar.biotech@brri.gov.bd nilufar_yasmin_shaikh@yahoo.com
Date of birth	November 19, 1971
Nationality	Bangladeshi
National ID number	1003304167
Govt. Employee ID no.	1P - 1386
Religion	Islam
Language	Bangla (Mother tongue), English, Japanese (Speaking)

Educational Qualification:

Degree	Name of Institution	Principal Subject	Passing Year	Result
PhD in Agriculture	Osaka Prefecture University, Japan	Plant Breeding, Applied Genetics & Biotechnology	2004	Satisfactorily completed
MSc in Agriculture	Miyazaki University, Japan	Plant Breeding, Applied Genetics & Biotechnology	1999	Grade - A
BSc (Hons. in Botany)	University of Dhaka, Bangladesh	Botany, Zoology & Chemistry	1994	First Class (Third position)
HSC	Muminunnisa Govt Women College, Mymensingh	Science Subjects	1989	Second Division
SSC	Viddiyamoyee Govt Girl's High School, Mymensingh	Science Subjects	1987	First Division

Field of Specialization: Plant Breeding, Applied Genetics & Biotechnology

Employment Experiences:

Duration: May 2009 to Date Employer: Bangladesh Rice Research Institute, Gazipur

Position: **Senior Scientific Officer,** Biotechnology Division
Duration: November 2007 to May 2009 Employer: Bangladesh Agriculture Research Institute, Gazipur Position: **Senior Scientific Officer,** Oilseed Research Center Project: Strengthening of Pulses and Oilseed Research Program in Bangladesh
Duration: July 2007 to November 2007 Employer: Bangladesh Agriculture Research Institute, Gazipur Position: **Senior Scientific Officer,** Tuber Crops Research Center Project: Strengthening of Tuber Crops Research Program in Bangladesh,
Duration: December 2005 to December 2006 Employer: UNMESH (Poor People Development Organization), Tamai, Sirajgonj Position: **Agriculture Officer**
Duration: April 2004 to September 2005 Employer: Center for Integrated Rural and Agricultural Development (CIRAD), Tangail Position: **Program Director**
Duration: April 1999 to March 2000 Employer: Faculty of Agriculture, Miyazaki University, Japan Position: **Foreign Researcher**

Professional Trainings:

A. Foreign training:

Field of Training	**Place and country**	**Duration**		
		Starting time	**Completion time**	**Length**
Training on Biotechnology	Kasetsart University, Thailand	25.5.2010	08.07.2010	1 ½ month

B. In-country Training:

Field of Training	**Place**	**Duration**	**Results**
Systematic Reviews and Meta-Analysis	Bangladesh Rice Research Institute (BRRI), Gazipur	19-21 April 2025	Successfully completed
Administrative and Financial Management	Bangladesh Academy of Rural Development (BARD), Cumilla	11-24 Nov 2019	Successfully completed
Financial and Procurement Management	Bangladesh Agricultural Research Council (BARC), Dhaka	21-26 Sep 2019	Successfully completed
Basic Molecular Biology & Disease Resistance	Bangladesh Rice Research Institute (BRRI), Gazipur.	16-21 March 2019	Successfully completed
Project Development and Management	Bangladesh Institute of Management (BIM), Dhaka.	14-18 Oct 2018	Successfully completed
Rice Physiological Development through Trait Discovery	Bangladesh Rice Research Institute (BRRI), Gazipur	11-16 Aug 2018	Successfully completed

Experimental Design and Data Analysis Training Program	Bangladesh Rice Research Institute (BRRI), Gazipur	8-10 April 2017	Successfully completed
Stewardship & Regulatory Training Program	Bangladesh Rice Research Institute (BRRI), Gazipur	2-4 April 2017	Successfully completed
Genetic Data Analysis Software	Bangladesh Rice Research Institute (BRRI), Gazipur,	23-28 June 2013	Successfully completed
Research Proposal Preparation and Scientific Report Writing	BRAC-CDM, Rajendrapur	11-16 May 2013	Successfully completed
Gene Cloning and Rice Transformation	Bangladesh Rice Research Institute (BRRI), Gazipur	15-24 April 2013	Successfully completed
Post Graduate Certificate Course on Seed Technology	Bangabandhu Sheikh Mujibur Rahman Agriculture University (BSMRAU)	04.12.2011-04.03.2012	Grade - A
Foundation Training Course of NARS scientists.	Bangladesh Academy of Rural Development (BARD), Cumilla	19.09.2010-16.01.2011	Successfully completed
Rice Production Training	Bangladesh Rice Research Institute (BRRI), Gazipur	21.03.2010-19.04.2010	Distinction
Hands on Training on Application of Genetic Engineering in Crop Improvement	University of Dhaka, Dhaka	19-28 July 2009	Successfully completed
Hybrid rice development and seed production.	Bangladesh Rice Research Institute (BRRI), Gazipur	02-04 Nov 2009	Satisfactorily completed
Tissue Culture Technique & Indexing of Virus Diseases Through ELISA method	Tuber Crop Research Center (TCRC), Bangladesh Agriculture Research Institute (BARI)	16-20 Sep 2007	Satisfactorily completed

Participation in Technology Development and Transfer Activities:

i. Development of BRRI dhan103
ii. Development of BRRI dhan96
iii. Development of BRRI dhan92
iv. Development of BRRI dhan89
v. Development of BRRI dhan87
vi. Development of BRRI dhan86
vii. Development of some salt tolerant & premium quality doubled haploids rice lines through anther culture method.
viii. Development of BRRI dhan47 and some premium quality somaclone rice lines were developed through rice seed culture method.
ix. Development of advance rice lines through embryo rescue from wide hybridization.

x. One QTL (q7.1 TSH) on chromosome 7 in rice was identified for taller seedling height from a F_2 population of BR11 x Sadamota (acc. no. 1576).
xi. Development of some premium quality rice lines through seed culture and EMS treated seed.
xii. Effect of Seeding Density on Mat-Type Seedling Quality for Mechanical Transplanting in Dry Season Rice was identified.
xiii. Effect of transplanting date on growth and yield of advanced lines of transplanted Aman rice was identified.
xiv. Wide hybridization and interspecific hybrid embryo rescue technique in buckwheat.
xv. Development of sampling and staining techniques for sections (by using ultramicrotome) of interspecific hybrid embryos of buckwheat.
xvi. Development of protocol for ultrastructural embryo development of Buckwheat through TEM

Research program developed, supervised and executed:

Sl. No.	Name of Research Program	Remarks
1	Development of premium quality rice variety through anther culture	Developed, supervised and executed
2	Development of salt tolerant rice variety through anther culture.	Developed, supervised and executed
3	Development of rice variety through wide hybridization followed by embryo rescue	Developed, supervised and executed
4	Improvement of BRRI dhan47 through somclonal variation.	Developed, supervised and executed
5	Development of premium quality rice variety through somaclonal variation.	Developed, supervised and executed
6	Development of premium quality rice variety through mutation by EMS	Developed, supervised and executed
7	Development of drought tolerant rice lines through in vitro screening.	Developed, supervised and executed
8	Progeny Selection of tissue culture derived materials, OT, PYT & SYT	Developed, supervised and executed
9	Observational Traials (OT) of salt tolerant double haploid fixed lines derived from BRRI dhan28/ BRRI dhan61.	Developed, supervised and executed
10	Preliminary yield trial (PYT) of salt tolerant double haploid fixed lines derived from BRRI dhan28/ BRRI dhan61.	Developed, supervised and executed
11	Observational Trials (OT) of premium quality double haploid fixed lines derived from BRRI dhan50/ Bashful (Acc. N. 3954) in Boro 2023-24.	Developed, supervised and executed
12	Preliminary Yield Trial (PYT) of lines derived from BRRI dhan28/*O. nivara* (IRGC103821) in Boro 2022-23	Developed, supervised and executed

13	Secondary Yield Trial (SYT) of lines derived from BRRI dhan28/*O. nivara* (IRGC103821) in Boro 2023-24	Developed, supervised and executed
14	Development of BRRI dhan47 through somaclonal variation (PYT & SYT).	Developed, supervised and executed
15	Identification of QTLs for taller seedling height in rice.	Developed, supervised and executed
16	Study on tray-growing rice seedling for mechanical transplanting in the Boro season.	Developed, supervised and executed
17	Hybridization, OT to develop Transplanted Aus Rice.	Supervised and executed
18	Hybridization for the favorable ecosystem of Boro Rice using anther culture techniques	Supervised and executed
19	Progeny selection for development of photosensitive rice	Supervised and executed
20	OT of the advanced lines having the standard seedling capability.	Supervised and executed
21	Progeny Selection, OT, PYT, RYT, ALART & PVT for desirable materials.	Supervised and executed
22	Development of high yielding Aus rice variety through anther culture	Supervised and executed
23	Development of rice variety through wide hybridization followed by anther culture.	Supervised and executed
24	Development of Swarna type rice variety through anther culture	Supervised and executed
25	Identification of QTLs for salinity tolerance both at seedling and reproductive stage.	Supervised and executed
26	Identification of yield enhancement QTLs from wild rice *O. rufipogon*.	Supervised and executed
27	Diversity analysis in Aus genotypes using SSR markers.	Supervised and executed
28	Introgression of submergence tolerance gene (*sub-1*) in variety BRRI dhan44 using MAB.	Supervised and executed
29	Distinctness, Uniformity and Stability (DUS) tests for the BRRI released varieties.	Supervised and executed

List of publications:

Full Scientific Research papers in the International Journal:
as Principal Author:

i. **N. Y. Shaikh, M. A. Alam and A. K. M. S. Islam 2022.** Effect of seeding date on the tray raised seedling quality for rice transplanter in Boro season, *Journal of Science, Technology and*

Environment Informatics, vol. 11, no. 2, Page no. 764-774, EISSN: 2409-7632, Link: https://doi.org/10.18801/jstei.110222.77

ii. **N. Y. Shaikh, M. A. Alam, M. Kamruzzaman, M. A. A. Mamun and A. K. M. S. Islam 2021.** Effect of Seeding Density on Mat-Type Seedling Quality for Mechanical Transplanting in Dry Season Rice, *Agricultural Sciences,* vol. 12, no. 11, page no. 1231-1243. DOI:10.4236/as.2021.1211078

iii. **N. Y. Shaikh, L. M. Guan and T. Adachi 2002.** Ultrastructural aspects on degeneration of embryo, endosperm and suspensor cells following interspecific crosses in the genus Fagopyrum, *Breeding Science,* vol. 52, no. 3, page no. 171-176, ISSN: 1344-7610, DOI:https://doi.org/10.1270/jsbbs.52.171

iv. **N. Y. Shaikh, L. M. Guan and T. Adachi 2002.** Failure of fertilization associated with absence of zygote development in the interspecific cross of *Fagopyrum tataricum* x *F. esculentum***.** *Breeding Science,* vol. 52, no. 1, page no. 9-13, Publisher: Japanese Society of Breeding, ISSN: 1344-7610, DOI:https://doi.org/10.1270/jsbbs.52.9

v. **N. Y. Shaikh, L. M. Guan and T. Adachi 2001.** Ultrastructural analysis on breeding barriers of interspecific hybridization in genus Fagopyrum. *Kinki Journal of Crop Science and Breeding,* vol. 46, page no. 37-45, DOI**:**10.13140/RG.2.2.24254.87365

Full Scientific Research papers in the International Journal:

as Co-author:

i. **A. Sultana, N. Y. Shaikh, M. S. Zahan, M. A. Badshah, R. Akter and M. Issak 2020.** Effect of transplanting date on growth and yield of advanced lines of transplanted Aman rice. *Research in Agriculture, Livestock and Fisheries,* vol. 7, no. 1, page no. 1-7, DOI:https://doi.Org/10.3329/ralf.v7i1.46825

ii. **J. C. Malakar, K. U. Ahammed, N. Y. Shaikh, S. K. Malakar and M. A. Siddiky 2009.** Performance of broadcast aus rice + maize intercropping as affected by maize population and nitrogen level. *International Journal of Sustainable Crop Production,* vol. 4, no. 1, page no. 19-22. Link: http://www.gwf.org.bd/

iii. **J. C. Malakar, K. U. Ahammed, N. Y. Shaikh, F. Pervin and M. A. Siddiky. 2009.** Rice-Maize intercropping as affected by nitrogen fertilization. *Eco-Friendly Agriculture Journal,* vol. 2, no. 3, page no. 479-482. DOI:10.13140/RG.2.2.15027.40485

iv. **M. A. Siddiky, K. U. Ahammad, N. Y. Shaikh, J. A. Mahmud and J. C. Malakar 2009.** Yield response of mustard, boro, T.aman rice to NPKS fertilizers in High Ganges River Floodplain Soil. *Int. J. Sustain. Crop Prod.* vol. 4, no. 1, page no. 49-54, DOI: 10.13140/RG.2.2.28449.17768**;** Link: http://ggfjournals.com/assets/uploads/49-541.pdf

Scientific Research Review Papers in National Journal

as Principal Author:

i. **N. Y. Shaikh 2020.** Research, cultivation and biosafety issues of GM crops in Agricultural Development of Bangladesh, *Journal of Bangladesh Agriculture,* vol. 10, no. 1, page no. 23-34, Link: https://www.researchgate.net/publication/356790596

ii. **N. Y. Shaikh 2019.** জিনোম এডিটিং প্রযুক্তি ক্রিসপার-ক্যাস (CRISPR-CAS): কৃষি উন্নয়নে নতুন সম্ভবনা, *Journal of Bangladesh Agriculture*, vol. 9, no. 1, page no. 23-27; (ISBN 984-31-1511-6); Link:https://bdbaag.net/admin/pdf/vol9num1.pdf;https://www.researchgate.net/publication/35

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iii. **N. Y. Shaikh 2013.** Potential of Yield Enhancing Quantitative Trait Loci (QTLs) in Rice Improvement, *Journal of Bangladesh Agriculture,* vol. 5, no. 1, page no. 49-61, BAAG Link: https://bdbaag.net/admin/pdf/vol5num1.pdf ; https://bdbaag.net/index.php

iv. **N. Y. Shaikh 2011.** Crop Biotechnology: An emerging science in Bangladesh, *Journal of Bangladesh Agriculture,* vol. 4, no. 1, page no. 32- 46, BAAG, Link: https://bdbaag.net/admin/pdf/vol4num1.pdf ; Link: https://bdbaag.net/index.php

v. **N. Y. Shaikh 2010.** "কৃষি উন্নয়নে বায়োটেকনোলজির ব্যবহার ও ঝুঁকি", *Journal of Bangladesh Agriculture,* vol. 3, no. 1, page no. 61-70, BAAG, ISBN 984-31-1511-6; Link: https://bdbaag.net/admin/pdf/vol3num1.pdf ; Link: https://bdbaag.net/index.php

Full Scientific Research papers in National Journal:
as Co-Author:

i. **A. Sultana, M. S. Zahan, N. Y. Shaikh, R. Akter, M. Issak 2019.** Agroclimatic Indices of Rice (*Oryza sativa* L.) Influenced by Different Planting Times. *Bangladesh Rice J.,* vol. 23, no. 2, page no. 87-94, DOI:https://doi.org/10.3329/brj.v23i2.48251

ii. **B. Karmakar, M. A. A. Mamun, M. S. Rahman, M. A. Islam, M. R. Islam, M. H. R. Mukul, Shamsunnaher, A. Zahan, R. Barua, M. R. Biswash, S. Parveen, S. Akter, N. Y. Shaikh and B. Ahmed 2019.** Adaptation of Promising Rice Genotypes for Broadcast Aus Season. *Bangladesh Rice J.,* vol 23, no. 2, page no. 35-48, DOI:10.3329/brj.v23i2.48246

Scientific Paper in National & International Symposium/Conference Proceedings
as Principal Author:

i. **N. Y. Shaikh and M. A. Q. Shaikh 2009.** Improving quantity of quality seeds for food security: Required policy and strategic interventions. *International Conference on Plant Breeding and Seed for food security, Plant Breeding and Genetics Society of Bangladesh, BARC Auditorium, Dhaka, 10-12 March, 2009, p. 89-93.*

ii. **N. Y. Shaikh and T. Adachi 2007.** Overcoming breeding barriers of interspecific hybridization in Buckwheat: An ultrastructural analysis and future prospects. *Conference on Promotion of Biotechnology in Bangladesh: National and International Perspectives, 06-07 April, 2007, University of Dhaka, p. 128.*

iii. **N. Y. Shaikh 2007.** Importance of Interspecific Hybridization in Buckwheat: World and Bangladesh Perspectives. *7th Annual Conference, 26 May, 2007, Plant Breeding and Genetics Society of Bangladesh, p. 71.*

iv. **N. Y. Shaikh, L. M. Guan and T. Adachi 2001.** Ultrastructural analysis on breeding barriers in post-fertilization of interspecific hybrids of buckwheat. *Proceedings of 8th International Symposium on Buckwheat (Advances in Buckwheat Research), Kangwon National University, Chuncheon Campus, South Korea, p. 319-329.*

Scientific Paper in National & International Symposium/ Conference Proceedings
as Co Author:

i. **M. E. Hoque and N. Y. Shaikh 2020.** Production and marketing of tissue culture-based

planting materials of rice, *Proceedings of the Workshop on Production and marketing of tissue culture-based planting materials of High Value Crops, Crops Division, BARC, Dhaka, p. 60-64*, Link: https://www.researchgate.net/publication/357420229

ii. **M. E. Hoque, S. Sultana, J. Ferdous, N. Y. Shaikh, S. M. Hisham, R. K. Roy, M. A. Hossain and S. D. Joya 2019.** Biotechnology Division of BRRI: A center of excellence for rice biotechnological research in Bangladesh. *Abstract of the Annual Plant Tissue Culture & Biotechnology conference 2018, BAPTC & B, Dhaka, Bangladesh, 31 Aug 2019, p. 07*, Link: https://www.researchgate.net/publication/336150221

News Article:

as Principal author:

i. **N. Y. Shaikh 2013.** "কৃষিতে নারীর অবদান", *Pakkhik Shunajar*, a fortnightly magazine, vol. no. 3, p. 11-12, March 2013, Gazipur.

Leaflet as Co-author:

i. **M. E. Hoque, S. Sultana, J. Ferdous, N. Y. Shaikh, S. M. Hisham Al Rabbi, R. K. Roy, M. A. Hossain and S. D. Joya 2017.** Leaflet on BRRI dhan89, a high yielding Boro rice variety, Biotechnology Division, BRRI, Gazipur (in Bangla).

ii. **M. E. Hoque, S. Sultana, J. Ferdous, N. Y. Shaikh, S. M. Hisham Al Rabbi, R. K. Roy, M. A. Hossain and S. D. Joya 2018.** Leaflet on BRRI dhan87, a high yielding Aman rice variety, Biotechnology Division, BRRI, Gazipur (in Bangla).

iii. **M. E. Hoque, S. Sultana, J. Ferdous, N. Y. Shaikh, S. M. Hisham Al Rabbi, R. K. Roy, M. A. Hossain and S. D. Joya 2019.** Leaflet on BRRI dhan92, a low water requirement high yielding Boro rice variety, Biotechnology Division, BRRI, Gazipur (in Bangla).

iv. **M. E. Hoque, S. Sultana, J. Ferdous, N. Y. Shaikh, S. M. Hisham, R. K. Roy, M. A. Hossain and S. D. Joya 2019.** Leaflet on BRRI dhan96, a low water requirement high yielding Boro rice variety, Biotechnology Division, BRRI, Gazipur (in Bangla).

v. **Ripon Kumar Roy, M. A. Hossain, S. M. Hisham Al Rabbi, S. Sultana, J. Ferdous, N. Y. Shaikh, S. D. Joya, M. S. Rahman, M. E. Hoque, 2024.** Leaflet on BRRI dhan103, a high yielding Aman rice variety, Biotechnology Division, BRRI, Gazipur (in Bangla).

- **Poster presentation as principal author:**

i. **N. Y. Shaikh 2001**. Poster presented on research progress of PhD, Conference on Biotechnology, on October 2001 at Osaka University, Japan.

ii. **N. Y. Shaikh, 2003**. Poster Presented on research work of PhD, International Colloquium on Plant Biotechnology: Further Progress in Productive and sustainable Agriculture, 20-21 November, 2003, Osaka Prefecture University, Osaka, Japan.

- **Seminar Presentation:**

i. **N. Y. Shaikh 2018.** Development of rice variety through wide hybridization followed by embryo rescue. Thursday Seminar presented on 17 May 2018 at BRRI auditorium, Gazipur.

ii. **N. Y. Shaikh 2009.** Overcoming breeding barrier in interspecific hybridization of Buckwheat. Thursday Seminar presented on 20 Aug 2009 at BRRI auditorium, Gazipur.

- **Awarded scholarships for Higher Studies:**

i. Awarded Monobu Kagaksho Scholarship from Japan Government (Oct 2000 to March 2004) for PhD degree in Osaka Prefecture University, Osaka, Japan.
ii. Awarded One Year Rotary Yoneyama Scholarship (March 1998 to March 1999) for MSc degree in Miyazaki University, Miyazaki, Japan.

- **Membership of Professional Society**

i. Plant Breeding and Genetics Society of Bangladesh.
ii. Bangladesh Association of Plant Tissue Culture & Biotechnology.
iii. Bangladesh Bioinformatics Computational Biology Association