# Curriculum Vitae

1. Name: Dr. Quazi Shireen Akhter Jahan

2. Designation: Chief Scientific Officer & Head

3. Official Mailing Address: Plant Pathology Division, Bangladesh Rice Research Institute, Gazipur-1701

4. Phone: 02-9294117-21, ext-434; Mobile: 01855873259

   Fax: 029261110 E-mail: shireenbrri@yahoo.com

5. Academic Attainment (Only university degree – last one first):

| Degree | Year | University | Major Field |
|---|---|---|---|
| PhD | 2014 | University Putra Malaysia, Malaysia | Plant Pathology |
| M. Sc. AGr. | 2006 | The University of Sydney, Australia | Plant Pathology |
| M. S. in Plant Pathology | 1997 | Bangladesh Agricultural University, Mymensingh, Bangladesh | Plant Pathology |
| B. Sc. Ag. (Hons.) | 1992(held in 1996) | Bangladesh Agricultural University, Mymensingh, Bangladesh | Agriculture |

6. Research / Teaching Experience:$26^{+}$ Years

7. Area of Expertise: Resistant source identification from native germplasms and lines/varieties, Chemical screening for blast disease management, Bio-compost preparation and formulation, Bakanae Pathogen identification, Plant extract (active ingredient) isolation and identification for disease management, Bakanae screening methodology development, Mechanism of Bakanae disease development identification, Seed borne pathogen identification and management, Disease management through organic amendment and crop rotation.

8. Publication : (a) International Journal : 11 Nos (b) National Journal : 20 Nos.

9. List of latest publications

**Full paper:**

**Principal author (International and Peer reviewed Journal): 8**

1. **Quazi Shireen Akhter Jahan**, Ziniya Sultana, Md Asad Ud-Daula, Md Ashikuzzaman, Md Shamim Reja, Md Mahfuzur Rahman, Amina Khaton, Md Abul Kashem Tang, M Safiur Rahman, Hossain Md Faruquee, Seung Ju Lee, ATM Mijanur Rahman (2024). Optimization of green silver nanoparticles as nanofungicides for management of rice bakanae disease. Heliyon, 10(6). DOI:https://doi.org/10.1016/j.heliyon.2024.e27579.
2. SAJ Quazi, **J ferdous, HB Shozib, A Khaton, Najam Waris Zaidi (2024). Role of *Trichoderma asperelloides* and *Trichoderma brevicompactum* in improving drought tolerance in rice. Plant Stress, 12. https://doi.org/10.1016/j.stress.2024.100457**
3. **Shireen A. Jahan Quazi**, Sariah Meon , Zainal Abidin B.M. Ahmad and Hawa Jaafar (2020). Symptoms Expression of Bakanae Disease Following Seed Treatment with Phytohormone and Metabolites. Journal of Genetics and Genetic Engineering, 4 (1):18-26
4. **Shireen A. Jahan Quazi,** Sariah Meon, Hawa Jaafar and Zainal Abidin B.M. Ahmad (2020). Varietal Screening and Infection Process of Fusarium proliferatum in Rice Varieties. Res. J. Bot., 15: 6-15.
5. **S. A. J. Quazi**, M. Sariah, Zainal Abidin B. M. Ahmad, J. Hawa (2016). Detection of Fungal Metabolites from Bakanae Diseased Plants and Their Relationship with Bakanae Disease Symptoms Expression. American Journal of Bioscience and Bioengineering, 4(6): 77-89.
6. **S. A. J. Quazi, Meon S, Jaafar H and Ahmad Z.A.B.M.** (2015). The role of phytohormones in relation to bakanae disease development and symptoms expression. Physiological and Molecular Plant Pathology 90 (1-12).
7. **Quazi, S.A.J., Meon, S., Jaafar, H. and Ahmad, Z.A.B.M.** (2013). Characterization of *Fusarium proliferatum* through species specific primers and its virulence on rice seeds. International Journal of Agriculture and Biology, 15: 649–656.
8. **S. A. J. Quazi**, L. W. Burgess and J. Smith-White (2009). Sorghum is a suitable break crop to minimize *Fusarium pseudograminearum* and *Gibberella zeae* in any location regardless of climatic differences, whereas *Gibberella zeae* is location and climatic specific. Australasian Journal of Plant Pathology. Vol: 38(1):91-99.

**Co-author (International and Peer reviewed Journal): 2**

1. M Sh Islam, **QSA Jahan**, K Bunnarith, S Viangkum and SD Merca (2000). Evaluation of seed health of some rice varieties under different conditions. Botanical Bulletins and Academia Sineca, 41: 293-297.
2. Latif,M.A. and Mohd Rafii, Yusop and Haque, A. and **Jahan, QSA** and Hossain, M. A. (2011). Cost-effective management of ufra disease of rice and identification of resistant landraces, Scientific Research and Essays, 6 (13). pp. 2268-2675

**International and Local Journal:**

**Principal author: 7**

**1. S A J Quazi**, T H Ansari, S Akter, M Tuhina-Khatun MA and Monsur (2010). Influence of soil amendment with organic silicon source on blast disease development. Eco-friendly Agriculture Journal, 3(6): 266-270.
**2. S A J Quazi** and Z R Moni (2010). *Echinochloa colona* (Barnyard grass) – An alternative host of crown rot fungus *Fusarium pseudograminearum*. Eco-friendly Agriculture Journal, 3(5): 237-241.
**3. S A J Quazi**, MAT Mia, MA Monsur and M Tuhina-Khatun (2010). Evaluations for methods for sheath rot disease development in screening purposes. International Journal of Bio Research, 8(4): 51-54.
**4. S A J Quazi**, M A Ali, T H Ansari, MA Monsur and M Tuhina-Khatun (2010). Screening of suitable fungicides in controlling rice blast disease. Eco-friendly Agriculture Journal, 3(5): 261-265.
**5. S A J Quazi**, S Akter, MA Monsur and M Tuhina-Khatun (2009). Assessment of Yield loss due to Tungro in Bangladesh. Bangladesh Journal of Plant Pathology,25(1-2):37-40.
**6. QSA Jahan**, I Hossain and A Momin (1998). Effect of date of sowing on leaf blotch (*Bipolaris sorokiniana*) of wheat and its interaction on grain formation. Bangladesh Journal of Seed Science & Technology, 2(1&2): 69-76.
**7. QSA Jahan,** I Hossain and A Momin (2001). Studies on leaf blight severity of wheat under field condition and its effect on grain formation. Bangladesh Journal of Agricultural Science, 28 (1): 73-78.

**International and Local Journal:**

**Co-author: 13**

1. Latif MA , Uddin MB , Rashid MM , Hossain M , Akter S , **Jahan QSA** , Hossain MS,*, Ali MA , Hossain MA (2021) . Rice Bakanae Disease: Yield Loss and Management Issues in Bangladesh. Food Science and Technology 9(1): 7-16.
2. Parvin W, **Jahan, QSA**, Rahman, MM and Wong Y (2018). In vitro screening and optimization of IAA production from plant growth promoting Rhizobacteria Burkholderia cepacia UPMB3. Plant Tissue culture and Biotech, 28(1): 25-34.
3. Ansari, T. H., Ahmed, M., Ara, A., Khan, M.A.I., Mian, M.S**., Zahan, Q.S.A.** and Tomita, M. 2018. Yield loss assessment of rice due to bacterial blight at different resistance level. Bangladesh J. Plant Pathol. 34 (1&2): 71-76
4. Nessa B, Salam MM, Haque AHMM, Biswas JK, **Jahan QSA**, Khan MAI, Bhuiyan MR, Ara A, Munir MR Galloway J Kabir MS and Ali MA (2016). Density and Distribution of False Smut Balls on Infected Rice Panicles. Bangladesh Rice Journal 20(2): 73-79.
5. Monsur MA, Ahmed M, Haque A, **Jahan QSA**, Ansari, TH, Latif MA, Borma NCD, Ali MA, Kabir MS and Banik BR (2016). Cross Infection between rice and wheat blst pathogen Pyricularia oryzae. Bangladesh Rice Journal 20(2): 21-29.
6. S Akter, Tuhina-Khatun, TH Ansari, **QSA Jahan**, MA Begum and MAT Mia (2009). Evaluation of fungicides in controlling brown spot disease of rice. Bangladesh Journal of Plant Pathology.

7. SSParul, MS Pervin, Kobita, **QSA Jahan** and Mohibul Hasan (2009). Study in rice yield variation over 20 years time (Late '60S to Early '80S). International Journal of Bio Research, 6(5): 43-50.
8. SSParul, M Hasan, ASM Hussain, MA Haque and **QSA Jahan** (2009). Effect of different nitrogen management techniques on nitrogen content an dits use efficiency of BRRI dhan 29. International Journal of Bio Research, 7(1): 41-47.
9. M A Latif, M A Ali, S Akter, M. Hossain, **QSA Jahan**, MS Kabir, N R Sharma, M M Rahman and M A T Mia (2009). Screening of genotypes, organic amendments and antagonistic bacteria for the management of sheath blight disease of rice. Eco-friendly Agriculture Journal, 2(7): 706-712.
10. ZR Moni, MA Ali, MAI Khan, **QSA Jahan**, R Barua, MAT Mia and M Alam (2009). Rice sheath blight disease management through different source and doses of ash. International Journal of Bio Research, 7(5): 108-112.
11. SSParul, **QSA Jahan**, Mohibul Hasan and Masood Ahmed (2008). Determination of optimum nitrogen doses of BRRI Dhan 28 using leaf color chart. International Journal of Bio Research, 5(6): 1-5.
12. SSParul, **QSA Jahan**, Mohibul Hasan and Masood Ahmed (2008). Optimization of N doses against two different spad values in BRRI Dhan 28. International Journal of Bio Research, 5(5): 7-12.
13. MS Kabir, MAT Mia, **QSA Jahan**, M Ibrahim and A Shaha (2001). Quality of farmer's seed of Feni district and effect of seed cleaning methods on seed borne fungi. Bangladesh Journal of seed science and Technology, 5(1&2): 35-39.**8.**

**Short Communication (International and Peer Reviewed):**

**Principal Author: 1**

**1. S. A. J. Quazi**, L. W. Burgess and J. Smith-White (2010). Colonization type of *Gibberella zeae* in Sorghum bicolor. Journal of Plant Pathology. 92(1): 261-265.

## Paper/abstract presented in the workshop, seminar/ Proceedings (International):

**Principal Author: 13**

1. **QSA jahan,** ATM Mijanur Rahman, M Asad Ud-Daula and MM Kamal (2023). Bakanae disease management with Neem leaf extract mediated AgNP using nano technology. Abstract published in International symposium for 50 years glory and success of Bangladesh Rice Research Institute (held on 23-24 February, 2023).
2. **QSA jahan,** Amina khaton, Kamal MM, Khalequzzaman M (2023). Formulation of bacterial biopesticide and management of bakanae disease of rice in field condition. Abstract published in 5$^{th}$ International Scientific conference on Food safety and health (held on 18 Feb, 2023).

3. **Shireen Quazi** , Mijanur Rahman (2023). Bakanae disease management by application of neem leaf mediated nano technology in field condition. Paper presented at the International Rice Congress 2023 from October 16-19 in Manila, Philippines.
4. **Dr. Quazi Shireen Akhter Jahan (2021).** Identify biocontrol agents and formulation of biopesticides to control bakanae disease of rice. Paper accepted at ACSTM conference held at Deira Dubai, UAE during 20-21 November, 2021.
5. **Dr. Shireen Quazi** (2019). Management of sheath blight disease utilizing Trichocompost. Abstract published in Conference Handbook. Poster presented in Australasian Plant Pathology Society Conference 2019, 26-28 November 2019 | Melbourne.
6. **Quazi Shireen Akhter Jahan** (2018). Varietal screening and infection process of *Fusarium proliferatum* in rice varieties. Paper presented at 5th International Rice Congress – Singapore 2018.
7. **Jahan QSA (2012).** Infection process and Mechanism of pathogenesis of *Fusarium* species in relation to development of bakanae disease in rice. **(**Abstract published in "ITA Book of abstracts Second Semester", Institute of Tropical Agriculture, UPM, Malaysia.
8. **Jahan QSA (2011).** Infection process and Mechanism of pathogenesis of *Fusarium* species in relation to development of bakanae disease in rice. **(**Abstract published in "Book of abstracts" on Graduate seminar in 2011, Institute of Tropical Agriculture, UPM, Malaysia.
9. **Quazi, S (2012).** Isolation, characterization and Identification of causal pathogen of bakanae disease of rice in Malaysia. Abstract published on Program book of International Agriculture Congress 2012 held in Marriot Putrajaya, Malaysia on 4-6 September 2012.
10. **Quazi S (2010).** Rice husk ash - natural silicon content amendment for Sheath blight disease management. Poster presentation at International Rice Research Conference held on 9-11 November 2010 in Hanoi, Vietnam.
11. **Quazi, S** and Mohammed, M (2008). Assessing the effectiveness of Silicon content materials against blast disease of rice. (Abstract published in the proceedings of "4$^{th}$ international Silicon in Agriculture conference" held in Wild Coast Sun, Port Edward, Kwazulu-Natal, South Africa on 26-31 October, 2008).
12. **S. A. J. Quazi**[1], L.W. Burgess[2] and J. Smith-White ((2008), Journal of Plant Pathology, **90** (2), Supplement). Sorghum is a suitable break crop to minimize *Fusarium pseudograminearum* and *Gibberella zeae* in any location. (Abstract published in the proceedings of the 9$^{th}$ International Congress of Plant Pathology held in Torino (Italy) from August 24- August 27, 2008.
13. **S. A. J. Quazi**[1], L.W. Burgess[2] and J. Smith-White[2]. Assessment of endophytic colonization of *Sorghum bicolor* seedlings by *Gibberella zeae.* Journal of Plant Pathology (2008), **90** (3, Supplement), S3.79-S3.89 P.86. (Abstract published in the proceedings of the X International Fusarium and Fusarium Genomic Workshop 2008 held in Alghero, Sardinia (Italy) from 30 August to 2$^{nd}$ September 2008.

# Thesis:

**Co-supervisor: 2**

1. **Quazi Shireen Akhter Jahan** (2020). Management of Rice Bakanae Disease using Azadirachta indica leaf extract mediated silver nanoparticles in field condition. Co-supervisor of M.Sc. Thesis. Submitted to Faculty of Biological Science, Islamic University, Kusthia.

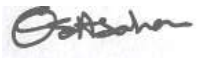
2. **Jahan QSA** (2017). Isolation and identification of *Fusarium proliferatum* from bakanae infected rice plant. The report is supervised for the fulfillment of the degree of Bachelor Science in Agriculture. At IUBAT.

**Projects (Completed):**

1. **Quazi Shireen Akhter Jahan** (2026). Studies on entomopathogenic fungi (*Metarhizium* ***anisopliae*** or other biocontrol agent*)* to control BPH as Principal Investigator funded by.FAO (new).
2. **Quazi Shireen Akhter Jahan** (2017- 2020). **Elucidate the effect of drought tolerant microbes (*Trichoderma/ Pseudomonas*) on drought responses of rice** in Bangladesh as Principal Investigator funded by EC-IFAD funded IRRI Project (Completed).
3. **Quazi Shireen Akhter Jahan** (2019-2022). Formulation of bio-pesticides to control bakanae disease of rice in field condition (Project ID-159)' funded by CRG of PIU- BARC, NATP-2 Sub-project (Completed).
4. **Quazi Shireen Akhter Jahan** (2017-2019). "Identify and Formulate Biopesticide to Control Bakanae Pathogen" (Project ID-712)' as Principal Investigator funded by CRG of PIU- BARC, NATP-2 Sub-project (Completed).
5. **Quazi Shireen Akhter Jahan** (2015-2017). PGB project on "Enhancing rice production through integrated blast and sheath blight disease management as **working scientist** funded by GOB (Completed.)

**11. Awards**

1. Chairman's Award (2nd Position), Foundation Training held in BARD, Comilla
2. Bangladesh Scholarship Council (Chartered by Govt. of Bangladesh)
3. Australian Development Scholarship for performing M.Sc.Agr. at The University of Sydney, Australia
4. NATP, PIU, BARC scholarship for performing PhD at University Putra, Malaysia.



Signature of the Researcher:
Date: 15-06-2025