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Date of birth : October 1, 1974

Specialization: Plant Bacteriology with special emphasis on *Candidatus Liberibacter asiaticus* (CLAs), Molecular Genetics of Plant Pathogenic Bacteria, Functional Genomics of Bacterial and Fungal pathogens, Population biology of Plant Pathogens, Biological Control of Plant Diseases, Mycotoxins and Mycotoxigenic fungi and Emerging Plant Diseases and Climate Change

Languages : English and Bengali (Native)

Summary of Skill and Experience

Strong academic and research background in plant bacteriology, molecular genetics of plant pathogenic bacteria, Huanglongbing of citrus and *Candidatus Liberibacter asiaticus* (CLAs), molecular diagnosis of plant pathogens, molecular characterization of citrus canker bacterium, *Xanthomonas axonopodis* pv. *citri*, population analyses of plant pathogens using molecular markers viz. late blight pathogen, *Phytophthora infestans*, bacterial wilt pathogen, *Ralstonia solanacearum*, rice bacterial blight pathogen, *Xanthomonas oryzae* pv. *oryzae*, biological control of some important plant diseases, identification and bioformulation of bacterial and fungal bioagents against some economically important plant pathogens, mustard based biofumigation against bacterial wilt pathogen, brown rot pathogen and production of brown rot free export quality potato, induced resistance in rice by plant growth promoting bacteria and detection of latent infection of mango post harvest pathogen, experienced in teaching, training and facilitator at levels ranging from local workshops to post-graduate degree courses in Bangladesh. Project and consultancy experience included project preparation, management and evaluation and formulation of plan of action. Several comprehensive studies on emerging plant diseases have also been undertaken which have included wheat blast and HLB of citrus. Collaborative works on potato late blight management is underway among Bangladesh, India and Belgium. Collaborative visits to South China Agricultural University as invited speaker on HLB in Bangladesh. Attended the the Joint International Organization of Citrus Virologists (IOCV) & International Research Conference on HLB (IRCHLB), Riverside, CA held in March 10-16, 2019 as one of the recipients of scholarship provided by Citrus Research Board, USA.

Education

Universities attended	Degrees earned	Major field of study	Dates received
University of Manitoba	Post-doctoral	Molecular Plant Pathology	1 April 2012
Gifu University	Ph.D.	Agricultural Sciences	10 September 2008
Bangladesh Agricultural University	Master of Science	Plant Pathology	4 August 2001
Bangladesh Agricultural University	B. Sc.Ag.	Agriculture	4 September 1999

Professional positions held

Professor	Department of Plant Pathology, Bangladesh Agricultural University (BAU), Mymensingh-2202, Bangladesh (27 October 2013 to date)
Associate Professor	Department of Plant Pathology, BAU, Mymensingh-2202, Bangladesh (27 October 2009 to 26 October 2013)
Assistant Professor	Department of Plant Pathology, BAU, Mymensingh-2202, Bangladesh (16 June 2005 to 26 October 2009)
Lecturer	Department of Plant Pathology, BAU, Mymensingh-2202, Bangladesh (27 October 2002 to 16 June 2005)

Courses taught, other services provided to students and the home institution

Plant Disease Epidemiology and Forecasting, Experimental Plant Pathology, Molecular Plant Pathology, Plant Bacteriology, Plant Disease Management, Plant Disease Clinic, Fundamentals of Plant Pathology, Principles of Plant Pathology and Diseases of Fruit Crops, Diseases of Fruits, Vegetables, Cash Crops and Seed Pathology (in Bachelor of Science and Master's level)

Acted as House Tutor in Sultana Razia Hall during 2003-2005

Acted as Head of the department of plant pathology during 2010-2012

Acted as Director of Professor Golam Ali Fakir Seed Pathology Centre during 2015-2017

Graduate Student Supervised

Ten PhD students (Five as Supervisor & Five as co-supervisor)	Research areas – Pathogen Diversity, Biofumigation for Bacterial Wilt Management, Molecular Characterization of <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> , Seed Pathology, Mitigation of Mango Fruit Drop, Molecular Characterization of Seed borne Bacteria, Pumpkin Yellow Mosaic Virus (Supervising Four ongoing PhD students)
Forty five MS students	Research areas – Molecular Diagnosis of <i>Candidatus Liberibacter asiaticus</i> (CLAs) and other Plant Pathogens, Genetic Diversity of Bacterial Plant Pathogens, Phenotypic Analyses of Oomycetes, Biological Control of Some Plant Diseases, Biochemical Characterization of Bacterial Wilt Pathogens, Molecular Characterization of Some Bacterial Plant Pathogens, Seed Pathology and Management of Some Important Plant Diseases (Supervising Fourteen ongoing MS students)

Research

On going

Principal Investigator, “Development of Nutrient based Innovative Technology for Improved Management of Citrus Greening disease of Sweet Orange” financed by Ministry of Education under Government of the People's Republic of Bangladesh under grant of advanced research in education (GARE), 2020-2023.

Principal Investigator, “Identification of atoxigenic *Aspergillus flavus* in controlling aflatoxins contamination in maize” (a Bangladesh Agricultural University Research System, BAURES) funded project, 2021-2022.

Completed

Principal Investigator, “Identification of novel resistant gene(s), gene pyramiding and sustainable management of bacterial blight (BB) disease of rice” funded by PIU-BARC NATP-2 (a World Bank and IFAD funded collaborative project with BRRI), 2018-2021.

Principal Investigator, “Holistic approach to control citrus greening, an emerging threat for expansion of citrus cultivation in Bangladesh” financed by Ministry of Education under Government of the People's Republic of Bangladesh under grant of advanced research in education (GARE), 2017-2020.

Principal Investigator, “Phenotypic and genotypic analyses of late blight pathogen, *Phytophthora infestans* and its biological control” financed by BAS-USDA, 2017-2020.

Principal Investigator, “Determination of seed and field health standard for Blast and BLB disease of rice” financed by BAURES, 2017-2018.

Principal Investigator, “Molecular and Phenotypic Characterization of *Xanthomonas oryzae* pv. *oryzae* races from Bangladesh” financed by International Foundation of Science (IFS), Stockholm, Sweden, 2015-2017.

Principal Investigator, “Molecular based detection of citrus greening causal organism, *Candidatus Liberibacter Asiaticus*, an emerging threat for citrus cultivation in Bangladesh”. Financed by Bangladesh University Grants Commission, 2017-2018.

Principal Investigator, “Analyses of genetic diversity of bacterial wilt pathogen, *Ralstonia solanacearum* in Bangladesh” financed by “The World Academy of Sciences (TWAS)”, Italy, 2016-2017.

Principal Investigator, “Development of rapid detection technique for brown rot pathogen, *Ralstonia solanacearum* with special emphasis on its management” financed by University Grants Commission (UGC)-Bangladesh Agricultural University Research System (BAURES), Mymensingh, Bangladesh.

Collaborator, Ecological approaches to ensuring food security: A learning platform for understanding and advancing Conservation Agriculture in Africa and Asia financed by International Development Research Centre, Canada to Dr. Martin Entz, Professor, Department of Plant Science, University of Manitoba, Canada.

Principal Investigator, “Assessment of pathotypic and genetic diversity of a rice pathogen, *Xanthomonas oryzae* pv. *oryzae* occurs in Bangladesh” financed by International Foundation of Science (IFS), Stockholm, Sweden, 2011-2014.

Principal Investigator, “Survey on the status of bacterial wilt of some selected vegetables in Bangladesh characterization of its pathogen and its integrated management” financed by University Grants Commission (UGC)-Bangladesh Agricultural University Research System (BAURES), Mymensingh, Bangladesh, 2011.

Co-Principal Investigator, “Surveillance of seedling diseases of important fruit species in Bangladesh, molecular characterization of the pathogens and developing a model with eco-friendly management” financed by Bangladesh Agricultural Research Council (BARC), Dhaka, Bangladesh, 2012-2014.

Co-Investigator, “Studies on status of tikka disease of groundnut in Bangladesh and molecular characterization of the pathogens with developing a model of biological control of the disease” financed by Ministry of National Science, Information, Communication & Technology (NSICT), Government of the People’s Republic of Bangladesh, 2010.

Publications

Book Chapters

Jannat, M., Masud, M. M., Bashar, S., Mita, M. M., Hossain, M. I., Alam, M. Z. and **Islam M. R.** Aflatoxins and fumonisins contamination of maize in Bangladesh: An emerging threat for safe food and food security. Maize-Recent Advances, Applications and New Perspectives for Crop Improvement, IntechOpen, ISBN 978-1-80355-016-9 (accepted)

Rahman MM, Masud MM, Hossain MI, Islam NT, Alam MZ, Rashid MM, Khan MAI, Latif MA, Halder KP and **Islam MR.** 2021. Potential Role of Rice Plant Growth Promoting Phylloplane and Rhizospheric Bacteria in Controlling *Xanthomonas oryzae* pv. *oryzae*, Integrative Advances in Rice Research, IntechOpen, DOI: 10.5772/intechopen.99854.

Islam, M. R., Uddin M. S., Evana, V. R., Nazmul, M. N., Islam, M. H. and Haque, M. M. and Islam, M. S. (2020). Plannt growth-promoting rhizobacteria controlling late blight pathogen, *Phytophthora infestans*. In Verma, J. K., Macdonald C., Gupta, V. K. and Podile, A. R. editors. *New and Future Developments in Microbial Biotechnology and Bioengineering: Phytomicrobiome for Sustainable Agriculture* (ISBN: 9780444643254), 1st edition. Elsevier.

Papers

Book chapter published

Jannat, M., Masud, M. M., Bashar, S., Mita, M. M., Hossain, M. I., Alam, M. Z. and **Islam M. R.** Aflatoxins and fumonisins contamination of maize in Bangladesh: An emerging threat for safe food and food security. Maize Genetic Resources - Breeding Strategies and Recent Advances, IntechOpen, ISBN 978-1-80355-016-9 (accepted)

Rahman MM, Masud MM, Hossain MI, Islam NT, Alam MZ, Rashid MM, Khan MAI, Latif MA, Halder KP and **Islam MR.** 2021. Potential Role of Rice Plant Growth Promoting Phylloplane and Rhizospheric Bacteria in Controlling *Xanthomonas oryzae* pv. *oryzae*, Integrative Advances in Rice Research, IntechOpen, DOI: 10.5772/intechopen.99854.

Islam, M. R., Uddin M. S., Evana, V. R., Nazmul, M. N., Islam, M. H. and Haque, M. M. and Islam, M. S. (2020). Plannt growth-promoting rhizobacteria controlling late blight pathogen, *Phytophthora infestans*. In Verma, J. K., Macdonald C., Gupta, V. K. and Podile, A. R. editors. *New and Future Developments in Microbial Biotechnology and Bioengineering: Phytomicrobiome for Sustainable Agriculture* (ISBN: 9780444643254), 1st edition. Elsevier.

Paper published

1. Mita, M.M.; Jannat, M.; Bashar, S.; Protic, I.A.; Saha, P.; Masud, M.M.; Islam, R.; Islam, N.B.; Alam, M.Z.; **Islam, M.R.** Potential Native Bacilli Reduce Fumonisin Contamination in Maize. *Agronomy* 2022, 12, 2608. <https://doi.org/10.3390/agronomy12112608>
2. Islam, M.H., Shanta, S.S., Hossain, M.I. *et al.* Phenotypic and Genotypic Analysis of the Population of *Phytophthora infestans* in Bangladesh Between 2014 and 2019. *Potato Res.* (2022). <https://doi.org/10.1007/s11540-022-09581-w>
3. **Islam, M. R.**; Haque, M. M.; Khatun, H.; Sarker, J.; Wang, Y.; Ke, W., et al. (2022). Huanglongbing in Bangladesh: A Pilot Study for Disease Incidence, Pathogen Detection, and its Genetic Diversity. *Journal of Citrus Pathology*, 9. <http://dx.doi.org/10.5070/C49152700> Retrieved from <https://escholarship.org/uc/item/4r1145dk>
4. Islam, M. H. ., Islam, S. ., Masud, M. M. ., Mita, M. M. ., Islam, M. S. ., & **Islam, M. R. .** (2022). Identification of potential chemical fungicides with diverse groups of active ingredient for controlling late blight of potato in Bangladesh. *Asian-Australasian Journal of Bioscience and Biotechnology*, 7(1), 23–35. <https://doi.org/10.3329/aajbb.v7i1.59386>
5. Islam, M.H.; Masud, M.M.; Jannat, M.; Hossain, M.I.; Islam, S.; Alam, M.Z.; Serneels, F.J.B.; **Islam, M.R.** 2022. Potentiality of Formulated Bioagents from Lab to Field: A Sustainable Alternative for Minimizing the Use of Chemical Fungicide in Controlling Potato Late Blight. *Sustainability* 14, 4383. <https://doi.org/10.3390/su14084383>
6. Mozumdar, U. K. ., Masud, M. M. ., Mita, M. M. ., Bashar, S. ., Hossain, M. M. ., Ashrafuzzaman, M., & **Islam, M. R. .** 2022. Screening of soybean genotypes for the source of soybean mosaic resistance. *Asian Journal of Medical and Biological Research*, 8(1), 47–62. <https://doi.org/10.3329/ajmbr.v8i1.58936>
7. Jannat, M., Masud, M. M., Bashar, S., Mita, M. M., Hossain, M. I., Alam, M. Z. and **Islam M. R.** 2022. Aflatoxins and fumonisins contamination of maize in Bangladesh: An emerging threat for safe food and food security. *Maize Genetic Resources - Breeding Strategies and Recent Advances*, IntechOpen, ISBN 978-1-80355-016-9
8. Haque, M. M., Masud, M. M., Bashar, S., Hossain, I., Alam, M. Z. and **Islam, M. R.** 2022. Avirulence gene based RFLP and rep-PCR distinguish the genetic variation of *Xanthomonas oryzae* pv. *oryzae* pathotypes in Bangladesh. *Plant Science Today*. 9(1):29–40.
9. Islam, S., Azad, M.A.K., **Islam, M.R.**, Sultana, M.S., Khatun, J.A. and Islam, M.H. (2021) Efficacy of Some Botanical Extracts on the Control of Late Blight Disease in Experimental Potato Field. *Advances in Bioscience and Biotechnology*, 12, 426-435. doi: [4236/abb.2021.1212027](https://doi.org/10.4236/abb.2021.1212027).
10. Rahman M. M., Masud, M. M., Hossain, M. I., Islam, N. T., Alam, M. Z., Rashid, M. M., Khan, M. A. I., Latif, M. A., Halder, K. P. and **Islam M. R.** Potential Role of Rice Plant Growth Promoting Phylloplane and Rhizospheric Bacteria in Controlling *Xanthomonas oryzae* pv. *oryzae*, Integrative Advances in Rice Research, Dr. Min Huang, IntechOpen, DOI: 10.5772/intechopen.99854. Available from: <https://www.intechopen.com/chapters/79152>
11. Zhu, X., Sayari, M., **Islam, M. R.** and Daayf, F. 2021. NOXA is important for *Verticillium dahliae*'s penetration ability and virulence. *J. Fungi* 7:814 <https://doi.org/10.3390/jof7100814>
12. Kabir, M., Tisha, F., Nayan, H., Islam, M., Kashem, M., Uddin, M., **Islam, M. R.** and Meah, M. (2021). Determining an effective and economic fungicide spray schedule for reducing blast of wheat. *International Journal of Agricultural Research, Innovation and Technology*, 11(1), 10–16. <https://doi.org/10.3329/ijarit.v11i1.54461>
13. Haque, M. M., Masud, M. M., Hossain, M. M., Rashid, M. M., Alam, M. Z. and **Islam, M. R.** Assessment of potentiality of known bacterial blight resistant genes against *Xanthomonas oryzae* pv. *oryzae* pathotypes exist in Bangladesh. *Archives of Agriculture and Environmental Science*, 6(3), 257-267.
14. **Islam, M. R.**, Uddin M. S., Evana, V. R., Nazmul, N., Islam, M. H. and Haque, M. M. and Islam, M. S. 2021. Plant growth-promoting rhizobacteria controlling late blight pathogen, *Phytophthora infestans*, Editor(s): Jay Prakash Verma, Catriona A. Macdonald, Vijai Kumar Gupta, Appa Rao Podile, *New and Future Developments in Microbial Biotechnology and Bioengineering*, Elsevier, 2021, Pages 105-124, ISBN 9780444643254, <https://doi.org/10.1016/B978-0-444-64325-4.00010-9>.
15. **Islam, M. R.**, Islam, M. N., Alam, M. Z., Hossain, M. M., Hussen, M. A. M. and Tipu, M. H. (2020). Chemical inducers, nutrient management, guava intercropping and insecticides can reduce Huanglongbing incidence and severity in Sweet orange. *Archives of Agriculture and Environmental Science*, 5(4): 436-446.10

16. Tipu, M. M. H., Rahman, M. M., Islam, M. M., Elahi, F., Jahan R. and **Islam M. R.** Citrus greening disease (HLB) on Citrus reticulata (Mandarin) caused by *Candidatus Liberibacter asiaticus* in Bangladesh. *Physiological and Molecular Plant Pathology*. 112: 101
17. Nahar, N., **Islam, M. R.**, Uddin, M. M., Jong, P.D., Struik, P.C. and Stomph, T. J . (2019). Disease management in eggplant nurseries also reduces wilt and rot in subsequent plantings: A participatory testing in Bangladesh. *Crop Protection*. 120: 113-124.
18. **Islam, M. R.**, Islam, N. E. T., Juthy, P. S., Haque, M. M., Rahman, M. M. 2019. Identification of plant growth promoting antagonistic bacteria against *Xanthomonas oryzae oryzae* in Bangladesh. *Fundamental and Applied Agriculture*. 4(4):1068-1080.
19. Mondal, S., Hossien, M.E., Akter, M. A., Haque, M. M., Ali, M.A., **Islam, M. R.** Survival and transmission of *Xanthomonas oryzae* pv. *oryzae* in rice seeds. *Fundamental and Applied Agriculture*. 4(1): 680–68
20. Muhtarima, J., Tumpa, F. H., **Islam, M. R.** and Khokon, M. A. R. 2018. Pathogenic variability of Colletotrichum sp. from chilli anthracnose and their tolerance to carbendazim: Pathogenic variability of Colletotrichum sp. *Journal of the Bangladesh Agricultural University*, 16(3), 417–423
21. Nahar, N., **Islam, M.R.**, Uddin M. M., de Jong, P., Struik P.C. and Stomph, T.J. 2018. Reducing damping-off problems in eggplant (*Solanum melongena* L.): A participatory testing of nursery management in Bangladesh. *Crop Protection*, 112:177-186.
22. Wang Y, Lu, J, Beattie GAC, **Islam MR**, Om N, Dao HT, Van Nguyen L, Zaka SM, Guo J, Tian M, Deng X, Tan S, Holford P., He Yurong and Cen Y. 2018. Phylogeography of *Diaphorina citri* (Hemiptera: Liviidae) and its primary endosymbiont, ‘*Candidatus Carsonella ruddii*’: an evolutionary approach to host endosymbiont interaction. *Pest Manag Sci*. 2018 Mar 25. doi: 10.1002/ps.4917.
23. Sultana, A., Alam, M. Z., **Islam, M. R.**, Tumpa, F. H. and Khokon, M. A. R. PCR-based identification of some native *Bacillus subtilis* isolates and evaluation of its in-vitro growth suppression ability against *Magnaporthe oryzae*. *Bangladesh J. Plant Pathol*. 34 (1&2): 5- 14
24. Monira, U. S., Ali, M. A. and Islam, M. R. 2018. Management of *Bipolaris oryzae* on hybrid rice seeds treated with Vitaflo 200FF. *Int. J. Bus. Soc. Sci. Res.* 6(3): 40-44. Retrieve from <http://www.ijbssr.com/currentissueview/14013277>
25. Sultana, N., Mondal, C., Hossain, M., Khokon, M. and **Islam, M.R.** Effect of fermented tea extract in controlling brown spot and narrow brown spot of rice. *Bangladesh Journal of Agricultural Research*, 42(4), 621–629. <https://doi.org/10.3329/bjar.v42i4.35790>
26. **Islam, M. R.**, Uddin, M. N. and Tipu, M. M. H. 2018. Molecular based identification and formulation of cyanogenic *Pseudomonas* spp. controlling *Phytophthora infestans*. *International Symposium on Innovative Crop Protection for Sustainable Agriculture*, Gifu University, Japan
27. Zhu, X., Soliman, A., **Islam, M. R.**, Adam, L.R. and Daayf, F. 2017. *Verticillium dahliae*'s Isochorismatase Hydrolase Is a Virulence Factor That Contributes to Interference With Potato's Salicylate and Jasmonate Defense Signaling. *Front. Plant Sci.* 8:399. doi: 10.3389/fpls.2017.00399
28. **Tsuyumu**, S., Fujikawa, T., Yamazaki, A., Okude, S., **Islam, M. R.**, Ishiyama, Y., Matsukura, A., Umekawa, S., Kimura, S. and Hirata, H. Pathogenicity determinants of *Xanthomonas axonopodiscitri*, causative agent of citrus canker. *Genome-Enabled analysis of Plant-Pathogen interactions*, ISBN: 978-0-89054-498
29. M.H. Tipu, **Islam, M.R.** and Azmatullah, M. 2017. *Candidatus Liberibacter asiaticus* causing citrus Huanglongbing on Citrus sinensis in Bangladesh. *Journal of Plant Pathology* (2017), 99 (1), 287-304
30. Islam A. B. M.M., Rahman, J. R., Nihad, S.A.I., Akter, R. , Dilzahan, H.A., Islam, M.Z., Bhuiyan, M.R., Kabir, M.H., Rashid, M.M., **Islam, M.R.**, Latif, M.A. and Khan, M.A. I. 2017. Evaluation of indigenous rice germplasm for identification of durable bacterial blight (*Xanthomonas oryzae oryzae*) resistance sources in Bangladesh. *The Experiment*, 43 (3): 2495-2515
31. **Islam, M. R.** Alam, M. S., Khan, M. A. I., Hossain, I., Adam, L. R. and Daayf, F. (2016) Analyses of genetic diversity of bacterial blight pathogen, *Xanthomonas oryzae oryzae* using IS1112 in Bangladesh. *Comptes Rendus Biologies*. 339 (9-10): 399 -407
32. Alam, M. S. **Islam, M. R.** Hossain, I., Bhuiyan, M. R. & Khan, M.A.I. (2016) Pathotypic variation of *Xanthomonas oryzae* pv. *oryzae* in Bangladesh. *Archives of Phytopathology and Plant Protection* <http://dx.doi.org/10.1080/03235408.2016.1150633>
33. Sarker, S. R., **Islam, M. R.** and Hossain, I. 2016. Prevalence and Eco-Friendly Management of Some Important Nursery Diseases of Mango in Bangladesh. *Journal of Agricultural Science*, 8:205-220

34. [Nishat](#) , Hamim, I., Khalil , M. R., Ali, M. A., Hossain, M. A., Meah, M. B., **Islam, M. R.** (2015). Genetic diversity of the bacterial wilt pathogen *Ralstonia solanacearum* using a RAPD marker. [Comptes Rendus Biologies](#). 338 (11): 757-767.
35. Elhadrami A, **Islam MR**, Adam L and Daayf F. (2015) A cupin domaincontaining protein with a quercetinase activity (VdQase) regulates *Verticillium dahliae*'s pathogenicity and contributes to counteracting host defenses. *Plant Sci.* 6:440. doi:10.3389/fpls.2015.00440
36. Zhen, Y., **Islam, M. R.**, Badawi, M. A., El-Bebany, A. F. and Daayf, F. (2015): Overexpression of *StRbohA* in *Arabidopsis thaliana* enhances defence responses against *Verticillium dahliae*. *Physiological and Molecular Plant Pathology*, 90:105-114.
37. Alkher, H., **Islam M. R.**, Wijekoon, M., Kalischuk, M., Kawchuk, Peters, R. D., Al-Mughrabi, K. I., Conn, K. L., Dobinson, K. F. Waterer, D., Daayf, F. 2015. Characterization of *Phytophthora infestans* populations in Canada during 2012. *Canadian Journal of Plant Pathology*, <http://dx.doi.org/10.1080/07060661.2015.1053987>
38. **Islam, M. R.**, Alkher, M. Bezzahou, C. Godee, L. R. Adam, L. M. Kawchuk, K. F. Dobinson et al. 2014. Diversity in population structure of the late blight pathogen, *Phytophthora infestans*, in Manitoba. *Canadian Journal of Plant Pathology*, 36: (2), 267-267.
39. Afrose, S., Hossain, I., **Islam, M. R.**, Hossain, M. D., Khan, M. A. H. (2014): RAPD analyses reveals the genetic diversity of the litchi leaf blight pathogen, *Pseudomonas syringae syringae* in Bangladesh. *Current Research in Microbiology and Biotechnology*, 2:301-309.
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62. **Islam, M. R.** Regulatory mechanisms of pathogenicity-related genes in *Xanthomonas oryzae* pv. *oryzae*. PhD dissertation. <https://ci.nii.ac.jp/naid/500000518313>
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Conference Papers presented

Islam, M. R., Md. Huzzatul Islam, Cooke, D.E. and Fry W.E. Phenotypic and genotypic analyses of late blight pathogen, *Phytophthora infestans* in Bangladesh. 3rd Asiabligh International Meeting, Beijing, China, 25-27 October 2019.

Islam, M. R., Haque, M. M., Khatun, H., Sarkar, J., Wang Y., Weizhang, K., Zheng, Z., Cen, Y. and Xiaoling, D. Huanglongbing in Bangladesh: Status, pathogen detection and its diversity. 21st Joint Conference of the International Organization of Citrus Virologist (IOCV) and International Conference of Huanglongbing (IRCHLB), March 10-15, 2019 Riverside Convention Centre, Riverside, USA.

Wang, Y., Lu, J., Beattie, G.A.C., **Islam, M. R.**, Holford, P., He, Yurong and Cen, Y. Phylogeography of *Diaphornia citri* and its primary endosymbiont, *Candidatus carsonella ruddii*: an evolutionary approach to host-endosymbiont. 21st Joint Conference of the International Organization of Citrus Virologist (IOCV) and International Conference of Huanglongbing (IRCHLB), March 10-15, 2019 Riverside Convention Centre, Riverside, USA.

Tipu, M. M. H., Azmatullah M and **Islam M. R.** Mystery unraveled: Citrus Greening Causal Organism, *Candidatus Liberibacter asiaticus* Detected in Bangladeshi Sweet Orange. 7th International Seminar of Regional Network on Poverty Eradication, Held in Bangladesh Agricultural University, Mymensingh, Bangladesh, November 13-15 2016.

Islam, M. R., Hossain, M. M., Hossain, M.M, Haque, M. M and Hossain, M. I Development of PCR based rapid detection technique for brown rot pathogen and management approaches for production of export quality potatoes. 7th International Seminar of Regional Network on Poverty Eradication, Held in Bangladesh Agricultural University, Mymensingh, Bangladesh, November 13-15 2016.

Islam M. R., Hadrami A. EI , Adam L. R., Dobinson K. F., Bezzahou M. and Daayf F. A cupin domain containing protein (*VdQase*) is required for optimum virulence in *Verticillium dahliae*. The 84th Annual Meeting of Canadian Phytopathological Society (CPS), June 16-19, 2013, Edmonton, AB, Canada.

Islam M. R., Alkher H., Bezzahou M., Godde C., Adam L. R. Kawchuk L. M., Dobinson K. F., Conn K., Peters R. D., Al-Mughrabi K. I., Shinnars-Carnelley T. and Daayf, F. Diversity in population structure of the late blight pathogen, *Phytophthora infestans*, in Manitoba (Poster). The 84th Annual Meeting of Canadian Phytopathological Society (CPS), June 16-19, 2013, Edmonton, AB, Canada.

Islam M. R. Regulatory mechanisms of pathogenicity-related genes in *Xanthomonas oryzae* pv. *oryzae*. Advanced Plant Science Seminar, October 25, 2012, Department of Plant Science, University of Manitoba, Winnipeg, Canada.

Alkher, H., Kawchuk, L.M., Adam, L. R., **Islam, M. R.**, Dobinson, K. F., Conn, K., Peters R. D., Al-Mughrabi, K. I., Daayf, F. Pathogenic diversity of Manitoba isolates of *Phytophthora infestans* on potato and tomato, Annual meeting of the *Canadian Phytopathological Society*, June 24-27, 2012, Niagara Falls, Ontario, Canada.

Islam M.R., Hirata H. and Tsuyumu S. A leucine-rich protein is a new regulator of *hrp* genes in *Xanthomonas oryzae* pv. *oryzae*. 4th International conference for the development of Integrated Pest Management (IPM) in Asia and Africa, January 20-22, 2011, Bangladesh Agricultural University, Mymensingh, Bangladesh.

Islam M. R., Hirata H., Tsuge, S. and Tsuyumu, S. A Pathogenicity-related gene in *Xanthomonas oryzae* pv. *oryzae*. Annual Meeting of the Phytopathological Society of Japan, April 26-28, 2008, Matsue, Shimane, Japan.

Membership and Activities in Professional Organizations

Membership

Member	Regional representative and member, Scientific Committee, AsiaBlight (2021-2023)
Member	Canadian Phytopathological Society (2013)
Life member	Bangladesh Phytopathological Society (BPS)
Life member	Bangladesh Seed Science Society and
Member	Phytopathological Society of Japan (PSJ)

Professional honors, awards and fellowships

- Received Scholarship from Citrus Research Board, California, USA in 2019
- Received International Foundation for Science (IFS) grant in 2011 and 2015
- Received The World Academy of Sciences (TWAS) research grant in 2016
- Received post-doctoral research fellowship in University of Manitoba, Canada from Federal and Provincial grant 2012-2014.
- Granted Japanese Government (MONBUKAGAKUSHO) Fellowship (2005-2008) for Ph.D. study
- Obtained National Science and Technology (NST) Fellowship (2000-2001) for MS study
- Board Scholarship (General) for securing good marks in Higher Secondary School Certificate (H.S.C) examination (1991)
- Board Scholarship (General) for securing good marks in Secondary School Certificate (S.S.C) examination (1989)

Consultancy

Have long been involved with a number of community services- Help and donation to poor and flood victim people, Networking and free consultancy in Community based Sweet orange farming and mitigation of HLB problem all over the country, Help growers in diagnosis the plant health problems and give prescription, Assisting newly recruited teachers in BAU in overseas communication, manuscript and research proposal writing for higher study and training, Served as consultant with British American Tobacco Bangladesh (BATB) on “Field management of bacterial wilt and potato virus Y (PVY) in Tobacco and worked with Agriconcern Bangladesh in producing brown rot free export quality potatoes.