# Curriculum Vitae of Dr. Mohammad Shah Jahan

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## Area of Research Interest

- Exploring the novel mechanism regarding to abiotic stresses at the physiological and molecular levels
- Stress physiology and phytoremediation
- Integrated high throughput techniques
- Protected Horticulture

**Research (online ID)**

Scopus ID. **https://www.scopus.com/authid/detail.uri?authorId=57208283155**
Web of Science Researcher ID: **https://www.webofscience.com/wos/author/record/L-4513-2019**
Google scholar ID. **https://scholar.google.com/citations?user=nJSBwTwAAAAJ&hl=en**
ResearchGate ID: **https://www.researchgate.net/profile/Mohammad-Shah-Jahan-2**
Institutional ID: **http://www.sau.edu.bd/teacher/183**

## Research/Employment History

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|---|---|
| **May 2022- Current** | **Associate Professor,** Department of Horticulture, Sher-e-Bangla Agricultural University (SAU), Dhaka, Bangladesh |
| **July 2023-** | **Postdoc Researcher,** College of Agriculture, Guangxi University, Nanning, China |
| **May 2015-May 2022** | **Assistant Professor,** Department of Horticulture, Sher-e-Bangla Agricultural University (SAU), Dhaka, Bangladesh |
| **September 2017-June 2021** | **Research Associate,** Lab of Protected Horticulture, Nanjing Agricultural University, Jiangsu, China |
| **May 2013-May 2015** | **Lecturer,** Department of Horticulture, Sher-e-Bangla Agricultural University (SAU), Dhaka, Bangladesh |

## Education

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|---|---|
| **Sep. 2017-Dec. 2021** | **Doctor of Philosophy (PhD) in Vegetable Science (Stress physiology and molecular biology),** Nanjing Agricultural University, Jiangsu, China |
| **Jan. 2009-Dec. 2011** | **Master of Science (MS) in Horticulture,** Sher-e-Bangla Agricultural University (SAU), Dhaka, Bangladesh |
| **Jan. 2005-Dec. 2008** | **Bachelor of Science (B.Sc.) in Agricultural Sciences,** Sher-e-Bangla Agricultural University (SAU), Dhaka, Bangladesh |

## Publications

### Year-2024

66. Chen J, Wu W, Gao S, **Jahan MS,** Xiao J, Guo T, Chen C, Li B, Luo C, He X, Xie F. Integrated transcriptome and metabolome analyses reveal anthocyanin biosynthesis in red and green mango pericarps under light and shade conditions. **Scientia Horticulturae**. 2024, 1; 338:113617.
65. Jabborova D, Davranov K, Jabbarov Z, Enakiev Y, Abdrakhmanov T, Datta R, Singh S, **Jahan MS,** Ercisli S, Singh N. Impact of Growth-Promoting Endophytic Bacteria on Ginger Plant Growth. **Indian Journal of Microbiology**, 2024, 21:1-0.

64. **Jahan MS**, Yang YJ, Althaqafi MM, Alharbi BM, Wu HH, Zhou XB. Melatonin mitigates drought stress by increasing sucrose synthesis and suppressing abscisic acid biosynthesis in tomato seedlings. **Physiologia Plantarum,** 2024 176(4), e14457.
63. **Jahan MS**, Huang Y, Qin NM, Wu HH, Zhou XB. Exogenous application of melatonin attenuates waterlogging stress through adopting quiescence adaptation technique in tomato seedlings. **Environmental and Experimental Botany**, 2024:105855.
62. **Jahan MS**, Hasan MM, Rahman MA. Hormones and biostimulants in plants: physiological and molecular insights on plant stress responses. **Frontiers in Plant Science**. 2024, 15:1413659.
61. He M, **Jahan MS**[#*], Khalil HB, Wang Y, Sun J, Shu S, Guo S. BAG2 and MAPK2 regulate differently on different periods of heat-induced programmed cell death in tomato. **Scientia Horticulturae**. 2024, 327:112815. **(# Co-first author and * corresponding author)**
60. Jiang S, Guo J, Khan I, **Jahan MS**, Tang K, Li G, Yang X, Fu M. Comparative metabolome and transcriptome analyses reveal the regulatory mechanism of purple leafstalk production in taro (*Colocasia esculenta* L. Schott). **Genes**. 2024, 22;15(1):138.

## Year-2023

59. Wang GY, Ahmad S, Wang Y, Wang BW, Huang JH, **Jahan MS**, Zhou XB, Shi CQ. Multivariate analysis compares and evaluates drought and flooding tolerances of maize germplasm. **Plant Physiology**. 2023, 30:kiad317.
58. **Jahan MS**, Li G, Xie D, Farag R, Hasan MM, Alabdallah NM, Al-Harbi NA, Al-Qahtani SM, Zeeshan M, Nasar J, Altaf MA. Melatonin mitigates salt-induced growth inhibition through the regulation of carbohydrate and nitrogen metabolism in tomato seedlings. **Journal of Soil Science and Plant Nutrition**. 2023, 23(3):4290-308.
57. **Jahan MS**, Zhao CJ, Shi LB, Liang XR, Jabborova D, Nasar J, Zhou XB. Physiological mechanism of melatonin attenuating to osmotic stress tolerance in soybean seedlings. **Frontiers in Plant Science**. 2023;14.
56. Fu M[#], **Jahan MS#**, Tang K, Jiang S, Guo J, Luo S, Luo W, Li G. Comparative analysis of the medicinal and nutritional components of different varieties of *Pueraria thomsonii* and *Pueraria lobata*. **Frontiers in Plant Science**. 2023, 29;14:1115782. **(# Co-first author)**
55. Hasan MM, Rahman MA, Corpas FJ, Rahman MM, **Jahan MS**, Liu XD, Ghimire S, Alabdallah NM, Wassem M, Alharbi BM, Raza A. Salt stress tolerance in rice (*Oryza sativa* L.): A proteomic overview of recent advances and future prospects. **Plant Stress**. 2023, 23:100307.
54. Rahman MA, Song Y, Hasan MM, **Jahan MS**, Siddiqui MH, Park HS, Lee SH, Singh D, Corpas FJ, Kabir AH, Lee KW. Mechanistic Basis of Silicon Mediated Cold Stress Tolerance in Alfalfa (*Medicago sativa* L.). **Silicon**. 2023, 6:1-3.
53. Saqib M, Shahzad U, Zulfiqar F, Tiwari RK, Lal MK, Naz S, **Jahan MS**, Awan ZA, El-Sheikh MA, Altaf MA. Exogenous melatonin alleviates cadmium-induced inhibition of growth and photosynthesis through upregulating antioxidant defense system in strawberry. **South African Journal of Botany**. 2023, 157:10-8.
52. Peng C, Shu S, Wang Y, Du J, Shi L, **Jahan MS**, Guo S. Transcriptome analysis of the regulatory mechanism of exogenous spermidine in high temperature stress resistance of tomato seedlings. **Agronomy**. 2023, 17;13(2):285.
51. Zeeshan M, Hu YX, Guo XH, Sun CY, Salam A, Ahmad S, Muhammad I, Nasar J, **Jahan MS**, Fahad S, Zhou XB. Physiological and transcriptomic study reveal SeNPs-mediated AsIII stress detoxification mechanisms involved modulation of antioxidants, metal transporters, and transcription factors in *Glycine max* L.(Merr.) roots. **Environmental Pollution**. 2023, 15;317:120637.
50. Du N, Xue L, Xue D, Dong X, Yang Q, **Jahan MS**, Guo H, Fu R, Wang Y, Piao F. The transcription factor SlNAP1 increases salt tolerance by modulating ion homeostasis and ROS metabolism in *Solanum lycopersicum*. **Gene**. 2023, 15;849:146906.
49. Akter A, **Jahan MS**, Geng X, Mwalupaso GE, Hoque F, Adeel A. Building smallholder farmers' capacity to adopt climate-smart agricultural practices in flood prone areas: Lessons from Bangladesh. **Review of Development Economics**. 2023.1-30.
48. Akter A, Mwalupaso GE, Wang S, **Jahan MS**, Geng X. Towards climate action at farm-level: Distinguishing complements and substitutes among climate-smart agricultural practices (CSAPs) in flood prone areas. **Climate Risk Management**. 2023, 1;40:100491.

## Year-2022

47. **Jahan MS**, Hasan MM, Alotaibi FS, Alabdallah NM, Alharbi BM, Ramadan KMA, Bendary ESA, Alshehri D, Jabborova D, Al-Balawi DA, Guo S. Exogenous putrescine increases heat tolerance in tomato seedlings by regulating chlorophyll metabolism and enhancing antioxidant defense efficiency. **Plants**, 2022, 11, 1038.
46. Raziq A, Din AM, Anwar S, Wang Y, **Jahan MS**, He M, Ling CG, Sun J, Shu S, Guo S. Exogenous spermidine modulates polyamine metabolism and improves stress responsive mechanisms to protect tomato seedlings against salt stress. **Plant Physiology and Biochemistry**. 2022, 15;187:1-0.
45. Wu J, Zhu M, Liu W, **Jahan MS**, Gu Q, Shu S, Sun J, Guo S. CsPAO2 Improves salt tolerance of cucumber through the interaction with cspsa3 by affecting photosynthesis and polyamine conversion. **International Journal of Molecular Sciences**. 2022, 17;23(20):12413.
44. Mahmood H, Cai J, Zhou Q, Wang X, Samo A, Huang M, Dai T, **Jahan MS**, Jiang D. Optimizing nitrogen and seed rate combination for improving grain yield and nitrogen uptake efficiency in winter wheat. **Plants,** 2022, 11(13):1745.
43. Hasan MM, Alabdallah NM, Salih AM, Al-Shammari AS, ALZahrani SS, Al Lawati AH, **Jahan MS**, Rahman MA, Fang XW. Modification of starch content and its management strategies in plants in response to drought and salinity: current status and future prospects. **Journal of Soil Science and Plant Nutrition**. 2023, 23(1):92-105.
42. Nasar J, Wang GY, Zhou FJ, Gitari H, Zhou XB, Tabl KM, Hasan ME, Ali H, Waqas MM, Ali I, **Jahan MS**. Nitrogen fertilization coupled with foliar application of iron and molybdenum improves shade tolerance of soybean under maize-soybean intercropping. **Frontiers in Plant Science**. 2022, 4;13:1014640.
41. Zhou Y, Sang T, Tian M, **Jahan MS**, Wang J, Li X, Guo S, Liu H, Wang Y, Shu S. Effects of bacillus cereus on photosynthesis and antioxidant metabolism of cucumber seedlings under salt stress. **Horticulturae,** 2022, 20;8(5):463.
40. Mamarasulov B, Davranov K, **Jahan MS**, Jabborova D, Nasif O, Ansari MJ, Danish S, Datta R. Characterization, enzymatic and biochemical properties of endophytic bacterial strains of the medicinal plant *Ajuga turkestanica* (Rgl.) Brig (Lamiaceae). **Journal of King Saud University-Science**, 2022, 18:102183.
39. Hasan MM, Liu X, Waseem M, Guang-Qian Y, Nadiyah MA, **Jahan MS**, Fang FW. ABA activated SnRK2 kinases: an emerging role in plant growth and physiology**. Plant Signaling & Behavior**, 2022, 17:1, 2071024
38. Han S, Shu S, Wang Y, **Jahan MS**, Sun J, Guo S. Cytokinin plays a critical role in bitter gourd rootstock-induced thermotolerance of cucumber. **Vegetable Research**, 2022, 1: 4
37. Wang Y, Liu H, Lin W, **Jahan MS**, Wang J, Sun J, Jiang J, Gu W, Zou J, Shu S, Guo S. Foliar application of a mixture of putrescine, melatonin, proline, and potassium fulvic acid alleviates high temperature stress of cucumber plants grown in the greenhouse. **Technology in Horticulture**. 2022;2(1):1-0.
36. Song J, Chen Z, Zhang A, Wang M, **Jahan MS**, Wen Y. The positive effects of increased light intensity on growth and photosynthetic performance of tomato seedlings in relation to night temperature level. **Agronomy,** 2022, *12*, 343.
35. Altaf MA, Shahid R, Ren MX, Naz S, Altaf MM, Khan LU, Tiwari RK, Lal MK, Shahid MA, Kumar R, **Jahan MS**. melatonin improves drought stress tolerance of tomato by modulation plant growth, root architecture, photosynthesis, and antioxidant defense system. **Antioxidants**, 2022, 11, 309.
34. Hayat F, Sun Z, Ni Z, Iqbal S, Xu W, Gao Z, Qiao, Tufail MA, **Jahan MS**, Khan U. Exogenous melatonin improves cold tolerance of strawberry (*Fragaria x ananassa* Duch.) through modulation of DREB/CBF-COR pathway and antioxidant defense system. **Horticulturae, 2022**, 8, 194

## Year- 2021

33. **Jahan MS**, Shu S, Wang Y, Hasan MM, Ahmed AE, Nadiyah MA, Dina H, Altaf MA, Sun J, Guo S. Melatonin pretreatment confers heat tolerance and repression of heat-induced senescence in tomato through the modulation of ABA-and GA-mediated pathways. **Frontier in Plant Science**, 2021, 12(381): 650955.
32. **Jahan MS,** Guo S, Sun J, Shu S, Wang Y, Ahmed AE, Nadiyah MA, Hikal M, Mostafa HMM, Hasan MM. Melatonin-mediated photosynthetic performance of tomato seedlings under high-temperature stress. **Plant Physiology and Biochemistry**, 2021, 167 (2021):309-320.
31. **Jahan MS**, Shi Z, Zhong M, Zhang Y, Zhou R, Mohamed ME, Sun J, Shu S, Guo S, Wang Y. Comparative transcriptome analysis reveals gene network regulation of TGase-induced thermotolerance in tomato. **Notulae Botanicae Horti Agrobotanici Cluj-Napoca**, 2021, 49 (1): 12208-12208
30. Wu J, Liu W, **Jahan MS**, Shu S, Sun J, Guo S. Characterization of polyamine oxidase genes in cucumber and roles of $CsPAO_3$ in response to salt stress. **Environmental and Experimental Botany**. 2022, 1;194:104696.
29. Ma S, Zhou X, **Jahan MS**, Guo S, Tian M, Zhou R, Liu H, Feng B, Shu S. Putrescine regulates stomatal opening of cucumber leaves under salt stress via the $H_2O_2$-mediated signaling pathway. **Plant Physiology and Biochemistry**. 2022, 1;170:87-97.

28. Chen J, Wang W, **Jahan MS**, Guo S, Sun J, Shu S. Improvement effects of conditioners on properties of acidified-salinized soils and lettuce growth. **Journal of Plant Nutrition**, 2021, 1-15.
27. Altaf MA, Shahid R, Ren MX, Khan LU, Altaf MM, **Jahan MS,** Nawaz MA, Naz S, Shahid S, Lal MK, Tiwari RK. Protective mechanisms of melatonin against vanadium phytotoxicity in tomato seedlings: insights into nutritional status, photosynthesis, root architecture system, and antioxidant machinery. **Journal of Plant Growth Regulation**, 2021, 12:1-7
26. Zhu H, He M, **Jahan MS**, Wu J, Gu Q, Shu S, Sun J, Guo S. CsCDPK6, a CsSAMS1-Interacting protein, affects polyamine/ethylene biosynthesis in cucumber and enhances salt tolerance by Overexpression in Tobacco **International Journal of Molecular Science,** 2021, 22, 11133
25. Hasan M, Alabdallah NM, Alharbi BM, Waseem M, Yao G, Liu XD, El-Gawad A, Hany G, El-Yazied AA, Ibrahim MF, **Jahan MS**. GABA: A key player in drought stress resistance in plants. **International Journal of Molecular Sciences**. 2021, 22(18):10136.
24. Zhou R, Wang Y, Tian M, **Jahan MS**, Shu S, Sun J, Li P, Ahammed GA, Guo S. Mixing of biochar, vinegar and mushroom residues regulates soil microbial community and increases cucumber yield under continuous cropping regime. **Applied Soil Ecology**,2021, 161 (2021): 103883.
23. Altaf MA, Shahid R, Ren MX, Altaf MM, **Jahan MS**, Khan LU. Melatonin mitigates nickel toxicity by improving nutrient uptake fluxes, root architecture system, photosynthesis, and antioxidant potential in tomato seedling. 2021. **Journal of Soil Science and Plant Nutrition**. 1-14.
22. Altaf MA, Shahid R, Ren MX, Altaf MM, Khan LU, Shahid S, **Jahan MS**. Melatonin alleviates salt damage in tomato seedling: A root architecture system, photosynthetic capacity, ion homeostasis, and antioxidant enzymes analysis. **Scientia Horticulturae** 285 (2021) 110145.
21. Liu W, Chen G, Chen J, **Jahan MS**, Guo S, Wang Y, Sun J. Overexpression of 7-hydroxymethyl Chlorophyll a Reductase from cucumber in tobacco accelerates dark-Induced chlorophyll degradation. **Plants** 2021, 10, 1820.
20. He M, Wang Y, **Jahan MS**, Liu W, Raziq A, Sun J, Shu S, Guo S. Characterization of *SlBAG* genes from *Solanum lycopersicum* and its function in response to dark-induced leaf senescence. 2021, **Plants** 10(5):947
19. Hasan MM, Rahman MA, Skalicky M, Alabdallah NM, Waseem M, **Jahan MS,** Ahammed GJ, El-Mogy MM, El-Yazied AA, Ibrahim MFM, Fang XW. Ozone induced stomatal regulations, MAPK and phytohormone signaling in plants. **International Journal of Molecular Science**, 2021, 22, 6304.
18. Hasan MM, Skalicky M, **Jahan MS,** Hossain MN, Anwar Z, Zhengfei N, Alabdallah NM, Brestic M, Hejnak V, Fang XW. Spermine: Its emerging role in regulating drought stress responses in plants. **Cells** 2021, 10, 261.
17. Hasan MM, Alharbi BM, Alhaithloul HAS, Abdulmajeed AM, Alghanem SM, Al-Mushhin AAM, **Jahan MS**, Corpas FJ, Fang XW, Soliman MH, Spermine-mediated tolerance to selenium toxicity in wheat (*Triticum aestivum* l.) depends on endogenous nitric oxide synthesis. **Antioxidants**, 2021, 10, 1835.
16. Elkelish A, El-Mogy MM, Niedbała G, Piekutowska M, Atia MAM, Hamada MMA, Shahin M, Mukherjee S, El-Yazied AA, Shebl M, **Jahan MS**, et al. Roles of exogenous lipoic acid and cysteine in mitigation of drought stress and restoration of grain quality in wheat. **Plants** 2021, 10, 2318.

## Year-2020

15. Zhang Y, Wang Y, Wen W, Shi Z, Gu Q, Ahammed GJ, Cao K, **Jahan MS**, Shu S, Wang J, Sun J, Guo S. Hydrogen peroxide mediates spermidine-induced autophagy to alleviate salt stress in cucumber. **Autophagy**. 2020, 1-15.
14. He M[#], **Jahan MS[#]**, Wang Y, Sun J, Shu S, Guo S. Compost amendments based on vinegar residue promote tomato growth and suppress bacterial wilt caused by *Ralstonia Solanacearum*. **Pathogens,** 2020, 9, 227 **(# Co-first author)**
13. Liu XY, Zheng C, **Jahan MS**, Wen Y, Yao X, Ding H, Guo S, Xu Z. RNA-Seq analysis reveals growth and photosynthetic responses of rapeseed (*Brassica napus* L.) under Red and Blue LEDs with supplemental Yellow, Green or White Light. **Horticulture Research**, 2020, 7 (1): 1-13.
12. Tao M, **Jahan MS**, Hou K, Shu S, Wang Y, Sun J, Guo S. Bitter melon (*Momordica charantia* L.) rootstock improves the heat tolerance of cucumber by regulating photosynthetic and antioxidant defense pathways. **Plants**, 2020, 9, 692
11. Chen Z, **Jahan MS**, Mao P, Wang M, Liu XY, Guo S. Functional growth, photosynthesis and nutritional property analyses of lettuce grown under different temperature and light intensity, **Journal of Horticulture and Science Biotechnology**, 2020, 1-9.
10. Hou K, Wang Y, Tao M, **Jahan MS**, Shu S, Sun J, Guo S. Characterization of the CsPNG1 gene from cucumber and its function in response to salinity stress. **Plant Physiology and Biochemistry**, 2020, 150 (2020):140–150.
9. Shu S, Tang Y, Zhou X, **Jahan MS**, Sun J, Wang Y, Guo S. Physiological mechanism of transglutaminase-mediated improvement in salt tolerance of cucumber seedlings. **Plant Physiology and Biochemistry**, 2020, 156 (2020):333–344.

8. Roy R, Wang R, Mostofa MG, Fornara D, Sikdar A, Feng S, Sarker T, Wang X, **Jahan MS**. Ecological restoration of coal-mined spoils using *Elaeagnus angustifolia* by fine-tuning of soil water and nutrient fertilizers. **Journal of Environmental Management** 270 (2020) 110855.
7. **Jahan MS,** Guo S, Baloch AR, Sun J, Shu J, Wang Y, Ahammed GJ, Kabir K, Roy R. Melatonin alleviates nickel phytotoxicity by improving photosynthesis, secondary metabolism and oxidative stress tolerance in tomato seedlings. **Ecotoxicology and Environmental Safety**, 2020, 197(2020): 110593

## Year-2019

6. **Jahan MS**, Shu S, Wang Y, Chen Z, He M, Tao M, Sun J, Guo S. Melatonin alleviates heat-induced damage of tomato seedlings by balancing redox homeostasis and modulating polyamine and nitric oxide biosynthesis. **BMC Plant Biology**, 2019, 19 (2019):414.
5. **Jahan MS**, Wang Y, Shu S, Zhong M, Chen Z, Wu J, Sun J, Guo S. Exogenous salicylic acid increases the heat tolerance in Tomato *(Solanum lycopersicum* L) by enhancing photosynthesis efficiency and improving antioxidant defense system through scavenging of reactive oxygen species. **Scientia Horticulturae**, 2019, 247 (2019): 421–429
4. Shen J, Wang Y, Shu S, **Jahan MS,** Zhong M, Wu J, Sun J, Guo G. Exogenous putrescine regulates the leaf starch overaccumulation in cucumber under salt stress**. Scientia Horticulturae**, 2019, 253(2019):99–110.
3. Uddain J, Tripti SI, **Jahan MS**, Sultana N, Rahman MJ, Subramaniam S. Changes of morphological and biochemical properties in organically grown zucchini squash (*Cucurbita pepo* L.). **HORTSCIENCE**, 2019, 54(9):1485–1491.
2. Sarkar MD, Solaiman AHM, **Jahan MS,** Kabir K, Rojoni RN, Hasanuzzaman M. Altering soil microclimate environment by colored polythene film mulches to induce growth, physiology, biochemical and mineral nutrient composition in onion. **Annals of Agricultural Sciences**, 64 (2019): 63-70.
1. Ni M, Lan D, **Jahan MS**, Wang J, Guo S. A pilot study on the microclimate of a multi-span solar energy greenhouse. **Applied Engineering in Agriculture**. 2019;35(4):601-16.

## International recognition

1. I have been listed among the top 2% of the world scientists by Stanford University, USA, and Elsevier in 2024 (Biology, subfield-Agronomy and Agriculture field).
2. Young Scientist award by Agricultural & Environmental Technology Society (AETDS) in 2021.

## Awards/Fellowships

1. Chinese Government Outstanding International Scholarship -2020.
2. Appraisal of Excellent International Students Award-2020 from Nanjing Agricultural University
3. Appraisal of Excellent International Students Award-2019 from Nanjing Agricultural University
4. Jiangsu Provincial Outstanding International Student Award-2019
5. Dean's award, Faculty of Agriculture, Sher-e-Bangla Agricultural University-2019
6. Chinese Government Scholarship (Chinese Scholarship Council -CSC)-2017
7. National Science and Information and Communication Technology (NSICT) Fellowship-2009.

## List of Attending Conferences and Symposium

1. The 5th International Symposium of Horticultural Plant Biology-2024, organized by Huazhong Agricultural University, Wuhan, China.
2. The 10th International Horticulture Research Conference, Guangzhou, China, 2023
3. The Climate Innovation Network: Youth Leadership in Climate Resilient Actions in Asia and Africa Forum 2023, Nanning, China

4. Participated at Maritime Silk Road International Conference on the Cooperation and Integration of Industry, Education, Research and Application (IERA), Nanning, China, 1-4 December, 2023.
5. The 8th International Horticulture Research Conference, Nanjing, China, 2021
6. Third annual conference of Belt and Road/ South-South Cooperation Agricultural Education, Science and Technology Innovation League (BRSSCAL), Hainan, 2020
7. International plant phenotypic symposium, Nanjing, China, 2019
8. 10th International GCHERA World conference, Nanjing, China, 2019
9. International academic conference for graduate students, Nanjing, China, 2019
10. The 15th International Conference on the Biogeochemistry of Trace Elements, Nanjing, China, 2019
11. 9th International GCHERA World conference, Nanjing, China, 2018
12. 40th Protected Horticultural Conference, Nanjing, China, 2019
13. Participated at the Advanced Training on Biotechnology, National Institute of Biotechnology, Savar, Dhaka (Bangladesh), 2016

## Training

Received more than five different types professional and skill developed training

## Editorial Board Member

1. **BMC Plant Biology**
2. **Genetic Resources and Crop Evolution**
3. **Frontiers in Plant Science**
4. **Discover Biotechnology**

## Guest Associate Editor

**1. Frontiers in Plant Science** (https://www.frontiersin.org/research-topics/49599/hormones-and-biostimulants-in-plants-physiological-and-molecular-insights-on-plant-stress-responses)

**2. BMC Plant Biology (**https://www.biomedcentral.com/collections/otahc, Omics technologies and applications in horticultural crops)

## Reviewing Skills

**Dr. Jahan** has been actively contributing as a reviewer for a number of prestigious scientific journals and conferences (>**30**).