Curriculum Vitae of Md. Mahabub ALAM

Md. Mahabub Alam, PhD
B.Sc.Ag (Hons); MS in Agronomy, PhD at Plant Stress Physiology & Molecular Biology (Japan)
Assistant Professor
Department of Agronomy, Faculty of Agriculture
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EDUCATIONAL QUALIFICATIONS:

Name of Degree	University	Passing Year	Major Field
Ph.D at Plant Stress Physiology and Molecular Biology	Ehime University, Japan	2014	Plant Stress Physiology & Molecular Biology
Master of Science in Agronomy	Sher-e-Bangla Agricultural University, Bangladesh	2008	Agronomy
Bachelor of Science in Agriculture (Hons.)	Sher-e-Bangla Agricultural University, Bangladesh	2004	Agriculture

PREVIOUS EXPERIENCES:

Position held	Organization	Duration	Major duties
Assistant Professor	Department of Agriculture, Noakhali Science and Technology University, Bangladesh.	4 November to 26 December, 2018	Teaching & Research
Lecturer	Department of Agriculture, Noakhali Science and Technology University, Bangladesh.	November 05, 2017-November 03, 2018	Teaching & Research
Research & Teaching Assistant	Laboratory of Plant Stress Responses, Faculty of Agriculture, Kagawa University, JAPAN	June 2012 to February 2014	Teaching & Research
Monitoring Officer	International Fertilizer Development Center	June 2012 to February 2014	Workshop & training

PROJECT WORKS:

Position	Title of the Project	Duration	Funding Agency
Principal Investigator	Effect of different abiotic stresses on morpho-physiological and biochemical parameters in *Corchorus olitorius*	July 2019-June 2020 (1 year)	Ministry of Science and Technology, Government of Bangladesh
Principal Investigator	Exogenous ascorbic acid-induced alleviation of salt stress in soybean varieties through enhancement of morphological and physiological parameters	July 2018-June 2019 (1 year)	Ministry of Science and Technology, Government of Bangladesh

PUBLICATIONS:

Thesis:

1. **Md. Mahabub Alam** (2014) Amelioration of short-term drought stress in *Brassica* seedlings by exogenous application of salicylic acid, ascorbic acid, jasmonic acid and trehalose: A key role of antioxidant defense and glyoxalase systems. Faculty of Agriculture, The United Graduate School of Agricultural Science-Ehime University, Japan.
2. **Md. Mahabub Alam** (2008) Performance of inbred and hybrid rice varieties to different levels of phosphorus. M.S. Thesis, Department of Agronomy, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Bangladesh.
3. **Md. Mahabub Alam** (2009) Effects of biotic and abiotic factors on quality of mungbean seed. Post Graduate Certificate Course on Seed Technology. Sher-e-Bangla Agricultural University, Bangladesh.

Abstract:

1. **Alam MM,** Hasanuzzaman M, Nahar K,Fujita M (2013) Protective role of salicylic acid in ameliorating drought stress in mustard (*Brassica juncea* L.) seedlings by up-regulating the antioxidant defense and glyoxalase system. Botanikertagung. September 29- October 04, 2013, Tubingen, Germany
2. **Alam MM,** Hasanuzzaman M, Nahar K, Fujita M (2014) Beneficial roles of exogenous ascorbic acid under abiotic stresses in *Brassica* seedlings. 3rd International Conference on Plant Metabolism. July 02-05, 2014, Xiamen China

Research articles (Selected):

1. Hasanuzzaman M, Alam MM, Nahar K, Mohsin SM, Bhuyan MHMB, Parvin K, Hawrylak-Nowak B, Fujita M (2019) Silicon-induced antioxidant defense and methylglyoxal detoxification works coordinately in alleviating nickel toxicity in Oryza sativa L. Ecotoxicology 28:261–276
2. Hasanuzzaman M, Nahar K, Alam MM, Bhuyan BMHM, Oku H, Fujita M (2018) Exogenous nitric oxide pretreatment protects Brassica napus L. seedlings from paraquat toxicity through the modulation of antioxidant defense and glyoxalase systems. Plant Physiol Biochem 126:173-186
3. Nahar K, Hasanuzzaman, M, Alam MM, Rahman A, Mahmud JA, Suzuki T, Fujita M (2017). Insights into spermine-induced combined high temperature and drought tolerance in mung bean: osmoregulation and roles of antioxidant and glyoxalase system. Protoplasma 1:445-460
4. Nahar K, Rahman M, Hasanuzzaman, M, Alam MM, Rahman A, Suzuki T, Fujita M (2016) Physiological and biochemical mechanisms of spermine-induced cadmium stress tolerance in mung bean (*Vigna radiata* L.) seedlings. Environ Sci Pollut Res 23: 21206–21218
5. Nahar K, Hasanuzzaman, M, Alam MM, Rahman A, Suzuki T, Fujita M, (2016) Polyamine and nitric oxide crosstalk: Antagonistic effects on cadmium toxicity in mung bean plants through upregulating the metal detoxification, antioxidant defense and methylglyoxal detoxification systems. Ecotoxicol Environ Saf 126:245-55
6. Nahar K, Hasanuzzaman M, Rahman A, Alam MM, Mahmud J, Suzuki T, Fujita M (2016) Polyamines Confer Salt Tolerance in Mung Bean (*Vigna radiata* L.) by Reducing Sodium Uptake, Improving Nutrient Homeostasis, Antioxidant Defense, and Methylglyoxal Detoxification Systems. Front Plant Sci 7:1104
7. Rahman A, Mostofa MG, Alam MM, Nahar K, Hasanuzzaman M, Fujita M (2015) Calcium Mitigates Arsenic Toxicity in Rice Seedlings by Reducing Arsenic Uptake and Modulating the Antioxidant Defense and Glyoxalase Systems and Stress Markers. BioMed Res Int 2015: 340812
8. Nahar K, Hasanuzzaman M, Alam MM, Fujita M (2015) Glutathione-induced drought stress tolerance in mung bean: coordinated roles of the antioxidant defenceand methylglyoxal detoxification systems. AoB PLANTS 7: plv069

9. Nahar K, Hasanuzzaman M, Alam MM, Fujita M (2015) Roles of exogenous glutathione in antioxidant defense system and methylglyoxal detoxification during salt stress in mung bean. Biologia Plantarum 59: 745-756

10. Nahar K, Hasanuzzaman M, Alam MM, Fujita M (2015) Exogenous Spermidine Alleviates Low Temperature Injury in Mung Bean (*Vigna radiata* L.) Seedlings by Modulating Ascorbate-Glutathione and Glyoxalase Pathway. Int J Mol Sci 16:30117–30132

11. Nahar K, Hasanuzzaman M, Alam MM, Fujita M (2015) Exogenous glutathione confers high temperature stress tolerance in mung bean (Vigna radiata L.) by modulating antioxidant defense and methylglyoxal detoxification system. Environ Exp Bot 112: 44–54

12. Alam MM, Hasanuzzaman M, Nahar K, Fujita M (2014) Exogenous jasmonic acid modulates the physiology, antioxidant defense and glyoxalase system in imparting drought stress tolerance in different *Brassica* species. Plant Biotechnol Rep 8: 279-293

13. Alam MM, Nahar K, Hasanuzzaman M, Fujita M (2014) Trehalose-induced drought stress tolerance: A comparative study among different *Brassica* species. Plant Omics J 7: 271-283

14. Alam MM, Hasanuzzaman M, Nahar K, Fujita M (2014) Alleviation of osmotic stress in *Brassica napus*, *B. campestris*, and *B. juncea* by ascorbic acid application. Biologia Plantarum 58: 697-708

15. Hasanuzzaman M, Alam MM, Rahman R, Hasanuzzaman M, Nahar K, Öztürk M, Fujita M (2014) Exogenous proline and glycine betaine mediated upregulation of antioxidant defense and glyoxalase systems provides better protection against salt-induced oxidative stress in two rice (*Oryza sativa* L.) varieties. BioMed Research International. http://dx.doi.org/10.1155/2014/757219

16. Hasanuzzaman M, Alam MM, Nahar K, Mahmud JA, Ahamed KU, Fujita M (2014) Exogenous salicylic acid alleviates salt stress-induced oxidative damage in *Brassica napus* by enhancing the antioxidant defense and glyoxalase systems. Aust J Crop Sci 8: 631-639

17. Hasanuzzaman M, Nahar K, Alam MM, Fujita M (2014) Modulation of Antioxidant Machinery and the Methylglyoxal Detoxification System in Selenium-Supplemented Brassica napus Seedlings Confers Tolerance to High Temperature Stress. Biol Trace Elem Res 161:297-307

18. Hasanuzzaman M, Nahar K, Alam MM, Bhowmik PC, Hossain MA, Rahman MM, Prasad MNV, Ozturk M, Fujita M (2014) Potential Use of Halophytes to Remediate Saline Soils. BioMed Research International. http://dx.doi.org/10.1155/2014/589341

19. Alam MM, Hasanuzzaman M, Nahar K, Fujita M (2013) Exogenous salicylic acid ameliorates short-term drought stress in mustard *(Brassica juncea* L.) seedlings by up-regulating the antioxidant defense and glyoxalase system. Aust J Crop Sci 7:1053-1063

20. Hasanuzzaman M, Nahar K, Alam MM, Fujita M (2013) Adverse Effects of Cadmium on Plants and Possible Mitigation of Cadmium-Induced Phytotoxicity. In*:* Hasanuzzaman M, Fujita M (eds) Cadmium: Characteristics, Sources of Exposure, Health and Environmental Effects. Nova publishers, pp 1-48

21. Hasanuzzaman M, Nahar K, Alam MM, Fujita M (2013) Physiological, biochemical, and molecular mechanisms of heat stress tolerance in plants. Int J Molecul Sci 14: 9643-84

22. Hasanuzzaman M, Nahar K, Alam MM, Fujita M (2012) Exogenous nitric oxide alleviates high temperature induced oxidative stress in wheat (*Triticum aestivum* L.) seedlings by modulating the antioxidant defense and glyoxalase system. Aust J Crop Sci 6: 1314-1323

PARTICIPATION IN TRAINING, WORKSHOP, SEMINAR, CONFERENCES:

- Inception Workshop on Developing Agricultural Climate Services Training Module, **04 September, 2019. Sher-e-Bangla Agricultural University, Bangladesh.**
- International Training Workshop on **"Grain Legume Molecular Breeding and Cultivation Techniques".** Institute of Crop Sciences, Chinese Academy of Agricultural Sciences (ICS, CAAS), **12-26 August, 2019, Beijing, China.**
- Training Program on **"Responsibilities of Teachers, Outcome Based Education and Different Rules & Regulations" January 12-13, 2019, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh.**

- Training Workshop on "Scientific Paper Writing and Publication", **24 July, 2019, Sher-e-Bangla Agricultural University, Bangladesh.**
- 3rd International Conference on Plant Metabolism. **July 02 -05, 2014, Xiamen, China**
- German Botanical Society, **September 29- October 04, 2013, Tubingen, Germany**
- Post Graduate Certificate Course on Seed Technology, Organized by Sher-e-Bangla Agricultural University, Dhaka-1207. **Duration 21 June to 10 September, 2009**

PROFESSIONAL MEMBERSHIPS:

- Life member of Japanese Universities Alumni Association in Bangladesh (JUAAB)
- Life member of Bangladesh Society of Agronomy
- Member of Bangladesh Society of Genetics and Plant Breeding.
- Member of Weed Science Society of Bangladesh
- Member of Sher-e-Bangla Agricultural University Alumni Association

REFEREES

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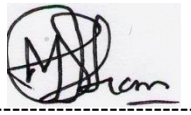

(Dr. Md. Mahabub Alam)