

MD. MAINUL HASAN

Post-doc Fellow (Plant cell Biotechnology Lab.): 2008-2009: MU, Thailand

PhD (Crop Production & Cropping System): 2006, UPM, Malaysia

MSc (Agricultural Systems): 2001, AIT, Thailand

BSc (Agriculture): 1998, BAU, Bangladesh

Professor

Department of Agricultural Botany, Faculty of Agriculture

Patuakhali Science and Technology University

Dumki, Patuakhali, BANGLADESH

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PERSONAL STATEMENT

Currently, I am serving as a full time faculty in a public university, Bangladesh, where I am teaching both graduate and undergraduate level courses in the area of plant morphology, plant anatomy, plant physiology, crop ecology, biotechnology, research methodology and agro-climatology related courses. I worked as a deputy sub-project manager with Higher Education Quality Enhancement Project (CP 6169); co-principal investigator with BAS-USDA-Program in Agricultural and Life Sciences project; and associate investigator of Science and Technology Research project of Ministry of Science and Technology. In the past, I received research grant from UGC, Bangladesh to conduct research on sustainable crop production. I have unique multidisciplinary research experiences, which includes Agronomic (crop production & cropping system), Watershed management (sustainable farming & land productivity), Nutritional (animal feeds and feeding) and Biotechnology (fertilization and agro-forestry) related research. I did collaborative research with international community during post-doc research at MU, Thailand and in NAF, Nepal as a part of DANIDA-AIT twinning program. Moreover, during postgraduate education, I coordinated a broad range of field visits in different leading overseas universities (NAIST, Japan; NUS, Singapore; TU, BCKV, India; Nepal; CU, Hong Kong). I also have experiences in guiding graduate students in their research (supervisor: 05; co-supervisor: 21 and 02 ongoing). In addition, I jointly organized WB-funded workshop for the Sri Lankan government delegates at AIT, Thailand. In addition, I have good command in computer (both hardware & software) and proficient in MS Office and various specialized research suites including SPSS, Minitab, SAS; Internet and Web design. I enjoy learning things from diverse cultural and social settings and utilize my knowledge and expertise for the benefit of mankind. My long-term career goal is to be a part of an active international academic or R & D community to contribute towards high-quality teaching and research in Agriculture.

EDUCATION

Post-doc Researcher (Plant cell biotechnology laboratory)

July 2008 - June 2009, Mahidol University, Thailand

Specialization: Fertilization and Agro-forestry technique with Macadamia plant

Major contribution: Macadamia is a lucrative cash crop and grow fairly well in the hills of northern Thailand but abnormal growth, sporadic flower and fruit throughout the year have been reported. So,

a systematic scientific approach and careful attention need to focus on the factors that limit the growth of the plant and quality of the nut in order to take corrective measures. Moreover, macadamia tree has a potential to grow in forest ecosystem and thus provide protection of forestlands from further depletion. A study therefore focused on various determinants of yield improvement and explored the reforestation potential of macadamia.

Ph.D. (Crop Production and Cropping System)
2002 -2006, University Putra Malaysia (UPM), Malaysia

Course work: CGPA 3.98

Specialization: Feed formulation, Animal nutrition, and Pasture management

Major contribution: In livestock production, feeds constitute a large proportion of the total cost, which hinders intensive livestock production. The only option available to feed animals is by residues of different crops. Utilization of rice straw by ruminants is the most efficient means due to its abundance and digested by rumen. The study focused on formulation and evaluation of rice straw-based total mixed ration for ruminant by upgrading their nutritive values and to obtain a satisfactory growth of animals. Certainly, the findings bring the benefit to the feed-miller and the livestock grower for intensive ruminant production.

M.Sc (Agricultural Systems)
2000-2001, Asian Institute of Technology (AIT), Thailand

CGPA 3.67; Thesis Grade: Excellent

Specialization: Integrated Watershed Development and Management (IWDM)

Major contribution: Ban Pong Chanuan is a village in northeast Thailand and located in the area of Lam Phra Phloeng watershed. It was identified through a reconnaissance survey that destructive farming technique resulted in low crop yield and depletion of forestlands. The project focused on some selected agronomic and social indices to characterize the existing farming systems of the watershed. Some selected soil physical and chemical analyses were done to determine the land productivity, which has direct impact on yield of crop. Based on the information and experimental result, a suitable cropping system was recommended for the watershed to improved land productivity and increase crop production.

Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Bangladesh: 1999

Graduate-level courses: Principles of Crop Production, Crop Physiology, Crop Ecology, Crop Growth and Culture, Weed Control, Plant Physiology, Seed Science, Soil Fertility.

Research: Productivity of rapeseed (*Brassica napus*) genotypes in relation to their morphological and physiological characters under different water regime

B.Sc (Agriculture)
Bangladesh Agricultural University (BAU), Bangladesh
Academic year (1989-'93) Degree conferred in 1998)

First Class honours (CGPA equivalent to ≤ 3.5 in 4.0 scales)

Major Courses: Agronomy, Horticulture, Biology (Botany/Zoology), Soil Science, Statistics, Genetics and Plant Breeding, Agricultural Economics, Animal Husbandry, Farm Mechanics,

Entomology, Plant Pathology, Rural Sociology, Agricultural Extension, Chemistry (Physical & analytical, Organic, and Biochemistry)

Notes: 12-year pre-university education in Bangladesh
1977-89, Higher Secondary Certificate, and Secondary School Certificate held nationwide
First class in both HSC and SSC education.

EMPLOYMENT HISTORY

Present Position

Professor

March 2017 - Present

Department of Agricultural Botany, Faculty of Agriculture
Patuakhali Science and Technology University (PSTU), Bangladesh

Associate Professor

December 2011 - March 2017

Department of Agricultural Botany, Faculty of Agriculture
Patuakhali Science and Technology University (PSTU), Bangladesh

Assistant Professor

March 2009 - December 2011

Department of Agricultural Botany, Faculty of Agriculture
Patuakhali Science and Technology University (PSTU), Bangladesh

Lecturer

March 2007 - 2009

Department of Agricultural Botany, Faculty of Agriculture
Patuakhali Science and Technology University (PSTU), Bangladesh

Major Responsibilities

- Teaching and research, both for undergraduate and graduate students
- Curriculum development for graduate and undergraduate programs
- Preparation of standard course materials for classroom teaching and online learning
- Offer specialized courses to professional community as well as farmer organization
- Actively participate in university academic council and share views
- Explore external research fund and follow up collaborations
- Establish academic/research linkage with regional/international institutes

Research Associate

December 2002-June 2006

University Putra Malaysia (UPM), Malaysia

Major Responsibilities

- Conduct R&D according to UPM's strategic plan
- Consolidate and disseminate research activities and findings
- Assist laboratory personnel in budgeting, planning and maintenance
- Teaching undergraduate courses, supervise young researchers and interns
- Prepare posters, leaflets and web contents to disseminate news and events

Research Assistant

October 2001-November 2002

Asian Institute of Technology (AIT), Thailand

Major Responsibilities

- Conduct R&D in accordance with ongoing project
- Collaborate twinning program with partner organizations
- Jointly organize training/workshop for the foreign delegates
- Prepare technical reports, scholarly articles for the trainees
- Assist in project meeting, excursion and peer-evaluation exercise

Research and survey: Attempts for improvement of land productivity through cropping systems in the hills of Nepal.

Agriculture Officer

November 1998 - January 1999

SOS: International NGO, Khulna, Bangladesh

Responsibilities

Motivate to promote scientific cultivation and sustainable agriculture among the rural farmers and the SOS-Boys (young orphans sheltered and brought up by the NGO)

CONFERENCES, TRAINING AND WORKSHOP**Virtual Training and Workshop** on Annual Performance Agreement (APA)

14 June 2021

Organized by Patuakhali Science and Technology University (PSTU), Bangladesh

Training on Fall Armyworm Management

19 February, 2020

Jointly organized by FAO and DAE in collaboration with PSTU, Bangladesh

Workshop on Quality Assurance System in PSTU and Accreditation

31 December, 2019

Organized by IQAC of Patuakhali Science and Technology University (PSTU), Bangladesh

Workshop on Annual Performance Management (NIS-APA Workshop 2019)

16 November, 2019

Organized by Patuakhali Science and Technology University (PSTU), Bangladesh

Training on Pesticide Application Technology

11 April, 2019

Funded and Organized by Syngenta Bangladesh Limited

Collaboration with Postgraduate Studies, PSTU, Bangladesh

Workshop on Designing outcome-based curriculum, Faculty of Agriculture

29 - 30 September, 2018

Organized by Self Assessment Committee, Faculty of Agriculture

Institutional Quality Assurance Cell of PSTU, Bangladesh

Training-Workshop on Teaching-Learning of Agricultural Science Education of PSTU
22 - 28 September, 2018
Organized by HEQEP sub-project, CP 6169
Patuakhali Science and Technology University (PSTU), Bangladesh

Seminar on Important Underutilized Plants of Bangladesh: Alternative Sources of Food, Feed, and Raw Materials for the Industry
18 April, 2018
Department of Agricultural Botany, Patuakhali Science & Technology University, Bangladesh

Workshop on Formulation of post self-assessment improvement plan
29 March, 2018
Institutional Quality Assurance Cell of PSTU, Bangladesh

Seminar on Horticultural interventions at PSTU and challenges ahead
3 March, 2018
Patuakhali Science and Technology University (PSTU), Bangladesh

Seminar on Revising rules of probation in PSTU
6 November, 2017
Patuakhali Science and Technology University (PSTU), Bangladesh

Training Course on Administrative and Financial Management
22-23 September, 13-14 October, 2017
Patuakhali Science and Technology University (PSTU), Bangladesh

Seminar on Strengthening research capabilities of postgraduate programs in Genetics and Plant Breeding of PSTU
22 May, 2017
Patuakhali Science and Technology University (PSTU), Bangladesh

Seminar on Overview and achievement of HEQEP sub-projects at PSTU
3 May, 2017
Organized by Patuakhali Science and Technology University (PSTU), Bangladesh

Workshop on Sharing the survey results with the faculty members
21 March, 2017
Organized by Self Assessment Committee, Faculty of Agriculture, (PSTU), Bangladesh

Seminar on Prospect of cotton cultivation in coastal areas of Bangladesh
5 March, 2017
Organized by Cotton Development Board, Jashore
Patuakhali Science and Technology University (PSTU), Bangladesh

Workshop on Team building & introducing self-assessment process for the faculty of Agriculture
11 March, 2016
Patuakhali Science and Technology University (PSTU), Bangladesh

Training Workshop on ARMIS Software and its operation
29 February, 2016
University of Barishal, Bangladesh

Course on Curriculum development for the faculty of Agriculture
18-20 February, 2016
Graduate Training Institute (GTI) in collaboration with IQAC of PSTU, Bangladesh

Workshop on Development of stress research protocol
31 March, 2015
Organized by HEQEP sub-project, CP 2431
Patuakhali Science and Technology University (PSTU), Bangladesh

In-service Training on Administrative and Financial Management
21-23, 29-30 October, 2010
Patuakhali Science and Technology University (PSTU), Bangladesh

Conference on Agricultural Waste Management
Business opportunities in Agricultural waste
Eastin Hotel, Petaling Jaya, Malaysia 11-12 August, 2003

Annual conference on Natural Products and Nutraceuticals in Animal Production
Malaysian Society of Animal Production (MSAP)
Melaka, Malaysia. 1-3 August, 2003

International Conference on Animal Nutrition (ICAN)
Marriott Hotel, Putra Jaya, Malaysia. 3-5 March, 2003

Training program on 'Sustainable Watershed Management'
School of Environment Resources and Development, AIT, Thailand 25 June-1 July, 2001

Training program on 'Upper Watershed Management Project, Sri Lanka'
School of Environment Resources & Development, AIT, Thailand 27 Aug.-1 Sept., 2001

Training program on "Agricultural Approach for Sustainable Watershed Management"
School of Environment Resources and Development, AIT, Thailand 22 April-6 May, 2002

AWARDS, SCHOLARSHIPS AND FELLOWSHIPS

Silver Medal (May 2006): Award for invention/innovation of 'pelleted rice-straw based total mixed ration for ruminants'.
ITEX'06, Kuala Lumpur Convention Centre, Malaysia.

Silver Medal (May 2005): Award of inter-university competition for invention/innovation of new research product.
Research Management Centre, University Putra Malaysia.

RA Fellowship (November 2002-December 2005): Awarded fellowship from the Ministry of Science, Technology and Innovation (MOSTI) for PhD education at UPM, Malaysia.

DANIDA Scholarship (January 2000-August 2001): Awarded Danish government (DANIDA) fellowship for M.Sc education at AIT, Thailand.

Merit Scholarship (Feb.-Dec., 1999): Award for academic excellence, Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Bangladesh.

Merit Scholarship (1989-1993): Award for academic excellence, four consecutive years of undergraduate study at Bangladesh Agricultural University (BAU), Bangladesh.

ADMINISTRATIVE AND PROFESSIONAL INVOLVEMENT

Member of the Advisory Board, Journal of Patuakhali Science and Technology University
June 2021 – Present
Patuakhali Science and Technology University (PSTU), Bangladesh

Provost, Kabi Begum Sufia Kamal Hall
20, March 2019 –
Patuakhali Science and Technology University (PSTU), Bangladesh

Chairman of the Ph.D. Examination Committee: (05, May 2019): MD. MOHIDUL HASAN
(Reg. No. 04165), Department of Agricultural Extension and Rural Development, PSTU.
Dissertation title: Effectiveness of Training on Sweet Potato Cultivation for Char Lander at Kurigram.

Chairman of the Ph.D. Examination Committee: (28, October 2018): SALINA SULTANA
(Reg. No. 04164), Department of Genetics and Plant Breeding, PSTU.
Dissertation title: Genetic improvement of bottle gourd [*Lagenaria siceraria*] for yield and quality.

Chairman, Department of Agricultural Botany :
2, April 2018 - 29, June 2020
Patuakhali Science and Technology University (PSTU), Bangladesh

Member of the Academic Council
November 2013 - October 2015
Patuakhali Science and Technology University (PSTU), Bangladesh

Member of the Faculty Executive Committee
2014 - Present
Faculty of Agriculture, Patuakhali Science and Technology University, Bangladesh

Member of the Faculty Executive Committee
2015 -
Faculty of Disaster Management, Patuakhali Science & Technology University, Bangladesh

Controller of Examinations
January 2012 - July 2013
Patuakhali Science and Technology University (PSTU), Bangladesh

Deputy Controller of Examinations
March 2011 - December 2011
Patuakhali Science and Technology University (PSTU), Bangladesh

Assistant Controller of Examinations
August 2009 - February 2011
Patuakhali Science and Technology University (PSTU), Bangladesh

Member of the Syllabus Committee
2009 -
Department of Environmental Science and Disaster Management
Patuakhali Science and Technology University (PSTU), Bangladesh

Member of the Examination Committee
2007 – Present
Department of Agricultural Botany, PSTU, Bangladesh

Member of the Planning and Execution Committee

2007 - Present

Department of Agricultural Botany, PSTU, Bangladesh

Member of the Central Laboratory Management Committee

2007 - Present

Patuakhali Science and Technology University (PSTU), Bangladesh

OTHER INSTITUTIONAL AFFILIATIONS**Visiting/Honorary staff**

November 2013 - Present

Southasia Institute of Advanced Studies (SIAS), Nepal

www.sias-southasia.org/new/people/visiting-honorary/

External Examiner (Undergraduate program)

Department of Nutrition and Food Technology

Jashore University of Science and Technology (JUST), Bangladesh

<https://just.edu.bd/>

External Examiner (Undergraduate program)

Department of Crop Botany

Bangladesh Agricultural University, Bangladesh

www.bau.edu.bd/

External Examiner (Postgraduate program)

Department of Crop Physiology and Ecology

Hajee Mohammad Danesh Science and Technology University, Bangladesh

www.hstu.ac.bd/

Thesis Examiner (Postgraduate program)

Department of Crop Physiology and Ecology

Hajee Mohammad Danesh Science and Technology University, Bangladesh

www.hstu.ac.bd/

Thesis Examiner (Postgraduate program)

Department of Agricultural Botany

Sher-e-Bangla Agricultural University, Bangladesh

www.sau.edu.bd/

Chief Advisor

Student Association of Satkhira (SAS)

Patuakhali Science and Technology University, Bangladesh

Chief Advisor

Khulna Student Welfare Association (KSWA)

Patuakhali Science and Technology University, Bangladesh

AFFILIATIONS WITH JOURNALS / EDITORIAL BOARD

Reviewer: (July 2021 – Present)

International Journal of Research and Innovation in Applied Science (IJRIAS)

<https://www.rsisinternational.org/>

Member of the Advisory Board: (June 2021 – Present)

Journal of Patuakhali Science and Technology University (Journal-PSTU)

<http://pstu.ac.bd/journal/>

Reviewer: (January 2020 – Present)

Pertanika Journal of Tropical Agricultural Science (JTAS)

<http://www.pertanika.upm.edu.my/JST.php>

Reviewer: September 2018 - Present

Journal of Agricultural Sciences (JAS)

Kamla-Raj Enterprises: <http://www.krepublishers.com>

Editorial Board Member: May 2018 - Present

Malaysian Journal of Halal Research (MJHR)

<https://www.myjhalalresearch.com/>

Editor of Project Proposal (2018 – Present)

Research and Training Center of PSTU

<http://www.pstu.ac.bd/offices/rtc>

Reviewer: May 2017 - Present

Pertanika Journal of Tropical Agricultural Science (JTAS)

www.pertanika.upm.edu.my/pertanika_journals.php

Reviewer: May 2017 - Present

Journal of Agrobiotechnology (JAB)

www.journal.unisza.edu.my/agrobiotechnology/index.php/agrobiotechnology

Reviewer: July 2016 –

Acta Physiologiae Plantarum

www.editorialmanager.com/acpp/default.aspx

Editorial Board Member: December 2014 - Present

Wudpecker Journal of Agricultural Research (WJAR)

www.wudpeckerresearchjournals.org

Reviewer: April 2012 - Present

Journal of Agricultural Science and Technology (JAST)

www.davidpublishing.org

Reviewer: June 2016 -

Experimental Agriculture – Cambridge Journals online

www.journals.cambridge.org/EAG

Editorial Board Member: May 2009 - Present

Journal of Plant Breeding and Crop Science (JPBCS)

www.academicjournals.org/JPBCS

RESEARCH GRANTS

Science and Technology Research Grant of MoST, Bangladesh

BS-245: Ex-situ conservation of medicinal and aromatic plants through tissue culture techniques. Project worth 2,362 USD.

Science and Technology Research Grant of MoST, Bangladesh

BS-301: Breeding for saline resistant Jute varieties through rapid screening and DNA marker assisted selection. Project worth 7,000 USD.

WB funded- Higher Education Quality Enhancement Project of MoE, Bangladesh

CP6169: Modernizing of teaching-learning of Agricultural Science education at Patuakhali Science and Technology University. Project worth 2,50,000 USD.

BAS–USDA Program in Agricultural and Life Science

CR48: Collection, regeneration, conservation and improvement of cultural practices for Murta (*Schumannianthus dichotoma*) production. Project worth 50,000 USD.

University Research Grant (2007-2008): Awarded research grant from the University Grants Commission, Bangladesh. Project worth 1,500 USD.

POSTGRADUATE RESEARCH SUPERVISION

MS student research: 26 (Supervisor - 05, Co-supervisor - 21)

Supervisor

1. Effect of Gibberellic acid (GA₃) on growth and yield of Cowpea (*Vigna unguiculata*). Abu Jafor Muhammad Nur Nabi. (June 2012)
2. Effect of bio-fertilizer on growth and yield responses of Lentil (*Lens culinaris*). Md. Nur Alam Siddiqui. (December 2012)
3. Selection of adaptive tomato genotypes for Patuakhali region. Md. Nazmul Ahsan. (December 2013)
4. Adoption of disaster risk reduction strategy in agriculture sector and its effectiveness in climate change adaptation at Sharankhola upazila. Prome Debnath. (December 2017)
5. Impact of climate change on Agriculture sector and its adaptative practices: A case study from Mehendiganj upazilla. Md. Saddam Hossain. (December 2018)

Co-supervisor

1. Performance of four wheat varieties under saline stressed condition. Md. Abu Abdullah Al-Musa. (December 2011)
2. Response of Nitrobenze on growth and yield of Chickpea in Patuakhali region. Md. Lutfur Rahman. (June 2012)
3. Promotion of hand washing to control childhood diarrhea in the coastal community of Dasmina Patuakhali. Md. Shajedur Rahman. (December 2013)
4. Screening of salt tolerant Jute (*Corchorus capsularis*) genotypes for AEZ-13. Bijoy Biswas. (June 2013)
5. Performance of wheat as influenced by different moisture level. Sheikh Tariqul Islam. (2013)

6. Murta cultivation in marshy fallow lands and its impact on soil quality and rural economy. Md. Emad Mustofa. (December 2013)
 7. Effect of seedling age on growth and yield of Moulata and Dudhkalam dhan. Md. Shamim Ahmed. (June 2014)
 8. Growth and yield performance of T. Aman rice varieties under different time of transplanting. Satyajit Roy (June 2014)
 9. Effect of nitrobenzene on growth and yield of Boro rice. Badal Chowdhury (December 2014)
 10. Foliar application of balanced mixed fertilizer on growth and yield of Boro rice. Mithun Chandra Sikder. (December 2014)
 11. Selection of suitable T. aman rice genotypes for Patuakhali region. Md. Rasel. (June 2014)
 12. Growth and yield performance of some selected aromatic T. aman genotypes. Md. Aminul Islam. (June 2014)
 13. Effect of different organic manures on growth and yield of Cabbage. Md. Ahsan Habib. (November 2014)
 14. Effect of concentrated fertilizer supplement (Cropmax) on growth and yield of Mungbean (*Vigna radiata*). Laila Arjumand Shimu. (December 2014)
 15. Effect of foliar application of Gibberellic acid on the growth and yield responses of Mungbean (*Vigna radiata* L.). Md. Moshir Rahman. (June 2015)
 16. Selection of suitable Mungbean (*Vigna radiata* L.) variety for Patuakhali region. Md. Miraj Hossain. (December 2015)
 17. Effect of integrated nutrient management on the growth and yield of Cauliflower (*Brassica oleracea* var. botrytis). Umme Kulsum Shanta. (December 2016)
 18. Effect of integrated use of organic and inorganic fertilizer on the growth and yield of Potato. Sabrina Akter Ratna. (December 2016)
 19. Effect of soil conditioner and frequency of irrigation on the yield and yield attributes of Boro rice (BRRI dhan29). Md. Ziaur Rahman. (June 2016)
 20. Genotypic variation in flowering pattern and reproductive efficiencies of Mungbean. Md. Nazrul Islam. (June 2016)
 21. Effect of source-sink manipulation on yield contributing characters and yield of Sesame (*Sesamum indicum* L.). Shawon Kumer Bain. (December 2016)
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FOREIGN LANGUAGES

Bengali: Native level competency

English: Excellent -all skills)Listening, speaking, reading, and writing (

Thai and Malayu: Beginner's level proficiency including conversational skills

Arabic, Hindi and Urdu: Basic understanding

TOURS AND TRAVELS

India: (Tour guide: study tour to universities and research institutes based on Agriculture)

Nepal: (Collaborative research with Nepal Agroforestry Foundation)

Singapore: (Social visit to university and professor's laboratories)

Hong Kong: (Visit to university and professor's laboratories)

Japan: (Social visit to university and professor's laboratories)

Thailand: (MSc and Post-doc education/research)

Malaysia: (PhD research and education)

PROFESSIONAL MEMBERSHIPS

Life Member

Bangladesh Society of Plant Science and Technology (BSPST)
<http://www.>

Member (Teachers Association)

Patuakhali Science and Technology University
<http://www.pstu.ac.bd>

Life Member

World Association of Soil and Water Conservation (WASWC)
<http://www.waswc.org/>

Life Member (0170)

Seed Science Society of Bangladesh (SSSB)
<http://www.sssb-bau.org/>

Alumni Member (BG004AU2001)

Asian Institute of Technology, AIT-Alumni Association (AITAA)
<http://www.aitaa.ait.ac.th/>

Active Member (01-94-6733)

Krishibid Institution, Bangladesh (KIB)
<http://kib.org.bd/>

General Member (Membership code 927)

Iranian Biotechnology Society (IBS)
http://www.biotechsociety.ir/index.php?slc_lang=en&sid=1

AREAS OF ACADEMIC EXPERTISE AND RESEARCH INTERESTS

- Plant physiology and crop ecology
 - Crop production and farming systems
 - Watershed management and land productivity
 - Pasture management and animal nutrition
 - Pollutions and toxicity
 - Organic farming
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SELECTED PUBLICATIONS

Book (English)

1. Utilization of rice straw in a total mixed ration for ruminants: Techniques to improve nutritive values of crop residues. Lambert Academic. Publishing (2011-08-18). ISBN-13: 978-3-8454-2835-2.
2. A guide to grow Macadamia: Review and reference manual. Scholars' Press (2013-05-20). ISBN-13: 978-3-639-51453-7.
3. Diversity of plants at the Patuakhali Science and Technology University campus. [Almost ready to publish]

Journal papers (National, Regional, and International)

- 1) Tran Van Dat, **Md. Mainul Hasan** (2019). Calibration of the Jensen' yield prediction model for rice crop cultivated in the northern region of Vietnam. *Pertanika Journal of Science and Technology*. 27 (3): 1169-1180.
- 2) Prome Debnath, **Md. Mainul Hasan**, A.K.M. Abdul Ahad Biswas, Avijit Biswas (2019). Adoption of disaster risk reduction strategy in agriculture sector at Southkhali Union of Sharankhola Upazila, Bangladesh. *Archives of Agriculture and Environmental Science*. 4 (2): 141-150.
- 3) SMD Haque, MHK Howlader, ABMMM Khan, **MM Hasan**, SA Ratna (2019). Growth, development and yield attributes of black gram (*Vigna mungo* L.) varieties at Patuakhali region. *Journal of Agroforestry and Environment*. 13 (1 & 2): 77-79.
- 4) MZ Rahman, R Ahmed, A Shila, **MM Hasan**, MHK Howlader (2019). Interactive effects of irrigation and flobond on growth and yield of BRRI dhan29. *Progressive Agriculture*. 30 (2): 165-172.
- 5) B Chowdhury, MHK Howlader, MK Hossain, MC Sikder, **MM Hasan** (2018). Effect of nitrobenzene on growth and yield of boro rice. *Progressive Agriculture* 29 (4): 304-312.
- 6) Shamim Mia, Eamad Mustafa, **Md. Mainul Hasan**, Md. Abdul Kayum, Nasar Uddin Ahmed and Md. Harun-Or-Rashid (2018). Co-limitation of nitrogen and phosphorus causes culm shortness in the aged Murta (*Schumannianthus dichotomus*) plantation. *International Journal of Innovative Research*. 3(3):94–99.
- 7) MM Rahman, ABMMM Khan, **MM Hasan**, LA Banu, MHK Howlader (2018). Effect of foliar application of gibberellic acid on different growth contributing characters of mungbean. *Progressive Agriculture*. 29 (3): 233-238.
- 8) LA Shimu, **MM Hasan**, ABMMM Khan, MK Hossain, MHK Howlader (2018). Performance of concentrated *Cropmax* on growth and yield of mungbean. *Progressive Agriculture*. 29 (3): 239-247.
- 9) Md Ahsan Habib, Mohammad Humayun Kabir Howlader, Md Resad Mallik, **Md Mainul Hasan**, Md Isfatuzzaman Bhuyan, Akhinur Shila, Rayhan Ahmed and Abu Jafor Muhammad Nur Nabi (2018). Effect of different organic manures on growth and yield of cabbage. *International Journal of Advances in Agricultural Sciences*. 3 (11): 01-10.
- 10) ST Islam, MZ Haque, **MM Hasan**, ABMMM Khan, UK Shanta (2018). Effect of different irrigation levels on the performance of wheat. *Progressive Agriculture* 29 (2): 99-106.
- 11) Sarwar Jahan and **Mainul Hasan** (2017). Light-harvesting complexes communicate growth and physiology of plants. *Indian Journal of Plant Physiology*. 23(1):1-6.
DOI: <https://doi.org/10.1007/s40502-017-0325-9>. (Available online on 22 December 2017)
- 12) MHK Howlader, M Rasel, MS Ahmed, **MM Hasan**, and LA Banu (2017). Growth and Yield Performance of Local T. Aman Genotypes in Southern Region of Bangladesh. *Progressive Agriculture*. 28(2): 109-113. (August 2017).
- 13) MN Hasan, **M M Hasan**, M Z Haque, MHK Howlader, and U.K. Shanta (2017). Adaptability of Tomato Genotypes Suitable for Coastal Region of Patuakhali in Bangladesh. *Progressive Agriculture*. 28(2): 84-91. (August 2017).

- 14)** Mohd Khairi, Syed Ahmad Naqib, Mohd Nozulaidi, **Md. Mainul Hasan** and Md. Sarwar Jahan (2017). Low Water Input Confers Sustainable Rice Production without Affecting Soil, Plant Physiological and Yields Parameters. Australian Journal of Crop Science. 11(08): 1068-1077. (www.cropj.com - June 2017).
- 15)** SA Ratna, MHK Howlader, **MM Hasan**, MR Mallick, and UK Shanta (2017). Effect of Integrated Use of Manure and Fertilizer on the Growth and Yield of Potato. Progressive Agriculture. 27(4): 435-443. (April 2017)
- 16)** Abdulaziz R. Abdulkadir, Nashriyah Mat, **Md. Mainul Hasan**, and Md. S. Jahan (2016). In vitro Antioxidant Activity of the Ethanolic Extract from Fruit, Stem, and Leaf of *Solanum torvum*. ScienceAsia. 42: 184-189.
- 17)** Md. Mahmudul Hasan, **Md. Mainul Hasan**, Jaime A. Teixeira da Silva and Xuexian Li (2016). Regulation of Phosphorus Uptake and Utilization: Transitioning from Current Knowledge to Practical Strategies. Cellular & Molecular Biology Letters. 21 (7): 1-19.
- 18)** A.J.M.N. Nabi, M.H.K Hawlader, **M. M. Hasan**, M.Z. Haque, and M. L. Rahman (2016). Growth and Yield Difference due to Application of Various Levels of Gibberellic Acid in Local and BARI Falon-1. Progressive Agriculture. 27(2): 94-100.
- 19)** M.S. Ahmed, **Md. Mainul Hasan**, M.L.Rahaman, M.A. Islam, and M. H. K. Howlader (2015). Performance of Selected Local T. Aman Rice Varieties in Patuakhali Region. Journal of Agroforestry and Environment. 9 (1 & 2): 53-55.
- 20)** S.Roy, **Md. Mainul Hasan**, M.S. Ahmed, M. Rasel, and M.H.K. Howlader (2015). Growth and Yield Performance of T. Aman Rice Varieties under Different Date of Transplanting in Southern Region. Journal of Agroforestry and Environment. 9 (1 & 2): 97-99.
- 21)** M.L.Rahaman, Md. Mainul Hasan, A.B.M.M.M. Khan, A.J.M.N. Nabi, and M. H. K. Howlader (2014). Growth and Yield Responses of Chickpea (*Cicer arietinum* L.) to Foliar Application of Nitrobenzene. Bangladesh Journal of Crop Science. 25: 133-137.
- 22)** Md. Asaduzzaman, Mahbub Robbani, Mohammad Ali, Md. Mahmudul Hasan, Monjila Begum, **Md. Mainul Hasan**, Jaime A. Teixeira da Silva, and Md. Jashim Uddin (2015). Mother Bulb Weight and Plant Density Influence on Seed Yield and Yield Attributes of Onion. International Journal of Vegetable Science. 21: 98-108.
- 23)** Md. Rezaul Haque, Mahbub Robbani, Md. Mahmudul Hasan, Md. Asaduzzaman, **Md. Mainul Hasan**, and Jaime A. Teixeira da Silva (2014). Zinc and Boron Affect Yield and Quality of Onion (*Allium cepa* L.) Seed. International Journal of Vegetable Science. 20: 131-140. (Published Online: 18 March 2014)
- 24)** A.J.M.N. Nabi, **M. M. Hasan**, M.S. Alam, M.S. Islam and M. R. Islam (2014). Responses of Gibberellic Acid (GA₃) on Growth and Yield of Cowpea cv. BARI Falon-1 (*Vigna unguiculata* L.). Journal of Environmental Science and Natural Resources. 7(2): 7-12. <http://www.banglajol.info/index.php/JESNR/article/viewFile/22196/15275>
- 25)** Md. Kamruzzaman, Md. Abdul Kayum, **Md. Mainul Hasan**, Md. Mahmudul Hasan and Jaime A. Teixeira da Silva (2013). Effect of Split Application of Nitrogen Fertilizer on Yield and Yield Attributes of Transplanted Aman Rice (*Oryza sativa* L.). Bangladesh Journal of Agricultural Research. 38(4): 579-587. (Published: December 2013)

- 26)** M. N. A. Siddiqui, **M. M. Hasan**, M. H. K. Howlader and M. K. Shahadat (2013). Effect of Biofertilizer on Growth Responses of Lentil (*Lens culinaris* L.). International Journal of Sustainable Agricultural Technology. 9 (4): 01-06. (Published: April 2013)
- 27)** M. N. A. Siddiqui, **M. M. Hasan**, M. H. K. Howlader and M. K. Shahadat (2013). Effect of Biofertilizer on Yield and Yield Attributes of Lentil (*Lens culinaris* L.). International Journal of Sustainable Agricultural Technology. 9 (5): 01-05. (Published: May 2013)
- 28)** M. Asaduzzaman, **Md. Mainul Hasan**, Md. Mahmudul Hasan, Md. Moniruzzaman and Mohammad Humayun Kabir Howlader (2012). Effect of Bulb Size and Plant Spacing on Seed Production of Onion (*Allium cepa* L.). Bangladesh Journal of Agricultural Research. 37(3): 405-414. (Published: September 2012)
- 29)** Md. Moniruzzaman, Md. Mahmudul Hasan, Jaime A. Teixeira da Silva, Md. Jashim Uddin, **Md. Mainul Hasan**, Monjila Begum, Md. Abu Syed (2012): Variability Study in Inter-variety Crosses of Aubergine (*Solanum melongena* L.). International Journal of Plant Breeding. 6(2): 135-138. (Accepted: 14 March 2012)
- 30)** Zamiul Haq, Mahbub Robbani, Mohammad Ali, **Mainul Hasan**, Mahmudul Hasan, Monjila Begum, Jaime A. Teixeira da Silva, Xiao-Ying Pan, and Rezaul Karim (2012). Damage and Management of Cyclone Sidr-affected Homestead Tree Plantations: A case study from Patuakhali, Bangladesh. Natural Hazards. (Accepted: 11 July 2012)
- 31)** Charturong Chanseetis, **Md. Mainul Hasan**, Kanyaratt Supaibulwatana and Md. Mahmudul Hasan (2012). Effect of Different Fertilizer Formulations on Growth and Chlorophyll Content of Greenhouse Grown Macadamia Plants in a Micro Drip-irrigation System. Journal of Agricultural Science and Technology B. 2(2012): 731-736. (Accepted: 20 June 2012)
- 32)** Md. Asaduzzaman, Md. Mahmudul Hasan, **Md. Mainul Hasan**, Md. Moniruzzaman (2012). Quality Seed Production of Onion (*Allium cepa* L.) an integrated approach of bulb size and plant spacing. Journal of Agricultural Research., 50(1): 119-128.
- 33)** Shafiquzzaman Siddiquee, Bo Eng Cheong, Khanam Taslima, Kausar Hossain and **Md. Mainul Hasan** (2012). Separation and Identification of Volatile Compounds from Liquid Cultures of *Trichoderma harzianum* by GC-MS Using Three Different Capillary Columns. Journal of Chromatographic Science. 50:358-367.
- 34)** Shafiquzzaman Siddiquee, Soon Guan Tan, Umi Kalsom Yusuf, Nur Hasan Nudin Fatihah, and **Md. Mainul Hasan** (2012). Characterization of Malaysian *Trichoderma* Isolates using Random Amplified Microsatellites (RAMS). Molecular Biology Reports. 29:715-722.
- 35)** Shafiquzzaman Siddiquee, Yee Weng Yan, Khanam Taslima, Nur Fatihah Hasan Nudin, S. Vujay Kumar and **Md. Mainul Hasan** (2012). Sequence Analysis of the Ribosomal DNA Inter Transcribed Spacer Regions in *Termitomyces heimi* Species. Ann. Microbiol. 62:797-803.
- 36)** M.Z. Haque, M.A.A. Al-Musa, **Md. Mainul Hasan**, M.I. Alam and M. F. Hoque (2012). Effect of salinity on seed germination, growth and yield attributes of Wheat. Journal of the Bangladesh Society for Agricultural Science and Technology. 9 (1&2): 5-10.
- 37)** M. Asaduzzaman, M. Robbani, M. M. R. Rajib, M. M. Hasan, **Md. Mainul Hasan** (2011). Effect of Bulb Size and Plant Spacing on Quality Seed Production of Onion (*Allium cepa* L.). Eco- Friendly Agricultural Journal. 4 (04): 592-598.

- 38)** M.J. Uddin, S. Ahmed, M.M. Hasan, and **Md. Mainul Hasan** (2010). Effect of Spacing on Morphology and Yield Response of Different T. Aman Rice Cultivars under Coastal Highland Ecosystem. *Indian Journal of Agricultural Research*. 44 (4): 251-258.
- 39)** M.Z. Haque, M.M. Hasan, M.M.R. Rajib, **M.M. Hasan** and M. M. H. Sikdar (2010). Stress-adaptive Traits in Wheat: Rate of Chlorophyll and Nitrogen Attenuation under High Temperature. *SAARC Journal of Agriculture*. 8 (1): 10-20.
- 40)** M.Z. Haque, M.M. Hasan, **M. Mainul Hasan**, H.M.K. Bashar, and M.R.K. Rajib (2010). Yield and Yield Attributes of Advanced Wheat Genotypes under Short Winter Ecosystem of Coastal Patuakhali. *International Journal of BioResearch*. 8 (5): 23-29.
- 41)** **Md. Mainul Hasan** and Khin Mar Cho (2009). Sustainable Farming Systems and Land Management: A Case Study from Northeastern Thailand. *Journal of the Patuakhali Science and Technology University*. 1 (2): 125-130.
- 42)** **M.M. Hasan**, A.K.M. Abdul Ahad Biswas and R.A. Halim (2009). Feeding Effect of Urea and Steam Treated Rice Straw on Growth of Ram. *Journal of the Patuakhali Science and Technology University*. 1 (2): 157-163.
- 43)** M.Z. Haque, M.M. Hasan, M.M.R. Rajib, and **M.M. Hasan** (2009). Identification of Cultivable Heat Tolerant Wheat Genotypes Suitable for Patuakhali District in Bangladesh. *Journal of Bangladesh Agricultural University*. 7 (2): 241-246.
- 44)** M.Z. Haque, M.J.U Ahmed, T. Hossain, and **M.M. Hasan** (2008). Late Planting Induced Flag Leaf Senescence and Growth Duration Reduction in Wheat Genotypes Differing in Cell Membrane Thermostability. *International Journal of Sustainable Agricultural Technology*. 4 (2): 41-47.
- 45)** **Md. Mainul Hasan**, Halim, R.A., Liang, J.B., and Alimon, A.R., (2006). Rice Straw as a Feed for Ruminant: Improvement of Nutritive Value and Evaluation of Straw-based Total Mixed Ration. *Malaysian Journal of Animal Science*. 1: 45-53.
- 46)** **M.M. Hasan**, R.A. Halim, and Asgar Ali (2006). Potential of Fibrous By-products as Feedstuffs: An Alternative Approach of Using Rice Straw. *Asian Journal of Microbiology, Biotechnology and Environmental Sciences*. 8 (3): 399-403.
- 47)** **Md. Mainul Hasan**, S.L. Ranamukhaarachchi (2006). Characterization and Implication of Land Productivity under Different Cropping Systems. *Ecology, Environment and Conservation*. 12 (1): 345-349.

Conference papers and other publications

- 1)** **M.M. Hasan**, K. Supaibulwatana, T. Potipiranun and C. Chanseetis (2009). Systematic study of water and fertilizer requirement of greenhouse grown macadamia (*Macadamia spp.*) stock plant using a micro drip-irrigation system. Book of Abstract: "Agricultural Biotechnology for Better Living and A Clean Environment", PP-PB-128. Agricultural Biotechnology International Conference (ABIC). Queen Sirikit National Convention Center, Bangkok, Thailand. 22-25 September 2009.
- 2)** **Md. Mainul Hasan** (2006). Nutritive value improvement and utilization of rice straw in a total mixed ration for lambs. Ph.D thesis. University Putra Malaysia, Malaysia.

3) Md. Mainul Hasan and Mohd Ridzwan Abd Halim (2005). Pelleted rice straw-based total mixed ration. p. 24. In 'Teknologi Memangkin Pemodenan Pertanian': Pameran Rekacipta Penyelidikan dan Inovasi UPM 2005. Faculti Pertanian, Universiti Putra Malaysia. 16th March 2005.

4) Hasan, M.M., R.A. Halim, J.B. Liang and A.R. Alimon (2004). Chemical composition and feed value of rice straw as affected by variety, fraction of plants and time of straw collection after grain harvest. p. 485-488. In New Dimensions and Challenges for Sustainable Livestock Farming, vol. III. Wong H.K. et al (eds.). Proceedings of the 11th Animal Science Congress: The Asian-Australasian Association of Animal Production Societies. 5-9th September 2004, Kuala Lumpur, Malaysia.

5) Sen, L.T.H., S.L. Ranamukhaarachchi, M. Zebisch, **M.M. Hasan**, W. Meskuntavon (2002). Effect of depth of water and duration of inundation on rice-weed competition and grain yield of rice in the central plains of Thailand. Proceedings of the International Research on Food Security, Natural Resource Management and Rural Development. Deutscher Tropentag, October 9-11, 2002. University of Kassel, Witzenhausen, Germany.

6) S.L. Ranamukhaarachchi and **M.M. Hasan** (2001). Watershed as a bio-physical environment and causes of degradation. (14 pages). Paper prepared for the UWMP, Sri Lanka - training program, June 25th – July 1st, 2001. AIT conference centre, Thailand.

7) S.L. Ranamukhaarachchi and **M.M. Hasan** (2001). Cropping systems approach for maintaining productivity of watershed. (9 pages). Paper prepared for the UWMP, Sri Lanka - training program, August 27th – September 1st, 2001. AITCC, Thailand.

8) Md. Mainul Hasan (2001). Farming systems in Ban Pong Chanuan village, northeastern Thailand: Characterization and implication for sustainability. M.Sc. thesis. Asian Institute of Technology, Thailand.

9) Md. Mainul Hasan (2001). 'Farming systems in Ban Pong Chanuan village, northeastern Thailand: Characterization and implication for sustainability'. Poster presentation in the SERD Research Bazaar, during 15th - 17th August, 2001 at the Asian Institute of Technology, Thailand.

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