

## Mst. Salma Akter, MPhil, MS

### EDUCATION

---

**Master of Philosophy (MPhil)** January 2019 – August 2021

Charles Sturt University, NSW, Australia

Supervisor: Professor Dr. Geoff Gurr, School the School of Agricultural, Environmental and Veterinary Sciences, Charles Sturt University, NSW, Australia

Thesis title: Do landscape properties mediate the response of herbivorous pest and natural enemy arthropods to local properties? (Online version [here](#))

**Master of Science (MS) in Entomology** January 2010 – December 2011

Sher-e-Bangla Agricultural University, Dhaka, Bangladesh

Supervisor: Professor Dr. Md. Razzab Ali, Department of Entomology

CGPA: 3.72/4.0

Thesis title: Mass rearing of *Trichogramma evanescens* Westwood egg parasitoid of lepidopterous insect pests.

Relevant Major Courses: Insect Physiology, Insect Morphology, Insect Taxonomy, Biological Control, and Insect Ecology

**Bachelor of Science in Agriculture** January 2005 – December 2008

Sher-e-Bangla Agricultural University, Dhaka, Bangladesh

CGPA: 3.85/4.0

Relevant Major Courses: Farm and Farming System, Chemistry of Biomolecules, Genetics and Plant Breeding, In-Vitro Culture, Entomology and Plant Pathology.

### RESERCH-RALATED EXPERIENCE

---

**Primary Advisor** October 2016 – Present

**Research Title:** Evaluation of some crop and non-crop flowering plants in enhancing natural enemies of cabbage (*Brassica oleracea* var. *capitata*) insect pests.

#### Co-Advisor

- **Research Title:** Investigation of intraguild predation (IGP) among the predators and parasitoids of mustard aphid *Lipaphis erysimi*

**Primary Advisor:** Professor Dr. Md. Razzab Ali, Department of Entomology, Sher-e-Bangla Agricultural University.

- **Research Title:** Effect of surrounding landscapes on different pollinators in the agroecosystem in Bangladesh (2022-Present)

**Primary Advisor:** Professor Dr. Mohammad Sakhawat Hossain, Department of Entomology, Sher-e-Bangla Agricultural University.

#### Principal Investigator

- **Research Title:** Efficacy of Trichogrammatid wasp with some botanicals in controlling insect pests of summer cabbage' (Funded project by Sher-e-Bangla Agricultural University Research System (SAURES), 2017-2018)

#### Co-Investigator

October 2016 – Present

- **Research Title:** Pod borer infestation on yard long bean and their biorational management with biopesticides and synthetic chemical insecticides (Funded by the Ministry of Science and Technology, 2021-2022)

**Principal Investigator:** Dr. Sabera Yasmin, Associate Professor, Department of Entomology, Sher-e-Bangla Agricultural University.

- **Research Title:** Incidence of phytophagous beetles and caterpillars on bottle gourd and their potential management (Funded by the Ministry of Science and Technology, 2022-2023)

**Principal Investigator:** Dr. Sabera Yasmin, Associate Professor, Department of Entomology, Sher-e-Bangla Agricultural University.

### Master of Philosophy (MPhil)

January 2019 – November 2021

**Research Title:** Do landscape properties mediate the response of herbivorous pest and natural enemy arthropods to local properties?

- Research chapter 1: Landscape context mediates the effects of local vegetation on in-field abundance of pests and natural enemies.
  - Developed GIS analyses and conducted statistical analysis using R
  - Manuscript published in ‘Ecology and Evolution’
- Research chapter 2: Landscape context affects the scope for local-scale habitat management to mediate in-field pest and natural enemy densities.
  - Developed GIS analyses and conducted statistical analysis using R
  - Manuscript under development for submission.

### Other Research Projects:

- **Research Title:** Field and landscape management to support beneficial arthropods for IPM on vegetable farms’ funded by Hort Innovation, Australia.
  - Investigated the landscape management part of the project
  - Participated in writing a review paper which has been published in ‘Austral Entomology’

### Master of Science in Entomology

January 2010 – December 2011

**Research Title:** Mass rearing of *Trichogramma Evanescens* Westwood egg parasitoid of lepidopterous insect pests.

- Investigated the effective medium to rear the parasitoid *Trichogramma Evanescens*
- Studies biology of the parasitoid
- Assess the parasitization performance of the parasitoid

## CAREER-RELATED EXPERIENCE

---

### Assistant Professor

October 2016 – Present

Department of Entomology, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh

- Conducting undergraduate courses
- Investigation of research project
- Supervising postgraduate students
- Publishing research articles

### Lecturer

October 2014 – September 2016

Department of Entomology, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh

- Conducting undergraduate courses
- Investigation of research project
- Publishing research articles

### Post-Harvest Extension Officer

March 2012 – August 2013

Integrated Quality Horticulture Development Project – 2nd Phase, Department of Agricultural Marketing  
People’s Republic of Bangladesh

- Administrative responsibilities as a head of the regional station

- Farmers' group formation
- Train the farmer on how to create marketing channel to get proper price of their product

### SEMINAR AND CONFERENCE

---

**Faculty of Science Higher Degree Research and Honours Symposium** 2020

Presentation Title: Landscape context mediates the effects of local vegetation on in-field abundance of pests and natural enemies.

**Faculty of Science Higher Degree Research and Honours Symposium** 2019

Presentation Title: Do landscape properties mediate the response of herbivorous pest and natural enemy arthropods to local properties?

**Australian Entomological Society 50th AGM and Scientific Conference, Queensland** 2019

Poster Title: Influence of landscape composition on arthropod assemblages of brassica vegetable fields

### KEY QUALIFICATIONS HIGHLIGHTS

---

#### Technical Skills

- **Modeling Software:** ArcGIS, QGIS
- **Programming Language:** RStudio
- **Project Management Software:** MS Office, MS Excel, MS Powerpoint

### FELLOWSHIP AND AWARDS

---

**Australia Awards Scholarship** 2019 – 2020

MPhil, Charles Sturt University, NSW, Australia

**National Science and Technology (NST) Scholarship** 2010 – 2011

MS, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh

### RESEARCH INTEREST

---

Insect ecology, molecular ecology, biological control, beneficial insects, insect-plant interactions, pest management, insect resistance management.

### PAPERS AND PUBLICATIONS

---

- **Akter, S.**, Rizvi, S. Z. M., Haque, A., Reynolds, O. L., Furlong, M. J., Melo, M. C., Osborne, T., Mo, J., McDonald, S., Johnson, A. C., & Gurr, G. M. (2023). Continent-wide evidence that landscape context can mediate the effects of local habitats on in-field abundance of pests and natural enemies. *Ecology and Evolution*, 13, e9737. <https://doi.org/10.1002/ece3.9737>
- Yasmin, S., Ali, M., Rahman, M. M., **Akter, M. S.**, Paul, A. K., Akter, M. M., & Latif, M. A. (2022). Screening certain mung bean varieties against thrips (Thysanoptera: Thripidae) and exploration of resistance sources. *Agrosystems, Geosciences & Environment*, 5(3), e20287.
- Rizvi, S. Z. M., Reynolds, O. L., Johnson, A., Haque, A., Furlong, M., Mo, J., Melo, M., **Akter, S.**; Sandoval-Gómez, V., Gurr, G. M. (2022). Prospects for habitat management to suppress vegetable pests in Australia. *Austral Entomology*, 61(1), 3-28.
- Yasmin, S., Ali, M., Rahman, M. M., **Akter, M. S.**, & Latif, M. A. (2021). Biological traits of bean flower thrips, *Megalurothrips usitatus* (Thysanoptera: Thripidae) reared on mung bean. *Science Heritage Journal (GWS)*, 5(2), 29-33.

- Hossein, M. I., Ali, M. R., Akter, **M. S.**, Akter, M. M., & Roy, S. R. (2018). Eco-friendly Management of Angoumois grain moth, *Sitotroga cerealella* Olivier using some botanicals on stored paddy. *J Biosci Agric Res*, 17(02), 1422-1430.