

DR. NAHID SULTANA

Department of Botany, Jagannath University, Dhaka 1100, Bangladesh

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FIELD OF SPECIALIZATION

- ✓ Plant Taxonomy
- ✓ Phytochemistry

EDUCATION

- **Ph. D.** in Botany (Plant Taxonomy), University of Dhaka, Bangladesh (2017)
Thesis – ‘*Taxonomy, propagation and chemical properties of selected anticancerous plants of Bangladesh*’
- **M. Sc.** in Botany (Thesis on Taxonomy), University of Dhaka (2007)
First Class First Position
Thesis – ‘*Systematic Studies in some Zingiberalean families from Bangladesh*’
- **B. Sc.** (Honors) in Botany, University of Dhaka (2005)
First Class First Position
- H. S. C. Viqarunnisa Noon College, Dhaka (1998)
First Division (Marks obtained 80.4%)
- S. S. C. Viqarunnisa Noon School, Dhaka (1996)
First Division (Marks obtained 82.4%)

CURRENT POSITION

Associate Professor (Since 4th January 2023)

Department of Botany

Jagannath University

Dhaka-1100, Bangladesh

PREVIOUS EMPLOYMENT RECORDS

- **Lecturer** (04/10/2015 – 04/01/2018)
Department of Botany
Jagannath University
Dhaka-1100, Bangladesh
- **Assistant Professor** (04/01/2018 – 04/01/2023)
Department of Botany
Jagannath University
Dhaka-1100, Bangladesh

- **Research Assistant** (01/12/2006 – 01/12/2009)
Encyclopedia of Flora & Fauna of Bangladesh Project
Asiatic Society of Bangladesh
5 Old Secretariat Road, Nimtali, Ramna,
Dhaka-1000

PROFESSIONAL SERVICES

- Contributor: Encyclopedia of Flora and Fauna of Bangladesh, Vols. 6-12 (2006-2009). Asiatic Society of Bangladesh. Contributed the detailed species profile of 15 plant species under 5 angiosperm families in the Encyclopedia of Flora and Fauna of Bangladesh.
- Translator (English to Bengali): Encyclopedia of Flora and Fauna of Bangladesh, Volume-10.
- Executive Committee Member, Bangladesh Association of Plant Taxonomists (2018-2020)
- Academic Committee Member, Department of Botany, Jagannath University, Dhaka 1100

TEACHING

Courses Taken and Subject Taught (Theory Courses):

- M.S. (Master of Science): Angiosperm Systematics
- B.S. Honours (3rd year): Taxonomy of Angiosperm II
- B.S. Honours (3rd year): Economic Botany and Ethnobotany
- B.S. Honours (1st year): Taxonomy of Angiosperm I

Practical Courses:

- BOT 5101: Angiosperm Systematics
- BOT 3108: Taxonomy of Angiosperm II
- BOT 3201: Economic Botany and Ethnobotany
- BOT 1106: Taxonomy of Angiosperm I

As Mentor:

- Guided five M.S. Thesis students and continuing guiding M.S. students.

RESEARCH

(A) Current Research

- ✓ Taxonomic studies of the genus *Albizia* in Bangladesh.
- ✓ *In vitro* antioxidant, antidiarrheal and cytotoxicity of *Cassia fistula*.
- ✓ Biological activities of *Cassia fistula*: Antidiabetic, Antibacterial, Analgesic, and Thrombolytic Evaluation.

(B) Previous Research

1. Taxonomic studies on the family Strelitziaceae and Cannaceae in Bangladesh.
2. Taxonomy, Propagation and Reproductive Biology of some anticancerous plants of Bangladesh
3. Evaluation of *Aphanamixis polystachya* as antidiabetic, antioxidant and cytotoxic agents.
4. Screening of *Aphanixis polystachya* for its anticancer, antibacterial, antidiarrheal and analgesic activities
5. Isolation of the compound Stigmasterol from methanol leaf extracts of *Aphanamixis polystachya*
6. Biological activities of *Oroxylum indicum* Vent: An analgesic, antidiabetic, antioxidant, cytotoxicity, anti-diarrhoeal, anti-depressant, antibacterial and anticancer evaluation
7. Isolation and characterization of four compounds from root bark of *Oroxylum indicum*
8. Taxonomy, anatomy and molecular characterization of different variants of *Canna indica* in Bangladesh
9. Biological activities of *Canna indica* (Cannaceae).
10. Multi-functional pharmacological credence of *Woodfordia fruticosa* in Bangladesh.

NEW SPECIES RECORD DESCRIBED

- ✓ *Physalis angulata* L. (Solanaceae)

RESEARCH PUBLICATIONS

1. Rahman, M.M, Soma, M.A., **Sultana, N.**, Hossain, M.J., Sufian, M. A., Rahman, M.O. and Rashid, M.A. 2023. Exploring therapeutic potential of *Woodfordia fruticosa* (L.) Kurz leaf and bark focusing on antioxidant, antithrombotic, antimicrobial, anti-inflammatory, analgesic, and antidiarrheal properties. Health Sci Rep. 6: e1654.
2. Ahmed, S.S, Rahman,M.O., Alqahtani, A.S., **Sultana, N.**, Almarfadi, O.M., Ali, M. A., Lee, J. 2023. Anticancer potential of phytochemicals from *Oroxylum indicum* targeting Lactate Dehydrogenase A through bioinformatic approach. Toxicology Reports. 10: 56-75.
3. **Sultana, N.**, Soma, M.A. and Rashid, M.A. 2022. Analgesic, hypoglycemic and antidiarrheal activities screening of *Canna indica* L. Bangladesh Pharmaceutical Journal. 25(2): 137-142.

4. Akhi, S.S., Sarkar, B.K., **Sultana, N.**, Jui, Z.S., Sarker, R.H. and Rahman, M.O. 2021. Molecular characterization of *Canna indica* L. based on random amplified polymorphic DNA markers. *Bangladesh J. Plant Taxon.* 28(1): 75-81.
5. **Sultana, N.**, Akhi, S.S., Hassan, M.A. and Rahman, M.O. 2019. Morphological and anatomical investigation among six variants of *Canna indica* L. *Bangladesh J. Plant Taxon.* 26(2): 219-230.
6. **Sultana, N.**, Rahman, M.O. and Hassan, M.A. 2019. Seed germination in six anticancerous plants of Bangladesh. *J. Asiat. Soc. Bangladesh, Sci.* 45(2): 151-159.
7. **Sultana, N.**, Rahman, M.O., Tahia, F., Hassan, M.A. and Rashid, M.A. 2017. Antioxidant, cytotoxicity and antimicrobial activities of *Aphanamixis polystachya* (Wall.) R.N. Parker. *Bangladesh J. Bot.* 46(4): 1381-1387.
8. **Sultana, N.**, Hassan, M.A., Begum, M. and Sultana, M. 2008. *Physalis angulata* L. (Solanaceae)- A New Angiospermic Record for Bangladesh. *Bangladesh J. Bot.* 37(2): 195-198.
9. **Sultana, N.** and Hassan, M.A. 2008. The *Heliconia* taxa cultivated in Bangladesh: Keys and Descriptions. *Bangladesh J. Plant Taxon.* 15(2): 141-153.
10. **Sultana, N.** and Hassan, M.A. 2008. Propagation Methods of *Cheilocostus speciosus* (J. Koenig) C.D. Specht. *Bulletin Heliconia Society International* 14(3): 10.

RESEARCH PROJECTS

- Taxonomy and biological investigation of *Cassia fistula* L.- funded by University Grants Commission of Bangladesh, Jagannath University (2021).
- Taxonomy, propagation and biological activities of *Woodfordia fruticosa* (L.) Kurz- funded by University Grants Commission of Bangladesh, Jagannath University (2019).
- Taxonomy, anatomy and biological activities of *Canna indica* L.- funded by University Grants Commission of Bangladesh, Jagannath University (2017).

AFFILIATION WITH SCIENTIFIC ORGANIZATIONS

1. Member of 'Bangladesh Botanical Society', Dhaka, Bangladesh.
2. Member of 'Bangladesh Association of Plant Taxonomists', Dhaka, Bangladesh.

AWARD AND FELLOWSHIP

- Prime Ministers Fellowship of Bangladesh for Ph.D. programme (2009)
- Dean Honour's Award from the Faculty of Biological Sciences, University of Dhaka for outstanding academic performance and regularity (2007).

SELECTED CONFERENCE PAPERS

- ✚ Rahman, M.O., Sultana, N., Rashid, M.A. and Hassan, M.A. 2018. Exploring biological and chemical properties of *Oroxylum indicum* (L.) Kurz. ***EuroSciCon Conference on Applied Science, Biofuels & Petroleum Engineering***, 12-13 November, 2018, Athens, Greece, p. 49.
- ✚ Sultana, N., Akhi, S.S., Hassan, M.A. and Rahman, M.O. 2019. Discrepancies in *Canna indica* L. complex as revealed by morphological and anatomical studies. Paper presented in '***Biennial Taxonomy Conference***' organized by Bangladesh Association of Plant Taxonomists, Dhaka, Bangladesh.
- ✚ Sultana, N., Rahman, M.O., Hassan, M.A. and Rashid, M.A. 2018. Evaluation of biological and chemical properties of *Oroxylum indicum* (L.) Kurz. ***7th International Botanical Conference***, 2-3 February 2018, Dhaka, Bangladesh. p. 61.
- ✚ Sultana, N., Rahman, M.O., Hassan, M.A. and Rashid, M.A. 2018. Antioxidant, cytotoxicity and antimicrobial activities of *Aphanamixis polystachya* (Wall.) R. N. Parker. ***7th International Botanical Conference***, 2-3 February 2018, Dhaka, Bangladesh. p. 62.

MAJOR CONFERENCES ATTENDED

- '***Biennial Taxonomy Conference***' organized by Bangladesh Association of Plant Taxonomists, Dhaka, Bangladesh (2019)

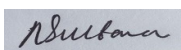
- *Annual Taxonomy Conference*, organized by Bangladesh Association of Plant Taxonomists, Dhaka, Bangladesh, 5 February 2018
- *7th International Botanical Conference*, organized by Botanical Society of Bangladesh, 2-3 February 2018, Dhaka, Bangladesh
- *4th International Botanical Conference*, organized by Botanical Society of Bangladesh, 16-18 January 2009, Dhaka, Bangladesh.

RESIDENTIAL ADDRESS

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REFEREES

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