



Professor Dr. Ahmad Shamsul Islam
(1924 - 2025)

Professor Ahmad Shamsul Islam was the founder president of Bangladesh Association for Plant Tissue Culture and Biotechnology (BAPTC&B) and founding Chief Editor of Plant Tissue Culture and Biotechnology (PTC&B) Journal.

Professor Islam spent more than 40 years teaching botany (Plant Breeding, Genetics and Biotechnology) at the University of Dhaka and other universities across the world. Furthermore, he served at the University of Dhaka as a Supernumerary Professor.

Professor Islam was born on 6th of August 1924 in Medinipur, West Bengal, India and died on April 14, 2025, at the age of 100 in Dhaka. In 1945, he earned a Bachelor's degree in Botany with Honors from the Presidency College in Calcutta, India. He graduated from the same university two years later with a Master's degree in Genetics and Plant Breeding. Professor Islam was awarded a Ph.D. from the University of Manchester in the United Kingdom in 1954 for his outstanding research on seedless strawberry breeding. In addition, he received the Currie Memorial Prize for this exceptional accomplishment.

Professor Islam played a pivotal role in securing Bangladesh's participation in the International Centre for Genetic Engineering Biotechnology (ICGEB) and in the establishment of contemporary biological research and development in Bangladesh. He is regarded as the "Father of Biotechnology" in Bangladesh. He performed a crucial role in the establishment of the National Institute of Biotechnology in Bangladesh. Professor A. S. Islam's notable achievement is the establishment of the Plant Breeding and Tissue Culture Laboratory in the Department of Botany at the University of Dhaka. Professor Islam initiated a scientific exchange program between the Department of Botany at the University of Dhaka and the University of Nottingham, facilitated by the British Council. As a result of this exchange program, a minimum of twelve scientists and teachers from the Botany Department acquired tissue culture training at the University of Nottingham.

Professor Islam provided teaching and mentoring to research students at the University of Dar es Salaam (1973-1975), the University of Sind (1955-1970) and the University of Kenya (1975-1997). In addition, he held positions at the University of Nottingham (1980, 1984), the University of Tokyo (1970), the University of California (1962-1963) and the University of Cornell (1961-1962). At the University of Texas, he served as an honorary faculty member in the Department of Botany during 1993 until 2005. The establishment of the Biotechnology Program at BRAC University (2006) in Dhaka was also organized by Professor Islam.

Professor Islam was an exceptional scholar. He adeptly advanced tissue culture and micropropagation methodologies for indigenous orchids and jute. Moreover, he achieved notable success in the development of virus free potato plants. Furthermore, he successfully implemented various tissue culture methodologies, such as meristem culture, somaclonal variation and micropropagation, applicable to horticultural, ornamental, and agricultural plants. He was the first to hybridize two commercial jute cultivars throughout his studies. He created disease-resistant cotton, jute and kenaf breeding systems. His excellent research, especially at Dhaka University,

resulted in four manuscripts in "Nature" between 1952 and 1960, one in "Science" in 1969, five in "Biologia" between 1959 and 1970, one in "Experimentia" and one in "J. of Heredity". He published most of his key cytogenetics, breeding, tissue culture and transformation studies. Professor Islam wrote and edited over 100 publications and two textbooks, Fundamentals of Genetics (1982) and Bangshagatibidyar Mulkatha (1985). He supervised multiple master's and M.Phil. theses, as well as at least 20 doctoral candidates throughout his professional career. He organized multiple international and local conferences, workshops, and training programs focused on tissue culture and plant biotechnology, including the commercial application of tissue culture in Bangladesh.

In acknowledgement of his significant contributions to education, science and development, Professor Islam has been honored with multiple awards. He received the President's Gold Medal in 1984 for his contributions to agriculture and was honored with the Ekushey Padak, a prestigious award for Martyrs' Day, in 1987 for his achievements in education. He received the Bangladesh Academy of Sciences' Award in 1987, an Honorary DSc degree from Viswa Unnayan Samaj of India, a Gold Medal from the Bangladesh Botanical Society in 1997, a Gold Medal from the Bangladesh Association for Plant Tissue Culture and Biotechnology, the Lifetime Achievement Award from GNOBB in 2017 and was recognized as an eminent botanist by the Dhaka University Botany Alumni Association in 2022.

Professor Islam and his wife, having achieved success as parents, raised three accomplished children. Dr. Yusuf Mahbubul Islam, the eldest son, serves as the vice chancellor of Southeast University in Dhaka. Dr. Zeba I. Seraj, their daughter, previously held a professorship in Biochemistry and Molecular Biology at the University of Dhaka and currently holds a position at the UGC in Bangladesh. Khalid Wahidul Islam, the youngest son, is a computer scientist based in the USA.

Over the course of several decades, Professor A. S. Islam has served as an inspiration to numerous biologists and their institutions worldwide through his dedication to teaching, innovative research, prolific writing, outstanding mentoring and the establishment of innovative academic and research programs, learnt societies and scholarly journals. Professor Islam was not only a pioneer in his field, but also an exemplary leader who inspired many others to pursue excellence. His dedication to the advancement of knowledge and his innovative research have earned him global recognition and admiration.

May his soul rest in eternal peace.

Ameen