



2015 BHEARD Scholar
Islam Hamim

Profile

Country of Study:	United States of America
University:	University of Hawaii
Department:	Plant and Environmental Protection Services
Student Position:	Graduate Research Assistant—Ph.D.
Hometown:	Chandpur, Bangladesh
Home Institution:	Bangladesh Agricultural University
Home Position:	Assistant Professor
Mentored By:	USA: Dr. John Hu, Professor, Plant and Environmental Protection Sciences Dept., University of Hawaii

Research Area: Molecular Plant Virology

BHEARD PROGRAM START DATE: August 2015

UNDERGRADUATE EDUCATION: B.Sc., Agriculture, Bangladesh Agricultural University, Bangladesh

GRADUATE EDUCATION: M.Sc., Plant Pathology, Bangladesh Agricultural University, Bangladesh

RESEARCH INTERESTS: Islam is interested in detection, characterization, and management of plant viruses using molecular biology techniques.

PERSONAL STATEMENT: Islam is interested in conducting research in the field of molecular plant virology. He has a plan for his research work entitled, “Development of virus resistant papaya variety through molecular technique for Bangladesh.”

Papaya (*Carica papaya* L.) is an important crop of Bangladesh and widely cultivated due to its high nutritional value as fruits and vegetables. Papaya ringspot virus (PRSV), currently is being ascribed to the genus Potyvirus of the family Potyviridae, is one of the most important limiting factors for production in Bangladesh. PRSV is a serious problem in northern part of Bangladesh, the major commercial papaya producing region of the country. This disease reduces the yield to a great extent and deteriorates the quality of fruits. In this context of Bangladesh, it is important to develop ringspot virus resistant papaya variety.

Developing ringspot virus resistant papaya variety through molecular technique has been widely studied throughout the world. But the present existence of the virus in Bangladesh is quite alarming. Lack of trained personnel and sophisticated technology together has brought this situation at the present stage.

However, recently some research has been started. Considering the ongoing scenario, Islam has decided to continue his study and research in this area and to dedicate his expertise in developing virus resistant papaya variety through molecular approach.

The Bangladesh Agricultural University is the largest university in the country, conducting all sorts of research in plant science. Here, laboratories with modern facilities such as molecular plant pathology lab, plant disease diagnostic clinic, integrated pest management lab, eco-friendly disease management lab and plant bacteriology and molecular microbe interaction lab have been established in their Department for conducting plant pathological research. Unfortunately, there are few well trained plant pathologists, having skill on modern biological techniques. To Islam's belief, this top-level research program in University of Hawaii, Manoa under BHEARD scholarship, will provide him the opportunity of acquiring plenty of knowledge and skills on the very latest procedures in plant pathology especially in molecular virology.

Islam believes that after finishing his Ph.D., he will be able to contribute to his home institution and put his all-out effort to learn as best as he can and after coming back to his home country. He will start research activities with the knowledge and skill obtained from the program. Islam will start adding new dimension in conducting problem oriented research in his country.

Moreover, this program will benefit him in that sense that it will open up the opportunity for more advance research in the future and this will ultimately benefit his institution with new and updated information and knowledge. Additionally, Islam will be able to teach his students with world standard course materials, techniques and methods. He wants to see his university as one of the world leading institutions in the near future.

As a young prospective researcher, it is Islam's dream to devote a part of his life to the development of agriculture in his country. His country is still an underdeveloped one. The Government has considered the goal of agricultural development until 2021, as a significant and urgent tenor for the country's modernization. Therefore, if Islam is able to make a good course at the program and learn practical use of the knowledge, he will be considered as a well-trained researcher which can be his advantage in leading a group of researchers in the future.

As a result, with his skill, knowledge and experiences, he will be able do more than an ordinary scientist. Through Islam's scientific achievements, he wants to make some contributions for his country. Islam knows it is a great challenge to materialize the dream, but he also knows that he's eager and prepared to meet all of the challenges, which may come his way.

WHEN I AM NOT WORKING I ENJOY: In his spare time, Islam enjoys listening to music, watching movies, cooking and passing time with his family.