

(For JSPS Fellow)

Form B-5

Date (日付) 26/01/2016

(Date/Month/Year: 日/月/年)

**Activity Report -Science Dialogue Program-**  
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名):

Most. Hushna Ara Naznin

(ID No. P15088)

- Participating school (学校名): Katsura Senior High School, Kyoto \_\_\_\_\_

- Date (実施日時): 15/01/2016 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English)

Induced Systemic resistance by Plant Growth Promoting Fungi (PGPF) in Plants

(in Japanese) 植物成長促進菌類(PGPF)による植物の誘導性全身抵抗性

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

My lecture was consisted of 3 parts; Introduction to my country, motivation to become a plant pathologist and to come Japan and a brief of my research in Japan. In the first part, I have presented the important features, seasons, foods, dress, festival and beautiful places of Bangladesh. The students enjoyed that part much and specially they were curious about my country food. In the second part, I pointed out the reason becoming a plant pathologist. I also focused on my interest to come Japan for higher study. In the third part, I discussed about my reseach work. My topic was about the biological control of plant diseases. Therefore, at first I focused on the harmful effects of chemical pesticide on environment. Then beneficial effects of using biocontrol agent for plant disease control as an alternative of chemical. I intruded a new beneficial moicrob that is known as plant growth promoting fungus (PGPF) could effectively supress plant pathogen. I have shown the mechanism of inducing systemic resistance inside the plant by the PGPF and mentined that plant hormones such as SA, ABA and H<sub>2</sub>O<sub>2</sub> are playing major role. Finally, I have discussed a little what I am doing now that I am trying to dessect the hormone signaling pathways of ISR by PGPF using advanced molecular techniques with the help of bioinformatics. I used very simple english in the power point and tried to explain slowly. At the end, I inspired the students to practice

english as much as they can from now on for their future carier. In the Q&A section, the teachers and few of the students ask me about my country as well as my research. It was a nice experience for me to share my views with the senior high school students in Japan.

- Language used (使用言語): English

- Lecture format (講演形式): Power Point

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 15 min (分)

◆Lecture style(ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Used Projector

◆Interpretation(ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

By myself and My host Professor

◆Name and title of accompanied person (同行者 職・氏名)

My host Professor Dr. Yoshiharu Y. Yamamoto, Faculty of Applied Biological Sciences, Gifu University, Japan

◆Other note worthy information (その他特筆すべき事項):

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。):

**高校生に対して「英語ができると世界のドアが開かれる」というメッセージを伝えることができました。今回は私たちもホスト高校も初の事業参加でしたが、参加してよかったと思います。**