

(For JSPS Fellow)

Form B-2  
(FY2018)

Date (日付) 03/02/2019

\_\_\_\_\_  
(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): Dr Md Nazim Uddin\_\_\_\_\_ (ID No. P17724)
- Participating school (学校名): Nagano prefectural Yashioro High School\_\_\_\_\_
- Date (実施日時): 24/01/2019\_\_\_\_\_ (Date/Month/Year: 日/月/年)
  - Lecture title (講演題目): Understanding of plant invasion mechanisms in ecosystem
- Name and title of your accompanying person (講義補助者 職・氏名)  
Gulgena Muhetaer, PhD student (2nd Year), Engineering Ecology lab\_\_\_\_\_
- Lecture format (講演形式): Oral in power point
  - ◆Lecture time (講演時間) 80 min (分), Q&A time (質疑応答時間) 30 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))  
\_\_\_\_\_  
Using Projector
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

An invasive plant species (i.e. a species that is not native to a specific location) has a tendency to spread in ecosystem to a degree believed to cause damage to the environment, human economy or human health. Explaining plant invasions is likely to involve not only multiple mechanisms of invasion, but also understanding the conditions under which each mechanism tends to be important. The resource–enemy release hypothesis predicts those conditions for two of the principal mechanisms of invasion, and in turn suggests how we could manage invasive species. For example, the effects of enemy release may be strongest for high-resource species. The resource–enemy release hypothesis predicts that high resource availability will help invasive plant species more than native species. Consequently, anthropogenic increases in resource availability, ranging from small-scale disturbances to global climate change, may not just facilitate invasion, but facilitate invasion by invasive species in particular. In fact, invasive species tend to outperform native species in high- but not low-resource environments. Humans may therefore play an even larger role in invasions by exotic species.

- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):

This is really a better opportunity for overseas researchers, who are working in Japan. It helps to understand about the culture, customs and communication approach of school. It gives an impression about the students in school and curricula what they are studying. In addition, it is a good time pass within the school students, those are very young and talented, as well as you can convey a message regarding your research and how the research impacts in our life. Overall, it is a good approach of JSPS to inspire and motivate school students to do research in their career, which is very important for the societal development. It is a way of contribution to the Japanese society as JSPS fellow.

- Other noteworthy information (その他特筆すべき事項):

I am very much pleased with students' behaviour and concentration to the lecture. They are very much eager to learn.

- Impressions and comments from the accompanying person (講義補助者の方から、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。)

As I am not good at Japanese so my accompanying person was very helpful to convey the message of the talk. As well as the accompanying person was very helpful to communicate with students and teachers also there. The person was very impressive for all of us.