

(For JSPS Fellow)

Form B-2
(FY2018)

Date (日付)

25/09/2018 (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): Yong-Jiang HUANG (ID No. P17094)
- Participating school (学校名): Chiba Municipal Chiba High School
- Date (実施日時): 21/09/2018 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): A Journey to Plant Science (botany)
- Name and title of your accompanying person (講義補助者 職・氏名)
Kokoro Iwahara, bachelor student
- Lecture format (講演形式):
◆Lecture time (講演時間) 90 min (分), Q&A time (質疑応答時間) 20 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))
Projector, and a small test on leaf type classification

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

My lecture is about plant science. Before my talk, I used several examples, e.g., vegetables, fruits, woody architecture, traditional medicine, etc., to show the close relationship between plants and our human beings. My talk includes three parts: (1) My personal information, (2) some basic knowledge of plant science, and (3) something about my previous research work on plant science. In regard of my personal information, I first briefly introduced myself, and then I talked about my country, China. As China is a big country with long civilization history, I had a lot to introduced, including historical sites, various minorities, spicy foods, beautiful landscapes, large populations and crowded cities. I also talked about my hometown which is located in Zhejiang, eastern China. Then I introduced my education and work history, in which many wonderful experiences might have stimulated me to have become interested in plant science. I stated that the wild nature is my second lab, and I have numerous opportunities to get close to the nature such as various landscapes, vegetations, and plants. This now represents the key reason of why I love plant science so much. Then came the question time and several students asked some interesting questions.

After a short break, I continued my lecture by introducing some basic knowledge in plant science. Here I tried to make it slow. I first introduced the major groups of plants in the world, including algae, moss, fern, gymnosperm, and angiosperm. Among them angiosperm is the most

advanced by having showy flowers and different fruit types. In taxonomy, angiosperms can be classified into numerous groups at different levels, and species is the basic and smallest unit of the whole angiosperm system. Other units commonly used include family and genus. Basically, the angiosperm classification is based on morphology, e.g., flower, fruit, seed, and leaf morphology. Leaf represents the easiest structure we can obtain from a vegetation and thus is one of the organs we most frequently employ to do taxonomic research. We often use several leaf characters such as leaf shape, leaf margin, venation, and epidermal details to identify a leaf. Here I performed a small test that I asked the students to place 18 leaves into different types on the basis of their morphology, and the students turned out to be excellent in this taxonomic work". After that, I moved forward to talk about my previous research work which focused chiefly in Yunnan, the major part of the Hengduan Mountains of China. I first briefly introduced the topography of Yunnan by emphasizing the rapid altitudinal rise from the south to the north. Such large altitudinal gradients provide a wide range of habitats for plants. I showed many pictures of beautiful wild flowers of different taxonomic groups photographed from Yunnan. I also presented a variety of vegetation types along altitudinal gradients where different plants live. Finally I talked in a simple way about plant fossils from Yunnan. Plant fossils represent those plants that occurred in the geological past, probably millions of years ago. In this part, I presented the students some plant fossil specimens I brought from Yunnan. This might be the first time for most of the students to see a plant fossil. I also talked about the significance of plant fossil studies. For examples, plant fossils may tell us the past plant diversity in a region, and some events such as species extinction and climate change. I ended my lecture by showing many thanks to JSPS and its financial support, my host, prof. Arata Momohara, from Chiba University, teachers and students from Chiba Municipality Chiba High School, and my accompany person, Mr. Kokoro Iwahara, for all their kind support and assistance. After the lecture, the students again asked several nice questions.

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

When talking about the professional part, it is advisable to make it simple, and easier to understand (Actually, I did not do well in regard of this).

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

None

- 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。)

My accompany person thought there are too many professional forms which may be difficult for students to follow.