Research Activity Report Supported by "Leading Graduate Program in Primatology and Wildlife Science"

(Please be sure to submit this report after the trip that supported by PWS.)

	2017. 05. 26
Affiliation/Position	Primate Research Institute
Name	Wanyi Lee

1. Country/location of visit

Yakushima, Japna

2. Research project

Study of fern species diversity on Yakushima island at different altitude

3. Date (departing from/returning to Japan)

2017.5.13 - 2017.5.19 (7 days)

4. Main host researcher and affiliation

Dr. Shinohara (Kagawa University) and Dr. Kudoh (Kyoto University)

5. Progress and results of your research/activity (You can attach extra pages if needed)

Please insert one or more pictures (to be publicly released). Below each picture, please provide a brief description.

During these seven days from 13 to 19 May of 2017, I joined Yakushima field course. In these days, I remained as a member of plant team, carrying out fern survey at different altitudes. We collected gametophytes and sporophytes in different sites for species identification. We will combine the information we got on this field course and the DNA analysis result we will get on the genome course to get further understanding on the fern community in Yakushima. My activity schedule is as follows:

2017.5.13 Arrive Yakushima

2017.5.14 Sample collection at altitude <300m

2017.5.15 Samples collection at altitude>1000m

2017.5.16 Sample collection at altitude from 300-1000m

2017.5.17 Presentation preparation

2017.5.18 Presentation

2017.5.19 Leave Yakushima

On 13 May, we travelled from Inuyama to Yakushima and arrived at Yakushima around 4pm. Since we still had some time before the protection zone is closed, we decided to search for monkeys by walking. Only some deers were found when we were walking. Fortunately, on the car back to field station, two monkeys were seen.

On 14 to 16 May, we collected fern samples. Since some people like me did not have any knowledge and experience on ferns, Professor Shinohara and Professor Kudoh showed us the method to collect sporophytes and gametophytes. While sporophytes can be collected simply by getting the plant, the gametophytes need to be collected with pincers. We visited two sites for altitude ranges < 300 m, 300-1000 m and > 1000 m. Prof. Shinohara gathered the sporophytes and the students collected the gametophytes. During spare time, we also went to hot spring and visited waterfalls around Yakushima like Oko No Taki for sightseeing. The students were mainly in charge of the gametophyte samples which will be used for DNA analysis in genome course. We cleaned the gametophytes to remove soil and cut the samples into half, one for DNA and one for voucher specimens. We did these for three days, each day in different altitude.

On 17 May, we identified the sporophytes by morphology and prepared for the presentation next day. The sporophytes were firstly identified by us and reconfirmed by Prof. Shinohara. In the afternoon, we compiled the data and prepared for the powerpoint slides. Before the dinner, we went for hot spring again and went for sightseeing.

On 18 May, we finished the powerpoint slides in the morning and presented in the afternoon. In this day, we got to know what the other groups were doing. At night, we had BBQ dinner. After dinner, we went to the beach for see turtle nesting.

On 19 May, I went collecting fecal samples from the lowland monkey groups with Hanya-sensei. After that, we

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went to sightseeing and enjoyed our lunch at the restaurant near Motchomudake. Then, we went to airport to go back to Inuyama.

It was an enjoyable trip that I get to do projects with others from PRI and from other departments of Kyoto University as a team and tried different field of study.



Collection tools for gametophytes



Sporophyte sample with mature spore



Species identification of sporophytes with Gro encyclopedia and internet



Group picture in front of Oko No Taki Fall

6. Others