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.)

	2017.5.29
Affiliation/Position	Center for Ecological Research
Name	Genki Yumoto

1. Country/location of visit

Yakushima Island, Kagoshima Prefecture

2. Research project

Yakushima Field Science Course

3. Date (departing from/returning to Japan)

2017. 5.13 – 2017. 5.19 (7days)

4. Main host researcher and affiliation

Primatology and Wildlife Science Leading Graduate Program, 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.

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.)

Purpose (Plant group in this course)

Fern has two stages in life cycle, sporophyte and gametophyte. They live in different places each other. So, we tried to search fern in different altitude, and study about distribution of two stages of fern.

Below is the schedule of this course;
5/13 Arriving at Yakushima, Observing some living things on Seiburindou
5/14 Collecting fern sample in low altitude, and prepare for Genome Science Course
5/15 Collecting fern sample in high altitude, and prepare for Genome Science Course
5/16 Collecting fern sample in middle altitude, prepare for Genome Science Course, and identifying sporophyte samples
5/17 Identifying sporophyte samples, and making presentation slide
5/18 Making presentation slide, and presentation
5/19 Cleaning, sighseeing, leaving from Yakushima

This Yakushima Field course has three groups, monkeys and deer, parasite, and plant. I belonged to plant group. We performed 4 things. First, we collected both of two type ferns, sporophyte and gametophyte in different altitudes. Second, we identified sporophytes by their morphology. Third, we washed and cut gametophytes into twice, and one is for specimen, other is for pretreatment of Genome course. Finally, we prepared presentation from results, and gave presentation.

5/13

We flew to Yakushima airport from Itami airport, we drove to PWS house from Yakushima airport. We observed some living things, such as deer and plant, but I was able not to watch monkeys.

5/14

Members of plant group got up at am.6:00, and left for Onoaida hot spring at 7:00. We collected fern around 270 m high along the Onoaida sidewalk. Then, we brought back samples of fern to PWS house, and we washed and cut fern gametophytes into twice, and one was stored in 100% ethanol for specimen, and another for pretreatment of Genome course.

5/15

Members of plant group got up at am.6:00, and left for Yodogawa trail head at 7:00. We collected fern around 1300 m high along the Onoaida sidewalk, descending a mountain from the trailhead. Then, we brought back samples of fern to PWS house, and we treated samples.

5/16

We left for Anbou road and collected samples around 500 m and 800 m high along the road. Then, we went back to PWS house and treated samples, and identified sporophyte samples after dinner. It was very difficult but interesting.

5/17

We got up at a.m.7:00, and restarted to identify sporophyte samples, and Dr. Shinohara told us answers about sporophyte identification at a.m.11:00. Afternoon, we found it more difficult than we expected to prepare a presentation. This day, we tried to make it until p.m.12:00.

5/18

We got up at a.m.6:00, and restarted to prepare the presentation. When we discussed, I felt bad due to my English ability. I must learn English harder. We had a BBQ after presentations. I talked with many people in this time, it was very interesting. After BBQ, we watched sea turtles in Nagata beach.

5/19

We cleaned PWS house, and we went to Shirataniunsuikyou for sightseeing, then we went home.

Result

Our group collected 40 (30 species) sporophyte samples and 195 gametophyte samples in low altitude, and 50 (33 species) sporophyte samples and 96 gametophyte samples in middle altitude, and 3 (3 species) sporophyte samples and

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.)

58 gametophyte samples in high altitude.

Plan

We will analyze gametophyte samples by molecular assay, and we will make comparison between distribution of sporophyte samples and gametophyte samples, and altitudes. Then, we make a poster about both of Yakushima Field Science Course and Genome Science Course, and present our result.

Discussion

Collecting gametophyte

Others

Thank prof. Hiroshi Kudoh, prof. Shinohra for assisting me in field, and other lectures and students for assisting me in this course. Finally, I am grateful to PWS for funding this course.