## 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. 27
Affiliation/Position	Primate Research Institute/M1
Name	Hiroya Takiyama

## 1. Country/location of visit

Yakushima Island

## 2. Research project

Yakushima field course: plant course

## 3. Date (departing from/returning to Japan)

2017. 5. 13 – 2017. 5. 19 (7 days)

## 4. Main host researcher and affiliation

Prof. Shinohara, Kagawa University, Prof. Kudoh, Center for Ecological Research

## 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.

For this course, I went to Yakushima Island as member of the 'plants' team. Our aim was to study the dispersal of ferns.

#### Schedule

13<sup>th</sup> May: We arrived on Yakushima.

14<sup>th</sup> May: We collected ferns at low level of altitude.

15<sup>th</sup> May: We collected ferns at high level of altitude.

16<sup>th</sup> May: We collected ferns at intermediate altitude levels.

17<sup>th</sup> May: We identified the species of sporophytes that we had collected.

18<sup>th</sup> May: We prepared our presentation and then presented our results.

19th May: We returned to Inuyama.

During this period, we studied ferns on Yakushima growing at different altitudes, a topic quite different from my master's research. However, oral presentation in English is very important experience for me. In addition to the academic aspects, it was a pleasure to observe the spawning event of Loggerhead turtles.

## Research

We collected fern sporophytes and gametophytes from 14<sup>th</sup> to 16<sup>th</sup> May. We identified the species of sporophytes in an encyclopedia, using morphological features. We focused on the differences in distribution among the three categories of altitude levels (high, intermediate and low) and we presented on 19<sup>th</sup> May. We cleaned the gametophyte and preserved them in 100% ethanol for DNA analysis and for voucher specimens. For the gametophyte specimens, we will identify the species using molecular analysis during the genome course.

Our research sites, Onoaida and Anbo, were far from Nagata, our research station, so we had to drive one and half hours to get to the research sites every day. On 14th May, we climbed the mountain and collected ferns along the trail. On 15th May, we first went to a high altitude area by car and then hiked trails to collect fern samples. On 16th May, we planned to climb up a mountain but one of us had trouble with our knees, so we changed the study site. However, we were nevertheless able to get enough samples.

Fortunately, the weather was fine on 14<sup>th</sup> and 15<sup>th</sup>, so we were able to collect ferns under good conditions.

Submit to: report@wildlife-science.org 2014.05.27

version

# 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.)



Collecting fern gametophytes



We visited Kigen-Sugi

## Presentation

We presented our results on 19<sup>th</sup> May. We, the members of the plants team, wrongly assumed that we had enough time to prepare. However, it took longer than expected to check the slides. So we did not have enough time left to practice the oral presentation. It was very regrettable.

Aside from the presentation in Yakushima, we will present the results of this course and the genome course at the CET-Bio on 30<sup>th</sup> May.





Submit to: report@wildlife-science.org

version

# 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.)



Sunset



Yakushima macaques

## 6. Others

This course was supported by PWS. My sincere thanks go to Ms. Sakai and Ms. Akiyama, staff of the PWS office. I would like to express my deep debt of gratitude to Prof. Wataru Shinohara, Prof. Hiroshi Kudoh and the other lecturers for precious knowledge they shared. The wonderful team-mates without whom this research would not have succeeded: I would like to acknowledge them.

Submit to: report@wildlife-science.org 2014.05.27

version