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.)

	2016. 05, 28
Affiliation/Position	Universiti Sains Malaysia
Name	Nur Juliani Shafie

1. Country/location of visit

Yakushima Island, Japan

2. Research project

Preliminary assessment of composition and variation in fig and fig wasp species on Yakushima Island, Japan

3. Date (departing from/returning to Japan)

2016. 05. 21 – 2016. 05. 27 (7 days)

4. Main host researcher and affiliation

1. Professor Takashi Hayakawa (Kyoto University, Japan Monkey Center/Primate Research Institute)
2. Professor Takakazu Yumoto (Kyoto University, Primate Research Institute)
3. Professor Munehiro Okamoto (Kyoto University, Primate Research Institute)

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.

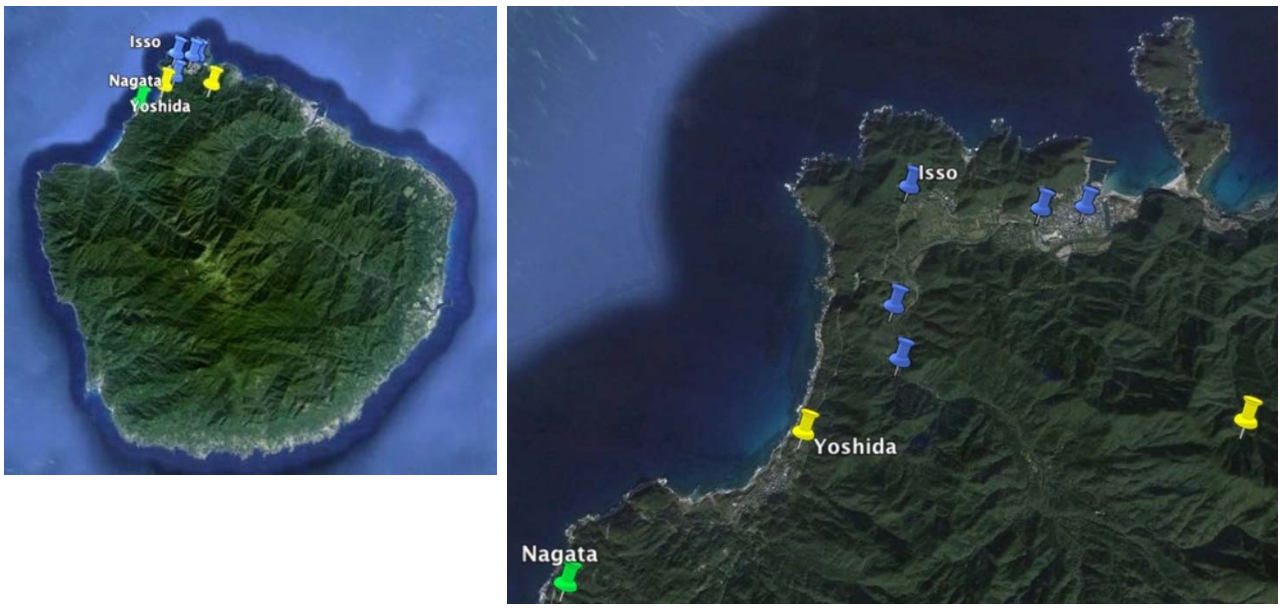

Figure 1: Map of sampling sites on Yakushima Island, Japan.

During this field, I was assigned under insect team to study on the relationship between fig and fig wasp in Yakushima Island. All syconia were collected from 10 sampling sites which located inside Yakushima Island (Isso, Yoshida and Nagata) and sampling was conducted in three consecutive days. There are three main objectives for our team during this field trip; (1) to sample the syconia from as many species of figs as possible, (2) to determine their diameter, hardness, colour and stage of the syconia and (3) to collect the leaves, syconia and fig wasp from the different species of figs for subsequent molecular analyses.

For the first objective, we collected 5 species of Ficus; *Ficus pumila*, *Ficus superba*, *Ficus microcarpa*, *Ficus erecta*, and *Ficus sarmentosa* with a total of 485 syconia and 169 insect samples. We recorded all the details including the date,

time, place (GPS coordinates), species name and others. This was a great experience for me to learn about plant-animal interactions, since this is my first time during fieldwork to learn about plant and insects. Before this, I only have experience on bat, small mammal, bird and reptile sampling methods.

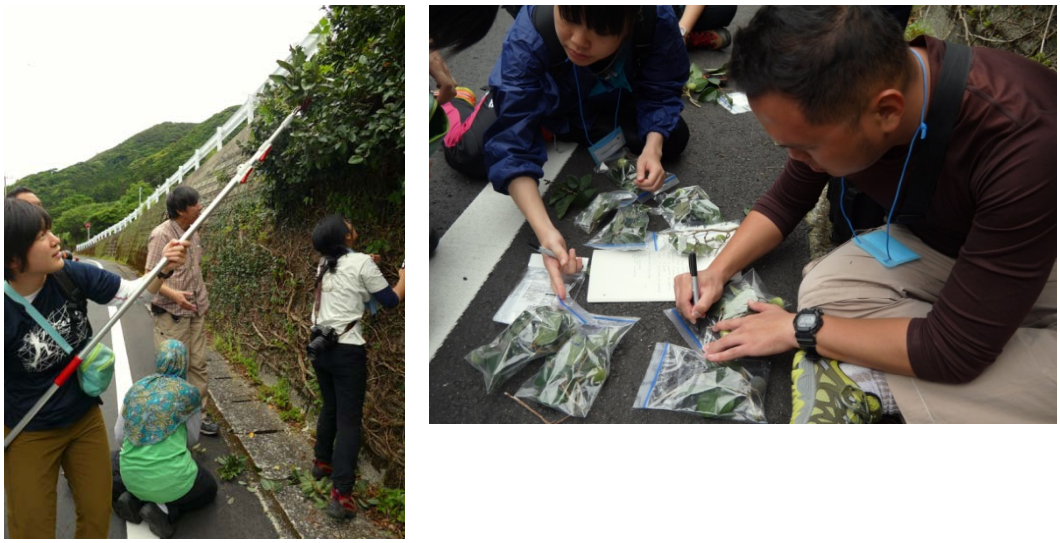

Figure 2: Insect group collecting and recording data samples in the field.

After collecting the syconia during the field sampling, we bring back all the syconia to our research station and we started to numbered and arranged them according to the size and color. We measured the diameter of syconia using digital caliper, determine the percentage of light green color for each syconia (0%-100%) and also the stage of hardness (soft, intermediate and hard).

Figure 3: The process of determine the size, color and hardness of the syconia.

After that, the syconia were cut and observed under the microscope. The stage of maturity and the sex of the syconia (male or female plant) were also determined. All the larvae, pupa and fig wasp inside the syconia were collected into small tubes and preserved in 100% ethanol. Besides that, the leave samples were also collected using tea bags and plastic with silica gel. Thus, all the specimens were brought to Inuyama for the next DNA analysis during our genome science course.

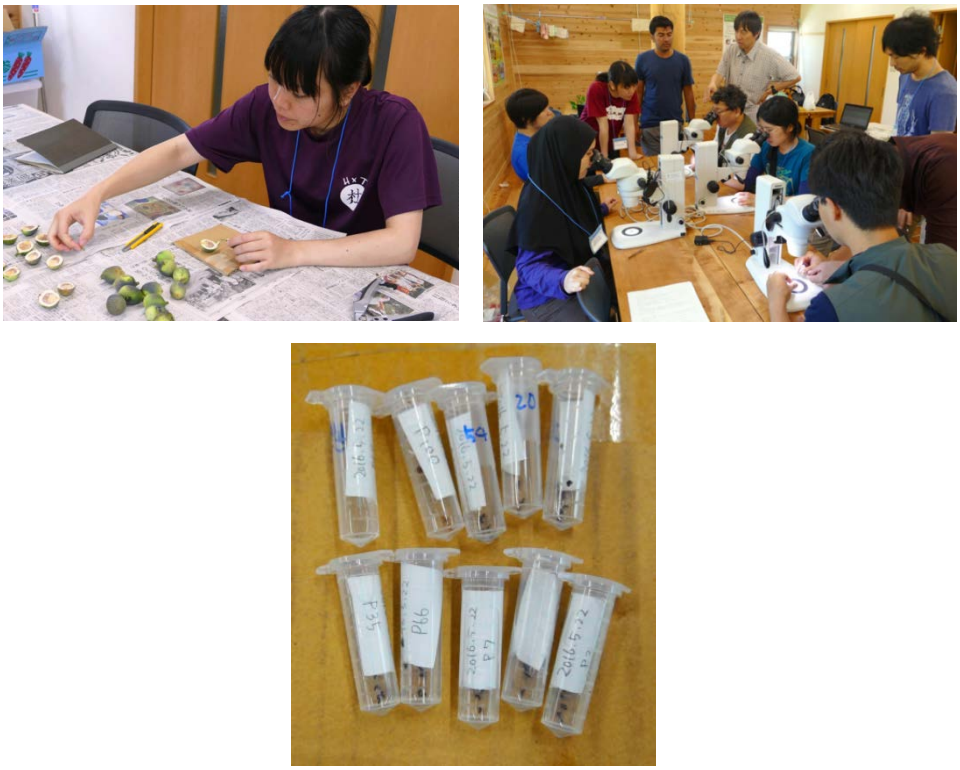

Figure 4: The process of collecting specimens for DNA analysis for genome science course.

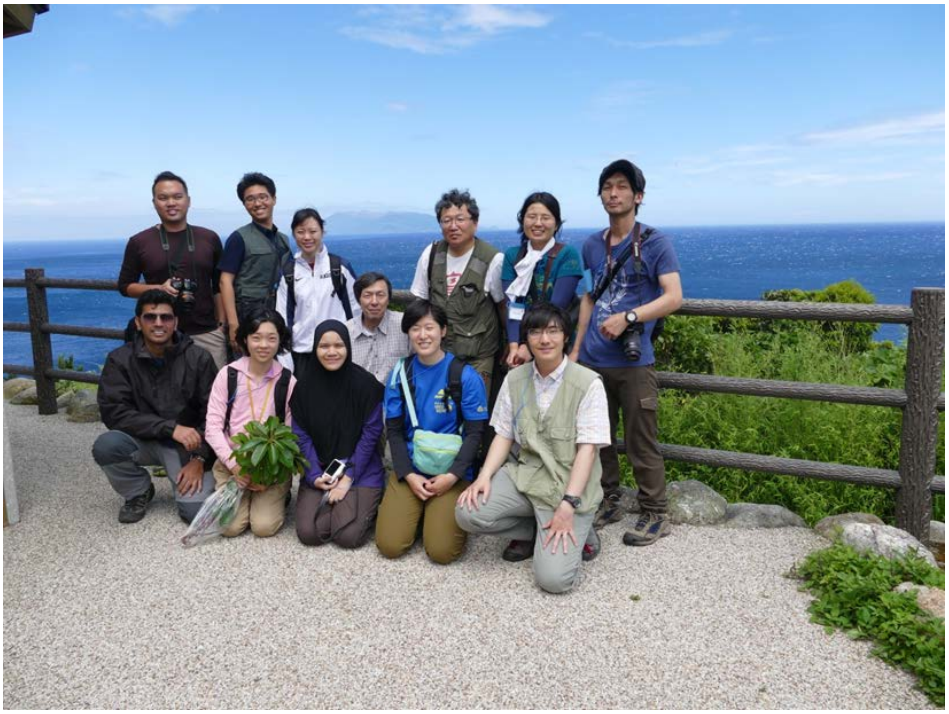

Figure 8: Group picture of insect team.

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6. Others

I would like to thank Kyoto University for giving me this opportunity, so that I can experience working in the field of Yakushima Island, one of the UNESCO's World Heritage Site. Last but not least, I would also like to express my gratitude to all the lecturers; Prof. Yumoto, Okamoto, and Hayakawa and my team members; Lee, Evan, Kunal, Yuka, Anna, Izumi, Yui and Fumihiko for their cooperation and hard work. I really had learnt a lot and enjoy this field course very much and I hope that I can use this knowledge in my future research.