	2017.11.01
Affiliation/Position	Primate Research Institute/ M1
Name	YAN Xiaochan

### 1. Country/location of visit

Indonesia/ Bogor Agriculture University, Ujung Kulon National Park, and Sulawesi Island

### 2. Research project

The 6th International Workshop on Tropical Biodiversity Conservation focusing on Large Animal Studies, Field work of *Macaca nigra* and *Macaca nigrescens* in Sulawesi Island

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

2017.10.15 - 2017. 10.30(16 days)

### 4. Main host researcher and affiliation

Dr. Bambang Suryobroto, Dr. Kanthi Arum Widayati (Lecturer, Bogor Agriculture University)

Dr. Shiro Koshima (Professor, 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 this trip, two main purposes were accomplished. Firstly, I attended to the workshop 'The 6th International Workshop on Tropical Biodiversity Conservation focusing on Large Animal Studies' which was held in Bogor Agriculture University organized by Dr. Bambang and Dr. Kanthi. Secondly, I visited the north part of Sulawesi Island where *Macaca nigra* and *Macaca nigrescens* are distributed in. During this trip, I got the opportunity to learn more about biodiversity and conservation on tropical countries, including Brazil, China, Malaysia, India Indonesia, and UK. In addition, I conducted DNA sampling and behavioral experiment of two species, *Macaca nigra* and *Macaca nigrescens* in Sulawesi, respectively.

From October 16 to 20, I participated in the workshop and gave a poster presentation. The main theme of the workshop is to discuss possibility of establishing 'Field Museum' in tropical countries, introduced by Dr. Koshima. Following the main theme, researchers from different countries introduced the biological diversity and conservation situation of their study sites. Yakushima Island in Japan was introduced as an example of 'Field Museum' by Dr. Yumoto. To achieve the aim 'Field Museum', it is urgent for government to take more measures to maintain biodiversity. During the workshop, I visited Ujung Kulon National Park as well. It was a good opportunity to learn more about biodiversity of Indonesia and consider the ideal 'Field Museum' by trekking in the forest. In Ujung Kulon National park, buffalo, hornbill, longtail macaque, deer and lutung were observed in a distance. What's more, with the explanation by Dr. Yumoto, we were able to identify kinds of endemic flora, and understand various patterns of plant-growth and reproduction.

From October 21 to 29, I visited Sulawesi Island accompanying by Dr. Bambang, Dr. Kanthi. With the guidance by the local, we visited many villages of northern Sulawesi. During this trip, I learnt the method to take saliva samples and conduct behavioral experiment of pet monkeys. Firstly, it was very important to show the kindness to the pet monkey and its master. In fact, pet monkey owners were greatly worry about whether we were police or reporter, and whether we will hurt their pets. The most important matter is to show our kindness to local people and monkeys to release their suspicion. It also will help us maintain the relationship with local people in the future. Secondly, closing and playing with pet monkey, it will help to establish the friendship with monkey and relax their guard. Following by behavioral experiment, we used clean cotton to collect saliva sample and dissolve it in lysis buffer. For behavioral experiment, normal apple piece was set up as baseline, and apple piece socked in 2 mM PTC and 12 mM salicin overnight were show to monkey for testing their sensitive of bitter compounds, respectively. Totally, 19 individuals participated in my experiment, 14, 4,1 of *Macaca nigra, Macaca nigrescens* and *Macaca hecki*, respectively. Behavioral experiment shows some interesting results, I will use next generation sequencing tool to get exon genomic data and clarify the mechanism in molecular level in near future.

In addition to academic workshop and field work, I explored Tangkoko national park as well. In this trip, I got the opportunity to observe the wild *Macaca nigra*, tarsier, two species of possum and several bird species. During the trip, what made me impressed is the enthusiasm of Indonesia people. Junior high school students greatly helped me to find out pet monkey. I was surprised by their courage and intelligence. They had no hesitation to speak English and ask question. Overall, I greatly enjoyed this trip. I learnt many things from this unfamiliar country. I believe these experiences will not only help me in academical field but also leadership establishing and life.

Finally, I would like to express my gratitude to Dr. Bambang, Dr. Kanthi and local researchers of Sam Ratulangi University, without their help, I cannot conduct my experiment in Indonesia. Thank PWS and CETbio for arranging and supporting this trip.



Fig 1. Collecting saliva sample of juvenile, Macaca nigra



Fig 3. Kidney-shaped ischial callosities of Macaca nigra



Fig 2. Behavioral experiment using apple of juvenile, Macaca nigra



Fig 4. Ischial callosities of Macaca hecki



Fig 5. Wild adult male of Macaca nigra



Fig 6. Goose-goose in Tangkoko National Park



Fig 7. Tarsier in Tangkoko National Park



Fig 8. Macaca nigra group in Tangkoko National Park



Fig 9. Pet Macaca nigra plays with dog



Fig 10. Macaca hecki



Fig 11. With junior high school students





Fig 13. Group members are observing buffalo in Ujung Kulon



Fig 14. Big figs tree in Ujung Kulon



Fig 15. Poster presentation in the workshop

# 6. Others