# 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.)

|                      | 2019.10.03                    |
|----------------------|-------------------------------|
| Affiliation/Position | Primate Research Institute/D1 |
| Name                 | Xiaochan Yan                  |

#### 1. Country/location of visit

Indonesia, Sulawesi

### 2. Research project

Field work of Macaca maura in southern Sulawesi

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

2019.09.01 – 2019.09.10 (10 days)

#### 4. Main host researcher and affiliation

Dr. Bambang Suryobroto, Dr. Kanthi Arum Widayati (Lecturer, Bogor Agriculture 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, I visited the habitat of *Macaca maura* and conducted field work. It was excited to explore the *Macaca* species in southern Sulawesi. I collected saliva samples and conducted PTC avoidant behavioral experiment. The schedule was following,

2019/9/1 Left for Jakarta

2019/9/2 Arrived at Makassar, Sulawesi

2019/9/3-8 Field work in Makassar, southern Sulawesi

2019/9/9 Left for Bogor Agriculture University

2019/9/10 Workshop in Bogor Agriculture University and flight back to Japan

From September 1 to 9, I visited Southern Sulawesi accompanying by Dr. Bambang and Dr. Kanthi. During this trip, I grasped the skills of taking saliva from monkeys and conducting behavioral experiment. Moreover, I got the chance to see wild *M. maura* and their unique habitat, karst forest. In preliminary analysis of TAS2R38, I predicted that some low PTC sensitive individuals would be found in southern species, including *M. maura*. As expectation, two individuals of *M. maura* exhibited low sensitivity to 2 mM PTC. Surprisingly, it was the first time in Sulawesi macaques that we found out some individuals showed strongly rejection to apple slices soaked in 40 mM salicin. On the contrary, we have not found any individual who showed rejection to apple soaked salicin in northern Sulawesi. It could be interesting to uncover the genetic mechanism of this difference between species. I hope to start doing experiment to uncover the bitter sensitivity in Southern Sulawesi. According to previous studies, salicin was related to diet of bark eating in Japanese macaque. Understanding the taste receptor mechanism will contribute to understanding the unique diet of *M. maura*. Therefore, I will focus on genetic experiment to illustrate the genetic mechanism of PTC sensitivity as well as Salicin perception.

In addition to sampling for saliva samples, I also joined a workshop held in Bogor Agriculture University. I was delighted to learn more about the ecosystem of Indonesia via other researchers' presentations.

Finally, I would like to express my gratitude to Dr. Bambang, Dr. Kanthi, Dr. Yumoto and Dr. Terai, without their help, I cannot conduct my experiment. Thank PWS a lot for supporting this trip.

Submit to: report@wildlife-science.org 2014.05.27

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Fig 1. An adult male sit near to a female of *M. maura* 



Fig 2. A mother-infant pair of *M. maura* 



Fig 3. An adult male of *M. maura* 



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Fig 4. An adult male of M. ochreata



Fig 5. M. maura habitat, Karst forest

# 6. Others

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