Research Activity Report
Supported by "Leading Graduate Program in Primatology and Wildlife Science"

	2017. 05, 28
Affiliation/Position	Primate Research Institute/D1
Name	Raquel Costa

1. Country/location of visit

Primate Research Institute, Inuyama, Japan

2. Research project

Genome PWS Course,

3. Date (departing from/returning to Japan)

2017. 05. 22 – 2017. 05. 29 (5 days)

4. Main host researcher and affiliation

Dr. Takashi Hayakawa and Mr. Akito Touge, Primate Research Institute, Kyoto University

5. Progress and results of your research/activity

This course followed the Yakushima Field Course Spring 2017. The aim of the course was to analyze genetically the samples collected in the field course. In order to do so, we extracted DNA from the exoparasites collected previously, which were morphologically classified as *Haemophysalis* and *Ixodes*. We amplified the DNA using tick, lepidoptera and mammalian primers. Following, we purified the PCR products. This last step was repeated in order to obtain the DNA sequencing (which failed on the first attempt). Finally, we analyzed the sequencing product using several specific software's (Mega, FinchTV). Our results showed two species for *Haemphysalis*, which is in agreement to the morphological identification, and three possible new taxa candidates. Because this is the first report on Yakushima ticks, it is possible that these species represent new species for science. However, to be sure we should repeat the procedures and collect more samples.

I personally used this opportunity to learn how to extract DNA and analyze the results. It was the first time that I used the mentioned software. We are currently working on a poster presentation based on these results for a international conference. Hopefully we can continue this result to confirm the identification of the species.

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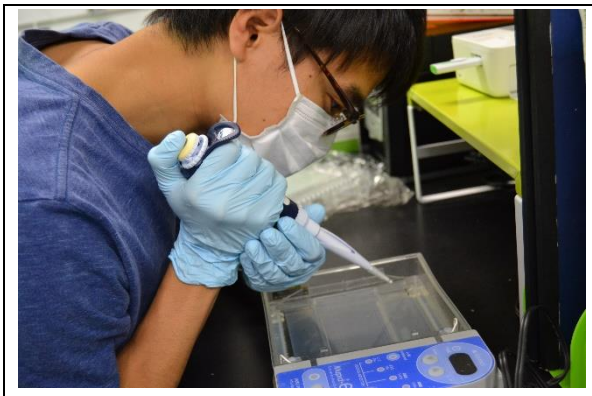

Fig. 1. Electrophoresis preparation.

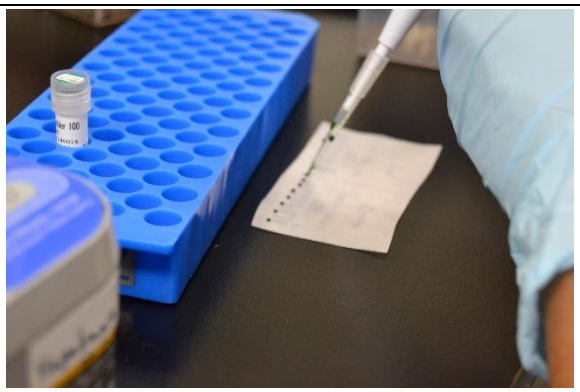

Fig. 2. Electrophoresis preparation.

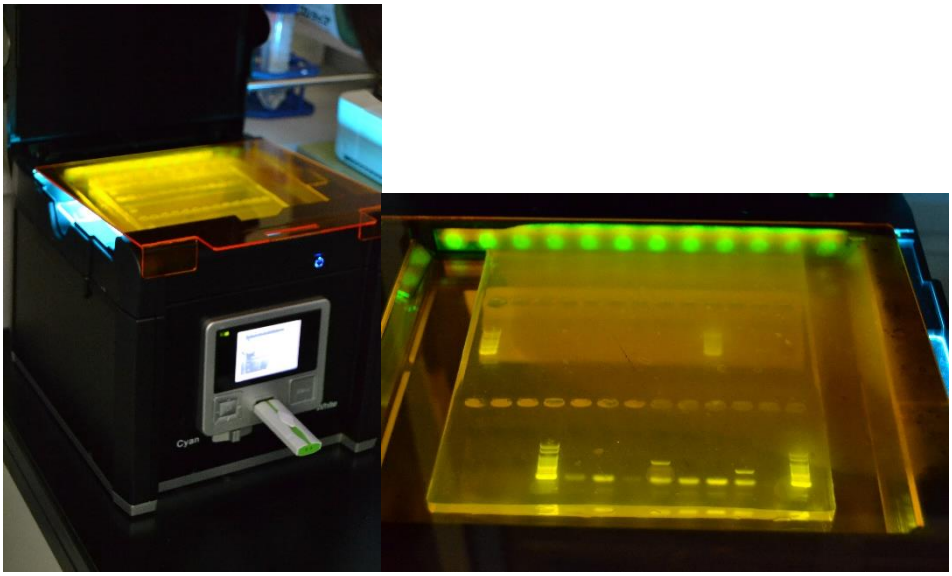

Fig. 3 and 4. Electrophoresis results.

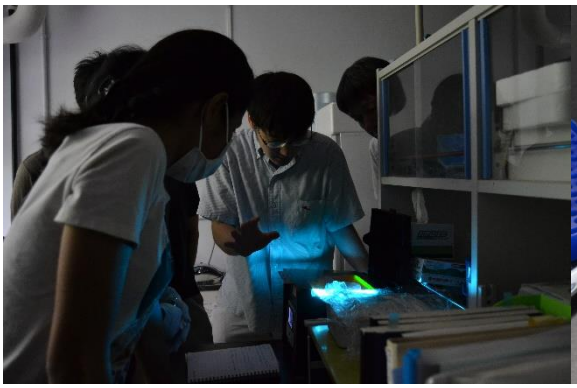

Fig. 5. Electrophoresis discussion

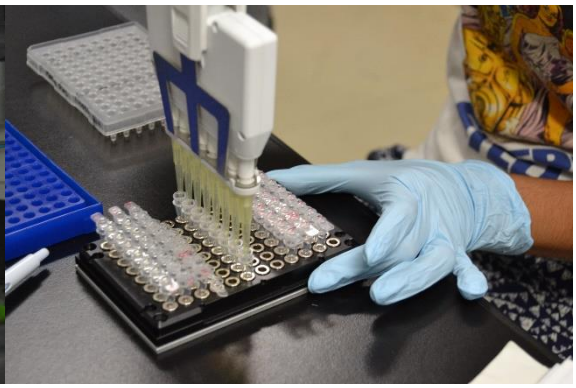

Fig. 6. Purification of DNA for sequencing.

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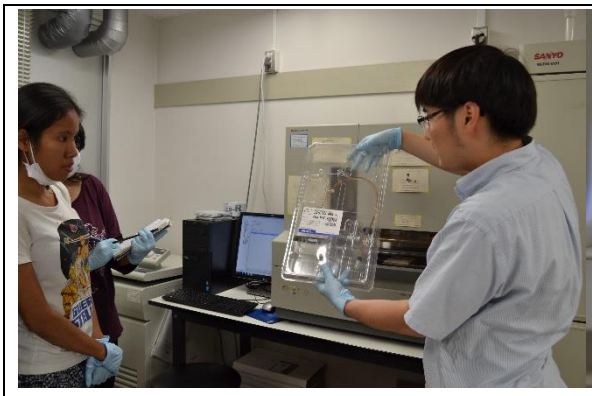

Fig. 7. DNA sequencing explanation

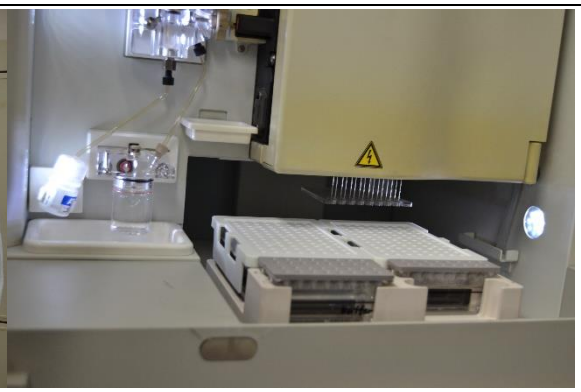

Fig. 8. DNA sequencing execution.

6. Others

I wish to express my gratitude to Dr. Takashi Hayakawa and Mr. Akito Touge and my colleagues for their guidance and patience. I'm very thankful to PWS for supporting this training.